The impact of the state`s enterprise supports on the competitiveness of Estonian economy

Does the state support its enterprises in the best way?

Report of the National Audit Office of Estonia to Riigikogu Tallinn, 23 August 2010

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Summary of the results of auditing

On the arrival of the economic crisis more and more has been spoken about the competitiveness of Estonian enterprises. In the situation, when both Estonians and our neighbours consume less, it is very complicated to produce the goods which people would like to buy. The Estonian enterprises have to compete with imported goods at our own domestic market and with other producers at foreign markets.

There has also been as much talk about the possibility that we would overcome the crisis being stronger than ever before because the Estonian entrepreneur adapts well to the circumstances. Definitely it is so, but is it sufficient? We should not forget that the same enterprises with which we compete domestically and abroad have received their states` support one way or other. The European states do not rely only on the capabilities of their enterprises. The competition between the states, which can offer their enterprises more support, is as severe and serious as the situation at the market. The used measures are most diverse: supports, the taxation policy, negotiations in adopting the requirements of the European Union, legal acts, etc. The imagination of the market, where the success in trading depends only on the entrepreneur´s vigour, is an illusion.

Also, the Republic of Estonia has undertaken itself a task to help develop the growth of competitiveness of Estonian enterprises giving them financial support, loans, surety. As long as the state`s development plans have been drawn up, the goals set were the growth of productivity, export capacity and innovation of Estonian enterprises. At the same time, until recently nobody has studied whether the state`s support has really increased the competitiveness of enterprises and the whole economy. To learn how supports function and how the state could better help its enterprises, it is necessary to assess the impact of the already applied activities. This was the task the National Audit Office of Estonia set itself when starting the audit.

What did we audit?

The National Audit Office of Estonia audited whether about 7.4 billion crowns given in 2004-2009 as enterprise supports had helped improve the competitiveness of the Estonian economy as a whole and how it could be possible to increase the impact of supports. The National Audit Office of Estonia treats as supports the direct supports given by the Foundation for the Development of Enterpreneurship – the Enterprise Estonia (EAS) and the loans, surety and guarantees given by the Foundation for Guaranteeing Credit and Export – KredEx.

Each state`s economy consists of branches of economy. In some countries more attention is paid to agriculture, in some others to the production of electronic goods, in still some others the promotion of tourism. Undoubtedly the states have different preconditions for building up their economic structure but it is known that different branches of economy have different potentials for getting wealth from economic activity. For example, the arable land may be most fertile, but one moment there will be a limit and it is not possible to earn more from the produce. At the same time information technology application can be constantly developed and sold at a higher price. This is why each state decides whether, how and which branches of economy it supports.

To look for the impact of the enterprise supports in the branches where the state itself expects most, the National Audit Office of Estonia requested the Ministry of Economic Affairs and Communications (MKM) to enumerate the fields of activity which are most significant for Estonia or with the highest growth potential and which should be primarily supported by the state. Proposed by the Ministry of Economic Affairs and Communications, information and communication technology, electronics, bio- and material technology, mechanical engineering and metal industry, timber industry, transport and logistics, medical and care services (the so-called wellness industry) and business and financial services constitute the sample of activities of the audit made by the National Audit Office of Estonia in the case of which we began to assess whether the supports had influenced the development of competitiveness of these fields (relying on its analysis, the National Audit Office of Estonia added some activities connected with production to the sample).

As in the period 2004-2009 the state had supported enterprises using 57 different measures, which had somewhat different aims, the National Audit Office of Estonia, proposed by EAS and KredEx, divided the supports into seven groups for carrying out the analysis. In the case of each group it was agreed which impact the support should have had on the behaviour and the economic indices of the enterprise (for example, the growth of export). This way it was guaranteed that the National Audit Office of Estonia should assess the presence of the impact which the state expected from the support.

To make an evaluation, the National Audit Office of Estonia sent a questionnaire to 4,262 enterprises belonging to the sample, out of which 1,881 enterprises responded. Out of respondents, 954 enterprises had received support, 180 enterprises had applied for it but did not get any, 747 enterprises had never applied for the support (the control group). In the questionnaire we requested the enterprises to assess the impact of the received support on the economic activity of the enterprise which we compared, for controlling the adequacy of the assessment, with the real economic indices of the enterprise. Also, the National Audit Office of Estonia compared the indices of competitiveness of the enterprises, who had received support, and of the control group, the indices in the fields of activities and the economy of Estonia as a whole. We questioned the representative organisations of 30 enterprises, conducted interviews and carried out an extensive documents analysis. With the help of the Statistics Board we carried out uniting the data of the questionnaire and the economic indices. The results of the study and the primary recommendations of the audit were discussed with researchers and policy makers in the focus groups before making them public.

Why is it important for taxpayers?

Without any doubt, the global economic crisis has decreased the welfare of the people in all the European countries but the crisis affected less the states the enterprises of which can produce with added value and sell the products. The present unemployed people feel most acutely the weakness of competitiveness of Estonian economy. In a competitive enterprise they could find employment.

The standard of living of a person in Estonia will always depend on the degree of competitiveness of Estonian economy. The state can also take care of the person – keep the Estonian health care system functioning, pay pensions, educate people and give them the feeling of security – mainly for the tax revenue, the amount of which depends on the successfulness of enterprises. The state must pay serious attention to the structure and competitiveness of Estonian economy so that the next period of economic decline might not bring along such a big unemployment rate as we have today.

What did we find and conclude as a result of the audit?

As assessed by the National Audit Office of Estonia, the supports have not improved the competitiveness of the audited fields of activity.

The low productivity and the small export capacity of Estonian enterprises have not significantly increased as a result of supports. The reason for the small impact of enterprise supports is a rigid, untargeted and dispersed system of supports which tries to deal at the same time with many problems of entrepreneurship and very often does not consider the actual needs of enterprises.

Keeping to the present principles of distributing supports, the impact of supports on the growth of the competitiveness of enterprises remains incidental and consequently does not help improve the competitiveness of the state`s economy in the future.

Most important findings

**Only one fifth of the enterprises, having received the state support for increasing productivity, estimated that the support had really had a significant impact on the enterprise`s productivity.** The rightfulness of the assessments of enterprises was confirmed by the real economic confirmed indices of these enterprises. At the same time productivity shows which monetary value the person`s work has (the product`s or service`s value which the person can create at the enterprise within a certain period of time or with certain costs). Casting a look at the development of productivity of Estonian economy as a whole, we see that in the period of 2005-2007 rapid growth really took place (constituting at the highest level only 65% of the average of the European Union with 27 members states), but it was primarily caused by the explosive growth of domestic consumption and not the growth of competitiveness at foreign markets. The illusory growth at the boom time is also confirmed by the fact that in the conditions of the crisis the indices of Estonian productivity, in comparison with the average of the European Union with 27 member states, had become worse.

The study of the National Audit Office of Estonia showed that the supports did not have a big impact on the appearance of new exporters. According to the study, the entrepreneurs saw a certain impact of support on the growth of export (depending on the support, 16-57% of respondents) but as assessed by the National Audit Office of Estonia, it was not sufficient considering the fact that the supports, directly aimed at the growth of export capacity, were analysed. The export capacity characterizes the enterprise`s skill to sell its product in a foreign country. In the Estonian economy as a whole the weakness of the export capacity was already reflected in the small export during the boom time, during the crisis period it has fallen even more. Balancing of the scopes of export and import in the recent times is not caused by the growth of the competitiveness of Estonian economy but by the drastically fallen domestic consumption. Although in a small country, entering bigger export markets, cooperation between enterprises would be presumed. According to the study of the National Audit Office of Estonia the Estonian enterprises do not view cooperation as a source for development and the supports have not been able to change this attitude. The problem of unsatisfactory cooperation is transferred to the development capacity of enterprises because with the help of development supports new developments are launched but cooperation and links with local enterprises (production) are weak. Consequently, it is not sure whether an Estonian enterprise and the population would generate revenues. The supports have not been able to cause the wide-scale innovation. In such a situation it is hard to achieve the complex aim – to raise the proportions of the added value export in Estonian economy.

The state is lacking an integral, carefully planned entrepreneurial policy with clear impact objectives. The content of entrepreneurial policy is to a great extent only the division of European Union supports and it does not consider different developmental problems of enterprises. This is why the long-term problems of Estonian enterprises – small productivity, export, developmental activities and the cooperation of enterprises – have remained the same for years. Most generally speaking, the reasons can be found in the bad organization of establishing the Estonian entrepreneurial policy and its insufficient content.

The study of the National Audit Office of Estonia revealed that the problems of the different fields of activity of Estonian economy are different. The fields of activity view the factors hindering the growth of competitiveness differently, assess the impact of the present state`s supports differently and wish to have different forms of support from the state. The knowledge of such differences is indispensable for working out the influential measures guaranteeing the growth of competitiveness. The knowledge of the general problems of economy is not sufficient for achieving targeted aims.

The present entrepreneurial policy does not profoundly deal with the needs of the fields of activity. The Ministry of Economic Affairs and Communications has no necessary competence and the staff for this purpose. It has also decreased the Ministry`s ability to use the Enterprise Estonia (EAS), having a certain overview of the problems, of the fields of activity and the developmental potentials, in shaping the entrepreneurial policy. The Ministry has not used for clarifying the problems and needs of fields of activity (or more broadly the branches of economy) the representative organisations of enterprises and professional associations which are seldom and rather formally involved.

The information about the implemented measures does not reach the Ministry even through research surveys because it is considered impossible to assess the impacts contentwise. The analyses of single measures do not show whether supports take us closer to the established aims to raise competitiveness. It cannot also be seen when observing the results on the level of a single support project performed by the Enterprise Estonia (EAS). The Ministry has no research staff, full outsourcing of research restrains in a longer perspective the growth of the competence of the policy maker. It has caused the situation that the real content of the Estonian entrepreneurial policy is primarily distributing the money from the European Union and there is no courage to have preferences or take risks.

The Estonian entrepreneurial policy is based on the distribution of the supports of the European Union, but from its own revenues the state does not invest money in enterprises. In the year 2010 the money from the European Union constitutes 90% of enterprise supports. The promise to invest in the period 2007-2015 in enterprise supports about 1 billion crowns of the state money is not kept, in reality about 60 million crowns have been allocated. This is why there was a hole of two years during supporting the enterprises when the period 2007-2013 for the implementation of the European Union supports was being prepared. At that time the state had money for this purpose.

On the one hand, it is possible to conclude that in the audited period the entrepreneurial policy was not the government`s priority, on the other hand, it means that the dependence on the European Union supports expects a rigid and periodical use of the money. The fear to allocate money to the projects, which are risky but with the help of which broader targeted aims and the development of the fields of activity would be really in the focus of attention, has created the situation that the successful enterprises, fulfilling their plans even without a support, get the support. The boosting effect of the support is thus decreased. Also, the enterprises, riskier but with a big growth potential, may remain without a support. According to the assessment of the National Audit Office of Estonia, the dependence on the European Union money and its periodical character increases the importance of the assessment of the impacts of supports and their timeliness. In the international context Estonia`s competitiveness in the race for the best place has lagged behind the leading countries because the competitors, the rich states of the European Union, support their enterprises from their state fund to a large extent and they do so even in spite of the economic decline. The inconsiderate system of supports at present places the Estonian enterprises into an unequal position both in competing at foreign markets and at the domestic market in the comparison with imported goods. To catch up with Europe in the proportions of the export of goods with a higher added value and bigger productivity, Estonia should radically improve the enterprise support, increasing the scope of supports and have more exact targeting.

Analysing the state`s entrepreneurial policy, development plans and the state budgets, the National Audit Office of Estonia reached a conclusion that Estonia lacks a complex entrepreneurial policy which is thoroughly thought over and the achievement of targeted aims should be managed in an integral way which should boost the impact of the state`s different activities in improving the competitiveness of enterprises. According to the plans, it is hoped to achieve the aims of the entrepreneurial policy with the help of the European Union supports but it has not happened. The state`s other possible measures to influence the process (for example, taxes, legal acts, standards and the adoption of the European Union requirements and negotiation, the use of the state`s assistance possibilities, etc.) in a joint manner have not been used in a considerate way and properly analysed.

The study of the National Audit Office of Estonia showed that not all the enterprises or fields of activity need money for raising competitiveness, for example, the information and communication technology has continuing problems with the availability of the qualified labour force. Obstacles in the development are also connected with the adoption of the rules and standards of the European Union, the administrative burden, etc. Moreover, the Estonian state has too little support money which would help achieve the aims of competitiveness and introduce changes in the behaviour of the enterprise solely with the assistance of supports at the time when the scores of times of more money pours out and in the country than the distributed support. The system of supports must be a part of the entrepreneurial policy which is targeted to achieving the aims and the fields of activity with a higher added value where it is possible to achieve the biggest impact with other measures assisted by concentrated supports.

The recommendations of the National Audit Office of Estonia for correcting enterprise supports and in general the entrepreneurial policy are primarily directed to be used as inputs into the planning process for the next period of the European Union supports. With this purpose it is necessary to improve significantly the capacity of policy shaping of the Ministry for Economic Affairs and Communications to understand what is happening in the fields of activity necessary for the competitiveness of Estonian economy, to find the obstacles in the development of the fields of activity and offer complex solutions for overcoming them, to measure the influence of the Ministry`s activities and on this basis to correct the system for allocating supports.

In our recommendations, based on the audit results, we proceed from the better use of the potentials by the Ministry for Economic Affairs and Communications, the Enterprise Estonia (EAS) and KredEx. The National Audit Office of Estonia finds that the key words of the renewed model for distributing supports should be: knowledge and an efficient system of obtaining knowledge, flexibility of measures proceeding from the needs of the enterprise, clear selection of the preferred fields of activity, topical and extensive involvement, taking moderate risks to achieve a bigger impact and the agreed and accepted rate of failure of supports.

The answer of the Minister of Finance: The Minister thanks the National Audit Office of Estonia for the work done in auditing an important sphere. The Minister of Finance agrees with the recommendations and finds that a precondition for supporting functioning enterprises is the existence of the planning and assessment system. The support of other countries to their enterprises cannot be the only reason for providing support. If according to the recommendations of the National Audit Office of Estonia, an integral entrepreneurial policy, which takes into consideration all the state`s measures for exercising influences, has been worked out. It must be weighed whether to provide more money from the state budget to the branch.

The answer of the Minister of Economic Affairs and Communications: The Minister recognizes the extensive analytical work of the National Audit Office of Estonia, but however, has doubts about the audit`s main conclusions and in the fact whether the impacts of enterprise supports can be quantified and which aspects must be born in mind in interpreting them.

The Minister of Economic Affairs and Communications underlines in his answer that between the strategy periods 2004-2006 and 2007-2013 important changes have taken place in the system of support (support measures have been perfected, they are better directed for achieving a bigger added value and export and the support policy, based on different types on enterprises, has been established). It should also be considered that in the case of the projects with the longer payback time not sufficient time has passed to reveal the impact. Also, the National Audit Office of Estonia questioned the enterprises in the conditions of the economic crisis when the enterprises` assessment of the impact of supports could be more negative. In addition, the presentation of the data on the basis of the branches of activity of enterprises refers to the fact that in the system of supports there are the aims of branches of activity which have not been provided in any strategic basic documents of the entrepreneurial policy. Consequently, the Minister finds that the National Audit Office of Estonia in interpreting the results of the research had had a negative attitude.

At the same time the Minister of Economic Affairs and Communications takes into consideration most of the recommendations of the National Audit Office of Estonia finding that they to a great extent coincide with the Ministry`s present plans for strengthening and further developing of entrepreneurial policy. With this purpose, among other things, working out of the monitoring system and the principles of assessing the impact of the support measures in 2011 has been started. On the other hand, the Minister does not consider it necessary to change essentially the existing planning system and doubts whether the working group system based on the fields of activities of enterprises can be implemented in all the fields of activities audited by the National Audit Office of Estonia.

The comment of the National Audit Office of Estonia: Although, the Minister of Economic Affairs and Communications weighs the recommendations of the National Audit Office of Estonia in the further development of entrepreneurial policy, the National Audit Office of Estonia is not sure whether the implementable activities are successful if important development does not take place in the planning system of enterprise supports and other measures for exercising influence.

The National Audit Office of Estonia has coordinated the methodology of auditing with the audited enterprises and taken into consideration all the recommendations of the Ministry of Economic Affairs and

Communications. As proposed by the Ministry, the common aim of the planning periods 2004-2006 and 2007-2013 was to improve productivity and increase export. In cooperation with the Ministry the list of the fields of activities which in Estonia have a bigger added value and export potential was confirmed for assessing the results of supports. As a result, the economic indices of the enterprises analyzed are better than of the enterprises having received average support. The National Audit Office of Estonia recommends to collect knowledge according to the fields of activities on the basis of the questionnaire and the interviews of the enterprises which clearly show that the problems and the need for supports of enterprises are different in different branches of activities.

The National Audit Office of Estonia finds that the period of one economic cycle – the economic boom and decline – is the best for assessing the economic indices of enterprises because the assessment of only the period of rise or fall would make the results one-sided and the assessment of the period of several economic cycles would make the evaluation of the impact of supports different. According to the agreed methodology, during the audit the assessment of the impact of supports made by the enterprises themselves was of prime importance because it allowed the enterprises to assess the expected impact of the support in the future and its importance among other influencing factors.

The National Audit Office of Estonia has answered all the questions of audited enterprises about the aims, methodology and data and it is ready for further discussion. This is why it is regrettable that the Ministry has doubts concerning the conclusions of the audit which constitute the results of the most extensive empirical research made until now confirming the Estonian economic experts` findings that the enterprise supports have not made the Estonian economy more competitive. The real situation does not allow the National Audit Office of Estonia to assess the Ministry`s activities as resultative. Namely, there is a possibility to change the whole system of supports at present when preparations are made for the new budgetary period of the European Union – on the basis of the audit the need for changes is evident and ignoring this fact is harmful to all the population of Estonia.

The answer of the Chairman of the Board of the Enterprise Estonia. The Chairman of the Board of the foundation confirms that the aims to increase the international competitiveness of Estonian enterprises have been made measurable including both bigger investments into enterprises and smaller supports to enterprises. As such a system has been used since 2008, the impact on most of the financed projects was not expressed by the time of the audit. Also, the impact of the enterprise supports on enterprises may be more extensive than dealt with in the audit.

The Chairman of the Board of the Enterprise Estonia takes the recommendations of the National Audit Office of Estonia into consideration and finds that the observations and recommendations confirm that the foundation has chosen the right direction in building up the system for supporting enterprises. For achieving the aims the foundation does not consider important only the implementation of the support schemes but the best sets of support schemes and the Enterprise Estonia`s own activities together with the use of diagnostic instruments. In the field of involving foreign investments and export the Enterprise

Estonia has started determining priority sectors and subsectors using for this purpose programme coordinators or client administrators. Further on, when the scope of support schemes decreases, it is planned to make a bigger contribution into similar activities. As an important deadline, given by the Chairman of the Board of the Enterprise Estonia, is the year 2010 during which they will work out a new client administration process which should help better find influencial projects and create synergy between the activities of different foundations. Also, the foundation in its product development projects is ready to bear essentially bigger technological risks.

The answer of the CEO of the Foundation for Credit and Export Guarantees (KredEx). The Head of the Foundation in his answer calls the attention to the fact that the foundation significantly strengthens the state money provided for promoting entrepreneurship with its loan sureties. As the capital of the foundation presumably remains the same, it can be repeatedly used and in a longer perspective the strengthening of enterprises will be several times bigger.

The Head of KredEx has an opinion that in interpreting the results of the audit several circumstances connected with the basic tasks of the foundation and the legal acts regulating its work should be considered. As the foundation manages the risks connected with the project and must administer the foundation itself, the main criteria for giving the loan or the loan surety are the project`s profitability and the related risks. The wider aims – the number of the jobs to be created and the growth of productivity – are rather the arguments supporting taking a particular risk. As in the case of the services of the foundation we do not have non-repayable monetary support, they cannot constitute a big part of the enterprise`s turnover. This is why it is hard to expect that they would cause significant changes in the supported enterprises.

The Head of KredEx does not agree with the conclusion of the audit that the services of KredEx will give mostly benefits to the successful enterprises which would have fulfilled their plans without the foundation`s help. As the offered services have to be paid for, they are necessary for the enterprises having applied for them. As the access to financial resources is among the first three factors limiting the enterprise`s development, the head of KredEx concludes that the foundation still deals with the improvement of competitiveness of enterprises and creates different opportunities to both exporting enterprises and the enterprises producing for the domestic market. In the recent years, as a result of the economic crisis, the provision of financing the current funds and bank guarantees has become especially significant.

Under present circumstances the foundation does not consider additional limitations to its portfolio reasonable because proceeding from the requirement of the economic self-management it is important to diversify risks sufficiently for covering the losses, connected with unsuccessful projects, with the revenues earned by successful projects. When establishing additional limitations, the surety will become more expensive for the enterprises and the state should start currently covering the losses.

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The enterprise supports have not been able to improve the competitiveness of economy

Productivity or labour productivity is the amount of work (the value of a product or services) which the employees are able to do during a certain temporal unit. Total productivity is also calculated on the basis of the costs made or it is the value which can be created per each spent crown (see: the formulae of economic indices in Appendix C).

1. According to the state development plans the aim of Estonian economic policy is to improve the welfare of Estonian people. With this purpose enterprises should be made more productive and their export capacity should be raised, both being the major yardsticks of the competitiveness of economy. With the economic crises also the preservation of employment has become the centre of attention with establishing the aim and its achievement with the use of the taxpayer`s money the policy shapers have taken themselves a task of becoming convinced in the impact of their activities.

Did you know that the branches of economy have different potentials for creating the added value?

It means that in branches of economy certain fields of activity (for example, information and communication technology or metal industry) can quicker, and with the development of technology raise productivity almost without limitations. Certainly, it depends on the phase of technology and which technology is used in the state in comparison with the rest of the world. For example, in agriculture it not possible to raise the land`s fertility endlessly and at present the productivity of this field is raised on the basis of other branches of economy (engineering, chemical industry and even biotechnology) and this is where also profits accumulate.

2. According to the internationally recognized research of economy and statistics, the potential capacity of branches of economy, independently from the state, is different to create the added value. On the other hand, the branches of economy are on a different level of development and preconditions and it is the state which decides whether, how and which branches of economy it supports. This is why the National Audit Office of Estonia (NAOE from hereinafter) harmonized the list of Estonian branches of economy, producing the biggest added value and having the highest potentials, with the Ministry of Economic Affairs and Communications (hereinafter: the audited branches of economy) to see in which branches this impact of the enterprise supports could function best of all and more usefully (see: more exactly Appendix A). These fields of activity are the following: information and communication technology (ICT) and electronics, bio- and material technology, mechanical engineering and metal industry, timber and timber industry, transport and logistics, medical and care services (*wellness industry)*, business and financial services and other types of production.

3. The higher potential of the selected branches of economy was also confirmed by the comparative analyses made by the National Audit Office of Estonia which revealed that the indicators of competitiveness and the dynamics of the enterprises in the audited branches of economy, which had received supports, were better than the results of the support-receivers in other branches of economy. At the same time, the audited branches of economy constitute about 30% of the whole economic activity (according to the share of the revenues from sales in 2008) of all the Estonian enterprises (this fact also describes the so-called problem of the structure of Estonian economy) which at present employ about 190,000 people.

4. As the branches of economy have a different potential to create wealth, the enterprise supports have also a different aim and a task in developing entrepreneurship. Although the main aim of Estonian entrepreneurial policy is the growth of competitiveness, which should be expressed primarily in the growth of the export capacity and productivity, beside that there are also several other sub-aims and indicators (for example, the entrepreneurial activity) which cannot be forgotten in shaping entrepreneurial policy. To check the appearance of namely this impact, which the Ministry of Economic Affairs and Communications itself expects for a particular support, the NAOE divided support (see: Appendix B) on the basis of aims, as proposed by the Enterprise Estonia

(EAS) and the Foundation of Guaranteeing Credit and Support (KredEx), into seven groups (see: Table 1).

Table 1. The groups of supports from the Enterprise Estonia (EAS) and KredEx and the economic indicators*

Groups of supports	Expected impact primarily on these indicators	Total**	In the NAOE sample
Supports to start-ups More sustainable and fastly growing entrepreneurs (EAS 1)	▪ Rate of survival ▪ No of employees	▪ Sum total of supports: 123, 997, 237 EEK ▪ No supports: 1,098	▪ Sum total of supports: 48, 660, 194 EEK ▪ No supports: 396
Export supports Higher export capacity and internationalisation (EAS 2)	▪ Export turnover ▪ Added value ▪ Growth of added value per employee	▪ Sum total of supports:: 356, 138, 115 EEK ▪ No of supports: 541	▪ Sum total of supports: 260, 305, 008 EEK ▪ No of supports: 380
Development supports Bigger developmental activity of enterprises (EAS 3a)	▪ Growth of R&D and innovation investments ▪ D and R costs ▪ growth of revenue (R&D agencies)	▪ Sum total of supports: 1, 603, 688, 544 EEK ▪ No of supports: 473	▪ Sum total of supports: 1, 507, 041, 081 EEK ▪ While 77% of the total support is given to 111 supported bio- and material technology enterprises ▪ No of supports: 348
Supports for increasing productivity Bigger productivity and added value (EAS 3b)	▪ Export turnover ▪ Added value/growth of added value per employee ▪ Growth of investments into fixed assets	▪ Sum total of supports: 950, 388, 710 EEK ▪ No of supports: 4,795	▪ Sum total of supports: 645, 521, 628 EEK ▪ No of supports: 2,470
Loan surety (KredEx 1)	▪ Added value per employee ▪ Growth of turnover ▪ Involved private sector ▪ Investments into new ▪ Machinery and installation	▪ Sum total of supports: 2, 494, 930, 616 EEK ▪ No of supports: 1,779	▪ Sum total of supports: 1, 297, 808, 771 EEK ▪ No of supports: 752
Loans (KredEx 2)	▪ Added value per employee ▪ Growth of turnover ▪ Involved private sector investments into new machinery and installation ▪ Growth of export turnover	▪ Sum total of supports: 258 848 237 EEK ▪ No of supports: 100***	▪ Sum total of supports: 206 055 108 EEK ▪ No of supports: 56
Exportguarantees (KredEx 3)	▪ Added value per employee ▪ Growth of turnover ▪ Growth of export turnover	▪ Sum total of supports: 1 387 735 659 EEK ▪ No of supports: 1,240	▪ Sum total of supports: 617, 658, 000 EEK ▪ No of supports: 643

* As of 23 December 2009.

** All these supports for the recipient of which it is possible to find a code in the Business Register and which was given to enterprises. The supports given to the self-employed persons are not included. All the recipients of supports are included, not only the respondents to the questionnaire. The division into the fields of activity has been made according to the basic activity in the year of receiving the support. When the enterprise had not yet started its activity, then the field of activity in the first year of functioning has been taken into consideration.

*** 53 out of 100 are the so-called start-up loans or the surety as a part of the starting and microloan surety programme, i.e. from the group KredEx 1. In dividing the supports into groups, a smaller start-up loan was added to group 2 of KredEx as the aims are the same. As the whole group of the recipients of support KredEx 2 was very small, and also the proportion of respondents in this group, excluding the start-up loans from sureties did not influence the assessment of loan sureties. Statistically significant results concerning the KredEx loans cannot be given. In the further assessment of the KredEx loans the National Audit Office of Estonia recommends to use the qualitative assessment method and the project-based case analysis.

The source: The National Audit Office of Estonia, on the basis of data of the Enterprise Estonia (EAS) and KredEx

5. During the time of the beginning of the audit, on the basis of the data of the Statistics Board there were 25,937 enterprises functioning in the audited fields of activity[1]. To receive the assessment of the impact of the supports, the NAOE asked for the opinion of 4,262 enterprises among which there were all the recipients of supports in the audited fields of activity (2,062 enterprises) or the applying enterprises (483 enterprises). A proportional control group, consisting of the enterprises, which did not apply for the supports in the years 2004-2009 (totally 1,716) was formed together with the experts of the Statistics Board and added to the audit. The responses, on the basis of which the conclusions of the audit have been made, came from 1,881 enterprises (954 support recipient enterprises, 747 control group enterprises and the number of the enterprises which had applied for the support but did not get it was 180 among the respondents.

6. In its assessments the NAOE observed whether the economic indicators, characterizing the competitiveness of enterprises, had improved under the influence of the supports given in Table 1. For the analysis of the degree of influence, the Statistics Board united the responses, received from the enterprises with the questionnaire, with the economic indices of the same enterprises collected by the Statistics Board and the data of taxation from the Tax and Customs Board. This way a possibility was created to check the subjective assessments of the degree of influence given by the enterprises - on the background of objective economic indices. The assessments of the audit are in the majority based on the combined analysis of the opinions of enterprises and economic indices made by the NAOE. The cases, where the basis for the assessment is only either the enterprise`s assessment or the economic indices, have been especially stressed.

7. As the economic data, collected by the Statistics Board, do not exactly coincide with the indicators of the impact, expected by the Ministry of Economic Affairs and Communications, the NAOE tried to form from the existing data very similar indicators for the characterization of the impacts[2] (see: the full list of indicators in Appendix C).

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[1] Here and hereinafter the notion "field of activity" is used by the National Audit Office of Estonia in the groups of enterprises formed on the basis of the Classification of the fields of activity in Estonian economy (EMTAK 2008). The groups of enterprises describe the economic content of their activities (electronics and ICT, mechanical engineering and metal industry, etc.) (see: more in Appendix A). The branch of economy is a general notion in the audit report denoting the fields of economic activity described on the basis of EMTAK 2008 (in EMTAK parts A,B, etc.) and used in the state`s statistics by the Statistics Board.

[2] The National Audit Office of Estonia, when viewing the growth of R&D activities and innovation investments, also observed the growth of R&D costs, the export revenue instead of the export turnover and inside the turnover the development of sales revenue was viewed. It was not possible to observe the growth of revenue in the R&D agencies proceeding directly from the project. Also, in the case of the KredEx loans and loan sureties, the involved private sector investments into machinery and installation were not separately measured, it would have meant an extra burden to the enterprise in presenting information. The National Audit Office of Estonia coordinated the observed economic indices with the audited enterprise.

8. The NAOE requested the enterprises to assess how the support had influenced 14 aspects significant from the point of view of competitiveness, (see: for example, Figure 4). Assessments in the report have been presented in the form of radar-drawings. Especially significant aspects of the impact have been separately outlined in the drawings. In addition, the NAOE requested the enterprises to assess on a scale the present problems of enterprises and the support measures which would be necessary, as thought by the entrepreneur, for the improvement of competitiveness. With the help of this information, the obstacles in the development of enterprises, their needs and also the fact, whether the impact of supports is complex, become evident.

9. In the methodology of the NAOE in making the assessment, the opinion of the enterprises is most important because otherwise the changes in the economic indices of the enterprise can be mistakenly connected with the outside influence, the enterprise`s efficiency, the general growth during the boom time, etc. With the purpose of getting an assessment to the indirect impact, so important in the present economic situation, the enterprise had a possibility to assess the impact as positive even then when the enterprise had been able, thanks to the support, to preserve its export, the number of the posts of employees or saw the growth in the future.

10. As the economic political aims of the impact are diverse in their essence, the NAOE assessed the impact of the support and the problems of enterprises according to the audited fields of activity to understand whether the provider of support solves real problems of the enterprise and the obstacles of development bearing in mind the aims of the impact.

The change in the strategic behaviour of the enterprise in this reports means the situation where the support causes the change in the enterprise`s plans wished by the state, for example, cooperation, research activities and export are started.

11. For giving a general assessment by the audit, the NAOE viewed the enterprise support and more broadly the entrepreneurial policy, assessing the impact on the level of economy, the field of activity and the strategic changes in the behaviour of enterprises (so to say, the audit`s macroview). The same logic is followed in the structure of the present audit report. The first chapter of the audit pays attention to the main yardsticks of the competitiveness of economy: whether the supports have promoted productivity, the export capacity and the developmental activity. The second chapter of the audit is focused on the organisation and content of shaping the Estonian entrepreneurial policy.

Supports have not resulted in the developmental leap in the structure of Estonian economy

12. Caused by the decrease of the domestic market, at least in words in the Estonian entrepreneurial policy it has become the priority to support the export of enterprises. Temporarily, in the crisis situation competitiveness may mean selling whatever products, but in the longer perspective the precondition for the growth of competitiveness and the people`s welfare is a bigger productivity and the export of goods with a higher added value, which can appear only in the branches of economy where it is possible to raise productivity significantly, where technology is the output which can be sold and not only the input to be bought. A bigger added value means that per one employee it is possible to produce and create more value. For example, for growing a couple of hundred tonnes of potatoes, the same number of working hours of people may be needed as for creating one software program. The sacks of potatoes will be sold in autumn at a market price but a good program can be sold when the better solution reaches the market and at a considerably higher price.

The branches of economy, producing goods with a high added value for export, would also allow our hairdressers and taxi-drivers to ask for higher wages for their work.

13. The analysis of the second important component of competitiveness of economy – productivity – is important namely because of the fact that it is necessary to understand which value of products and services the labour force in the country creates during working hours in comparison with other countries. High productivity is a precondition to get the highest added value from economic activities. To guarantee that the whole population of Estonia could economically cope well, we need the branches of economy with the possibly highest added value and in which employment is significant, being able to bring in money from outside the country and with the help of the solvent consumers at the domestic market, for example, raise the price of potatoes and hairdressing services. Consequently, it is especially important for small countries to have well functioning exporting branches of economy with a high added value, being able to compete at the foreign markets with their productivity and the value of products in comparison with the branches of economy of other countries. The fields of activity[3] of the audited enterprises, described above, have namely such qualities.

14. The NAOE, when carrying out the audit, presumed that the system of supports helps in the audited fields of activity raise the growth of productivity, labour force, the export capacity and technology input, and cause the promotion of the changes in the strategic behaviour of enterprises (especially in looking for export markets).

The productivity of economy grew because of the boom, not the state`s support. During the crisis time we have lost in the degree of productivity in comparison with the average productivity of the EU.

15. Observing the development of productivity, we see that until the year 2007 Estonia was coming closer to the EU – 27 average but then the indicator began to drop again (see: Figure 1). Although being at its highest level, the productivity of Estonian labour force constituted only 65.1% of the EU – 27 labour force productivity, the achievement of also this relationship was caused more by the economic boom than the Estonian enterprise supports and policy because in comparison with the growth of productivity in economy the labour costs were growing several times.

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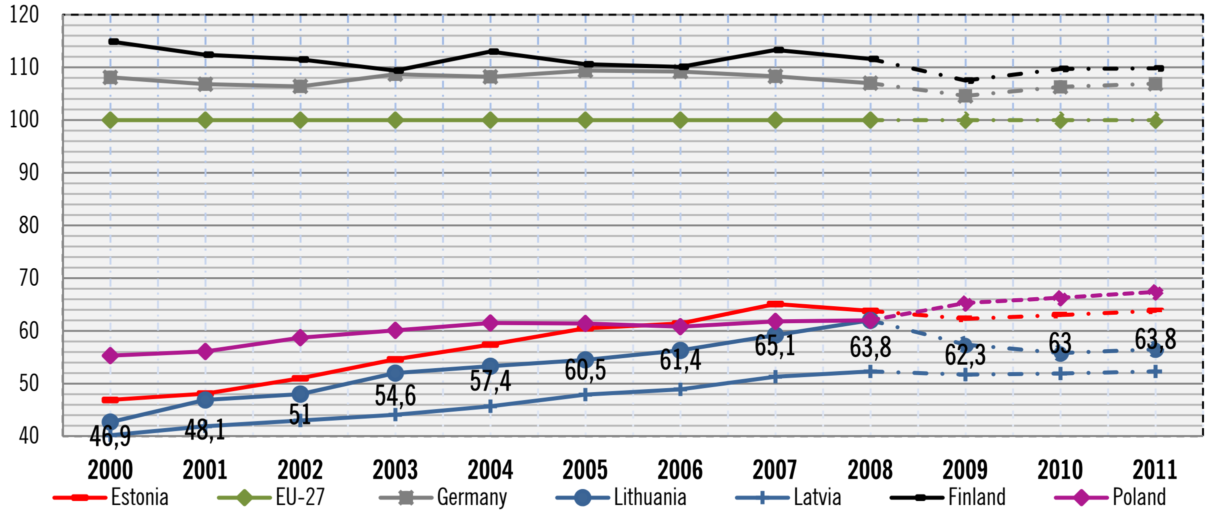
[3] Information and communication technology (ICT) and electronics, bio- and material technology, mechanical engineering and metal industry, timber and timber industry, transport and logistics, medical and care services (*wellness industry)*, business and financial services and other types of production.

Figure 1. Labour force productivity in the comparison of the average of states and the EU* (% of the EU-27 average)



* GDP (PPS) per capita in comparison with the EU-27 (EU-27-100)

The source: the National Audit Office of Estonia on the basis of the Eurostat data.

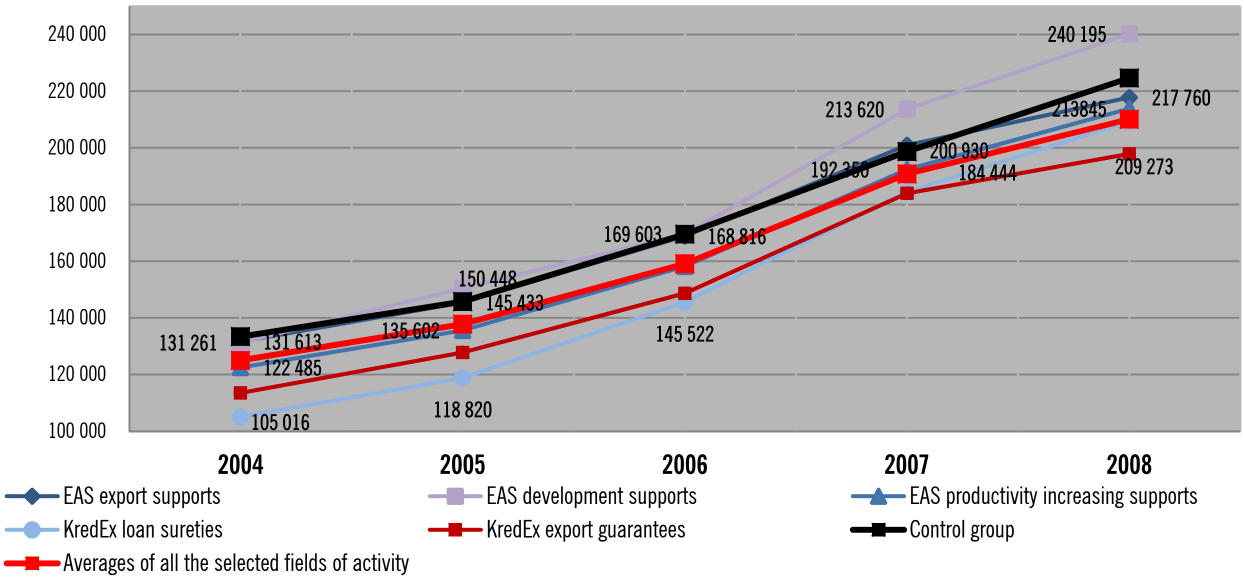
The residual revenue is the added value which remains if to subtract labour costs and depreciation from the sales revenue. Consequently, the residual revenue shows the money which remains for the entrepreneur and gives the opportunity to invest. The National Audit Office of Estonia, when calculating the residual revenue, used the following formula: Residual revenue = added value – (depreciation + labour costs).

16. To establish how the economic boom has influenced productivity at the enterprise level, the NAOE compared the development of economic indices during the boom period in the enterprises which were supported and in the enterprises which did not apply for support. It was revealed that in the period of 2004 – 2007 only in one year and only in one supported group the indices of added value and sales revenue grew quicker than in the control group while also in the current year the indicator characterizing the vitality of enterprises – the residual revenue – was lower than in the control groups. Interpreting the results of the analysis, it can be concluded that the economic boom influenced the studied enterprises equally. The almost equal economic results of the two groups show that the supports had not had a macroeconomic impact.

The labour cost increase even outpaced the unsustainable productivity growth during the boom time.

17. The fact that the boom period productivity growth was not sustainable is even more worrying because at the same time the labour force costs had grown in a significantly quicker speed. Although it is not possible to regulate these processes directly with enterprise supports, it illustrates the situation that in assessing the impact of supports it is necessary to observe the development of economic indices in a complex manner. In the construction sector and the real estate the radically happened growth (including also employment) brought along the quicker growth of labour force costs than the growth of productivity also in the audited fields of activity (see: Figure 2). In its turn, it decreased the added value or wealth, created in the enterprises, which the enterprise will have for financing its future developmental activities and growth, thus also for increasing competitiveness.

Figure 2. Average labour force cost per employee in the audited fields of activity (thousand crowns)



* Shows the development of average economic indicators in the enterprises of the observed fields of activity (ICT and electronics; bio- and material technology; mechanical engineering and metal industry; timber and timber industry; transport and logistics; medical and care services (wellness industry), business and financial services, other production).

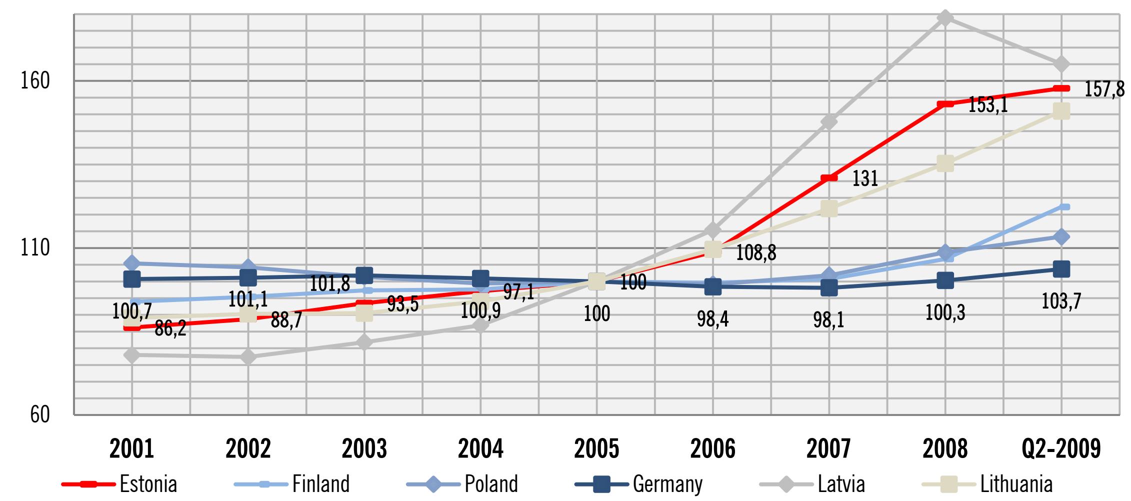
The source: the National Audit Office of Estonia on the basis of the data of EKOMAR

Quick salary growth during the boom time impedes even at present the competitiveness of Estonian economy

Unit Labour Costs show in a general manner the costs per employee in comparison with his or her productivity of labour. The unit labour costs are received dividing the employee`s labour force cost by his or her productivity. Simply saying, the bigger the specific expenditure of the labour force, the smaller is competitiveness.

18. Noticeable growth of the price for labour force has made the competitiveness of Estonian economy in foreign markets very low. When in Germany labour force costs have developed in the same speed with productivity, then in Estonia at the level of low productivity labour force costs have grown so high that creating one unit of the product in the international context is relatively more expensive in Estonia (this is described by the unit labour costs, see: Figure 3). For Estonian exporters it makes the situation very complicated at the international market.

Figure 3. The scissors of productivity – the unit labour costs in the comparison of states* (%)



* The indicator of the specific expenditure for the labour force is found dividing the employee`s labour force cost by his or her productivity. According to the basic year of the OECD (2005-2010).

The source: the National Audit Office of Estonia on the basis of the OECD data.

Neither enterprise supports nor other measures have been able to improve employment in the branches of economy creating high added value.

19. It is important for the competitiveness of economy that the employment in the branches of economy producing more added value and exporting their products should be higher so that through their employees` ability to consume, the prices of products and services might sustainably grow at the domestic market. Beside the problems of productivity, the low competitiveness of Estonian economy is characterized by the fact that employment in the audited or higher potential branches of economy has practically remained on the same level in the period of 2004-2009. In the economic growth of the boom time the number of jobs and their location as an aim of economic policy lost its importance, although it is clear that in the service sector with a smaller potential of added value a bigger part of the working population of Estonia was employed as also at present – and also earlier and in the exporting branches of industry there were problems of finding skilled labour. This is why it is short-sighted to consider the aims of employment of second importance.

20. Creating jobs has again come to the centre of attention only with the economic crisis. Creating jobs is definitely the aim of the supports for the start-up enterprises given by the Enterprise Estonia and the aim of support measures, provided according to the strategy of KredEx, but in reality, for example, KredEx does not consider creating jobs important when assessing the support applications of enterprises. In the applications of enterprises the total number of new jobs is viewed as created jobs even without checking whether the jobs were really created. Making this information available for the general public is misleading because such an impact of the supports is generally of random character and not the result of targeted activity.

Enterprise supports have not been able to call enterprises up for cooperation. Cooperation is an important engine of competitiveness.

21. The cooperation between enterprises themselves and with research institutes is one of the most significant growth engines of competitiveness. The development of products and processes, entering foreign markets and winning the market share can more easily be achieved together, so to say, back to back. The research of the NAOE established that Estonian enterprises cooperate very little and very few of them plan to start it in the future. In the period of 2004-2009 out of the enterprises in the sample 38.8% have cooperated with other enterprises and only 6.3% of all the respondents plan to start cooperation. Little cooperation characterizes, in addition to the audited fields of activity, the Estonian entrepreneurial environment more widely. Also, the supported enterprises are not different from the control group enterprises. The problems of little cooperation were also admitted by several interviewed employees of the Enterprise Estonia. The Estonian enterprises do not consider cooperation as a resource for development and the enterprise supports have not changed this opinion.

The supported enterprises do not bring more tax revenue to the state treasury and have the same amount of loans as the enterprises which did not get any support.

22. One of the outputs of competitive economy is a big tax revenue treasury accrued into the state. On the basis of the tax data analysed by the NAOE, it cannot be said that the supported enterprises bring in more tax revenue or have smaller loans. Generally speaking, in the period of 2004-2009 the state received on average 4.25 million crowns of tax revenue from the supported enterprises – in the control group the respective sum was 4.98 million crowns. Again, it should be said that there are equally successful enterprises and the supports do not have a general impact.

The competitiveness of audited fields of activities has not grown in the period of 2004-2009 and when the state continues to pursue the same entrepreneurial policy, it will not grow.

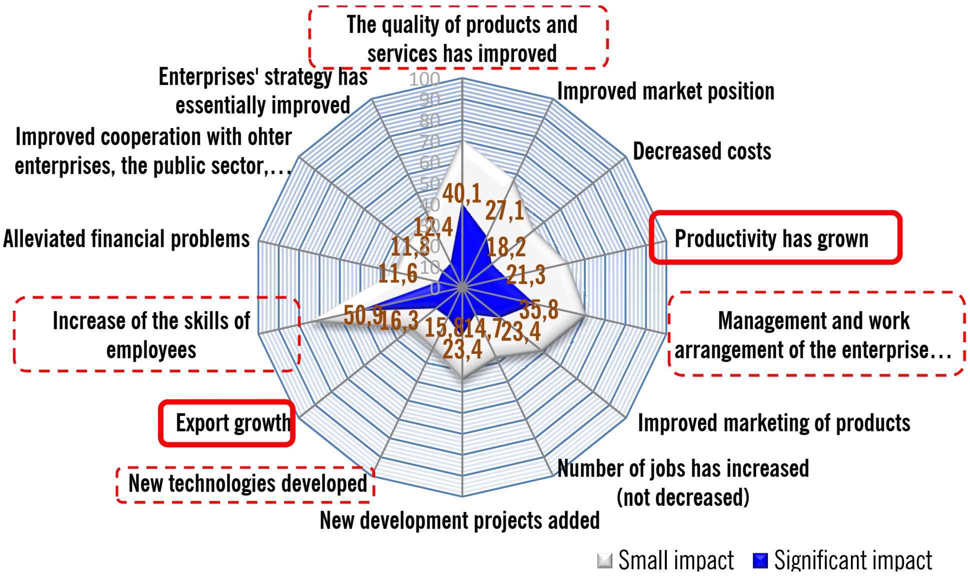
23. To sum up, it can be said that as assessed by the NAOE, the competitiveness of the audited fields of activity has not grown in the period of 2004-2009. The growth of competitiveness, employment and export turnover was caused by the economic boom and it has not been sustainable. The restructuring of economy has not taken place, a big part of people work at low-salary posts and create products or services of small value. As assessed by the NAOE, with the continuation of using the same model of distributing supports there are very few opportunities to help enterprises grow their competitiveness. The long term problems of enterprises – small added value, export, developmental activities, cooperation between enterprises – have remained the same. The system of supports does not deal with these problems as a whole. In the following sub-chapters of the audit the problems of the competitiveness of economy will be described and the reasons will be analysed on the enterprise level.

Supports to promote productivity growth have not fulfilled their task

Only one fifth of the recipients of the support for the productivity growth saw a significant impact on productivity.

24. Productivity is one of the main yardsticks of competitiveness but out of the economic indicators studied by the NAOE namely the supports aimed at the growth of productivity (group EAS 3 b) have had the smallest impact. Only one fifth of the enterprises, which had received the support directly aimed at the growth of productivity, admitted a significant impact of the support (see: Figure 4). On the basis of economic indices the assessment of enterprises was adequate or even a little optimistic – the indices of productivity of the enterprises which admitted the impact were on the same level in the period of 2004-2008 or fell a little. The productivity of the enterprises, not admitting the impact, was decreasing more quickly (in 2008 the fall of 14% in comparison with the previous year).

Figure 4. The assessment by enterprises of the impact of the productivity growth supports given by the Enterprise Estonia (EAS) (% of respondents)*



* The figure illustrates the multidirectional assessment by enterprises of the impact of supports. The red box shows the indicator which the state considers important, in this group of supports, in the case of which the National Audit Office of Estonia presumed that all the enterprises, having received the support, consider the support influencial because it was given for achieving a particular result. To make the qualitative processes and impacts more vivid, the National Audit Office of Estonia has added the aspects of the impact and marked them with a red line.

The source: the National Audit Office of Estonia, on the basis of the data of the questionnaire

The impact on the growth of productivity was seen by the enterprises which had received the support being two times bigger than the average.

25. The assessment of enterprises whether the support had helped the growth of productivity depends significantly on the sum of the received support. The enterprises, which thought that the support had a significant impact, had received on average a support being two times more than in the case of the enterprises which did not detect the impact. Also, the support constituted about 13.8% of their turnover (in the enterprises not detecting the impact the ratio was near 2% (see: Appendix G). In the case of also other assessed aspects of the impact in this support group (i.e. EAS 3b) essential impact was seen by the enterprises having received more money. For example, significant impact on the development of technologies was seen by the enterprises which had received the support being three times more than the averages; in the case of the accessibility to capital and the improvement of the market position by the enterprises which had received the money being two times bigger than the average.

The enterprises did not see notable impact on the growth of productivity in any support group aimed at the growth of productivity.

26. The growth of productivity was also the aim of all the KredEx measures and the Enterprise Estonia (EAS) export supports (group EAS 2) but not a single measure of support has had a notable impact on the growth of productivity. From the enterprises, having received the EAS export support, 21.2% of the enterprises assessed the impact on productivity significant (see also Figure 7), in the case of KredEx loan sureties the respective percentage was 25.2, in the case of loans 32 and in the case of export guarantees 24 (see Appendix 1). Concerning KredEx, the reason is that the expected growth of productivity was not important in reality when analysing the support applications and the provision of support.

27. KredEx functions following the principle of self-profitability as a result of which the risks of the enterprise`s capacity to pay back the loan (in the case of the export guarantee – the foreign buyer`s solvency) is mainly considered. On the basis of other criteria (the size, productivity, etc.) the enterprises are not assessed. It means that KredEx practically does not deal with the improvement of the competitiveness of enterprises.

28. In the case of the KredEx measures and the EAS supports there is no reason for doubting that the enterprises underestimate the impact of the support because the indicators of productivity of the enterprises, having positively assessed the impact, were a little better than in the enterprises not admitting the impact. At the same time, the indicators of productivity of the enterprises, having admitted the impact, had rather fallen and in the period of 2004-2008 the indicators of productivity of the control group enterprises[4] were higher than in any group of supported enterprises (see: Figure 5).

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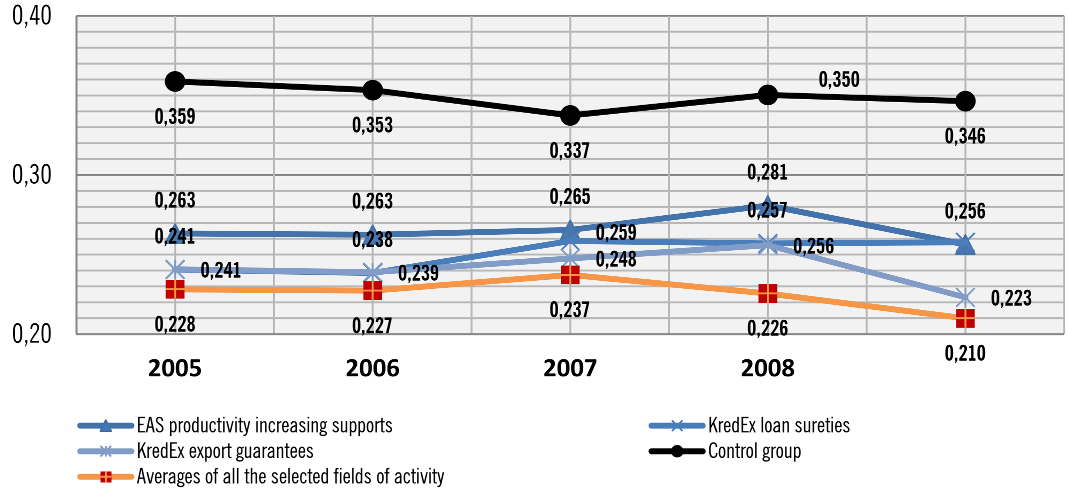
[4] The amount of export revenue among the control group of NAOE analyses was in 2004 (the starting year of analyses period) similar to all the enterprises belonging to analyses set. This is showing that control group was in this respect also homogeneous to the group of supported enterprises and not oriented more to producing for internal market. This is important since the economic growth period had somewhat different impact on exporters and producers for internal market.

Figure 5. Total productivity on the basis of added value* (thousand crowns) – fields of activity summed up**

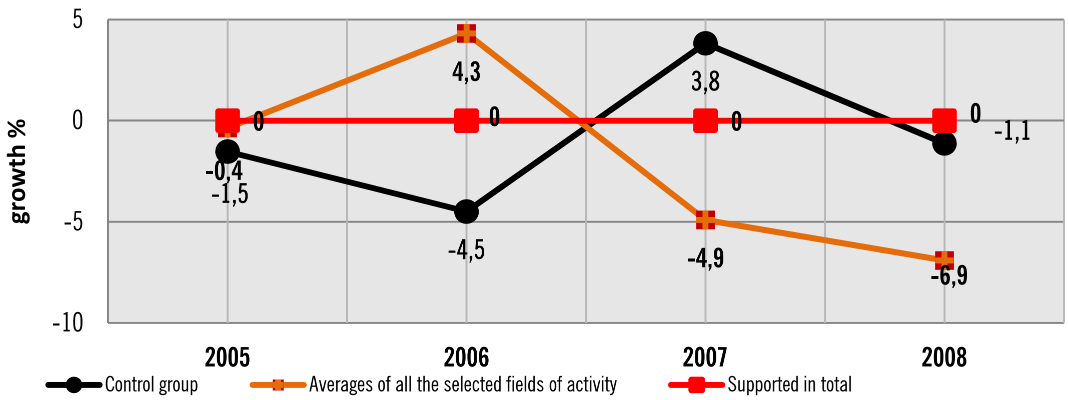


* Value-added productivity is calculated as the ratio of value added of the total costs of an enterprise (value-added productivity = total value added as output/ total costs).
** Here and hereinafter the National Audit Office of Estonia has compared the indicators of total productivity of supported groups. In addition, the audited fields of activity were compared separately with the average economic indices of the supported enterprises (by the groups of support) and the control group was compared with the proportional group "Supported in total" in the so-called macroanalysis. Under developments the development of average of the fields of activity in the sample of the National Audit Office of Estonia were observed (in the figure "Averages of all the selected fields of activity").

The source: the National Audit Office of Estonia on the basis of the EKOMAR data.

29. As the analysis of the NAOE showed that the best enterprises receive support or these enterprises which already before getting support had a higher added value, sales revenue and had made bigger investments (see: Appendix 1), it is necessary to assess the growth of productivity in comparison with the previous year and the link with the received support (see: Figure 6).

Figure 6. The growth of total productivity on the basis of added value in comparison with the previous year (%) – fields of activity summed up.



The source: the National Audit Office of Estonia on the basis of the EKOMAR data

30. Although it may be thought that the bigger enterprises, having received relatively big supports, cannot demonstrate such a percentage of the growth of added value as the small enterprises, then leaving aside the enterprises assessments of the importance of the impact, the analysis of the NAOE did not reveal the significant link between the size of the sum of the support and the later growth of the economic indices in the case of all the enterprises, having received the support. Rather, the size of the support was to a small degree dependent on the best economic indices in the year previous to the support (see: examples also in Appendix N).

The start-up and young enterprises see the impact of the support on the growth of productivity.

31. The correlation analysis, carried out with the help of the Statistics Board (see: Appendix F), shows that the significant impact on the growth of productivity was seen in the case of the EAS support for the start-up enterprises (group EAS 1) which was not aimed at the growth of productivity (see: Appendix B). The supports for the start-up enterprises should primarily help create new jobs, entrepreneurial activity and the survival of enterprises, 60.3% of the support recipients in this group (see: Appendix 1) admitted significant impact on the growth of productivity. It was also confirmed by the economic indices of enterprises. The enterprises which thought that the support had significantly improved the enterprise`s productivity, had also a bigger total added value than the enterprises which did not consider support efficient.

32. At the same time we deal with the enterprises which were established in the fields of activity with a bigger received support, added value and productivity potential (audited fields of activity). In comparing the average economic indices of the audit fields and of the start-up enterprises, having received support, it became evident that the enterprises, established in the audited fields of activity, were able in the first turning point of the economic boom (the comparison of the year 2007 with the data of 2008), differently from others, to preserve or even increase their average added value, productivity, the sales revenue and the residual revenue. These were in majority new and small enterprises, the influence of which on the productivity of economy as a whole and on particular fields of activity is still small at the beginning.

33. To sum up, not a single support, aimed at the growth of productivity, can be considered sufficient. The presence of the impact on the level of single enterprises does not result in the growth of productivity in the field of activity or economy as a whole.

Certain impact of the supports aimed at the growth of export is admitted but not all the measures function as expected

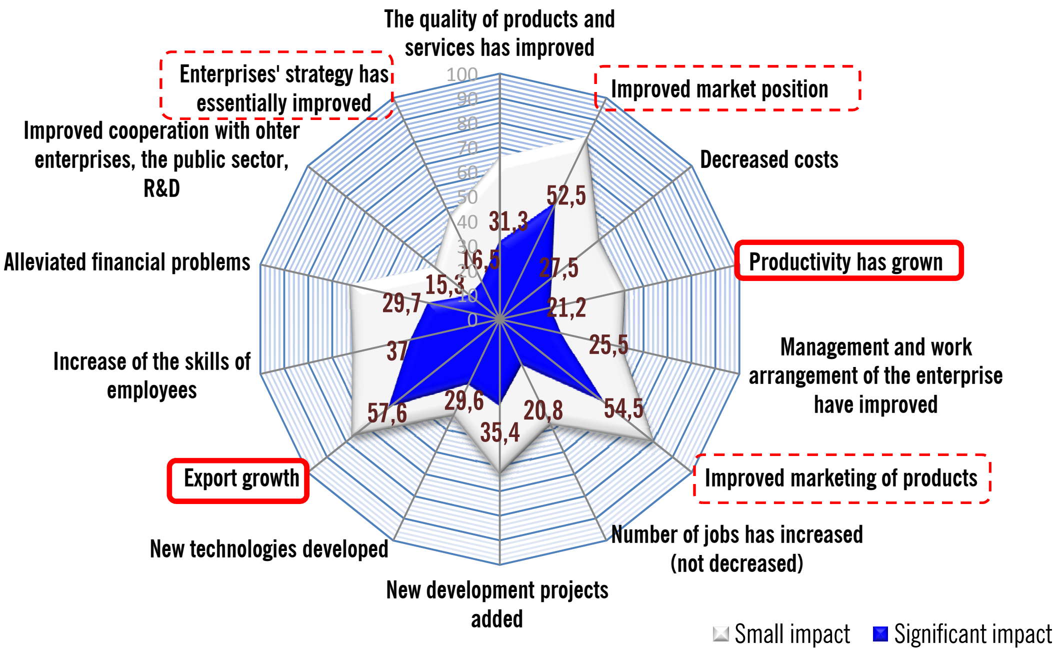
34. The growth of the export capacity of enterprises and internationalisation as the second important indicator of competiveness should be supported according to the expectations of the Ministry of Economic Affairs and Communications by the five support groups out of seven: the activities of the whole KredEx (or loan sureties, loans and export guarantees), the export supports and the supports aimed at improving productivity from the Enterprise Estonia (EAS).

The EAS export supports achieve their aim.

35. The assessment of enterprises to two EAS support groups is very different. The aim of the support group (EAS 3 b), dealt with in the previous sub-chapter, is, in addition to the impact on productivity, to influence the growth of export but, as assessed by enterprises, it was not successful – only 16.3% of the enterprises, having received support, have the opinion that the export capacity has significantly increased or survived. The assessment of enterprises is adequate because the export revenue of the enterprises, admitting the impact of supports, is in comparison with the enterprises, having received average support, much bigger and it also grew in 2008. At the same time the assessment depends to an essential degree on the size of the support – the enterprises, admitting significant impact, had received 3.5 times more support than on average.

36. The second support group, aimed only at the growth of export (export supports (EAS2)) has been considered influencial by more enterprises – 57.6% of the support recipients admitted that the support had had a significant impact on the export capacity of the enterprise (see: Figure 7). At the same time when the support`s direct aim is to help enterprises reach the foreign markets and the assessment of the recipients of money from the state are presumably positive, then according to the NAOE, practically all the enterprises, having received support, should see the positive impact. Otherwise it could be possible that the competition inside the country is distorted, although Estonian enterprises, because of their smallness, cannot win big market shares and consequently do not compete with each other outside the home country but at the domestic market we have competitors.

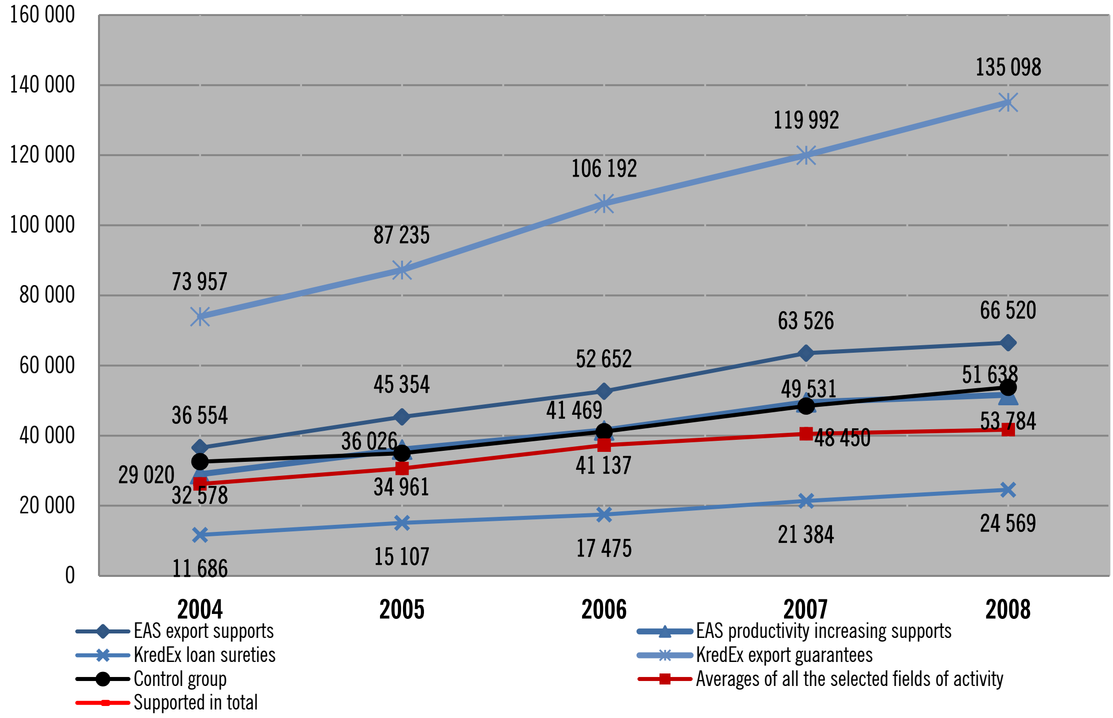
Figure 7. The assessment by enterprises of the impact of the EAS export supports (% of respondents)



The source: the National Audit Office of Estonia on the basis of the data of the questionnaire

37. The assessments of enterprises are also supported by their economic indices. The enterprises, which admitted that the support had significantly helped in their export activity, had in the years 2007 and 2008 bigger than average export revenues. At the same time, in the period of 2004-2008 the growth of average export revenues had slowed down according to the sample of the research (see: Figure 8).

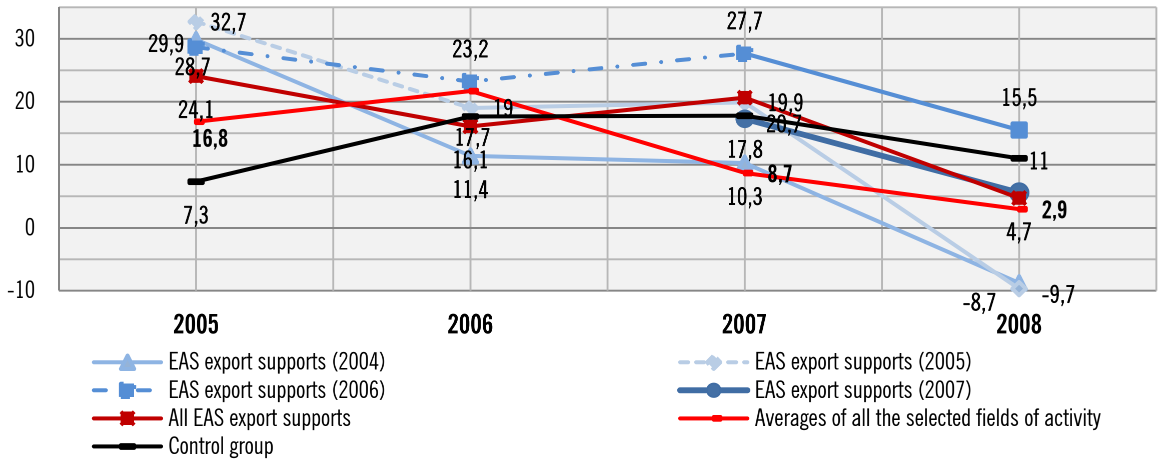
Figure 8. Average export revenues (thousand crowns, fields of activity in total)*



The source: the National Audit Office of Estonia on the basis of EKOMAR data

38. Logically the enterprises from the export support groups saw a bigger impact also on the improvement of the market position (52.5% of the recipients of the support) and on marketing the products (54.5% of the recipients of the support) (see: Figure 7). Although among the recipients of the support there could be the enterprises which reached the export thanks to the support, the economic indices rather confirm that the enterprises, having received the export support, had before getting the support significantly increased their export revenues using their own potentials (see: Figure 9).

Figure 9. The growth of export revenues (%) in comparison with the previous year (all the fields of activity is total)*



* In the figure of growth of export revenues of the enterprises having received the EAS export support, the growth is shown according to the year when the support was received.

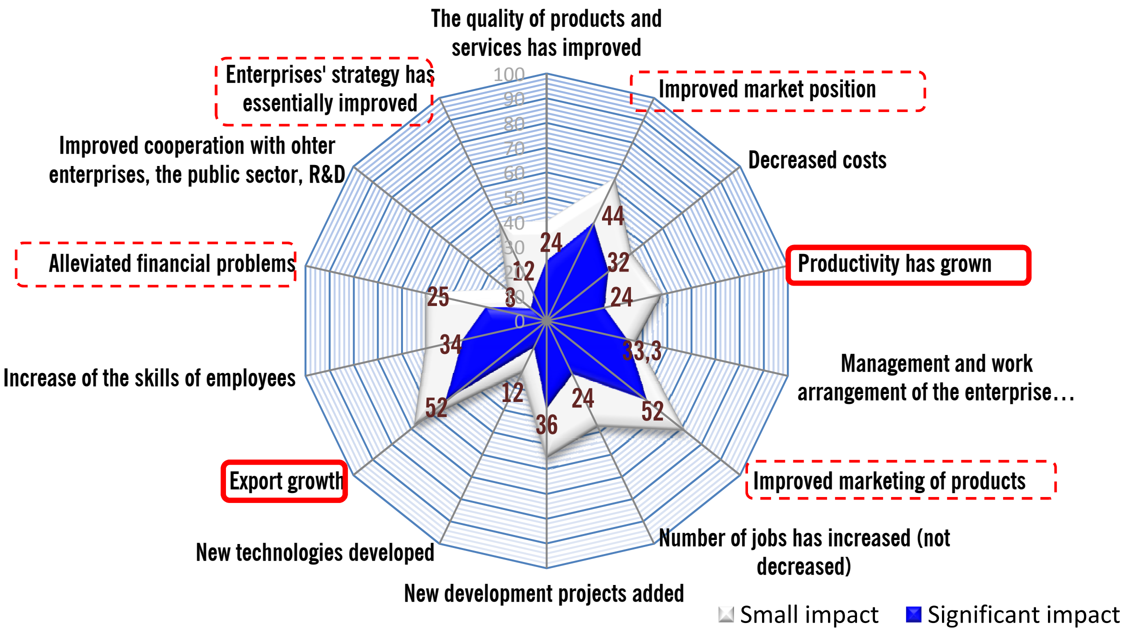
The source: the National Audit Office of Estonia on the basis of EKOMAR data

39. If to look at the supports, the aim of which is not directly the growth of export, then the enterprises see a certain effect on the export thanks to development supports – 28.2% of the recipients of support had an opinion that the support had had a significant impact on the growth of export (see: also Figure 13). The mentioned enterprises have almost by one third higher than average export revenue indices, or enterprises dealing with developmental activities and having already export results consider support results influential. But the enterprises, which get proportionally bigger supports in comparison with their turnover, do not see any impact on the growth of export. Consequently, with bigger supports and the enterprises dealing with development there is a danger that the developed products will never be produced in Estonia and exported (more detailed information in the following chapters). The supports for start-up enterprises (EAS 1) will not understandably bring along the growth of export and here the enterprises do not see any impact.

The KredEx supports active and successful exporters.

40. The activities of KredEx on the whole are aimed at supporting export but because of the differences between the offered measures the NAOE has distinguished, as wished by KredEx, loan sureties, loans and export guarantees. The enterprises attest export guarantees (see: Figure 10) as having the biggest impact on the growth of export.

Figure 10. The assessment by the enterprises of the impact of the KredEx export guarantees (% of respondents)

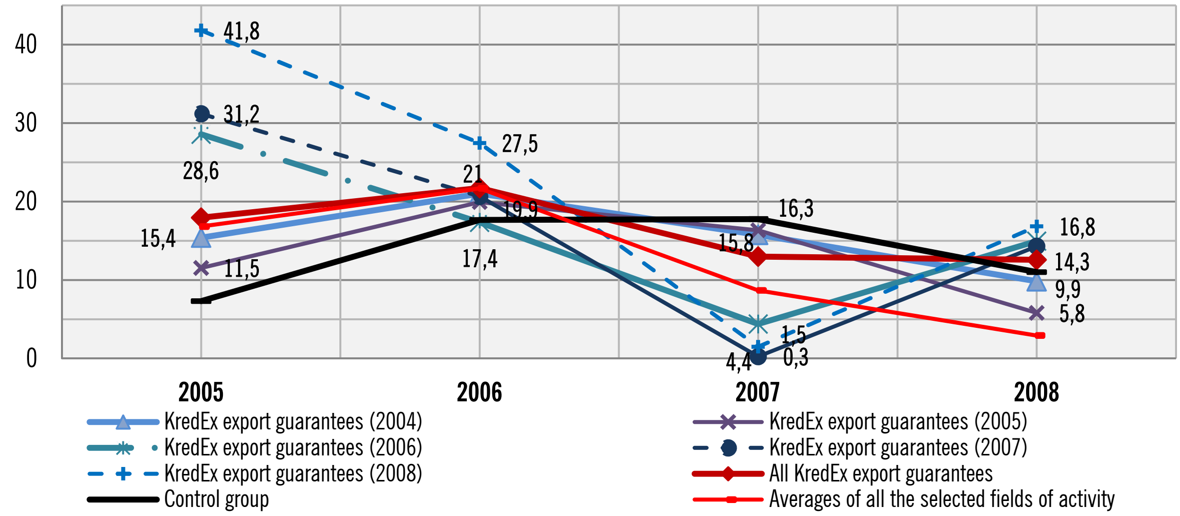


The source:: the National Audit Office of Estonia on the basis of the data of the questionnaire

The impact on the growth of export is seen in the case of export guarantees which are given only to exporting enterprises.

41. Almost half of the enterprises (52%), which had used the KredEx export guarantees, found that the support helps significantly increase export. They also feel the impact of guarantees on the marketing of products (52%) and the improvement of the market position (44%) (see: Figure 10). Conciderinq the positive attitude of the recipients of the guarantees, the NAOE expected a bigger number of positive respondents. In addition, the analysis of economic indices of the recipients of guarantees shows that export guarantees had "happened" to be given only to the exporting enterprises with the projects of a small risk. Also, the economic indices confirm that the enterprise was an exporter before getting support and had increased its export already before the beginning of the economic boom (see: Figure 11), i.e. the existing measures have not created significantly more exporters.

Figure 11. The growth of export revenues (%) in comparison with the previous year – the KredEx export guarantees (all the fields of activity in total)*

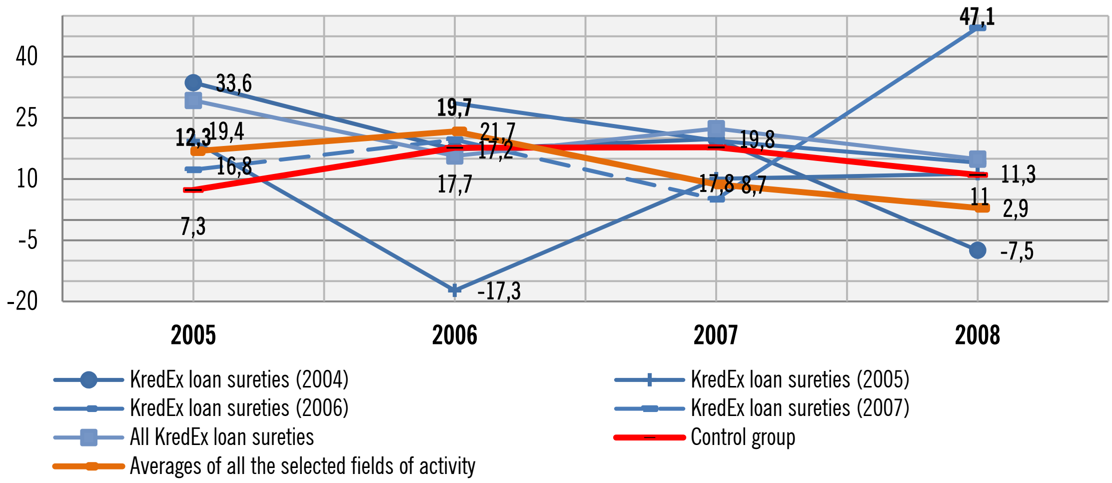


* In the figure the growth of export revenues of the recipients of export guarantees from KredEx is shown according to the year of the received support.

The source: the National Audit Office of Estonia on the basis of EKOMAR data

42. The KredEx loans and loan sureties have a smaller impact on the growth of export – 23.9% of the enterprises, having used loan sureties, and 41,7 % of the enterprises, having received loans, saw a significant impact on the growth of export (see: Appendix 1). The economic indices of enterprises confirmed the assessment (see: also Figure 12), the enterprises, admitting the impact, have bigger export revenues and the growth continued also in 2008. At the same time the assessments of enterprises depend on the amount of the surety. The enterprises, having admitted a significant impact, had received 41% bigger than average sureties from KredEx.

Figure 12. The growth of export revenues (%) in comparison with the previous year – the KredEx loan sureties (fields of activities in total)*



* In the figure the growth of export revenues of the recipients of loan sureties from KredEx is shown according to the year of the received support

The source: the National Audit Office of Estonia on the basis of EKOMAR data

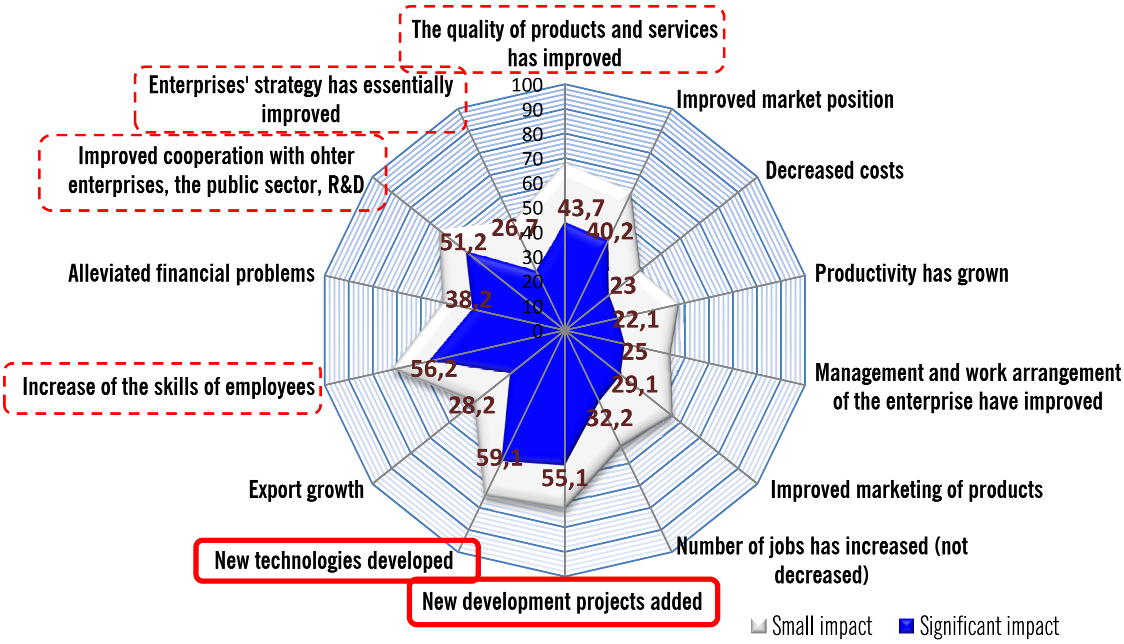
43. To sum up, it can be said that the measures aimed at the growth of export do not function as expected. In the case of the group of enterprises, having received the KredEx export guarantees, and one group of the EAS support recipients, a little more than a half of the enterprises, having received the support have admitted a significant impact but this estimating indicator should be bigger because here we have the measures namely established for growing the export (in the case of KredEx it is meant for strong active supporters). Also, the economic indices confirm that the supports have not had the expected impact.

The few high-tech enterprises, receiving developmental supports, do not influence the competitiveness of the whole economy

The developmental supports promote new development projects but it is not sure whether the received revenue reaches the population as a whole.

44. Creating new products and services, the perfection of old products, including cooperation with research institutes or other enterprises, is a precondition for constant improving and preserving the competitiveness of the enterprise. The aim of any type of innovation and also the development of the production processes and support activities is to receive a competitive advantage needing very often new or perfected technology. About a half of the enterprises, having received the EAS developmental support, find that the support has helped develop new technologies (59.1%) and implement development projects (55.1%). Consequently, the enterprises assess developmental supports as more influencial than the measures aimed at increasing productivity or export.

Figure 13. The assessment by enterprises of the impact of EAS developmental supports (% of respondents)



The source: The National Audit Office of Estonia on the basis of the data of the questionnaire

45. From the point of view of the welfare of the state and its population, it is important (considering especially the present structure of Estonian economy) that the new development projects should reach production. Thanks to the success of the project through jobs (or the redivision of the taxes in the state budget) the wider population of the state should also gain a benefit.

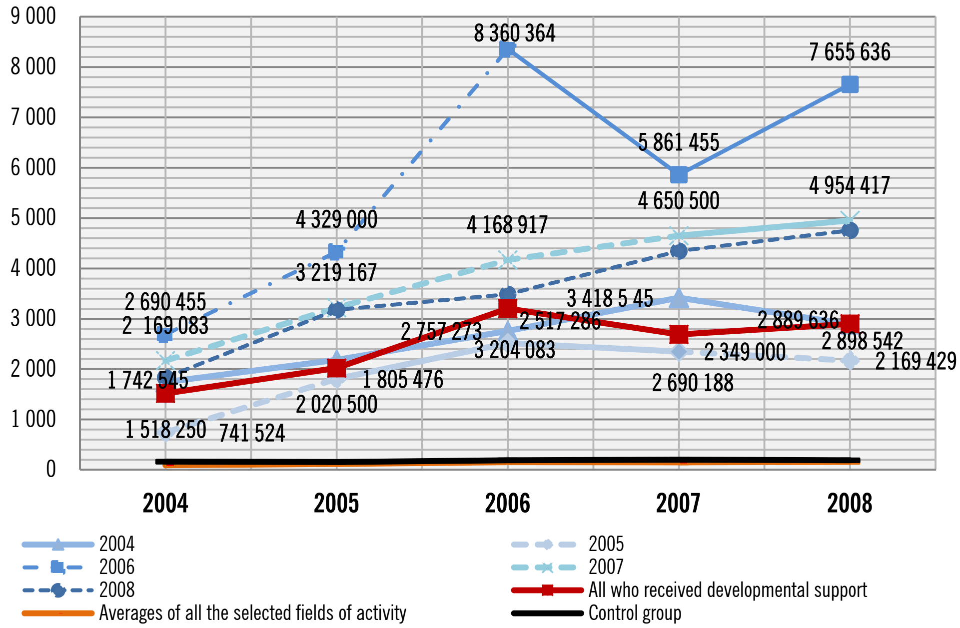
Selling the successful development will bring benefit to single people, not the population of the state as a whole.

46. The analysis of the NAOE and the assessment of enterprises showed that the support could not influence which development project and with which aim they were implemented. The bigger in size, the longer in duration the projects, the smaller number of enterprises think of marketing their product one day. The enterprises, involved in developmental activities, having a turnover ten times smaller than the received support, do not export and it is not sure whether they start doing it one day. The fact that developing enterprises themselves do not plan to market or export their products but to sell the result of the developmental activity, is the issue of the selected business model and it is not only bad. At the same time, it is the so-called blind and unweighed risk because the wider impact of the supported project is not systematically analyzed and the expected impact is not described. Also, there is no overview of the activities how it is planned to direct the development of the whole field of activities with the help of developmental supports.

47. The enterprises, having received developmental support, have also, to an essential extent, been dealing with developmental activities and have established their directions of activities (see: Figure 14). The assessments of enterprises show that the support does not influence the enterprises` strategic behaviour, the projects, far from the aim of marketing, are financed (in the present case through the Enterprise Estonia as an organisation for financing enterprises). The danger, revealed in the course of the earlier research, exists that the development companies sell the results of their work to companies outside Estonia and the state`s population as a whole does not gain anything from the project. Both the leadership of the Enterpise Estonia and entrepreneurial advisers stressed this risk during the interviews carried out by the NAOE.

48. The risk is considerable because the few enterprises, dealing with developmental activities, have been supported with the biggest sums – the average developmental support (EAS 3a) is over 10 million crowns. For example, 77% (1.24 billion crowns) of the developmental supports during the last six years were given to the enterprises of bio- and material technology while export supports given to this field of activity were only in the sum of 3.5 million crowns. Although the development results could be implemented in other Estonian enterprises, it is not a real precondition to involve local partners for getting the support. Also, the Enterprise Estonia does not carry out respective formal monitoring and the presence of information about the future activities of the recipients of the support depends on the interest of the entrepreneurial adviser. The enterprise, to which the development result is sold, is not obligated to report to the Enterprise Estonia.

Figure 14. Average costs of development and research (thousand crowns) according to the year of receiving the developmental support*



* The years in the figure denote the year of giving the developmental support.

The source: The State Audit Control according to the EKOMAR data

Did you know that

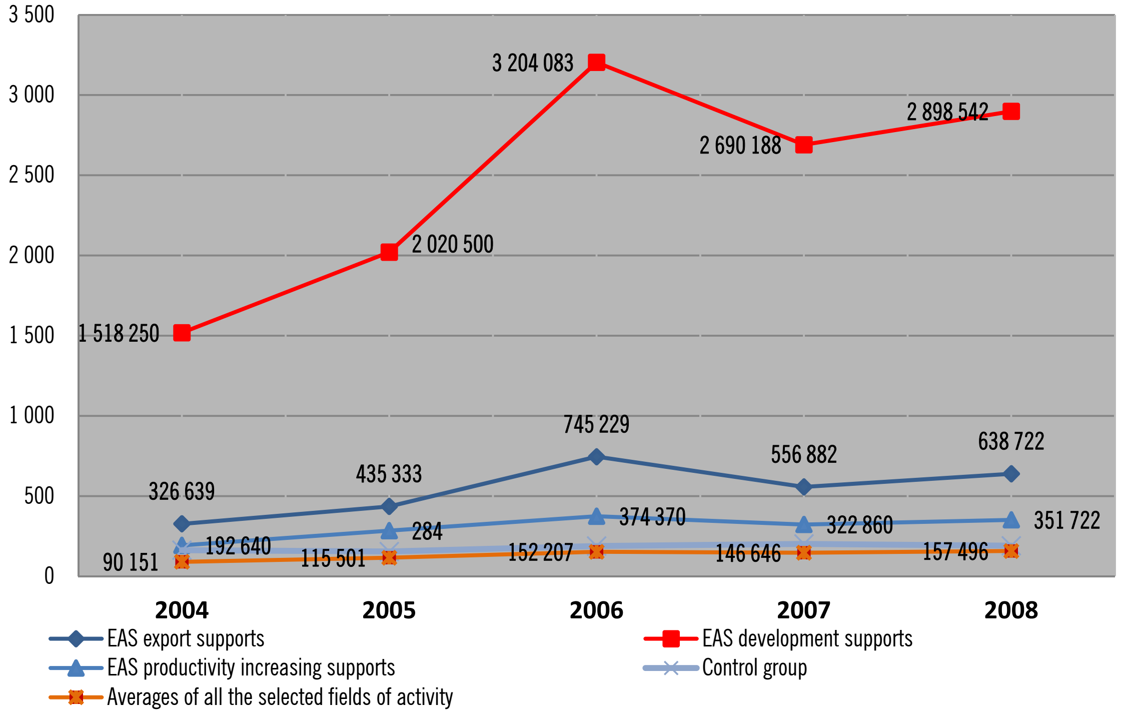
in the fields of activities audited by the National Audit Office of Estonia, more than a half of the 348 developmental supports have been given to 111 biology and material technology and 87 ICT and electronics enterprises. In the years 2004-2009 these two fields of activity taken together constitute about 86% or 1.37 billion crowns, The total number of enterprises in biology and material technology is 137 according to the Statistics Board, out of them 42 enterprises have received support (half of them have the annual turnover lower than 100,000 crowns and in the enterprises of the field all in all about 650 people are employed). At the same time, for example, during six years in mechanical engineering and metal industry 21 developmental supports in the sum of 15.5 million crowns, in timber industry 10 supports in the sum of 2.7 million crowns were allocated, other production received 48 supports in the sum of 50 million crowns, transport and logistics field – 2 supports with 200,000 crowns. Both in mechanical engineering and metal industry and timber industry about 10,000 people are employed, in other types of production about 29,000 people, in the field of transport and logistics about 40,000 people.

49. In the high-tech fields development activity is definitely several times more expensive than in other fields. Consequently, the NAOE does not say that the development of bio-and material technology would be bad and in the international comparison 1.2 billion crowns could be a rather small sum for developing biotechnology. At the same time such financing proportions and the numbers of supports show clearly that in traditional and close-to-market fields of activity (including audited fields of activity) innovation and developmental activity have not been financed to a significant degree.

50. The NAOE presumed that the enterprises making development and research expenditures have significantly bigger labour force costs because it is said that in Estonia it is expensive to employ R&D specialists and it is an obstacle to development. During the audit the labour force costs of the enterprises, belonging to the sample, which made development and research costs, were compared with the costs of the enterprises which did not deal with developmental activities (relying on the enterprise`s taxation data).

51. It was revealed that the labour force costs were somewhat bigger in the enterprises having developmental costs and significantly bigger in the high-tech fields like ICT and bio-and material technology. As these enterprises, having received support, were mainly those which were established at the university in the framework of a certain project, they see the significant impact of the support on the growth of the skills of employees and the improvement of cooperation with other enterprises, research institutes and universities (see: Figure 13). Consequently, also here the supports do not cause changes in the principles of the behaviour of enterprises because the enterprises, in one way or other, make bigger expenditures for the development and these fields of activity depend mainly on the development of employees. This is why the average development and research costs are higher in the enterprises having received developmental supports (see: Figure 15).

Figure 15. The average development and research costs (thousand crowns) – all the fields of activity in total



The source: the National Audit Office of Estonia on the basis of the EKOMAR data

52. In other observed fields of activity such a difference cannot be revealed , or it is possible to presume that namely the general growth of labour force costs in the boom years, not the bigger employment of development employees made the labour force expensive in all the enterprises (not depending on their activities). The secondary character of the importance of the developmental activities in other fields of activities also shows the fact that at present development and research costs in them are very small (being different among the recipients of developmental supports even up to seven times). Proceeding from the present competitive advantages of the enterprises, it is not seen as an important problem while the main reasons why the reneval of products and services stopped are the unstable demand for goods and services, too big domestic competition and costly developmental activity (see: Appendix M). These problems have not been solved by the system of supports targeted to a small number and mainly high-tech R&D enterprises.

The impact of KredEx on the investment into new technologies and development projects is small.

53. In addition to EAS developmental supports the aim of the KredEx loans and loan sureties is to promote investments (including the use of new technology). The assessment of the impact in this case is modest – only less than 30% of the enterprises, having received financing from these measures, have the opinion that the support significantly influences the use of new technologies. The KredEx many-time clients do not find that the state`s assistance plays an important role in developing new technologies and promoting developmental activities (see: Appendix F).

54. To sum up, the enterprises have the opinion that developmental supports have a bigger targeted impact than the supports for the growth of productivity or export but according to the NAOE research it is not sure whether a considerable part of the development projects, having received the most extensive support, ever reaches the product stage, to bring benefits to the Estonian enterprises and the population and to cause structural changes in economy.

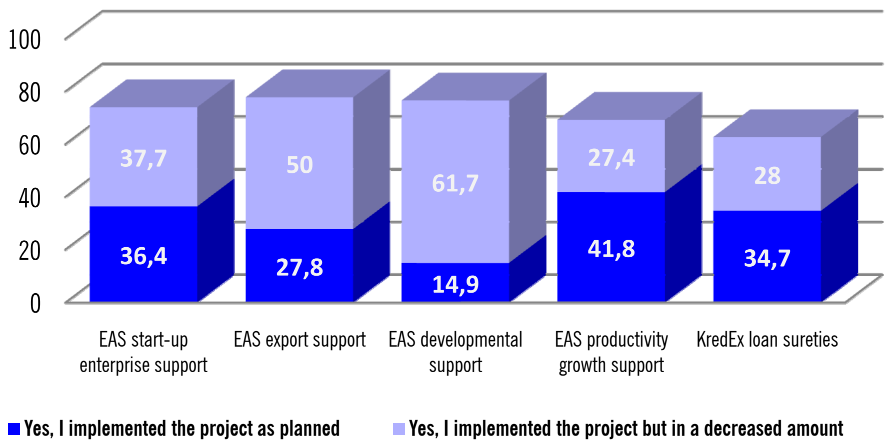
A big part of the support recipient enterprises would implement the project even without the help of the support

The accrual depends on giving the support, and with giving it the costs and activities of the enterprise are accompanying.

55. The idea of enterprise support is to promote the activities which should give benefits to the economy as a whole which the entrepreneur is not able to implement without a support. The provider of the support, making an investment using the taxpayer`s money, must not distribute money to the evidently unsustainable enterprises but must, however, be able to take a moderate risk if in the case of success the benefit for society can be big. This is how the maximal accrual to the supports is guaranteed.

56. The NAOE asked from all the support recipient enterprises[5] in the sample whether they had implemented the project when they had not received any support or had received less than they applied for. It became evident that in spite of the decreased supports one third of the enterprises had implemented the project in the planned amount and one third in the decreased amount (see: Figure 16). In the case of the supports, aimed at the growth of productivity, the project was implemented in the full amount, not depending on the size of the support, even in 41.8% of the case.

Figure 16. The enterprise implemented the project although it was not given the support in the applied amount (%)



The source: the National Audit Office of Estonia, on the basis of the data of the questionnaire

[5] Both from those who had received the support either in the full or partial amount and also from those whose support application was not satisfied

The supports have a big "deadweight" and a small added effect.

The "deadweight" of supports – the given support or a part of the support which would not have influenced the enterprise`s plans or outputs if not received. The empty load of the support shows the part of the state support which was targeted in the wrong way to the enterprises which did not need support at all.

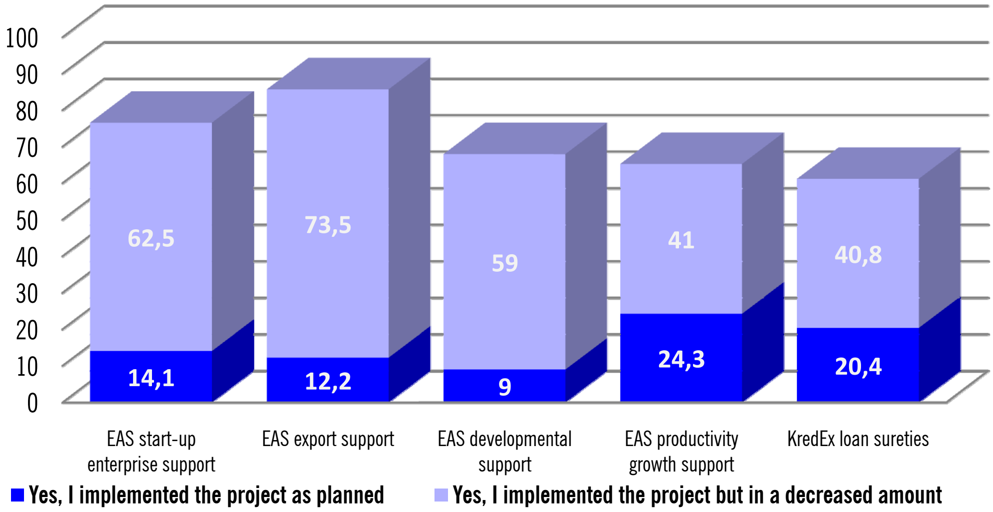
57. The last one can also be treated as avoiding the "deadweight" of support because the provider of support could eliminate giving the support in the full amount to the enterprises which did not need assistance to such a degree. At the same time we are worried by the assessment of the enterprises which had received the support in the full amount and answered the hypothetical question whether they could have implemented the project even then when they had not received the support. According to the assessments of almost one fifth of the respondents, they would have implemented the project in the full amount. Depending on the group of supports only 14-39% of the enterprises would have fully given up their project (see: Figure 17 and 18). These are the enterprises for which the support constituted only five per cent necessary for implementing the project. The assessments of the enterprises were especially considerable in the case of large enterprises. Only 9% of the respondents from the enterprises, where 50 people or more were employed, would have given up the project fully.

58. At the same time, for example, few development enterprises in the field of bio- and material technology practically depend fully on the supports. In the case of these enterprises almost one third would have fully given up the implementation of the project, the rest would have implemented the project in a decreased amount. In the case of the developmental supports, the enterprises, having received the supports bigger than the average (about 16 million crowns), believed that without the support they would not have implemented the project. The enterprises, which would have implemented the project in the planned amount, received the supports, being 50 times smaller. At the same time, in the case of both the Enterprise Estonia export and the productivity growth supports, even the enterprises, which could have implemented their projects fully or in a decreased way, received the supports bigger than the average. It also illustrates the fact that influencing bigger exports or bigger companies in the case of present amounts and proportions of supports may not be targeted in the best manner and consequently do not bring along a significant impact.

59. The enterprise`s strategic choices are also not influenced by bigger KredEx loan sureties – the bigger surety the enterprise had received, the bigger is the probability that the enterprise, according to its assessment, would also have managed without the KredEx surety and found another possibility for implementing its plan of activities.

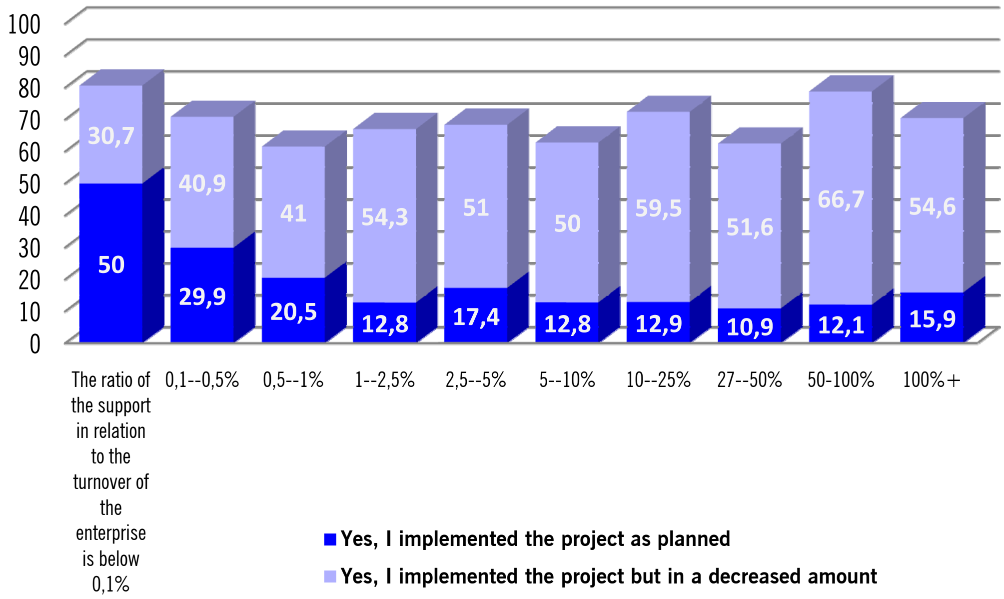
60. The assessments of enterprises also illustrate the fact which the NAOE found in observing the procedural activities of providing supports and questioning the enterprise advisers – when providing supports, no attention is paid to the deadweight of the support and it is not analysed by the enterprise advisers when carrying out the support procedure. At the same time the assessment of the added effect and the deadweight of supports must be an inseparable component in revealing the impact of supports.

Figure 17. The assessments by enterprises of the implementation of projects if the support would not have been provided (%) according to support groups



The source: The National Audit Office of Estonia on the basis of the data of the questionnaire

Figure 18. The assessments by enterprises of the implementation of projects if the support would not have been provided (%) – the ratio of the support in relation to the turnover



The source: the National Audit Office of Estonia on the basis of the data of the questionnaire

61. As assessed by the NAOE, the situation, when a big part of the supported projects would be implemented without a support, is most problematic because the efficiency of the support as an important economic-political activity is very small at present. The profound analysis of the Enterprise Estonia must establish whether the big deadweight of the support is caused by a wrongly arranged process of selection (which practically avoids risk in providing supports) or the wrong targeting of supports (i.e. does not solve the real problems of enterprises or the supports are too small for solving real problems).

62. **The recommendation of the National Audit Office of Estonia to the Minister of Economic Affairs and Communications:** With the purpose of establishing the aim for working out and changing the support measures and assessing the applications, to change the strategic behaviour of the enterprise – looking for cooperation partners, increasing productivity, increasing exports the following should be done.

- To support start-up enterprises and entrepreneurial activeness more in these fields where the added value (for example, the audited fields of activity) is bigger. To consider the increase of maximal start-up and growth supports to the enterprises depending on their export ambitions and opportunities. At least during three years, after having received the support, to keep the contacts with the enterprise to establish what the obstacles for development are and how the state can support the enterprise. To put an end to supporting the fields of activity producing only for the domestic market and creating products and services with a small added value or separate these supports (also for alleviating economic decline) for the entrepreneurial policy measures targeted to the added value and export growth. Dispersed measures do not give an overview of the Ministry`s present activities in increasing the competitiveness of the Estonian economy, the aims and the expected impact.

- To support more the exporters, also the enterprises which at the moment of applying for the support do not export as yet but whose products and services have a potential at foreign markets. To provide the exporter with a high potential, on the basis of the single application, a package of supports during a certain period (for example, starting from in-service training and finishing with the export support). During this period the provider of the support must monitor the development of the enterprise and react to possible obstacles.

- To give developmental supports instead of single high-tech enterprises to the enterprises in the fields of activity with the production closer to the market and knowledge-intensive services which use very little and outdated technology. The support to the present high-tech R&D enterprises (in majority bio- and material technology) must be provided in a complex manner in the framework of the present or future technology programmes.

- With the growing consultation ability of the Enterprise Estonia to consider offering support packages instead of single supports in conformity with the obstacles to the development and monitoring results obtained by the support provide

- To decide in providing the support how big the risk can be that the results of the project will not be achieved (the acceptable risk can be bigger in the fields of activity with a growth potential). If the enterprise can independently implement the project (i.e. it is impossible to avoid the support`s deadweight), it is more efficient to give a loan instead of a support.

The answer of the Minister of Economic Affairs and Communications: When finishing supporting the branches, which work for the domestic market and create little added value and services, it would be helpful if the National Audit Office of Estonia offered a list, possibly as profound as possible, of the sectors which it wishes to eliminate. As the issue is not trivial and at present the preferences, based not so much on sectors but key technologies and further on the economic clusters proving more and more of their hard-working capacity, will be implemented.

We draw the attention to the fact that already today the fields of activity, having the character of intermediating activities at the domestic market, have been eliminated from the recipients of support in the case of the majority of support measures (for example, retail and wholesale trade, real estate development, financial services). We also draw the attention to the fact that the sectors, oriented to the domestic market and with low added value, are not the same – for example, financial intermediation and the real estate sector are of a very high added value level in Estonia being significantly higher than the processing industry.

What concerns the other side of the same recommendation or creating the two-level system of supports – some services to everybody, but a bigger part of the most significant services only to the enterprises with a big added value – then here again we have the analogy with the system of value chains already being launched at the Enterprise Estonia which offers certain simpler and more universal supports (information services, training course) to everybody, including also the bigger financial supports, personal counselling, keeping contacts and servicing the key clients when the needs appear in the further development of their enterprises.

We seriously weigh the possibilities to replace present support measures to a bigger extent with loan measures or perfect them (in the case of the well-capitalized enterprises). We ourselves have found the need for the support to the less ambitious product development (the best level in Estonia, the best level at the whole market not yet practised today).

63. The recommendations of the National Audit Office of Estonia to the Chairman of the Board of the Enterprise Estonia in cooperation with the Minister of Economic Affairs and Communications:

- To pay more attention in processing the more capacious applications to the discovery of the possible deadweight of the support (for example, with the help of the profound interview with the applicant). To order deadweight studies from independent agencies to get objective assessments from the enterprises.

- With the purpose of influencing the strategic choice of enterprises and promoting their cooperation, to give preference to the supports for increasing productivity, export capacity and developmental activities (for example, as additional points in the assessment model) applied for by some enterprises together or the cooperation partners have been involved in the business plan. The entered changes in the assessment criteria should be made known to the wider public.

- In the case of the supports targeted to development and the extensive growth of productivity to demand that in the business plan of the applicant there should be a prognosis when and into which markets the enterprise wishes to enter, how the development project, becoming mature for the market in the distant future, is planned to be implemented.

The answer of the Head of the Enterprise Estonia: The Enterprise Estonia uses in assessing the bigger investments the criteria and principles which are aimed at minimizing the deadweight using for this purpose the experts from Estonia and outside Estonia (for example, in assessing the projects of product development and export marketing). At the same time it is possible and necessary to continue developmental activities in this sphere.

Introducing preferences in the case of the measures stimulating cooperation is appropriate and definitely deserves implementation after analyzing.

The Enterprise Estonia demands and continuously demands from the entrepreneurs the prognoses of the added turnover, export turnover and the growth of productivity in the case of big developmental supports and marketing projects.

The Minister of Economic Affairs and Communications: The prognosing of the expected deadweight in the phase of assessing the application for the support has been repeatedly practised (the assessment of the so-called activizing impact) but a sufficiently good solution has not been found. Certainly we shall pay continuous attention to it. In assessing the joint applications from enterprises and giving bonus points to them or providing a bigger support rate have already been a tried approach. In the support programme of technological investments such a possibility was available but the demand for the use of this possibility remained very low. Also, the joint marketing programme will soon become a part of the export marketing programme or the enterprise can choose whether to apply with an individual project or together with partners. We are ready to weigh the similar practice to be introduced to other measures. What concerns the recommendation "to demand in the case of developmental supports and the supports aimed at increasing productivity the prognosis in the business plan of the applicant when and into which markets the enterprise wants to enter", it is followed today and the respective information is asked from the applicant. It is a problem that there are objective difficulties in assessing the realistic value of the prognoses (in connection with the many undeterminable factors) not the absence of prognoses.

Rigid, horizontal and dispersed entrepreneurial policy does not result in the growth of competitiveness

The problems of competitiveness of Estonian economy have become noticeable a long time ago but entrepreneurial policy began to be shaped only when the money from the European Union arrived

64. During the audit the NAOE analyzed more than 50 strategic documents, connected with the support to enterprises and influencing the activities of enterprises, implementation plans and the accounts of fulfilment of these plans valid for the years 2004-2009. The NAOE presumed that clear and measurable aims to entrepreneurial policy (especially concerning enterprise supports) existed and that on the strategic level the measures of entrepreneurial policy were planned to have an integrated impact.

65. It was revealed that the plans of development, designed in the speedy period of growth, forecast that the economy, based on cheap loans and oriented to the domestic market, in a long term perspective was not competitive. The small amount of added value, low export capacity, innovative attitude and cooperation were the sore points stressed in all the economic-political development plans. This is why in a right way the help to the promotion of the growth of competitiveness of enterprises has been the state`s economic-political aim as long as the aims have been written down[6] but until the opening of the support funds from the European Union there were only very few measures for achieving the aims. The main problems of Estonian economy have not changed in their essence during ten years. Neither enterprise supports nor entrepreneurial policy as a whole have been able to solve these problems.

66. The first plans dealing with the problems of entrepreneurship in a general manner were designed in the middle of the 2000s (plan of activities for the growth of economy and employment for 2005-2007, the Estonian entrepreneurial policy in 2007-2013). Earlier plans dealt with some narrower part of entrepreneurship. (The basic principles of Estonian export policy from 2001, “Enterprising Estonia – the policy for the development of Estonian small and medium size enterprises in 2002-2006”). At the same time, in spite of aims, not a single plan of development deals with the possibilities for the promotion of entrepreneurship.

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[6] Plans for Estonian growth of economy and employment, the Estonian entrepreneurial policy in 2007-2013, the plan for the implementation of the development of economic environment, “Sustainable Estonia 21”, etc.

The growth of competitiveness of enterprises is hoped to be achieved with the help of supports, other measures are single and they were not planned assessing the total impact

The states are competing with each other in promoting entrepreneurship, support is only one measure to be used.

67. There are numerous measures used internationally for influencing the competitiveness of enterprises. Certainly, the state`s supports, taxation policy, domestic legal environment, the way of adopting international requirements, concluding agreements (for example, standards, the rules for state assistance) and the education and research policy can be mentioned. The analysis of the entrepreneurial political plans of development shows that the Estonian state hopes to achieve the established aims with different enterprise supports which are mentioned as the main and very often the only measure. As assessed by the NAOE, the enterprise supports constitute the only measure which at least in some part has been analyzed and an attempt has been made to describe with exact indicators of impact what the influence of the state activities on economy had been like.The development of legal and taxation environment has been dealt with (for example, in the entrepreneurial policy for 2007-2013, the legal sphere, economic growth are described, in the plans of employment – taxation policy) but the analysis and the use of the total impact of entrepreneurial-political measures has not been reached. It means that in majority the state`s interference into economy, concerning competitiveness, is not thought over (i.e. the activity, the influence of which is constantly being analyzed).

Did you know that

the proportion of the money from the European Union for enterprise supports has constantly increased reaching almost 90 per cent in the year 2010.

68. The analysis of the state budgets, additional budgets, and amendments shows that in the years 2000-2002 when in majority the state`s revenues could be used, through the Ministry of Economic Affairs and Communications a little more than 400 million crowns were transferred to the enterprises. In the years 2004-2009 through the Enterprise Estonia 5.8 billion crowns, including 4 billion crowns of foreign supports (71%), reached enterprises. KredEx has supported enterprises primarily on the basis of the treasures transferred to it by predecessors and the received revenue for service. For the first time KredEx was allocated money from the state budget only in 2008, the money which was coming from the European Union. In the year 2010 the budget of the Ministry of Economic Affairs and Communications has planned about 1.2 billion crowns for supporting enterprises, about one billion (89%) is a foreign support.

The support is the main measure, but the state does not want to invest its own money into it.

69. When the foreign supports opened, the state`s contribution had not considerably grown. The big proportion of foreign supports refers to the fact that the state on its own behalf has not allocated more money to enterprises than the European Commission demands for obligatory co-financing (excluding some single state programmes).

70. In the period of 2007-2013 the rules for obligatory co-financing of foreign supports have become less strict for the state: the state must not add a certain sum to each measure and the self-financing of beneficiaries (for example, enterprises) can be shown partially as the state`s contribution. To preserve flexibility in using the state`s own revenue, the smallest possible sum for the state`s self-financing was fixed in the European Commission but with some ministries an agreement was concluded that in the period of 2007-2015 an additional sum to certain fields of activity would be given and each year, during designing the state budget, the sum will be agreed.

Until today the Government of the Republic of Estonia has not been able to find the money for enterprises which could be used freely, flexibly and operatively excluding the EU limitations to alleviate the obstacles of the development of enterprises.

71. Since the year 2007 in the articles of the text of the state budget there is an agreement in conformity with which in the period of 2007-2015 an additional sum of about 1 billion crowns should be allocated for promoting innovation and the capacity of growth of enterprises. As of 2010, about 60 million crowns have been allocated. The state`s money could have helped avoid the two-year hole in the support of enterprises at the time when the period of 2007-2013 of the implementation of the EU support was being prepared. In the year 2007 the state could have money for this purpose.

72. Relying on the above said, there is a situation now that enterprises get even less money than in the period of 2007-2013 when the obligatory self-financing rate was 15%. It means that the state does not use the money, given by the EU, for strengthening its economic policy, but replacing it. It is not sure that the Estonian state will soon support its economy with its money because of the problems of the recovery of economy and the structure of revenues and costs.

Did you know that

in the 2nd quarter of 2009 more money as investments was taken out of Estonia than distributed during seven years for enterprise supports.

73. Comparing the state`s entrepreneurial policy development plans and state budgets, it is revealed that more transparent entrepreneurial policy appeared in Estonia thanks to the European Union supports. The use of the European Union supports as the main component of entrepreneurial policy is problematic in the Estonian development phase with open economy in a small state primarily because of the fact that the support money is always small. It is especially small in comparison with the market developments in the quick growth of fall periods (loan money and in-and out- flow of foreign investments) to cause independently the expected impact which has also been demonstrated by the impact research carried out by the NAOE.

74. As assessed by the NAOE, the essence of Estonian entrepreneurial policy has not changed during the audited period and it is continuously based on the distribution of the EU money. No doubt, economy is also influenced by changes of taxation affecting all the enterprises in a similar manner (decrease of income tax, increase of VAT, etc.), made and unmade additional budgets, the development of almost all the spheres of politics and separate particular measures (freeing enterprises from the income tax) but these changes have not been designed for solving the problems of enterprises applying the total effect or measuring the impacts.

It is not sufficient to have only enterprise supports to exercise the influence

The obstacles of development in the fields of activities are too different to get considerable support from horizontal measures.

75. The analysis of the impact, carried out by the NAOE, showed that the enterprise supports in the present amount and arrangement and practically being the only measures of impact cannot make enterprises competitive. The entrepreneurial policy must have more diverse measures and be aimed at the integrated total impact analyzing parallel political possibilities (for example, taxation policy, education policy, legal policy) but even that could not be sufficient to achieve the aims of the entrepreneurial policy. As the research of the NAOE showed that the problems of enterprises are different in different fields of activities (see. also Appendix J), the measures must be planned proceeding from the development obstacles of the fields of activities.

Horizontal entrepreneurial policy and horizontal measures are defined by the National Audit Office of Estonia as the promotion of Estonian enterprises without paying special attention and giving privileges to certain enterprises. Such policy influences the enterprises in a similar way but the development obstacles and needs of enterprises are not similar.

76. The branches of economy have different potentials to create added value and export, for doing it they need different help. According to the research of the NAOE, the biggest problems for all the enterprises are the decrease of demand at foreign and domestic markets (73% and 53% respectively), the development obstacles are the limited ability to invest for entering new markets (47%), purchasing new machinery and equipment (46%) and developing new products and services (46%).

77. For example, in the ICT fields of activity in comparison with others there is a continuing lack of the labour force with the necessary skills and insufficient cooperation with other enterprises and research institutes. At the same time there are fewer problems connected with the access to capital, the taxation environment is not a big development obstacle for ICT. Because of the absence of people, 19% of ICT enterprises have not fully carried out innovations (see: Appendix M) and this problem cannot be solved with support. At the same time insufficient liquidity, complicated finding of foreign capital and the taxation environment constitute important problems, for example, to timber industry.

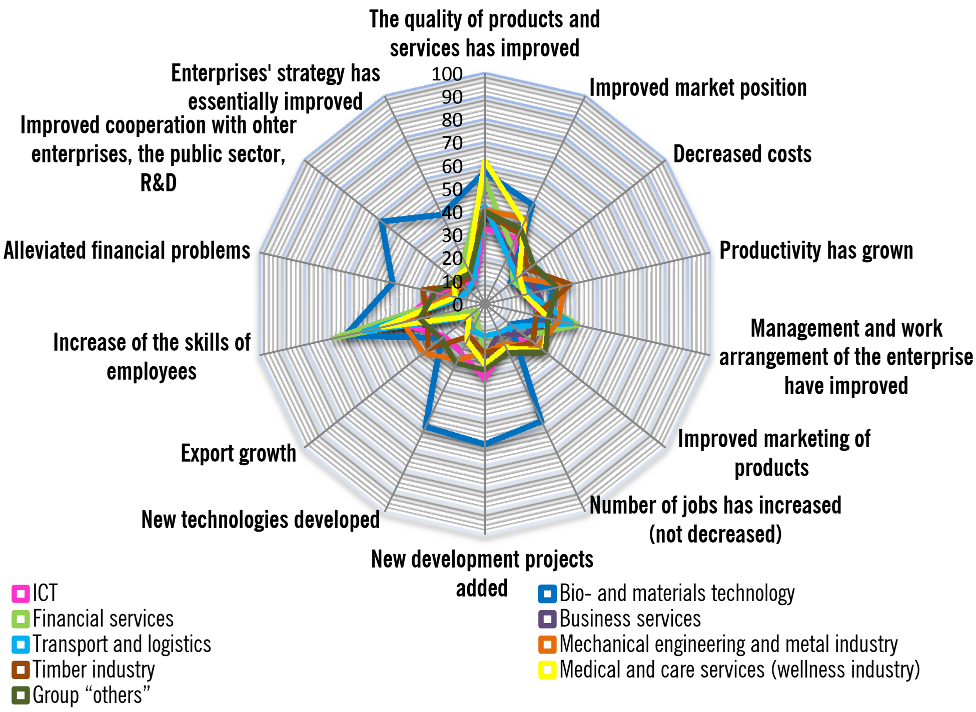
Focussing of supports is defined by the National Audit Office of Estonia as the use of money for doing away with the development obstacles of enterprises which can be solved with the help of money (selecting as wished the fields of activities or enterprises to which the support is given). The distribution of focussed supports is opposite to the system of horizontal supports.

78. Because of limited money and for reaching a wider economic impact, it is necessary to have a profoundly reasoned focussing. At the same time for achieving the aim of entrepreneurial policy – increasing the export of products with a bigger added value – it is necessary that the supports should be focussed to real areas which can be solved with the help of money.

In different fields of activities development obstacles, impacts of supports and the expected measures from the state are seen differently.

79. According to the research of the NAOE in different fields of activities, in addition to development obstacles, also the impacts of the received supports are seen differently and the expected help from the state for increasing competitiveness are seen (see: Figure 19).

Figure 19. The assessment by enterprises of the significant impact of supports in different fields of activities (% of respondents)



The source: the National Audit Office of Estonia on the basis of the data of the questionnaire

80. Undoubtedly the biggest impact of supports on their economic activities is seen by bio-and material technology enterprises which in majority have been established by a certain project and the turnover may be several times smaller than the received support (see: Appendix C). The enterprises of this branch see the impact clearly in connection with the received money, for example, the bio- and material technology enterprises have received 77% of the developmental supports money in the period of 2004-2009 or 1.2 billion and only 3.5 million crowns of export supports (see also: points 44-54 where it became clear that the recipients of the developmental supports do not often plan to export the product).

81. The enterprises assess most positively the impact of the support to raise the skills of their employees. Also, the impact of supports is well assessed on the improvement of the quality of products and services The fact that the problems of the fields of activities of the enterprises are different and cannot be always solved with supports was also shown by the assessments of the growth of productivity in the fields of activities. For example, the biggest number of supports for the production of the growth of productivity was received by the mechanical engineering and metal industry but the biggest impact of the support was seen by the enterprises of timber industry.

82. According to the questionnaire of the NAOE, the measures with which the state can help raise competitiveness are also assessed differently in different fields of activities (see: Appendix K). If the support to export and developmental activities is in majority considered important, the assessments to other support measures are varied. For example, 29% of ICT enterprises and 67% of timber industry enterprises consider the support for purchasing new equipment definitely necessary. Management training is considered important by half of the enterprises offering financial services, but by almost 30% of the ICT and timber industries. Recruiting foreign specialists for bringing new skills to enterprises is considered definitely necessary by one third of bio- and material technology enterprises and only by 8% of transport and logistics enterprises.

In the entrepreneurial policy development plans the problems of branches of economy are not analyzed, tourism is the only example of more complex strategic planning in the field of activity.

83. In the Estonian economic-political development plans, the problems of branches of economy have not been analyzed. The only economic branch development plan in Estonia is the state tourism development plan which has helped attract attention to the field of activity. It was revealed in the interviews and the document analysis, carried out by the NAOE, that the tourism development plan has helped establish the problems of the branch and an official, specializing in the tourism field at the Ministry of Economic Affairs and Communications, was defending the interests of tourism when working out the regulations for the measure. It is possible that this is the reason why tourism has been given a considerable part of the European Union enterprise supports and why tourism as the only field will get an additional sum of money from the state in the framework of the enterprise supports in the period of 2007-2013[7].

84. An example of technology -based approach is, for example, the Estonian R&D&I strategy "Knowledge-based Estonia" biotechnology programme at the Enterprise Estonia. The programme of energy technology has also been designed (it was completed even before the biotechnology programme but it was launched later). At the SA Archimedes also an ICT programme is being prepared. The launching of all the above mentioned programmes has been delayed a long time and their influence on the present support proportions is small. These are the programmes of young people which have not resulted in important political initiatives as yet but on the other hand, for example, in the framework of the biotechnology programme the problems of the branch and the possibilities for assistance from the existing measures have been revealed. It allows the programme leader at least in the phase of designing the regulations for supports and introducing changes to make a proposal proceeding from the needs of the biotechnology field of activity. Also, the programme has helped promote cooperation within the field of activity.

Insufficient staffing of the Ministry of Economic Affairs and Communications does not allow to get an overview of the developments in the branches of technology.

85. These are the only examples of the focussed approach in the Estonian entrepreneurial policy. The present staffing of the Ministry of Economic Affairs and Communications does not allow to reveal the development obstacles in Estonian economy in the branches of economy or in the fields of activity of enterprises in particular (there are only three officials for specialization who also have other current tasks). The knowledge of the representations of enterprises and the speciality associations has not been used (see: points 125-131). It means that decisions must be made on the basis of too general knowledge.

86. The Ministry of Economic Affairs and Communications referred during the audit to certain initiatives characterizing focussing to the issues like the strategy of space technology, the development of environment technology, the strategy of design and the support measures for creative industry but their connections with the competitiveness of economy and present production were not very clearly explained. Also, their priority in the financing schemes is not well seen and they rather proceed from the other measures of the state (for example, the participation in the EU space investigation programme, clean environment, culture) or the success of some single enterprises but not from the increase of the added value or the competitiveness of economy.

87. The present understanding by the Ministry of Economic Affairs and Communications of the entrepreneurial policy involving fields of activity – the cluster programme, the programme of R&D centres and the state`s R&D activity programmes – have a very small impact from the point of

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[7] In the implementation plan for developing the economic environment, among the priority measures for the renewal and growth potential development of enterprises the only measure "Increasing the knowledge about Estonia as tourism destination and the demand for tourism products" was planned to be given the state`s co-financing. The tourism measures get about one third of the EU supports for this field.

view of the competitiveness of economy (it was also shown by the results of the NAOE research). The idea is based on a simplified understanding of research (i.e. if there are at least some enterprises which with their provision chains and their partners want to get money from the cluster programme, then these enterprises and the communities – so to say, multiply themselves). Also, not a single above mentioned and separately standing initiative reaches the level of supports – from the interviews with entrepreneurial advisers it became clear that some strong enterprises, belonging to the above mentioned programmes, would get the support from the Enterprise Estonia anyhow and without the additional priorities of the assessment model stressing cooperation.

Flexible entrepreneurial policy in sectors allows the researcher to distinguish the fields of activities of enterprises concerning their advantages in competition, problems and development obstacles penetrating all the entrepreneurial, innovation, education legal and also taxation policies. Consequently, such an entrepreneurial policy considers different development obstacles in the fields of activity offering complex measures for the promotion of the growth of competitiveness in the particular fields of activity.

88. Awareness of the general problems of economy is not enough to promote the growth of competitiveness. It is important to establish development obstacles by branches of economy for alleviating of which the support or only the support is needed. In entrepreneurial policy it is necessary to achieve flexibility in sectors where supports are provided, legal acts are corrected, the interests of Estonian enterprises are protected in introducing standards and the EU rules, in applying the rules of the state`s assistance, training of necessary labour force, etc. in conformity with the needs of branches of economy and fields of activity willing to achieve the impact on the improvement of the competitiveness of economy.

The implementation of the entrepreneurial policy, considering the differences of branches of economy, will create better preconditions for increasing the impact of supports.

89. In the case of certain aims (for example, entrepreneurial activeness as the cradle of competitive enterprises) the horizontal supports are justified but the major part of entrepreneurial policy (including supports) must concentrate attention to the growth of productivity and export capacity, not in a general and abstract manner, but in conformity with the differences of branches of economy. The use of well- targeted and combined measures is especially important when financial possibilities for influence are scarce like in Estonia.

90. If obtaining and keeping of top competence in all the branches of economy in the state is too expensive for the shaper of policy or it is considered unreasonable, the branches of economy with the highest growth potential must be selected, their development obstacles must be profoundly recorded and assistance for their alleviation should be provided. On the basis of the NAOE research, international research and the Estonian entrepreneurial policy development plans namely the fields of activities of audited enterprises constitute the most potential branches of economy. The competence in the knowledge of branches of economy helps in finding the branches of economy and value chains being the growth engine of Estonian economy to which the state`s support must be focussed.

The sector specific competence will help to find and focus supports on sectors that could become the engines of growth for the Estonian economy.

91. Although the analysis showed that the enterprises established in the audited fields of activity had better economic results than the enterprises established in other branches, the audit does not give the right to say that namely these or all these are the branches to which the state`s attention and support should be focused. But the audit gives sufficient confidence that at least in these branches of economy competence should be created with the purpose of more exactly establishing the Estonian branches of economy with a higher growth potential to which the state`s support measures should be focussed in the conditions of limited resources.

On the strategic level there is no unanimity whether, to whom and how to focus the state support – supports are given to many enterprises and the supports are small

Somebody`s privileged development means for the policy shaper an inconvenient explanation to the Estonian taxpayer and a financial risk with the European Commission.

92. Although in the course of auditing the NAOE found a common understanding with the Ministry of Economic Affairs and Communications concerning the priority of certain fields of activities of enterprises, in the Estonian economic-political development plans there is no clarity which branches of economy have the biggest potentials for Estonia and which the state should primarily develop with its measures. At the beginning of the 2000s three key technologies were established in the strategy of developmental activities and innovation, the importance of which was also stated in the plans of economic growth and employment, in the support money planning documents in the period of 2007-2013. In the Estonian entrepreneurial policy for the years 2007-2013 priority development branches of economy have not been underlined but they are fixed in the implementation document "Made in Estonia" in which to the list of key technologies the fields of activities preferred by enterprises have been added.

93. Some of the Enterprise Estonia (EAS) divisions (for example, the export division) have also selected the preferred branches of economy. The selected branches of economy only partly coincide with the branches of economy fixed on the strategic level. According to the plans of the Enterprise Estonia, in the near future all the divisions should fix their preferred clients and preferred branches.

Some EAS divisions have established their key clients and branches but the political authorization and the decisiveness of the board to use preference are missing.

94. In real life the Estonian entrepreneurial policy is horizontal concerning the supports and other single measures (for example, freeing enterprises from the income tax). In the regulations of distributing enterprise supports some of the branches of economy as recipients of support are eliminated, but nobody is preferred. This is why the Enterprise Estonia has no direct authorization and possibilities to use preferences in real life. In comparison with the approved acts, regulating the distribution of the EU support money, the Enterprise Estonia has also little money from the revenues of the Estonian state for a flexible use (and when wished for focussing).

"With preference a risk is always accompanying. There is no political force which would like to bear responsibility for recourse, it is wiser to be on the safe side"

Ministry of Economic Affairs and Communications

95. Proceeding from the rules of distributing the EU money and the fear of possible repayment, the Enterprise Estonia supports the enterprises which are definitely able to implement the project. Supporting of the best enterprises (not necessarily with the biggest potential) is also the dispersing of responsibility: this is how smaller repayments are ensured and on the project level indicators of output are better achieved but which may not mean a broader impact on economy (support to the best enterprises and a small impact of these supports was also seen in the research of the NAOE). The results on the project level, not as a whole on the level of the branch of economy or the whole economy, are these facts which the Enterprise Estonia measures and according to which the Ministry of Economic Affairs and Communications assessed the work of the Enterprise Estonia.

96. Although according to the Ministry of Economic Affairs and Communication at present there is a division of labour between the Enterprise Estonia and KredEx in the manner that differently from KredEx the Enterprise Estonia takes risk with giving non-repayable supports for achieving the aims of economic policy so that potentially good ideas would not remain without financing, the present procedure of assessing results at the Ministry of Economic Affairs and Communications and the European Commission does not favour necessary flexibility (i.e. taking risks). Evidently it is the reason why the Enterprise Estonia has not used the possibility of making the Ministry of Economic Affairs and Communications a proposal for reserving a part of the budget for the purpose of some branch of economy being preferably developed. The Enterprise Estonia has repeatedly raised the question whether certain preferred development could be necessary for achieving the impact but the policy shaper has not further developed the issue and reached the decision.

The activities of the Ministry of Economic Affairs and Communications and the Enterprise Estonia at the meeting of the coordinating steering group on 29 January 2008:

The Enterprise Estonia: " When building up our client service model, most probably it is necessary to know more than before which fields of target groups have priority and among whom our client administrator should find the new client potential. As we know today, the R&D&I strategy is the only one which enumerates the priority fields. To get a broader confirmation, it is necessary to have the Ministry`s opinion which can be added to the priority fields."

The Ministry of Economic Affairs and Communications: "We do not want to eliminate anybody but for this purpose it is necessary to move closer to the final consumer in the production chain within the sector. Proactive activity must be concentrated on a certain aspect. We think that these sectors, where the average for Estonia or higher added value is produced, are priority areas."

The Enterprise Estonia: "When we have the possibility to cover 4-5 sectors with more or less acceptable competence, it should be reasonable to know it. The future potential must be assessed".

97. Although as assessed by the Enterprise Estonia, for improving competitiveness it is possible to cover 4-5 fields of economy with profound analysis capacity, the Ministry of Economic Affairs and Communications has not supported the idea. Also, support measures have basically remained horizontal and in a good case boost the strategic choices of the enterprise but do not change them. The absence of effect of the supports is high and planning of supports is mainly based on the fact how quickly the enterprises can use the supports. As a result, the supports do not bring along real changes and the improvement of competitiveness on the level of branches of economy.

The activities of KredEx do not support changes in the structure of economy

98. KredEx works efficiently in providing guarantees and loans but the prime aim of this activity is not the growth of the competitiveness of economy but guaranteeing the sustainability of the foundation.

99. Although some KredEx measures are targeted only to exporting enterprises, in the remaining part the KredEx measures are also horizontal. KredEx does not think of implementing the support measure in the case of which there is a doubt that it may bring along losses. Also, when assessing the application, the applicant`s ability to fulfil obligations is decisive. The applicant, when being successful, can create 100 jobs or triple the added value but if KredEx has doubts that the project can be unsuccessful because of insolvency, the applications are not satisfied. On the contrary, if the project is strong, the application from the enterprise not belonging to the supported branch of economy may be satisfied. As KredEx says, in the case of their activities, the essential principle is self-profitability and that is why other indicators (i.e. the growth of added value, export turnover, etc.) are not of prime importance. It creates the situation under which the KredEx activities are not significantly connected with the aims of reaching the impact really established in entrepreneurial policy (or the aims of reaching the impact of its measures are wrong), although, for example, if the financial markets do not function, KredEx can alleviate the problems of liquidity of some successful enterprises.

The success of KredEx activities is assessed both by KredEx and the Ministry of Economic Affairs and Communications according to the sales volume and profitability.

100. The KredEx board has set for KredEx activities the aim to achieve the volume, not the impact. Proceeding from the requirement of self-profitability, the KredEx strategies and accounts deal mainly with the KredEx sales activities and the received profits/losses. In the accounts the KredEx activities are assessed successful if it was possible to sell much and avoid losses. As the KredEx employees` bonuses have depended on the KredEx sales volume and the results of economic activities, it is possible to presume that the processor of the application has no motivation to take even the smallest risk to support the projects with a bigger influence in the case of success.

101. In KredEx strategies also the indicators of the added value, turnover and export turnover of supported enterprises in comparison with the market average have been shown, but in reality KredEx has not been able to assess the impact of its activities, rather, it is presumed that the bigger part of the loan market KredEx has, the bigger is its impact. KredEx does not check whether the jobs, promised to be established in the application, appeared. The question, how consciously the present arrangement of activities allows KredEx to contribute to the aims of achieving the impact set forth in the entrepreneurial policy political documents, has also been raised by KredEx itself but the foundation has continued to follow the principle of self-financing and avoiding financial risks at the market.

102. To sum up. KredEx is not with the present arrangement of its work and according to the task set by the Ministry of Economic Affairs and Communications a profoundly planned instrument in making the economy more competitive. Productivity, jobs and the export of products with added value are supported by KredEx only then when the support is the result and a part of the investment with minimized financial risks. Because of the same reason, KredEx cannot prefer any branch of economy and with the present arrangement of work the support could be useless in the case of focused entrepreneurial policy.

In the Enterprise Estonia the competence based on branches of economy is appearing but it is dispersed and for efficient supporting of enterprises it should be further developed

103. The Enterprise Estonia has started compiling an overview primarily of the key branches, they themselves have selected, and certain specialization has taken place to better understand the branches of economy. Beside increasing competence, the Enterprise Estonia has set itself a task of raising the ability of finding developmental obstacles in general with the purpose of making the division of supports more based on the consultation and the complex assessment of the needs of the enterprise.

Value chain in the understanding of the Enterprise Estonia is a row of supports which should, when used, exercise the wished impact (for example, the value chain of export capacity).

104. In 2007 the Enterprise Estonia began to practise the management, based on the value chain according to which the activities, supports and programmes of the Enterprise Estonia are grouped on the basis of certain aims of the impact (for example, the value chain of the export capacity). All in all, there are 11 value chains. The wished situation is such when enterprises move in a value chain receiving one or many supports in accordance with their situation and needs. All the enterprises move in the value chain: these who applied to the Enterprise Estonia or whom the Enterprise Estonia contacted itself on the basis of certain preference (so-to-say key clients). The client administrator should manage the movement of enterprises in the value chain.

The Enterprise Estonia has set itself an aim of analyzing more profoundly the needs of enterprises when distributing supports, but because of a big load of work in processing applications and few opportunities for development, the management, on the basis of the value chain, has not become the basic form of work.

105. In the documents describing the system, the interconnections between the value chains are very weakly explained. In spite of that, for example, that the aims of internationalisation and involving foreign investments coincide on paper, the coordination of everyday activities of enterprise advisers cannot be seen (or they do not look for foreign investments for local enterprises which would help them reach export markets or increase their technological capacity). The absence of such connections is characteristic of the whole system of value chains describing rather the organization of the Enterprise Estonia and the logic of distributing supports than the process how an enterprise should constantly develop and move from one value chain to another. Consequently, at present the content of value chains is the interpreting of the work of the Enterprise Estonia itself, being the form of representing the results of the Enterprise Estonia but it does not influence the enterprise as a recipient of support.

106. As it was mentioned above, the task of the divisions of the Enterprise Estonia is to find its key clients but as the value chains have not yet been interconnected, the divisions deal with finding key clients separately. Consequently, each division separately has started finding, according to the division`s assessment, the most significant branches of economy in Estonia. Possible exporters are being looked for, they deal with the existing development enterprises but the key clients from different value chains are not consciously supported or the coordination of key branches does not take place between divisions.

107. The interviews, conducted by the NAOE, with the advisers of the Enterprise Estonia showed that the employees of the foundation are able to describe the value chain of their division but the information of what is going on parallelly in other divisions is mainly lacking. Also, there is no information about the research, carried out in the other divisions, or about determined key clients.

108. The understanding of the Enterprise Estonia of the management, based on the value chain, has not yet become rooted in real life. There are few client administrators (out of 290 employees only six), only few enterprises reach the consultation and it is not regulated who can have a consultation. The features of key clients have not been determined. In the existing horizontal political framework it is not clear how it could be done. The client administrators have little time for looking for key clients but namely the key client is the figure through whom the Enterprise Estonia hopes to influence the development of branches of economy.

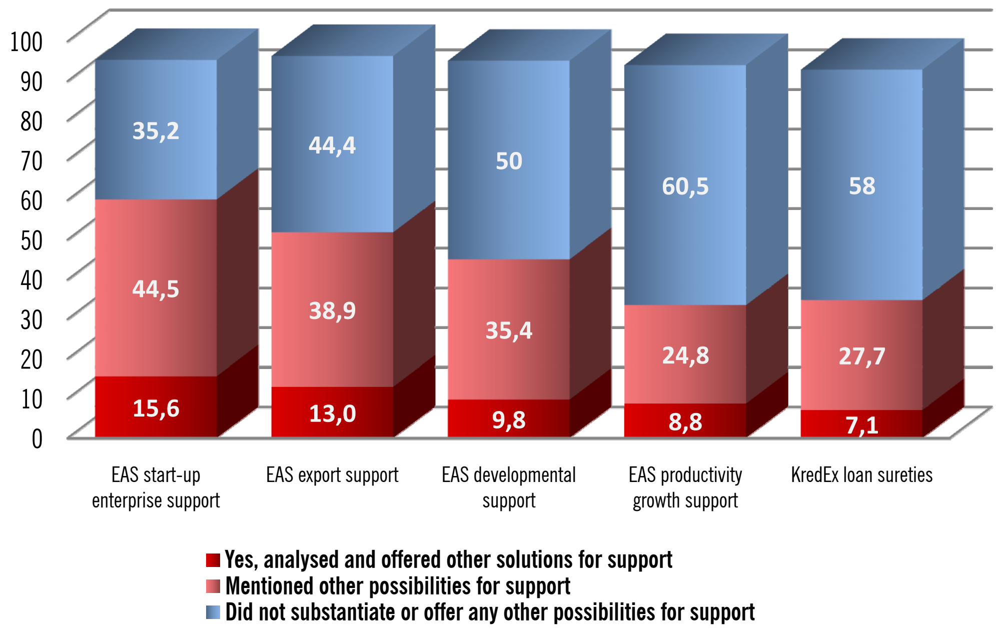
109. The changes in the general horizontal system of distributing supports, i.e. launching the activities, based on the client-centred approach and the value chain, are also hindered by drawbacks in the information system into which the information about communicating with clients is installed. The existing information is not constantly used, the employees of the Enterprise Estonia used different opportunities for storing information – the *outlook* files, not discs, etc. which is risky from the point of view of the so-called memory of the foundation and storing of information if some employees happen to leave the foundation.

110. The NAOE could not fix during the audit that the information about the major problems of support risks and the activities of avoiding and solving them was constantly collected from the enterprise advisers (although the risks on the organisation level are assessed in the Enterprise Estonia each year). In reality today there is no formal need for enterprise advisers to assemble the collected information because the accounts do not contain it. In its turn, it means that the Ministry of Economic Affairs and Communications fully does not have access to such a package of information characterizing the developments in real economy (excluding the possibility to interview all the enterprise advisers separately).

Enterprises do not feature the Enterprise Estonia as an adviser.

111. The fact that the system, based on consultations, has not rooted in the Enterprise Estonia was also vividly demonstrated by the questionnaire carried out by the NAOE in which the recipients of support and those who did not get it were requested to answer how much the Enterprise Estonia had analyzed the needs of the applicant, had mentioned other supports and offered additional opportunities, giving reasons for the refusal (see: Figure 20 with the assessments of the enterprises which did not get a support).

Figure 20. The explanations and the activities of the Enterprise Estonia when refusing the support (% of the respondents by types of support)



The source: The National Audit Office of Estonia on the basis of the data of the questionnaire

112. According to the questionnaire of the NAOE the Enterprise Estonia analyzed the needs of enterprises for finding a suitable support in about one tenth of the cases. Depending on the group of support, 35-60% of the enterprises which did not get the support considered the reasons for refusal insufficient. In the case of the recipients of the support also about one tenth of the enterprises had their needs analyzed to be convinced whether the enterprise needed namely the support applied for other support opportunities were mentioned in the case of less than, a third of enterprises.

The implementation unit is in the Enterprises Estonia the distributor of authorized and accredited supports. For example, the implementation units are the Enterprise Estonia, KredEx and the Centre for Environmental Investments.

113. The distribution of consultation-based and complex supports and the guidance of enterprises should not take place only within the Enterprise Estonia but also in cooperation between the Enterprise Estonia and KredEx. In reality the employees of one implementation unit do not know the measures and the procedure of the other implementation unit (excluding the start-up loan which according to the legal act, providing the basis for distributing supports, is the so-called forceful cooperation – the measure of KredEx which is processed by the Enterprise Estonia but decided together). In spite of the common information days, the interviewed client administrators and advisers did not know a single case when a client had reached them by the recommendation of another implementation unit.

Without a strong support to the development of the organisation structure of the Enterprise Estonia there is no confidence that the client-centred approach and the management, based on the value chain, will be put into practice.

114. The leadership of the Enterprise Estonia sees solutions in the perfection of the system of information, in the restructuring of the organisation and involving teams of experts. Although the information system is an important precondition for introducing the distribution of supports, based on the client-centred approach and the value chain, the NAOE is not sure that it is sufficient. The connections between the value chains of the Enterprise Estonia are weak at present and do not describe how the activities are connected with each other and how they have a penetrating influence through branches of economy on the economy of Estonia (beginning from start-up enterprises to foreign investors, exporters in the field of activity simultaneously). Because of the big load of procedure in the Enterprise Estonia, its advisers cannot be aware of the activities of the neighbour, not to speak of the whole Enterprise Estonia. Also, there are too few client administrators to be the engines of development.

115. As assessed by the NAOE, the Enterprise Estonia is developing the competence, based on branches of economy which is an important source of information in the case it will be implemented and further developed and a tool for the Ministry of Economic Affairs and Communications in working out and putting into practice the entrepreneurial policy, based on the analysis of economy and the enterprises in respective fields of activity.

Entrepreneurial policy must not be a technical task in distributing the European Union money

The maintenance costs of the Enterprise Estonia, KredEx and development centres in counties constitute a price for what competence has been founded on and information collected and it should be used to the maximal degree in shaping policy.

116. The European Union gives Estonia billions of crowns for supporting entrepreneurship. In distributing this money, the rules and certain roles must be followed. Somebody has to plan, somebody must carry out the procedure of distributing money and providing it, somebody has to check the whole process. Designing policy or making choices what, in which amount and according to which criteria to give support is the role of the Ministry of Economic Affairs and Communications. The successful fulfilment of this role has a key importance. Here everything depends on the Ministry`s ability to make wise choices. For this purpose it is necessary to have sufficient competence and good information. The Enterprise Estonia and KredEx, distributing supports, must have the immediate information about the developments in the enterprise which must be used a much as possible in designing the policy. The European Union does not say that these agencies could not do more than technically distributing the money.

Did you know that

the requirement of the Ministry of Economic Affairs and Communications to process the applications for a start-up enterprise support within 10 days cannot be fulfilled, as assessed by the Enterprise Estonia, in a high quality manners.

117. The Ministry of Economic Affairs and Communications expects that the Enterprise Estonia distributes money as quickly as possible. The Enterprise Estonia is actively involved in working out and changing support measures (it could even be said that the Enterprise Estonia designs a bigger part of the regulations for measures) but when the regulations have been completed, it is their role to provide mainly the information about the obstacles for implementing the measures (slow use, the simplification of the process, the possibility to make use of the money). As the Ministry does not give either the Enterprise Estonia or KredEx any general guidance above the support measures, (for example, concentration to increasing productivity in chemical industry), there is a situation under which the Enterprise Estonia has a wish and an opportunity to work out its activities and strategic preferences rather autonomously but only in the limits of the budget`s own resources not in the limits of foreign supports.

118. On the strategic level of designing policy (for example, in the period of 2007-2013 the division and priorities of the enterprise support money) the Enterprise Estonia was not involved or was involved on an unclear basis. For example, the plan for involving foreign investments in 2007-2013 titled "Made in Estonia" was made thanks the Enterprise Estonia potential and at the same time occasional shaping of policy. On the basis of the interviews with the Enterprise Estonia and the Ministry of Economic Affairs and Communications "Made in Estonia" developed from the Enterprise Estonia initiative into a development plan thanks to the accumulation of suitable persons, chances and the political situation. It means that the priority fields of activities, which appeared in the state, (in the form of the plan of development "Made in Estonia") proceed mainly from the opinion of one division (internationalisation) of the Enterprise Estonia which is very little connected with the activities of other divisions of the foundation, not to speak of the broader connections with entrepreneurial policy.

119. The Enterprise Estonia has more potentials for the participation in shaping the entrepreneurial policy than the role of an implementation unit prescribes. From their everyday contacts with enterprises the Enterprise Estonia employees have significantly more information about the problems of enterprises than the Ministry of Economic Affairs and Communications. Both the Ministry of Economic Affairs and Communications and the Enterprise Estonia have understood that for designing well-targeted entrepreneurial policy it is necessary to know the problems of Estonian economy in its branches but differently from the Enterprise Estonia, the Ministry does not have a sufficient number of people for raising the competence based on branches of economy. The divisions of the Enterprise Estonia have started to create such competence but a big load of processing the support applications and a small budget for development costs hinders the foundation`s ability to be a diagnoser of the problems of economy and an adviser to the Ministry of Economic Affairs and Communications.

The Ministry of Economic Affairs and Communications lacks people (and knowledge) to use the Enterprise Estonia competence much better

120. This is why there is a situation where the Enterprise Estonia has certain competence which could be further developed but for using it the Ministry is not sufficiently competent and staffed at present. The Board of the Enterprise Estonia, on the contrary, because of the big applications processing burden and the unclear future of the activities of the organisation it is cautious in asking for itself a bigger role in shaping policy. Although between the Ministry and the Enterprise Estonia there are regular cooperation forms established (for example, the steering group and the cooperation workshop), the Ministry has no capacity to use the Enterprise Estonia in shaping policy to the maximal degree.

KredEx participates in policy shaping but must primarily take care of earning profits not of the future of Estonian economy

121. KredEx as the second implementation unit of the Ministry of Economic Affairs and Communications participates, on the basis of the analysis of documents and the interviews, actively and with good results in shaping entrepreneurial policy but the task of KredEx is narrower i.e. to improve the access of enterprises to capital and guarantee export. Similarly the Enterprise Estonia, also KredEx in its field of work has more competence than the Ministry of Economic Affairs and Communications (for example, in December 2008 the Ministry gave the foundation basically the task of compiling a list of measures for alleviating the crisis and the full design of the support package for enterprises was prepared by KredEx within a couple of months. At the same time proceeding from the principle of economic self-financing, the main aim of KredEx has been at least to earn zero-profit from its activities which may limit, in the long-term perspective, making more useful proposals for Estonian economy and the implementation of these proposals.

Country Development Centres could provide regional economic information for policy shaping but the state does not finance it.

122. In addition to all-Estonia implementation units also regional support structures for entrepreneurship have been established in Estonia or the network of country development centres (CDC) is coordinated by the Enterprise Estonia. The task of CDCs is to give enterprises advice and acquaint them with the support opportunities. In practical life the clients of CDCs are mainly the start-up enterprises. Although in the CDC strategy one of the aims of increasing the impact of development centres is “to develop the cooperation networks of entrepreneurs (including field and regional)” and “to own and distribute information about the regional entrepreneurial resources”, then because of the scarcity of budget money, the centres do not deal with the analysis of the entrepreneurial environment and revealing the cooperation possibilities in a profound marker.

123. Also, the budget, allocated to the CDCs, does not allow to develop a CDC into a competence centre which could answer the questions of enterprises and meet their needs. At the same time, the CDCs have a possibility to collect unique information about the entrepreneurial situation in the region which, as wished by the state, could be developed into analytical overviews as an input into entrepreneurial policy. In their interviews to the NAOE the CDCs express their readiness, in the case of provided resources, to be stronger partners of the Enterprise Estonia and function as more active contact builders for enterprises, municipal governments, representation unions and research agencies in their cooperation on the regional level.

Entrepreneurial policy is often designed without involving entrepreneurial organisations and assessing impacts

124. The key for a successful entrepreneurial policy is the most exact establishing of the problems of enterprises for offering the solutions which will function in the respective environment. With this purpose the

Ministry of Economic Affairs and Communications must implement the knowledge and information from the agencies connected with enterprises, the representative organisations of enterprises, compile prior- and post-implementation surveys of measures and have the competence for collecting and representing information and using it in policy making.

125. The NAOE sent a questionnaire (see: Appendix E) to the representative organisations and speciality associations requesting to answer whether they had been involved in compiling entrepreneurial political development plans, planning the European Union supports or working out support measures. Out of 30 organisations 8 responded saying that they had been involved in compiling entrepreneurial political development plans, 9 questioned organisations had been involved in planning the European Union supports, 10 organisations had been asked their opinion in working out support measures.

The representation organisations were not invited to work out the development plan which expressed the expectations for their activities in shaping policy.

126. Separately the NAOE asked whether the representation organisations were involved in compiling the plan of activities for foreign investments and export in 2009-2011 titled "Made in Estonia" as this plan describes the present activities of representation organisations as a result of which their involvement into shaping entrepreneurial policy should be improved. Also, on the basis of speciality associations, having similar interests, the Ministry wishes to establish marketing and representative channels at export markets. On the basis of responses only three organisations out of 30 were involved in compiling the mentioned plan and this is why the organisations did not know about the existence of the plan or its content.

"Partner is the mascot of the Ministry of Economic Affairs and Communications"

EVEA president

127. In addition to the sent questionnaire the NAOE interviewed bigger representation organisations which assessed the involvement as a seeming involvement. For expressing one`s opinion very often a ready-made decision or document is sent to the organisation and very little time is given for expressing the opinion and the proposals concerning the content are very seldom taken into account. According to interviews and the questionnaire, the Chamber of Commerce and Industry is the only representation organisation whose opinion has more influence. At the same time, the interview with the leader of this organisation made an impression that they generally do not make "hopeless" proposals.

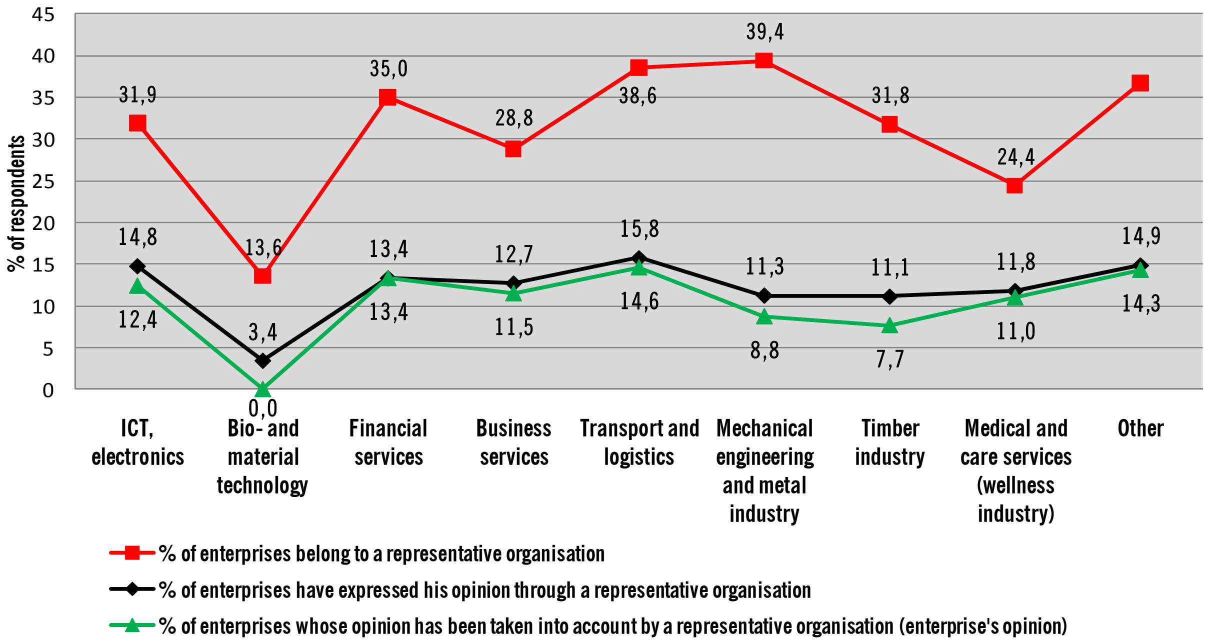
As assessed by the Ministry of Economic Affairs and Communications, the representation organisations are not strong partners for the design of policy.

128. In the interviews, conducted by the NAOE, the Ministry of Economic Affairs and Communications expressed an opinion that the representation organisations are not sufficiently strong partners for the policy designer. At the same time it is clear that with setting the aims of entrepreneurial policy the state has taken the responsibility and for achieving these aims in the best way it is necessary to know the needs of Estonian enterprises. Consequently, it is inevitable that the state must be interested in growing strong partners for itself and it is possible when supporting and involving them in the processes of decision making.

129. For assessing the abilities of entrepreneurial organisations the Estonian Employers` Central Association ordered in 2009 a research and relying on the basis of the results, a training programme for entrepreneurial organisations was carried out. As a follow-up activity, it is planned to compile a handbook for the leaders of representation organisations. At the same time it is most important that the Ministry of Economic Affairs and Communications should involve representation organisations into decision making which is one of the most practical ways of increasing the interest and competence of representation organisations.

130. The potential, how many enterprises the designer of policy could reach, is characterized by Figure 21. The questionnaire, carried out by the NAOE showed that in audited fields of activities about one third of enterprises belong to representative organisations and the enterprises have confidence in their representatives or they believe that the organisation takes their opinions into consideration. With a bigger involvement of representation organizations and considering their opinions the number of active enterprise would evidently grow.

Figure 21. The enterprises which can be reached through entrepreneurial organisations and speciality associations



The source: the National Audit Office of Estonia on the basis of the data of the questionnaire

Successful policy management is based on the knowledge of the influences of policy

The Ministry of Economic Affairs, the Enterprise Estonia and KredEx consider the assessment of their activities most complicated if not possible.

131. Research constitutes a significant source of shaping resultative policy: the initial research for the clarification whether the support measure suits our environment and the research of the impact to become convinced whether the implemented measure is successful for solving problems and causing a positive impact. In the interviews conducted by the NAOE almost all the audited enterprises stated that the assessment of the impact is very complicated, the impact is expressed after a long delay and very often it is impossible to measure it.

132. The impact of support measures for Estonian enterprises has not been studied systematically and embracing all the aspects, many measures have no prior- and post- implementation research. The research ordered by the Ministry of Economic Affairs and Communications is concentrated in majority to the results of a certain measure and the monitoring information is based on the output indicators, not assessing the impact on economy or a branch of economy. In the period of 2007-

2013 the support measures to a great extent constitute the prolonged and broadened version of the measures of the period of 2004-2006 (because there is more money), the achieved and the expected macroeconomic impact of which has not been analyzed profoundly.

The Ministry of Economic Affairs and Communications has few people to carry out the research of the impact at the Ministry, outsourcing does not develop competence.

133. Carrying out the research of support measures is both for the shapers of policy and its implementers an opportunity to learn better and better the entrepreneurial environment. Until recently the Ministry of Economic Affairs and Communications has outsourced almost all the enterprise support research or employed a foreign adviser for designing the measure. On the one hand, such an arrangement may bring along a risk that the solutions functioning in other countries and not suitable for our entrepreneurial environment are adopted. On the other hand, the competence of the policy shaper grows more slowly when the research is outsourced than carrying it out at the Ministry.

The Enterprise Estonia does not carry out research, the results are assessed according to each project.

134. The monitoring of support measures by the Enterprise Estonia is the observation of results on the project level. The economic-political aims are set for the whole of economy and the monitoring of projects without the impact research does not give the confidence that the support measures cause the expected impact which was revealed during the course of the audit.

KredEx assessed its activities primarily proceeding from the profits and "the market share".

135. Monitoring and accountancy, carried out by KredEx, is because of the self-financing requirements centred to the profits/losses of the KredEx measures and the impact on the added value and export created by economy is not assessed. KredEx uses as an indicator of its activities the number of created jobs but it is based on the promised number indicated in the project application but later the fact is not checked. According to the experience of the Enterprise Estonia such prognoses are not realized to an essential scope, for example, in the case of start –up supports the prognosis for the number of jobs was fulfilled only in about one fifth of cases.

136. Also, according to the present order the country development centres do not assess the impact of their activities, the information which is collected about the life in the county is different and getting feed-back to their work is possible when the CDCs themselves show initiative.

The exact arrangement of the assessment of impacts is especially important in the situation when the entrepreneurial policy depends on the periodic character of the European Union budget.

137. Definitely, it is not easy to establish the role of the state`s activities in the economic developments but with the use of the taxpayers` money the results to be achieved must accompany the process and revealing the impacts helps plan the state`s measures much better. Also, a way how to study the impacts more operatively must be found because the policy relying on the European Union support money must consider the periodic character of the EU supports.

138. If in the Estonian enterprise supports 90% were the state`s own revenues and 10% foreign money, the study of the impacts could be done waiting for a longer time for the appearance of the impact but the assessment of the impact of supports for the period of 2007-2013 cannot be completed before planning the new programme period (which starts already in 2011). It means that non-effectively functioning support measures may remain functioning for the following seven years.

139. To sum up, as assessed by the NAOE, until recently too much attention has been paid to the issues of distributing the EU money, necessary competence for designing policy has not been developed and necessary information, concerning the impact of the existing measures, has not been collected. The improvement of the present support system, having a small impact, can be started from perfecting the knowledge.

140. The recommendations of the National Audit Office of Estonia to the Minister of Economic Affairs and Communications:

The general goal of the recommendations is to make the designing of Estonian entrepreneurial policy maximally using doing away with the existing competence and the obstacles of the growth of competitiveness in a complex way.

The National Audit Office of Estonia wishes that in designing the new development plan for entrepreneurial policy and planning the EU support period the policy maker should have an overview which obstacles of the development the Estonian economy faces on the level of fields of activity and for the alleviation of the obstacles combined and well-targeted measures should be implemented. This knowledge must be a part of everyday working task, inter-agency cooperation and the assessment of impacts at the agencies shaping entrepreneurial policy. For designing knowledge-based and efficient entrepreneurial policy, the National Audit Office of Estonia offers as one of the possibilities the following plan of activities:

- To recruit the team for analyses which form the basis for designing economic policy so that the work of one analyst is only one field of activities. With such approach to create the competence at the Ministry of Economic Affairs and Communications for the fields of activity having a high growth potential (the National Audit Office of Estonia sees the audited fields of activity as the biggest circle of the fields of activity having a high growth potential).

- To launch at the Ministry the working groups based on the fields of activity, the task of which is to reveal the development obstacles of a field of activity and find the state`s possible measures of assistance. The leader of the working group is the Ministry`s analyst dealing with this field of activity, the members are employees of the Enterprise Estonia and KredEx dealing with the same field of activity, also the representatives of the representation organisations of enterprises and speciality associations. To raise the abilities of the representation organisations of enterprises and speciality associations, it should be discussed whether to support their activities with the money from the state budget (in addition to the already carried out trainings).

- In the course of the activities of the working groups to establish the level of productivity of the fields of activities (in comparison with other member states of the EU), the rate of employment, the need for skilled labour, opportunities for cooperation between enterprises and fields of activities, a regional (Scandinavian) cluster, also the possibilities for the fields of activities to participate in them.

- In the course of the activities of the working groups to establish the aims of the speciality associations and the representation organisations of enterprises, their present activities and the circumstances hindering the expression of the opinion.

- Proceeding from the development obstacles of the fields of activities established in the working groups, to involve the shapers of policies for clarifying the existing measures and working out the new solutions in the fields (for example, the Ministry of Education and Research in the framework of education, research, continuing education and requalification; the Ministry of Finance in the framework of taxation policy and the state`s assistance; the Ministry of Justice in the framework of legal environment; and other ministries, boards in the framework of the legal acts, development plans, etc. influencing the fields of activities).

- To carry out in the course of the activities of working groups (involving research companies with methodology assistance) the analyses of the impact of the existing entrepreneurial policy measures and preliminary research for the planned measures.

- To limit in conformity with the results of the activities of the working groups, the circle of fields of activities with a high growth potential for the selection of the fields of activities where the state`s concentrated activities would have the biggest impact on the competitiveness of the whole economy.

- To establish the needs for the supports affecting all the state`s enterprises in an equal degree or the need for horizontal supports (the measures targeted to raising entrepreneurial awareness and activeness, short-term measures against unemployment) and the measures targeted to the growth of the competitiveness of economy. In the case of the last measures to apply, the concentration of measures according to the selected fields activities and clearly preferring the growth of productivity, export capacity and cooperation.

- To agree in providing the state`s measures (i.e. not only supports) according to the results of the activities of the working groups which can be taken into consideration in compiling the new entrepreneurial policy development plan and designing the plan for distributing the European Union supports in the period of 2007-2013. To discuss creating development plans which are based on the preferred fields of activities.

- To apply for additional money from the state budget which is promised to enterprises and use it for supporting the fields of activities with a high growth potential.

- To involve the working groups on a regular basis for the assessment of the impacts of the state`s activities and establish the need for correcting the activities.

- To continue developing the competence based on the fields of activity at the Enterprise Estonia and to launch providing client-centred supports.

- On the basis of the results of the activities of the working groups and entrepreneurial policy decisions, to establish the aims for distributing the supports of the Enterprise Estonia on the basis of the value chain, the interrelated total effect of the value chains, to establish the system of supports in which the value chains can be really used.

- To strengthen the proactive capacity of the Enterprise Estonia in conformity with the entrepreneurial policy preferences increasing the number of the client administrators of the foundation.

- To guarantee that the high quality information which the Enterprise Estonia collects about an enterprise is forwarded to the working groups and the Ministry of Economic Affairs and Communications. With this purpose to finish developing the information system and guarantee that the employees of the foundation should use the information in a similar way.

- To order from the Country Development Centres, providing necessary resources, an analytical economic overview of the high potential fields of activity in the region (fixed on the state level) for the use in the working groups and the design of entrepreneurial policy. To use CDCs more bravely for promoting local cooperation, i.e. with agencies of local government and research institutes.

- To analyze the possibilities of KredEx to pursue the policy of developing preferred fields of activities with a high growth potential under the present situation of arranging supports. To assign KredEx to work out measures in conformity with the results of work of the above described working groups.

The answer of the Minister of Economic Affairs and Communications: The Ministry of Economic Affairs and Communications thanks the National Audit Office of Estonia for the recommendations which to a great extent coincide with the present plans of the Ministry of Economic Affairs and Communications to strengthen and further develop entrepreneurial policy. From the point of view of strengthening we have started working out the monitoring system and working out the principles of assessing in 2011 the impact of support measures. The client administration system, being developed in the Enterprise Estonia at present, is aimed at creating long-term contacts with enterprises, better understanding of the enterprises` needs and supporting them in every aspect.

The recommendations, which deal with the introduction of working groups based on the fields of activity and their use in shaping the policy addressed to the field of activity, directly depend on the choice of the preferred fields. At present the counselling chamber and the steering group of the energy technology programme, the counselling chamber and the steering group of the biotechnology programme and the council of space investigation already function at the Ministry of Economic Affairs and Communications. Consequently, we have recognized the need for analogous arrangement of work. As the same approach is used in the case of the remaining key fields of "The knowledge- based Estonia", it is questionable how expedient and possible it is to extend such a system of a working group to all the economic sectors offered by the National Audit Office of Estonia. As there are application possibilities of the key technologies in all the fields of economy and the introduction of these technologies in Estonian economy and the public sector is one of the aims of "The knowledge-based Estonia", then in real life biotechnology, material technology, ICT and space investigation technology working groups in their activities must indispensably have important connections with very many other sectors where there are possibilities, when starting to use key technologies, to increase added value. In this case a proper example can be the programme of biotechnology in the framework of which supporting of the application of biotechnological methods in food processing industry has started with the purpose of producing functional food and developing food processing technologies.

The recommendation for using country development centres to get economic overviews from regions and to activate local cooperation is rational and in "The strategy of country development centres" such activities are also provided. At present the high-quality application of the respective activities is inhibited by the serious excessive burden of work of the employees of country development centres because of a big number of unemployed people resulting in a quickly growing demand for the consultations how to establish a start-up company.

We definitely also weigh the further development of the KredEx instruments as recommended by the National Audit Office of Estonia.

141. **The recommendation of the National Audit Office of Estonia to the Minister of Finance:** To find an opportunity to allocate additional money from the state budget for implementing the plan of activities recommended to the Ministry of Economic Affairs and Communications.

The answer of the Minister of Finance: The precondition for providing additional money to support entrepreneurial activities can be a functioning planning and assessment system. Only this way it is possible to guarantee the efficient use of the state money. If, relying on the proposal of the National Audit Office of Estonia, an integral entrepreneurial policy has been worked out, while in addition to supports for achieving the aims of entrepreneurial policy also other measures influencing enterprises (taxes, regulating limitations, etc.) have been born in mind. The provision of the additional resources from the budget into the field can be weighed. The argument, that other states support their enterprises, cannot be the reason for providing support.

142. **The recommendation of the National Audit Office of Estonia to the Chairman of the Board of the Enterprise Estonia:** At the foundation to continue the development of competences based on the fields of activities, launching of providing client-centred supports and developing value chains. In developing value chains to give up the approach based on the divisions of the foundation, to coordinate the profiles of the key clients, the fields of activities and to launch monitoring of the fields of activities in all the divisions of the foundation. To unite value chains in cooperation with the Ministry of Economic Affairs and

Communications, taking the obstacles for the development of the fields of activities and flexible support packages for the basis.

The answer of the Head of the Enterprise Estonia: The Enterprise Estonia has started and continuously considers it important, on the basis of segmenting enterprises, to focus attention to the sectors, subsectors, technologies and markets which have the highest growth potential.

The state, via the Enterprise Estonia, has started using the programme-based approach. It means that the technology field is established (for example, energy technology, biotechnology, information and communication technology, the theme (for example, the space), the sector (for example, tourism) or the target market (for example, in tourism marketing the biggest priority markets are Finland, Russia, Germany, Sweden) are also established. Necessary research is carried out, parties are involved in revealing major opportunities and challenges, the main priorities and the plan of activities are agreed upon and it is started to implement the plan. Certainly, it is the more efficient way than only the use of support schemes. At the same time it is also the activity needing bigger resources or being more expensive.

We have also started determining our priority sectors and subsectors in the fields of involving foreign investments and export with the purpose of paying more attention to them.

The Enterprise Estonia has client administrators, also the coordinators of the above – mentioned programmes whose task it is to participate actively in implementing projects and the planning activities. At present there are more than 10 employees of this type. Further on, when the scope of support schemes decreases, it is planned to contribute more to such activities.

During the year 2010 we work out the new client administration process which would better help find efficient projects and would create connections for achieving synergy between value chains.

/signed digitally/

Tarmo Olgo
Head of performance audit department

The recommendations of the National Audit Office of Estonia and the answers of the Minister of Finance, the Minister of Economic Affairs and Communications, the Chairman of the Board of the Enterprise Estonia and the CEO of KredEx

On the basis of the audit the National Audit Office of Estonia made several recommendations to the Ministry of Finance, the Ministry of Economic Affairs and Communications, the Enterprise Estonia (EAS) and the Foundation of Credit and Export Guaranteeing (KredEx). The Minister of Finance sent his answer to the recommendations of the National Audit Office of Estonia on 16 June 2010, the Minister of Economic Affairs and Communications on 15 June 2010, the Chairman of the Board of the Enterprise Estonia on 15 June 2010 and the Head of KredEx on 28 July 2010.

General comments on the report of the audit

The Minister of Finance: The Ministry of Finance recognizes the National Audit Office of Estonia for its work in auditing an important field. The draft of the control report contains the following recommendations to the Minister of Finance: "To find for the Ministry of conomic Affairs and Communications for implementing the recommended plan of activities a possibility to give additional money from the state budget for enterprises."

The precondition for providing additional money for enterprise support can be the functioning system of planning and assessment. Only this way it is possible to guarantee the efficient use of the state money. If , relying on the proposals of the National Audit Office of Estonia, an integral entrepreneurial policy has been worked out where in addition to support for achieving the aims of entrepreneurial policy other influencing measures (taxes, regulating limitations, etc.) have been born in mind, it is possible to start weighing the provision of additional budget resources for the field. The argument, that other states support their enterprises, cannot be the reason for providing support.

The Minister of Economic Affairs and Communications: The Ministry of Economic Affairs and Communications recognizes the National Audit Office of Estonia for carrying out extensive analytical work but cannot agree with the main conclusions of the audit. As assessed by the Ministry of Economic Affairs and Communications, the National Audit Office of Estonia:

1. in making its conclusions several important circumstances have not been considered;
2. the methodology of analyzing, used by the National Audit Office of Estonia, has several drawbacks and this is why all the results are not reliable;
3. the National Audit Office of Estonia`s conclusions are significantly more far-reaching from the real analytical finds, also not all the conclusions of the National Audit Office of Estonia are directly based on the performed analysis;
4. in interpreting the finds of the audit, the National Audit Office of Estonia has been negatively oriented and the National Audit Office of Estonia has not compared the finds with the finds of other states` similar analyses to understand better whether the impacts of enterprise supports are at all quantifiable and which aspects should be born in mind in interpreting the finds;
5. the National Audit Office of Estonia has not understood the structure and the development plans of entrepreneurial policy and its criticism refers to the disability to implement the sector-based preferences while at the same time such sectorial policy has never been the strategic aim of entrepreneurial policy.

Explanations

1. The National Audit Office of Estonia in making its conclusions has not taken into consideration several important circumstances.

1.1. The National Audit Office of Estonia in its analysis deals with different strategic periods of 2004-2006 and 2007-2013. In reality significant change of strategic approach took place between the periods. In the period of 2004-2006 there was a significantly more limited choice of support programmes and the so-called initial stage of shaping entrepreneurial policy, which before the new period was notably corrected, was under way. The revision of basic principles, working out of support packages based on value chains proceeding from the needs of different types of enterprises (start-up enterprises, science-based enterprises, the users of technology, exports, etc.) and the addition of several new big money supports to the support system took place. Consequently, the basis for systematic outcomes according to support groups appeared only in the present strategic period.

The time necessary for the appearance of the impact is not considered, for example, in the case of the average product development project it is at least three years from the end of the project. Consequently, the present analysis of economic indices can see only the influence of the previous strategic period (2004-2006). For seeing the impact of the new period, it is too early, especially when considering the fact that the National Audit Office of Estonia could not as yet use the data of the year 2009 in carrying out its research.

The same comment is also valid in the case of the results received from questioning the enterprises which is concentrated on the impact of the received supports. This is why it can reflect only these supported projects the implementation of which had been finished by the time of the questionnaire. In the case of the projects with the long pay-back time no sufficient time had passed for the appearance of the impacts. Although the National Audit Office of Estonia in its questionnaire offered an opportunity, in addition to the appeared impacts, to assess "the expected impact in the future", such an assessment does not give as reliable results as the characterization of the impact of the developments which had taken place because the enterprise cannot adequately foresee all the influences happening in the future and it is possible that their extent may be underestimated.

To sum up, the analysis of the National Audit Office of Estonia mainly registers the influence of the strategic period 2004-2006 but generalizes the results of the period of 2004-2009 and ignores in its conclusions the perfection of the set of support measures, better targeting to higher added value and export and the introduction of the support policy based on the different types of enterprises which all took place between the periods of 2004-2006 and 2007-2013. The audit of the National Audit Office of Estonia cannot give the content assessment (analytically argumented) to the result of these rearrangements because sufficient time for the appearance of the impacts has not yet passed.

1.2. In its audit the National Audit Office of Estonia has grouped the support measures into target-based groups. One of these groups is constituted by the supports aimed at the growth of productivity. The National Audit Office of Estonia is most critical in its conclusions concerning namely the results of the supports aimed at increasing productivity: *“Only one fifth of the enterprises, which had received from the state the support aimed at raising the growth of productivity, admitted that this support had had significant impact on the productivity of the enterprises. (Page 3).”*

The National Audit Office of Estonia does not take into consideration the fact that the increase of productivity as an independent aim was raised only in 2007. It proceeded from the “Knowledge-based Estonia”, the document of the strategy of research and development and innovation, and the new versions of Estonian entrepreneurial policy for the years 2007-2013 and its basic logic was to increase the number of innovative enterprises

In Estonian economy offering support: 1) for the use of the latest technologies, 2) for employing developmental employees in enterprises (who among other things would be able to initiate the introduction of product development processes at the enterprises) and 3) for developing cluster-based cooperation between enterprises in sharing orders for products and the use of technologies. Until that time the main supports in the “productivity group” as defined by the National Audit Office of Estonia were only the support for organizing refresher courses and the counselling support and the enterprise infrastructure support introduced in 2004-2006 which was not directly targeted to productivity growth but solving the infrastructural problems dating back to the Soviet times and which at the end of 2006 were closed (because there were no market obstacles any longer). Consequently, until the second half of 2008 the support programmes directly aimed at the growth of productivity were not yet functioning and this is why the hypothesis of the National Audit Office of Estonia that in economic indices and the assessments of the extremely significant impact of this set should appear is unrealistic from the very beginning.

1.3. When analyzing the resultativeness of the group of supports aimed at product development, the National Audit Office of Estonia does not consider the peculiar features of the enterprises with a big amount of development and interprets the results in an one-side way in several cases. In many cases the National Audit Office of Estonia stresses that in monetary value (too) many developmental supports have been given to the sectors of biotechnology and material technology in comparison, for example, with the processing industry. The Ministry of Economic Affairs and Communications underlines here that the assembling of big amounts of development supports in the above mentioned two sectors and in addition to ICT is natural because here we have the preferred fields of knowledge-based Estonia or the policy of preferred development of priorities is implemented which the National Audit Office of Estonia constantly considers necessary. In addition, it is necessary to consider that in some fields the development activity is many times more expensive and time-consuming than in other fields and this is why the supported projects are longer in duration and needing more money than on average. It is especially true of the field of biotechnology were the period before new technology reaches the market is very long reaching up to 10 years. It is possible to summarize the main criticism of the National Audit Office of Estonia concerning development supports in one statement :”*The National Audit Office of Estonia has no confidence that a notable part of the development projects, having received the biggest support, ever reach the product stage, bringing revenues to Estonian enterprises and the population and causing structural changes in economy.”* (Page 25)

The Ministry of Economic Affairs and Communications remarks that as in the early development stage of science-rich rich projects there are high technological risks and market risks involved, nobody can have full confidence whether the marketed product is produced and export reached. The only way to help these enterprises constantly is to start supporting export then when the product has been developed and the time for it adequately considered (not demanding export, for example, when the applied research is completed).

The reproach of the National Audit Office of Estonia “no confidence in reaching the market” is in contradiction with the reproach “the state takes too few risks” (see page 4 : *The fear to give money to the projects, which are more risky but with the help of which there could be more extensive aims for the support and the development of fields of activity is in the real centre of attention, has brought along a situation where successful enterprises, which could fulfil their plans without a support, are supported.”* The same idea is repeated also elsewhere in the audit report).

In addition, the National Audit Office of Estonia introduces the notion of the so-called “blind and unweighed risk” dealing with the situation where the Enterprise Estonia supports developmental work at the enterprises specializing in research and development activities which on the basis

of the chosen business model and the division of labour existing in economy do not plan to take the product to the market but they sell further the final result of their developmental work (pages 25-26). The Ministry of Economic Affairs and Communications agrees that reaching of such product development to the market is connected with additional risks but does not agree with the fact that these risks are not assessed at the moment of applying for the support and the risk is “blindly” taken. Here the problems are hidden in the later realization of the enterprise`s plans and prognoses (which are assessed at the moment of supplying for the support) – as there are more undeterminable factors, there are also relatively more developments which are not related to the prognoses.

2. The methodology of the analysis used by the National Audit Office of Estonia has several drawbacks.

2.1. The composition of the control group. For the quantitative assessment of the impact of the supports the National Audit Office of Estonia formed a similar comparison group from the enterprises, having not used the support, to the analyzed supported enterprises in conformity with their fields of activity, the number of employees and the turnover. But the Ministry has no confidence whether the comparable enterprises have been compared by the control group formed by the National Audit Office of Estonia. Page 15 figure 5 shows that, for example, the control group is much higher, concerning the productivity of total costs, than any enterprise in the group of supported enterprises. There are other significant differences, for example, no attention has been paid to the fact that the control group would have had a similar export capacity with the support recipient enterprises. A more important issue is the fact that it seems that with one and the same control group different support recipients or

different target groups have been compared while at the same time, for example, the start-up entrepreneurs and export developers cannot be well compared.

2.2. The presence of the influence of the economic boom in the data. The hypothesis of the National Audit Office of Estonia was that in the case of an influencial support the supported enterprises should have grown quicker than the enterprises without a support. This hypothesis need not be right because considering the fact that during the boom the domestic market grew quicker than the economies in the major target countries of Estonian export. Enterprise supports are in majority given to exporters but the exporters, being in tight competition of the world market and in the more slowly growing markets than the Estonian domestic market, had not a possibility to raise prices and salaries in comparison with the enterprises working for the domestic market. As in forming the control group used in the analysis, the presence of export and its proportion in turnover was not considered and the support recipient enterprises and the control group need not be comparable in the export capacity, not only the hypothesis is incorrect, but the result received by the National Audit Office of Estonia is also not reliable (the hypothesis is refuted).

2.3. The questionnaire of the National Audit Office of Estonia was carried out in the period of the economic crisis. In interpreting the results of the questionnaire the National Audit Office of Estonia has not considered the circumstance that the questionnaire was carried out at the beginning of 2010 when the influence of the economic crisis was in its peak and the entrepreneurs, facing the difficult situation, could underestimate the impact of the received supports, especially when the supports were received in the "good times" for achieving the aims (for example, increasing investments, increasing the market share, the growth of turnover) which as a result of the economic crisis were not achieved and remained unrealistic.

2.4. The practice of other countries in assessing the impact of enterprise supports ("Economic Impact Evaluation of Scottish Enterprise`s Interventions with Account and Client Managed Companies. A Report to Scottish Enterprise" (GEN, Hayton Consulting Research Resource, January 2009), www.evaluationsonline.org.uk) underlines that in questioning enterprises it is necessary to take into account the following factors which influence the assessments of the necessity of the supports made by enterprises:

- the entrepreneurs may not wish to give good achieved results to anybody else beside oneself and underestimate the importance of the support;
- the entrepreneur does not remember all the aspects of the support and he/she may underestimate its impacts:
- among many different factors, influencing the enterprise`s developments, the entrepreneur has a difficulty to separate these factors which were caused by the support;
- the entrepreneur may give bigger importance to the impact of the support than it really was hoping thus to get new financing.

These factors have not been considered in the analysis of the National Audit Office of Estonia.

3. The conclusions of the National Audit Office of Estonia go significantly further from the real analytical finds of the audit. Also, all the recommendations presented by the National Audit Office of Estonia do not grow directly out of the analysis carried out by the National Audit Office of Estonia.

3.1. In many places the National Audit Office of Estonia underlines that enterprise supports have not achieved a wider impact on the competitiveness of the sectors with a big added value. The real analytical proving material for this statement remains unclear. The only analytical find of the National Audit Office of Estonia which could be received from the audit was the absence of the noteworthy difference between the economic indices of the supported enterprises and the enterprises of the control group (except the group of developmental supports where there was a clear difference in favour of the supported enterprises). It remains unclear for the Ministry how on the basis of this find it is possible to state that the supports have not had a more extensive impact in the sectors. In the case if a bigger difference appears between the supported group the control group, the received benefit remains enterprise- centred. Can it be stated that the support did not influence the whole sector more broadly? Making conclusions about the broader impact in the whole sector would have presumed the analysis of the presence of the connection between the resultativeness of the enterprises having received support in a particular sector and the resultativeness of the sector as a whole which was not made in the research but only supported groups and control groups were taken into account.

3.2. Despite the conclusion that supports in the audited sectors have not had a more extensive impact, the National Audit Office of Estonia recommends supports in a bigger scope than before to be targeted to these sectors although the National Audit Office of Estonia has not calculated which part of all the supports has been given to these sectors in the period under discussion. The Ministry underlines that in the period of 2004-2009 via the Enterprise Estonia 5.5 billion crowns of support were given to enterprises while to the sectors audited by the National Audit Office of Estonia 3.4 billion crowns or 61.8% were given. Out of this sum 24.2% went to the sector of bio- and material technology. The high percentage is natural considering the key fields of "Knowledge-based Estonia" and the fact that out of five technology development centres functioning in 2004-2009 who are financed by the Enterprise Estonia four centres work in the bio- and material technology sectors. By importance the following bigger supports have been given in the audited sectors to business and finance services – 17%, mechanical engineering and metal industry and timber and furniture – to both 6%, to ICT and electronics – 5,3%. It is not less important to mention that 2.1 billion crowns, which have been given to the sectors outside the sectors audited by the National Audit Office of Estonia, have been relatively equally divided between the sectors not observed in the audit of the National Audit Office of Estonia, for example, to food processing industry, textile industry and the production of transport vehicles. To sum up, it becomes clear that a rather big percentage of supports has already been given to the sectors viewed by the National Audit Office of Estonia. Considering the data of the National Audit Office of Estonia that the audited sectors in 2008 constituted about 30% of Estonian economy (page 11), it can be said that into one third of economy two thirds of the support have been given. Such a development is also natural because in giving supports the supported project`s ability to create high added value and develop export are taken as the basis. The research of the National Audit Office of Estonia showed that in the audited sectors the added value was higher than the average or the enterprises of these sectors had a certain natural privilege (proceeding from the environment of activities) for applying for supports among other applicants.

3.3. In addition, the Ministry of Economic Affairs and Communications remarks that for making the recommendation to give more resources in the future and devote attention to the sectors (audited) with big added value the National Audit Office of Estonia had no need at all to carry out the analysis of the impact of the support on the level of a single enterprise and the comparison between the support recipient groups of enterprises with the control group. Such a conclusion can be reached with a simple comparative research comparing the levels of added value in separate economic sectors. Perhaps, the National Audit Office of Estonia has given the recommendations which do not grow out of the analysis carried out on the impact of supports but most probably they have been thought out before carrying out the analysis.

3.4. The National Audit Office of Estonia states:…*the supports have not been able to cause wider innovation attitude* (page 3). This statement again is not based on the analytical finds which are not found in the audit or, perhaps, the indices of the assessed supported enterprises (for example, innovation investments, investments into research and development) are not linked to the respective indices on the level of the whole economy. As background knowledge it must be said that the investments of Estonian enterprises into research and development have grown since 2004 on average 30% each year which is a very high speed in the European Union context. During the same time the number of enterprises investing into research and development has grown 44% and the percentage of innovative enterprises among all the enterprises has reached 56% (in 2004- 48%).

3.5. The National Audit Office of Estonia, in making its conclusions, has not taken into consideration the situation during the time of the economic boom when there was a tendency rather to invest into the field of construction and real estate than into the new product development for export. Such “searching for easier life” made it more complicated to find worthy clients and such trends may partially explain the fact why in audited sectors the growth of employment was modest (because the construction and real estate sector increased employment at the cost of other fields of activities).

3.6. The National Audit Office of Estonia states: *The Estonian enterprises do not view cooperation as a resource for development and the supports have not changed this opinion.* This statement has been built on the find from the questionnaire that during the period of 2004-2008 the percentage of enterprises in the sample cooperating with others, was 38.8% and 6.3% of all the respondents planned to start cooperation. Without any comparison the National Audit Office of Estonia considers the given percentage low. Also, it has not studied the growth of cooperation in time but deals with the total results of the period. Here the Ministry presents the results of the research of the innovative activities of enterprises in 2004-2008 according to which the percentage of the enterprises cooperating in the field of innovation has grown from 34.8% in 2004 to 41.2% in 2008. It has been fully left out of consideration that one of the most important support measures to encourage cooperation between enterprises and develop clusters was implemented only at the end of 2008 at first in the from of prior applications (or supports for finding partners of strategic cooperation, for drawing up a common plan of activities and only in the current year a bigger number of real cluster development plans are supported (to implement common plans of activities). Consequently, the National Audit Office of Estonia gives a negative assessment to the implementation of the policy which in its full shape has not yet researched the stage when all the results could appear.

3.7. The National Audit Office of Estonia states: *“The whole entrepreneurial policy is distributing the European Union supports. /_/ It is hoped to achieve the aims of entrepreneurial policy with the help of the EU supports but it has not been successful. /_/. The research of the National Audit Office of Estonia showed that not all the enterprises or fields of activity need money for raising competitiveness. For example, the information and communication technology has a constant problem with the availability of skilled labour. Obstacles for development are also connected with the adoption of the EU rules and standards, the administrative capacity, etc.*

The Ministry of Economic Affairs and Communications states that the National Audit Office of Estonia in its audit either purposefully has not considered it necessary to reflect the activities under way already today or did not have the respective information. Entrepreneurial policy is developing in time and in the involved themes has very often moved further and continues to move in the future further than the support measures provided by the Enterprise Estonia and KredEx. Some examples of the activities under way:

1)assessment of the administrative burden and its decrease together with the Ministry of Justice and other ministries, 2) teaching of entrepreneurial skills together with the Ministry of Education and Research, 3) in connection with the need for ICT labour force adopting a state programme for information and communication technology together with the Ministry of Education and Research, 4) development of curricula and the state commissioned education which would consider the needs of entrepreneurs and the economy, 5) increasing the cooperation of entrepreneurs with local municipal governments and regional research and educational establishments in cooperation with the Ministry of the Interior, 6) developing creative industry together with the Ministry of Culture (which is aimed at using creative work and creativity for developing the products and services of other economic sectors, not only the prosperity of culture as the National Audit Office of Estonia wrongly says on page 35, paragraph 87).

The National Audit Office of Estonia stresses the need to connect entrepreneurial policy closely with education and research policy but it has not taken into consideration, among the basic documents of entrepreneurial policy (page 34, paragraph 67), “The Knowledge-based Estonia” which is an equal basis of the system of enterprise supports beside the Estonian entrepreneurial policy. “The Knowledge-based Estonia” is the common strategy of the Ministry of Economic Affairs and Communications and the Ministry of Education and Research which reflects the activities of the two ministries in the fields of higher education and research and in increasing the innovation capacity of enterprises and the respective activities are carried out in cooperation and guaranteeing the coordination of activities.

4. The National Audit Office of Estonia, in interpreting the finds of the audit, has had a negative inclination and has not compared its finds with the finds of the similar analyses of other countries with the purpose of better understanding whether the impacts of enterprise supports can be quantified and which aspects should be born in mind when interpreting the finds.

4.1. The presence of inclination in interpreting the resultativeness of the export supports. The National Audit Office of Estonia states: “*According to the research the entrepreneurs saw a certain impact of the supports targeted to the growth of export (depending upon the supports 16-57% of respondents) but it is not sufficient as assessed by the National Audit Office of Estonia considering the fact that there are the supports directly targeted to the growth of export.” (Page 3).*

The comparisons with the assessment results of other countries give hints how the responses of entrepreneurs to assessment questions should be interpreted. For example, on the basis of the assessment carried out in Scotland, the responses where the assessments of entrepreneurs accumulate to the degree of 1/3 (1.e about 30% of the respondents support one answer) should be considered significant. Proceeding from the above said, we cannot agree with the assessment of the National Audit Office of Estonia that the support measures targeted to export growth do not fulfill the aim because only a little more than a half of the entrepreneurs see a significant impact of supports. Considering the fact that in addition to those, who see the significant impact of supports, a part of the respondents see a small impact, then the overall percentage of the entrepreneurs, who feel some impact of the supports, researches 70-80% (page 21, figure 7; page 23, figure 10). This result should be assessed as good.

A very vivid example of the inclined interpretation is the conclusion made by the National Audit Office of Estonia on the basis of page 23 figure 10 – the impact assessments of enterprises reaching over 50% given to the significance of KredEx export guarantees in increasing export, marketing of products and the improvement of the market position are not sufficient because the target group of supports consists of already exporting enterprises and this is why the impact should be bigger. As the Ministry of Economic Affairs and Communications assessed , the right interpretation is absolutely opposite – as the supports are targeted in majority to the already acting exporters, they may not assess the impact of the guarantee for the further development of export so important as the beginning exporter in the case of the first entering into a foreign market.

4.2. The inclination in interpreting the results of the deadweight. The deadweight exists then when the support recipient enterprise would have implemented the project without the support in the same amount, during the same time and in the same place. According to the results of the questionnaire of the National Audit Office of Estonia the deadweight of enterprise supports is between 9% (support group EAS 3 a) and 24% (support group EAS 3b) (figure 17, page 30). Relying on the research of the impacts of enterprise supports made in Scotland, such a low percentage of the deadweight is a very good result.

The National Audit Office of Estonia presents such a result but does not present it clearly and understandably in one meaning as an assessment of the deadweight but minimizes the importance of this find adding to this find insignificant and misleading finds for inclining the assessment to the negative side.

The National Audit Office of Estonia:

- does not proceed from the international definition and observes the situation whether the project which did not get a support would have been implemented at all (“*Depending upon the group of support only 14-39% of enterprises would have fully given up the project”* (Page 29) at the same time the important effect to the enterprise and economy appears already much quicker than the final implementation of the project is completed and to a bigger degree.
- observes the enterprises which did not get the support but still implemented the project (“*In the case of the supports targeted to the growth of productivity the project was implemented in its full scope not depending on the support in 41.8% of projects”* (Page 28, paragraph 56). At the same time the given result characterizes the fact that the selection criteria for projects have efficiently eliminated the projects which would have had the deadweight if they had received the support. The opposite connection that the enterprise, having not received the support, implemented the project also without a support is not a deadweight of the support but the fact that these enterprises which did not need a support did not get it. It shows the extent of avoiding the deadweight (as the National Audit Office of Estonia by the way mentions but does not remove the quoted paragraph from its text).

The National Audit Office of Estonia makes an impression in the reader that the best support is a support without any deadweight. It may be considered purposeful misleading of the reader. Namely, in interpreting the deadweight, it is necessary to consider the fact, approved in international and also Estonian practice, that the deadweight characterizes the projects which are either 1) necessary to enterprises or 2) with a small scope. A small deadweight (or the projects which the enterprise would not implement if the support were not provided) characterizes the projects with a big need for resources (for example, science-based product development). A question arises which projects should be supported – whether these where the deadweight is not present or the projects which the enterprise would not initiate if it does not get the support. If the project has some value for the enterprise, the deadweight appears indipensable but its acceptable level is important.

4.3. Expressing unrealistic expectations of the impact of enterprise supports. Although the National Audit Office of Estonia in its general approach stresses the need to deal with entrepreneurial policy wider than only supports. In assessing the impact of supports it does not keep to this principle and tries to express the development of productivity and employment on the level of the whole economy only with the impact insufficient of the supports. For example, page 17, paragraph 23:”*The growth of productivity, employment and export turnover was caused by the economic boom and it was not sustainable. Restructuring of economy has not taken place /_/. As assessed by the National Audit Office of Estonia, when continuing the present model of distributing supports, there are few opportunities to help promote the growth of the competitiveness of the enterprises,”*

The idea of the overall power of support is also expressed, for example, on page 28: *“…the main reasons why the renewal of products and services has not been completed are the unstable demand for goods and services, too big domestic competition and the expensiveness of the developmental work.*

The support system aimed at few and mainly high technology R&D enterprises has not been able to solve these problems. Here the Ministry of Economic Affairs and Communications asks how the state instead of the entrepreneur could solve the problem of unstable demand and stiff competition.

5. The National Audit Office of Estonia has not understood the structure and the plans of development of the entrepreneurial policy and its criticism is addressed to the inability to put into practice sector-based preferences while at the same time such sectorial policy has never been the strategic aim of entrepreneurial policy.

The main criticism of the National Audit Office of Estonia addressed to the Enterprise Estonia and the Ministry of Economic Affairs and Communications deals with the inability to work out competence in economic sectors and set the aims bigger than the measures – again evidently the aims to be resultative in certain sectors. Here the National Audit Office of Estonia ignores the fact that establishing such textbook-like sectorial policy is not provided in any fundamental strategic document of entrepreneurial policy. In other words, the National Audit Office of Estonia is critical because something of the kind had not been done or was done improperly – the things which had never constituted the aim.

Instead of selecting the preferred economic sectors the entrepreneurial and innovation policy has proceeded from alternative principles:

1) The development of key technologies and important social-economic fields (ICT, biotechnology, material technology, energy technologies and energy supply, space investigation technology, the environment, health care). The basis for the selection is the understanding that the so-called key technologies are the technologies widely used already at present or in future in economy and society, the possibilities for implementation in the whole economy and the public sector are much more extensive than the use of the products of an average industrial enterprise. By today the state programmes have been launched (energy technology, biotechnology) or being launched (ICT). Their fundamental logic and the organization of implementation exactly meets the needs considered necessary by the National Audit Office of Estonia for the development of priority fields of activity – the inner priorities of the field critical points and possibilities for development had been clarified. In cooperation between different ministries, according to needs developmental supports are targeted to the field. Human capital and the infrastructure are developed, cooperation inside the field of activity and between other fields of activity is promoted, etc.
2) Supporting the enterprises aiming at producing high added value, despite belonging to an economic sector. Dividing economy into sectors is a statistical simplification which ignores a big amount of information. Until recently it was not possible to find the biotechnology sector in statistics and until today it is not possible to find material technology. In addition, the sector-based attitude is also ignoring the value chains necessary for producing a particular (export) product. For example, the production of wind generators is registered as mechanical engineering industry but in reality for the successful export of this product needs input from the industries of plastics and metal, engineering and designing bureaux, the construction sector, etc. Consequently, it is not reasonable to leave easily out a big number of sectors from the focus of support policy. Also, the monitoring project of the “Industrial engines 2018” of the Development Fund came to the conclusion that the success or the failure does not depend on the branch of industry and the choice by the state between them would not be right. The so-called business function is significant (for example, R&D, the product design, production, logistics and distribution, marketing and sales, post-service and additional services) or on which stage in the value chain some entrepreneur is located, no difference in which sector he/she is presently functioning.
3) Shaping the policy based on preferred fields of activity, using the so-to-say method from below to the top. The Ministry of Economic Affairs and Communications is of the opinion that in Estonia it is not thinkable to have the so-called enlightened autocracy in the framework of which the ministry knows and solves the problems of the selected priority economic sectors. Instead of the state`s selection of preferred sectors the ministry proceeded from supporting the formation of economic clusters based on value and procurement chains while supporting the development of building up the ability to analyze the situation and the environment of activities to create long-time strategies and give the state an input in the from of clarifying particular needs for support or the needs to intervene in some other way inside the clusters themselves. In the case of the supported clusters (to give an idea how the clusters differ from statistical economic sectors, we shall present a selection of the clusters which have by today received the decisions to be supported: the Estonian wooden construction cluster, the Estonian ICT expert cluster, the cluster of wind energy, the cluster of ecological construction and design, the cluster of health technologies, the cluster of creative industry, the cluster of medical IT), we consider especially significant namely the cooperation between sectors which allows to generate more new ideas and, for example, the products and services which complement each other and which can be combined for offering the consumer an integrated final solution.

The Chairman of the Board of the Enterprise Estonia: Herewith I send the answers of the Enterprise Estonia (EAS) to the draft law control report “The impact of the state`s enterprise supports on the competitiveness of Estonia economy”. The answer to the remarks in the chapter “The summary of the results of auditing”:

The Enterprise Estonia together with the Ministry of Economic Affairs and Communications has the aim to invest the public resources in the way which would result in the biggest impact on increasing the international competitiveness of Estonian enterprises. To achieve it, the most significant fields of intervention are the increasing of export capacity of enterprises, the support to the development of new products and series, the support to establishing new enterprises with a growth potential, the involvement of foreign investments with the export potential and the improvement of entrepreneurial environment. Constantly, it is important in the case of the given fields of intervention that the productivity of enterprises should increase.

We have established the aims to the given intervention fields, made them measurable and divided them into sub-aims which have been fixed in the annual plans of activities of the Enterprise Estonia and confirmed by the Council of the Enterprise Estonia.

For achieving the aims we do not consider significant only the implementation of support schemes but the best sets of support schemes and the activities of the enterprises themselves together with the use of diagnostic instruments.

The parts of the plans of activities of the Enterprise Estonia or the value chains have been built up so that they contain both bigger investments (for example, 1-2.5 million crowns of export marketing supports, the supports for technology investments from one million to 500 million crowns) and also smaller investments (for example, some tens of thousands crowns to support participation in fairs or the supports for knowledge and skills development and innovation supports). Smaller supports are planned rather for creating preconditions to achieve the impact of bigger investments.

In the case of the projects financed by product development supports we are ready to take significant weighted technological risks.

At the same time it is important to stress that such an approach is applied only in the new financial period (2007-2013) and it means that on this basis we have carried out certain activities and selected projects and financed them beginning from 2008. In its turn it means that by the time of the present audit (the year 2010, the first quarter) there cannot be the impact of the most of the financed project and the carried out activities.

Why? It is because we presume that in the case of even the start-up supports, causing the quickest effect, the mean impact results (the degree of survival, the increased turnover) will appear after the completion of the project in the first or the second full year.

In the case of the export and product development supports, in technological investments the time of the appearance of the impact is even longer. For example, if the projects of export marketing are 2 years, we presume the growth of export capacity during 1-3 years after the end of the 2-year-long marketing project. The time perspective is even-longer for the appearance of the impact in the case of the projects of product development.

On the basis of our experience the appearance of new exporters was hindered very strongly by the growth of the possibilities of the domestic market during the economic boom and the following first year (2008-2009) of the economic decline when in the traditional target markets of Estonian entrepreneurs the demand fell radically. Only in 2009 we made an effective intervention with the support scheme of technological investments for increasing productivity and this is why it could not cause an impact by the beginning of the year 2010. The Enterprise Estonia stresses that, as it known to us, the countries, more developed than we (the Nordic countries, the Netherlands, the United Kingdom), have been dealing with building up the public sector`s support system for enterprises for scores of years and also in these countries the research of the impact has very often given contradictory results.

The definition of the added value is in reality much wider than underlined in the conclusions of the audit. Namely, the added value is also present, when as a result of the state`s intervention the processes and developments take place more quickly in time, they take place in a bigger scope or take place in the place where they would not have taken place otherwise.

This is how the added value is dealt with by the more developed states being an example to us in supporting their entrepreneurship.

Proceeding from the added value`s so-called absolute definition – that the development and processes would take place only because of the state`s intervention, not depending on time or scope – is too ambitions and very expensive and a risky activity. In real life the idea, the project owner`s leading initiative and capability are of decisive importance. The revealed facts and the recommendations of the present audit confirm that we have chosen the right direction for building up the system of public sector enterprise supports.

The CEO of the Foundation of the Credit and Export guaranteeing (KredEx): According to the Statutes of KredEx, the aim of the foundation, established by the state, is to create for capital, with the help of improving access and controlling risks, the possibilities for the development of entrepreneurship and export and improving living conditions if the sufficient offer of financial services by the private sector is not guaranteed. The main tasks of the foundation are proceeding from the state development plans and policies:

- guaranteeing the credit products offered by the credit and financing establishments, including state guaranteeing enterprise and dwelling houses repair loans in the meaning of “The Act on Supporting Enterprises and the State Guaranteeing of Loans”;
- guaranteeing export deals, including the organization of state guarantees for export deals and giving state guarantees in the meaning of “The Act on State Guaranteeing Export”;
- the development of other financial services and offering them in the enterprise and dwelling houses repair sector.

In fulfilling its main task the foundation cooperates with Estonian, other states` and international financial institutions.

To improve the access to capital and controlling risks, KredEx offers the enterprises guaranteeing of credit products provided by credit and financing establishments and financing in the form of the subordinated loan. For controlling the credit risks connected with export KredEx offered export guarantees up to 30 June 2010. From 1 July AS KredEx Credit Insurance established by the state and KredEx deals with offering credit insurance.

As according to the Statutes the economic activities are organized so that in the long perspective the revenues of the foundation cover its operating costs, the services offered to the entrepreneurs by KredEx have to be paid for. In pricing the services the principle of economic self-management is followed.

The analogous services with KredEx are actively offered also in other countries. KredEx is a member of the AECM, uniting the European organizations offering loan guarantees (http://www.aecm.be), the NEF, uniting the European organizations which finance small and medium size enterprises (http://www.nefi.be), and the Berne Union/Prague Club, uniting the world credit insurers (http://www.berneunion.org.uk(/prague-club.html).

Having acquainted itself with the draft law of the control report of the National Audit Office of Estonia “The impact of the enterprise supports on the competitiveness of Estonian economy”, KredEx considers it important to stress on its behalf the following aspects to decrease the possibilities for a wrong interpreting of the control report:

1. The loan guarantee, the subordinated loan and the export guarantee of KredEx have to be paid for by enterprises. Through the loan guarantee, the subordinated loan or the export guarantee the enterprise does not get non-returnable monetary supports. Both the subordinated loan and the loan given by a credit and financing establishment and guaranteed by KredEx have to be paid back by the entrepreneur. The entrepreneur is relieved from paying back only in the case of insolvency and after realizing all the guarantees given by KredEx. In the case of a loan guarantee and the insolvency of the entrepreneur KredEx has an obligation to pay the credit and financing establishment the main part of the unpaid loan from which the revenues received from realizing the guarantees set by the entrepreneur are deducted. For the use of the loan guarantee the entrepreneur pays KredEx the single agreements fee and the guarantee fee until the end of the period of the agreement. Also, the entrepreneur pays the interest for using the loan to the credit or financing establishment.

2. In the case of the subordinated loan the entrepreneur does not pay it back in the case of insolvency and after realizing all the guarantees set by himself. For the use of the subordinated loan the entrepreneur pays to KredEx the costs connected with concluding the agreement and administration, the price of the money and the risk fee.

The content of the export guarantees is controlling the risk of insolvency connected with the buyer in the credit sales or in using the export guarantee the exporter`s losses in the amount of the insurance rate are covered in the case of the insolvency of the exporter`s buyer. For controlling the described risk the entrepreneur pays insurance premium to KredEx.

In the case of the services of KredEx it is not right to state that “successful enterprises which would implement their plans also without a support are supported”. As the services of KredEx have to be paid for, it is not a non-repayable support. Presuming that entrepreneurs behave economically in a rational manner, the services of KredEx are used only by the enterprises which need the respective service for their economic activities.

3. KredEx significantly amplifies the state money targeted for promoting entrepreneurship. Thanks to 1 million crowns invested into KredEx by the state, KredEx can give loan sureties of 10 crowns which allows the enterprises to add 17 crowns of financing from credit and financing establishments and together with the self-financing of enterprises about 21 crowns in total are put into entrepreneurship. As the capital of KredEx presumably survives , it can be used repeatedly with the same aim and in the longer perspective the amplification will be many times bigger.

4. In offering sureties and loans KredEx must proceed from the rules of the state help of the European Union according to which surety and the loan cannot be given to the activity connected with export which is directly connected with the exported amounts of goods, the creation and functioning of the net of division or other current costs related to exporting it with giving a surety the state`s help provided. Also sector-based limitations (agriculture, the steal sector, etc.) have been established.

In addition, the state`s help rules limit the offer of KredEx export guarantees. Starting from 1 January 2008 KredEx can offer short-term export guarantees in the direction of the high income OECD countries only to small and medium size enterprises, the export turnover of which does not exceed 2 million EUR a year. Consequently the KredEx export guarantees were used starting from this date primarily by very small exporters or the enterprises, the export of which was directed to developing states.

5. The additional sector-based limitation is not effectual under the presently valid conditions because proceeding from the requirement of self-profitability it is important to diversify risks to cover the losses, connected with guaranteeing unsuccessful projects, with the revenues earned by the successful projects. In introducing additional limitations the sureties will become more expensive for the enterprises and the state must start consistently to cover the appearing losses. It can also be stated that in the case of loan guarantees the KredEx resources are sufficient, i.e. because of the lack of the capital not a single negative decision was made and presumably in the near future KredEx must not make a negative decision. Consequently, from the point of view of economic development and employment it is reasonable to improve access to capital in the case of all economically viable projects. In the case of export guarantees making additional favourable offers is limited by the rules adopted by the European Union and the OECD which do not allow the states to give advantages to the experts which would distort competition. In the case of the subordinated loans of KredEx there are more favourable conditions for the enterprises, the export turnover of which constitutes more than 20% of the total turnover.

6. If to compare the enterprises which used the loan guarantees or the subordinated loan of KredEx with the enterprises which did not use the services of KredEx, it must be born in mind that the offers of KredEx are used primarily by the enterprises being weaker than average or the enterprises which need the state`s support for achieving success. This is why it should be considered rather a good result when the economic indices of the enterprises, supported by KredEx, are on the comparable level with the control groups of the audit. In addition to the comparison of economic indices, it must also be considered important that the supported enterprise continues its activities and preserves jobs.

In the present audit it is also underlined that because of the economic crisis in the years 2008-2009 the economic indices of enterprises became worse. First of all, the less capitalized enterprises, which because of loan guarantees and subordinated loans were the main target group of KredEx, happened to be in a different situation.

7. In assessing the applications for guarantees, the number of created jobs and the growth of productivity of the project influence indirectly the decision to be made. As KredEx controls the risks connected with the project and must at the same time follow the principle of self-profitability, the main criteria for giving a loan or surety is the project`s profitability of business and the related risk. The number of created jobs and the growth of profitability are rather the arguments supporting the particular risk taking. At the same time there is no doubt that successful business projects help promote economic growth and through it to achieve the aims of the growth of employment and productivity. As it is known, the information connected with creating jobs does not influence the KredEx decision, there is no reason why to have doubts whether the enterprises presented wrong information.

8. The present audit presents: “The enterprises, which thought that the support had a significant impact, had received two times a bigger support than the enterprises which did not see any impact. Also, the support in their turnover constituted about 13.8% (in the case of the enterprises not seeing the impact the rate was at 2%). “In the case of the loan guarantee, the subordinated loan and the export guarantee it is not non-repayable monetary support. The entrepreneur has an obligation to pay the loan back, also it is necessary to pay the interest for the loan either to the bank of KredEx. In the case of the use of the loan guarantee the enterprise pays a fee for the guarantee to KredEx. The export guarantee is realized only in the case when the buyer does not pay to the exporter. For the use of the export guarantee the entrepreneur pays the insurance premium to the KredEx. As in the case of KredEx services we do not have the non-repayable monetary support, these sums cannot constitute a big percentage of the turnover and this is why it is difficult to expect that these sums would cause significant changes in the behaviour of the supported enterprises. In the case of the loan guarantee, for the entrepreneur it is of great importance to have the resource, involved thanks to the loan surety of the loan, or the export deals, having taken place, thanks to which it is possible to develop or extend the present economic activities. Among other things, it must be born in mind that as a rule the enterprise could not get a loan without the loan guarantee of KredEx. In the case of smaller sums of the loan (the sum of the loan up to 500,000crowns) the entrepreneur may not even feel the use of the KredEx loan guarantee because in the case of smaller sums KredEx has to delegate decision making and concluding agreements to the credit and financial establishments and only when needed to ask more exact information from the entrepreneur.

9. It is not right to state that “KredEx does not deal with improving the competitiveness of enterprises.” Through the loan guarantee, the subordinated loan and the export guarantee we improve the access of enterprises to capital and control risks at export markets. Both the access of enterprises to capital and also export, as assessed by KredEx, are important aspects in increasing the competitiveness of enterprises. The present audit also reveals that for enterprises the biggest problems at present are “the fall of the demand at the domestic and foreign markets, the obstacle for development is the limited ability to invest into

entering the new markets, machinery and equipment and into working out products and services." Also, according to other research work availability of financial resources is in most cases among the first three factors limiting the development of enterprises.

10. The audit report underlines that "for the growth of the export capacity and internationalization as the second important indicator of competitiveness, according to the expectations of the Ministry of Economic Affairs and Communications, the full activities of KredEx (or loan sureties, loans and export guarantees)" must contribute. KredEx considers it important to stress that proceeding from the aspects of economic development and employment also the non-exporting enterprises are given guarantees for taking loans from the credit and financial establishments and to a small degree the activities of non-exporting activities are financed by giving them loans from KredEx.

11. In the present audit it is stated: "In addition, the analysis of the economic indices of the support recipient enterprises shows that the export guarantees "happened to be given" only to the exporting enterprises whose project had a small risk. Unfortunately here the content of the export guarantee has not been understood. On the basis of the analysis of the economic indices of the enterprise which used the export guarantee it is not possible to assess the risks of the project with credit insurance.

In the case of credit insurance the risks are caused by the buyer of the goods or services (in the given case by the importer) not the seller (exporter).

As in case of the export guarantee the risks connected with the buyer are assessed, then it is not right to state that the export guarantees of KredEx are targeted only to strong functioning exporters. When offering the export guarantee, the exporter`s strength is not important. The aim is to raise export capacity, i.e. not so much to improve the economic position of a particular enterprise but to extend the possibilities of exporters to find new buyers or markets. The absence of possibilities to control the risks connected with buyers is an obstacle in developing the enterprises and their competitiveness.

12. The aim of the loan sureties of KredEx is not only supporting investments, including the use of a new technology. Investments can also be made into buildings, product development, etc. As a result of the economic crisis, in the recent years guaranteeing of financing of circulating capital and bank guarantees has become especially important. For example, in the year 2009 the percentage of guarantees connected with the overdraft and the turnover loan was 41%, the percentage of investment loan and leasing 35% and the percentage of bank guarantees 24%.

13. It is hard to agree with the statement in the audit report: "the bigger surety the enterprise has received from the foundation, the bigger is the probability that the enterprise, as it assesses itself, could have managed without the surety from KredEx and found another possibility for implementing its plan of activities." Because of the reasons explained above there would not be a need and an agreement to use the services of KredEx and its would not be economically rational behaviour.

<table>
<tr><th>The recommendations of the National Audit Office of Estonia</th><th>The answers of Ministers, the Chairman of the Board of the Enterprise Estonia and the Head of KredEx</th></tr>
<tr><td>Supports for changing the strategic behaviour of entrepreneurs

62. The recommendation of the National Audit Office of Estonia to the Minister of Economic Affairs and Communications: With the purpose of establishing the aim for working out and changing the support measures and assessing the applications, to change the strategic behaviour of the enterprise – looking for cooperation partners, increasing productivity, increasing exports the following should be done.

▪ To support start-up enterprises and entrepreneurial activeness more in these fields where the added value (for example, the audited fields of activity) is bigger. To consider the increase of maximal start-up and growth supports to the enterprises depending on their export ambitions and opportunities. At least during three years, after having received the support, to keep the contacts with the enterprise to establish what the obstacles for development are and how the state can support the enterprise. To put an end to supporting the fields of activity producing only for the domestic market and creating products and services with a small added value or separate these supports (also for alleviating economic decline) for the entrepreneurial policy measures targeted to the added value and export growth. Dispersed measures do not give an overview of the Ministry`s present activities in increasing the competitiveness of the</td><td>The answer of the Minister of Economic Affairs and Communications: When finishing supporting the branches, which work for the domestic market and create little added value and services, it would be helpful if the National Audit Office of Estonia offered a list, possibly as profound as possible, of the sectors which it wishes to eliminate. As the issue is not trivial and at present the preferences, based not so much on sectors but key technologies and further on the economic clusters proving more and more of their hard-working capacity, will be implemented.

We draw the attention to the fact that already today the fields of activity, having the character of intermediating activities at the domestic market, have been eliminated from the recipients of support in the case of the majority of support measures (for example, retail and wholesale trade, real estate development, financial services). We also draw the attention to the fact that the sectors, oriented to the domestic market and with low added value, are not the same – for example, financial intermediation and the real estate sector are of a very high added value level in Estonia being significantly higher than the processing industry.

What concerns the other side of the same recommendation or creating the two-level system of supports – some services to everybody, but a bigger part of the most significant services only to the enterprises with a big added value – then here again we have the analogy with the system of value chains already being launched at the Enterprise Estonia which offers certain simpler and more universal supports (information services, training course) to everybody, including also the bigger financial supports, personal counselling, keeping contacts and servicing the key clients when the needs appear in the further development of their enterprises.

We seriously weigh the possibilities to replace present support measures to a bigger extent with loan measures or perfect them (in the case of the well-capitalized enterprises). We ourselves have found the need for the support to the less ambitious product development (the best level in Estonia, the best</td></tr>
</table>

The recommendations of the National Audit Office of Estonia	The answers of Ministers, the Chairman of the Board of the Enterprise Estonia and the Head of KredEx
Estonian economy, the aims and the expected impact. **(pp. 20-30)** ▪ To support more the exporters, also the enterprises which at the moment of applying for the support do not export as yet but whose products and services have a potential at foreign markets. To provide the exporter with a high potential, on the basis of the single application, a package of supports during a certain period (for example, starting from in-service training and finishing with the export support). During this period the provider of the support must monitor the development of the enterprise and react to possible obstacles. **(pp. 34-43)** ▪ To give developmental supports instead of single high-tech enterprises to the enterprises in the fields of activity with the production closer to the market and knowledge-intensive services which use very little and outdated technology. The support to the present high-tech R&D enterprises (in majority bio- and material technology) must be provided in a complex manner in the framework of the present or future technology programmes. **(pp. 44-59)** ▪ With the growing consultation ability of the Enterprise Estonia to consider offering support packages instead of single supports in conformity with the obstacles to the development and monitoring results obtained by the support provide. **(pp. 60-61)** ▪ To decide in providing the support how big the risk can be that the results of the project will not be achieved (the acceptable risk can be bigger in the fields of activity with a growth potential). If the enterprise can independently implement the project (i.e. it is impossible to avoid the support`s deadweight), it is more efficient to give a loan instead of a support. **(pp. 55-61)**	level at the whole market not yet practised today).
Processing of applications for support at the Enterprise Estonia 63. The recommendations of the National Audit Office of Estonia to the Chairman of the Board of the Enterprise Estonia in cooperation with the Minister of Economic Affairs and Communications: ▪ To pay more attention in processing the more capacious applications to the discovery of the possible deadweight of the support (for example, with the help of the profound interview with the applicant). To order deadweight studies from independent agencies to get objective assessments from the enterprises. ▪ With the purpose of influencing the strategic choice of enterprises and promoting their cooperation, to give preference to the supports for increasing productivity, export capacity and developmental activities (for example, as additional points in the assessment model) applied for by some	**The answer of the Head of the Enterprise Estonia:** The Enterprise Estonia uses in assessing the bigger investments the criteria and principles which are aimed at minimizing the deadweight using for this purpose the experts from Estonia and outside Estonia (for example, in assessing the projects of product development and export marketing). At the same time it is possible and necessary to continue developmental activities in this sphere. Introducing preferences in the case of the measures stimulating cooperation is appropriate and definitely deserves implementation after analyzing. The Enterprise Estonia demands and continuously demands from the entrepreneurs the prognoses of the added turnover, export turnover and the growth of productivity in the case of big developmental supports and marketing projects. **The Minister of Economic Affairs and Communications:** The prognosing of the expected deadweight in the phase of assessing the application for the support has been repeatedly practised (the assessment of the so-called activizing impact) but a sufficiently good solution has not been found. Certainly we shall pay continuous attention to it. In assessing the joint applications from enterprises and giving bonus points to them or providing a bigger support rate have already been a tried approach. In the support

<table>
<tr><th>The recommendations of the National Audit Office of Estonia</th><th>The answers of Ministers, the Chairman of the Board of the Enterprise Estonia and the Head of KredEx</th></tr>
<tr><td>enterprises together or the cooperation partners have been involved in the business plan. The entered changes in the assessment criteria should be made known to the wider public.
▪ In the case of the supports targeted to development and the extensive growth of productivity to demand that in the business plan of the applicant there should be a prognosis when and into which markets the enterprise wishes to enter, how the development project, becoming mature for the market in the distant future, is planned to be implemented.
(pp. 46–48; 55–61)</td><td>programme of technological investments such a possibility was available but the demand for the use of this possibility remained very low. Also, the joint marketing programme will soon become a part of the export marketing programme or the enterprise can choose whether to apply with an individual project or together with partners. We are ready to weigh the similar practice to be introduced to other measures. What concerns the recommendation “to demand in the case of developmental supports and the supports aimed at increasing productivity the prognosis in the business plan of the applicant when and into which markets the enterprise wants to enter”, it is followed today and the respective information is asked from the applicant. It is a problem that there are objective difficulties in assessing the realistic value of the prognoses (in connection with the many undeterminable factors) not the absence of prognoses.</td></tr>
<tr><td>Suggestions for changes of entrepreneurial policy
140. The recommendations of the National Audit Office of Estonia to the Minister of Economic Affairs and Communications:
The general goal of the recommendations is to make the designing of Estonian entrepreneurial policy maximally using doing away with the existing competence and the obstacles of the growth of competitiveness in a complex way.
The National Audit Office of Estonia wishes that in designing the new development plan for entrepreneurial policy and planning the EU support period the policy maker should have an overview which obstacles of the development the Estonian economy faces on the level of fields of activity and for the alleviation of the obstacles combined and well-targeted measures should be implemented. This knowledge must be a part of everyday working task, inter-agency cooperation and the assessment of impacts at the agencies shaping entrepreneurial policy. For designing knowledge-based and efficient entrepreneurial policy, the National Audit Office of Estonia offers as one of the possibilities the following plan of activities:
▪ To recruit the team for analyses which form the basis for designing economic policy so that the work of one analyst is only one field of activities. With such approach to create the competence at the Ministry of Economic Affairs and Communications for the fields of activity having a high growth potential (the National Audit Office of Estonia sees the audited fields of activity as the biggest circle of the fields of activity having a high growth potential).
▪ To launch at the Ministry the working groups based on the fields of activity, the task of which is to reveal the development obstacles of a field of activity and find the state`s possible measures of assistance. The leader of the working group is the Ministry`s analyst dealing with this field of activity, the members are employees of the Enterprise Estonia and KredEx dealing with the same field of activity, also the representatives of the representation organisations of enterprises and speciality associations. To raise the abilities of the representation</td><td>The answer of the Minister of Economic Affairs and Communications: The Ministry of Economic Affairs and Communications thanks the National Audit Office of Estonia for the recommendations which to a great extent coincide with the present plans of the Ministry of Economic Affairs and Communications to strengthen and further develop entrepreneurial policy. Form the point of view of strengthening we have started working out the monitoring system and working out the principles of assessing in 2011 the impact of support measures. The client administration system, being developed in the Enterprise Estonia at present, is aimed at creating long-term contacts with enterprises, better understanding of the enterprises` needs and supporting them in every aspect.
The recommendations, which deal with the introduction of working groups based on the fields of activity and their use in shaping the policy addressed to the field of activity, directly depend on the choice of the preferred fields. At present the counselling chamber and the steering group of the energy technology programme, the counselling chamber and the steering group of the biotechnology programme and the council of space investigation already function at the Ministry of Economic Affairs and Communications. Consequently, we have recognized the need for analogous arrangement of work. As the same approach is used in the case of the remaining key fields of “The knowledge- based Estonia”, it is questionable how expedient and possible it is to extend such a system of a working group to all the economic sectors offered by the National Audit Office of Estonia. As there are application possibilities of the key technologies in all the fields of economy and the introduction of these technologies in Estonian economy and the public sector is one of the aims of “The knowledge-based Estonia”, then in real life biotechnology, material technology, ICT and space investigation technology working groups in their activities must indispensably have important connections with very many other sectors where there are possibilities, when starting to use key technologies, to increase added value. In this case a proper example can be the programme of biotechnology in the framework of which supporting of the application of biotechnological methods in food processing industry has started with the purpose of producing functional food and developing food processing technologies.
The recommendation for using country development centres to get economic overviews from regions and to activate local cooperation is rational and in “The strategy of country development centres” such activities are also provided. At present the high-quality application of the respective activities is inhibited by the serious excessive burden of work of the employees of country development centres because of a big number of unemployed people resulting in a quickly growing demand for the consultations how to establish a start-up company.
We definitely also weigh the further development of the KredEx instruments as recommended by the National Audit Office of Estonia.</td></tr>
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The recommendations of the National Audit Office of Estonia	The answers of Ministers, the Chairman of the Board of the Enterprise Estonia and the Head of KredEx
organisations of enterprises and speciality associations, it should be discussed whether to support their activities with the money from the state budget (in addition to the already carried out trainings). ▪ In the course of the activities of the working groups to establish the level of productivity of the fields of activities (in comparison with other member states of the EU), the rate of employment, the need for skilled labour, opportunities for cooperation between enterprises and fields of activities, a regional (Scandinavian) cluster, also the possibilities for the fields of activities to participate in them. ▪ In the course of the activities of the working groups to establish the aims of the speciality associations and the representation organisations of enterprises, their present activities and the circumstances hindering the expression of the opinion. ▪ Proceeding from the development obstacles of the fields of activities established in the working groups, to involve the shapers of policies in the filed for clarifying the existing measures and working out the new solutions (for example, the Ministry of Education and Research in the framework of education, research, continuing education and requalification; the Ministry of Finance in the framework of taxation policy and the state`s assistance; the Ministry of Justice in the framework of legal environment; and other ministries, boards in the framework of the legal acts, development plans, etc. influencing the fields of activities). ▪ To carry out in the course of the activities of working groups (involving research companies with methodology assistance) the analyses of the impact of the existing entrepreneurial policy measures and preliminary research for the planned measures. ▪ To limit in conformity with the results of the activities of the working groups, the circle of fields of activities with a high growth potential for the selection of the fields of activities where the state`s concentrated activities would have the biggest impact on the competitiveness of the whole economy. ▪ To establish the needs for the supports affecting all the state`s enterprises in an equal degree or the need for horizontal supports (the measures targeted to raising entrepreneurial awareness and activeness, short-term measures against unemployment) and the measures targeted to the growth of the competitiveness of economy. In the case of the last measures to apply, the concentration of measures according to the selected fields activities and clearly preferring the growth of productivity, export capacity and cooperation. ▪ To agree in providing the state`s measures	

The recommendations of the National Audit Office of Estonia	The answers of Ministers, the Chairman of the Board of the Enterprise Estonia and the Head of KredEx
(i.e. not only supports) according to the results of the activities of the working groups which can be taken into consideration in compiling the new entrepreneurial policy development plan and designing the plan for distributing the European Union supports in the period of 2007-2013. To discuss creating development plans which are based on the preferred fields of activities. ▪ To apply for additional money from the state budget which is promised to enterprises and use it for supporting the fields of activities with a high growth potential. ▪ To involve the working groups on a regular basis for the assessment of the impacts of the state`s activities and establish the need for correcting the activities. ▪ To continue developing the competence based on the fields of activity at the Enterprise Estonia and to launch providing client-centred supports. ▪ On the basis of the results of the activities of the working groups and entrepreneurial policy decisions, to establish the aims for distributing the supports of the Enterprise Estonia on the basis of the value chain, the interrelated total effect of the value chains, to establish the system of supports in which the value chains can be really used. ▪ To strengthen the proactive capacity of the Enterprise Estonia in conformity with the entrepreneurial policy preferences increasing the number of the client administrators of the foundation. ▪ To guarantee that the high quality information which the Enterprise Estonia collects about an enterprise is forwarded to the working groups and the Ministry of Economic Affairs and Communications. With this purpose to finish developing the information system and guarantee that the employees of the foundation should use the information in a similar way. ▪ To order from the Country Development Centres, providing necessary resources, an analytical economic overview of the high potential fields of activity in the region (fixed on the state level) for the use in the working groups and the design of entrepreneurial policy. To use CDCs more bravely for promoting local cooperation, i.e. with agencies of local government and research institutes. ▪ To analyze the possibilities of KredEx to pursue the policy of developing preferred fields of activities with a high growth potential under the present situation of arranging supports. To assign KredEx to work out measures in conformity with the results of work of the above described working groups. **(pp. 64–139)**	
Allocation of extra funding for enterprise support 141. The recommendation of the National Audit	**The answer of the Minister of Finance:** The precondition for providing additional money to support entrepreneurial activities can be a functioning

The recommendations of the National Audit Office of Estonia	The answers of Ministers, the Chairman of the Board of the Enterprise Estonia and the Head of KredEx
Office of Estonia to the Minister of Finance: To find an opportunity to allocate additional money from the state budget for implementing the plan of activities recommended to the Ministry of Economic Affairs and Communications. **(pp. 71–74; 137–139)**	planning and assessment system. Only this way it is possible to guarantee the efficient use of the state money. If, relying on the proposal of the National Audit Office of Estonia, an integral entrepreneurial policy has been worked out, while in addition to supports for achieving the aims of entrepreneurial policy also other measures influencing enterprises (taxes, regulating limitations, etc.) have been born in mind. The provision of the additional resources from the budget into the field can be weighed. The argument that other states support their enterprises cannot be the reason for providing support.
Development of Enterprise Estonia 142. The recommendation of the National Audit Office of Estonia to the Chairman of the Board of the Enterprise Estonia: At the foundation to continue the development of competences based on the fields of activities, launching of providing client-centred supports and developing value chains. In developing value chains to give up the approach based on the divisions of the foundation, to coordinate the profiles of the key clients, the fields of activities and to launch monitoring of the fields of activities in all the divisions of the foundation. To unite value chains in cooperation with the Ministry of Economic Affairs and Communications, taking the obstacles for the development of the fields of activities and flexible support packages for the basis. **(p-d 92–97; 103–123; 134)**	**The answer of the Head of the Enterprise Estonia:** The Enterprise Estonia has started and continuously considers it important, on the basis of segmenting enterprises, to focus attention to the sectors, subsectors, technologies and markets which have the highest growth potential. The state, via the Enterprise Estonia, has started using the programme-based approach. It means that the technology field is established (for example, energy technology, biotechnology information and communication technology, the theme (for example, the space), the sector (for example, tourism) or the target market (for example, in tourism marketing the biggest priority markets are Finland, Russia, Germany, Sweden) are also established. Necessary research is carried out, parties are involved in revealing major opportunities and challenges, the main priorities and the plan of activities are agreed upon and it is started to implement the plan. Certainly, it is the more efficient way than only the use of support schemes. At the same time it is also the activity needing bigger resources or being more expensive. We have also started determining our priority sectors and subsectors in the fields of involving foreign investments and export with the purpose of paying more attention to them. The Enterprise Estonia has client administrators, also the coordinators of the above – mentioned programmes whose task it is to participate actively is implementing projects and the planning activities. At present there are more than 10 employees of this type. Further on, when the scope of support schemes decreases, it is planned to contribute more to such activities. During the year 2010 we work out the new client administration process which would better help find efficient projects and would create connections for achieving synergy between value chains.

Characterization of the audit

The aim of the audit

The aim of the audit was to assess whether and to which degree the enterprise supports have influenced the competitiveness of the enterprises, which received the support, and Estonia economy.

The criteria for the assessment

Making the assessment, the National Audit Office of Estonia proceeded from the following criteria:

- Clear and measurable aims of entrepreneurial policy and enterprise supports exist.
- The aims presented in "Enterprising Estonia", "Estonian entrepreneurial policy in 2007-2013", " The state strategy of using structural resources in 2007-2013" and "The plan for economic growth and increase of employment" have been achieved and the measures help achieving the aims.
- Enterprise supports have been planned to exercise total impact in a complex manner, considering the growth of added value, export and the scope of technology implementation in an enterprise.
- Entrepreneurial organisations, branch associations and enterprises have been involved in working out the measures of enterprise supports.
- The enterprises, having received the support, assess very highly the impact of supports on the added value, export and the scope of technology implementation and the enterprises assess very small deadweight of projects.
- The support recipient enterprises have grown more quickly in the period of 2004-2009 than the enterprises which did not get the support. Under the influence of enterprise supports entering the branches of economy preferred by the state has grown and the added value, productivity, export and R&D costs have grown in the branches of economy with a bigger potential for producing added value.
- The Ministry of Economic Affairs and Communications, the Enterprise Estonia and KredEx have necessary information for assessing the resultativeness of enterprise supports, this information is exchanged, the impact of competitiveness is measured.

The scope and the way of treatment of the audit

The audit covers the supports provided by the Enterprise Estonia and KredEx in the period of 2004-2008 to the enterprise of ICT and electronics, bio- and material technology, business services, financial services, transport and logistics, mechanical engineering and metal industry, timber industry, wellness industry and other types of production (see: Appendix A). The enterprise supports are, in addition to direct monetary support, also the received loan guarantees and sureties which were provided to the enterprises by the Enterprise Estonia and KredEx in the audited period.

The audit concentrated its attention to the three main questions:

1. Has the state`s entrepreneurial policy established long-term developmental aims and complex measures for increasing the competitiveness of enterprises?
2. Are the enterprise supports planned involving the enterprises and in conformity with the state`s long-term aims?
3. Have the provided enterprise supports assisted to introduce changes in the structure of economy?

To answer the main questions of the audit, the following activities were carried out:

- Legal acts, political documents, regulations for giving enterprise supports, the documents dealing with compiling and changing of regulations, the assessment criteria, the Enterprise Estonia and KredEx standing rules, the materials of the council and the board were analyzed.
- The representatives of the audited enterprises, the representatives of entrepreneurial organisations and experts were interviewed (see: Appendix D).
- The representatives of speciality associations and entrepreneurial organisations were questioned (see: Appendix E9).
- With the help of the Statistics Board about 1,900 enterprises from 9 fields of activities (see: Appendix A), having received (see the support groups in Appendix B) the supports, having applied for the support and the control group were questioned. The data of the questioned enterprise were connected with the economic indices of EKOMAR and EMTA taxation data (see the description of the methodology of assessing the impact of enterprise supports in Appendix C).
- Two focus groups were organised for discussing the conclusions of the audit (see: Appendix D).

The time of the completion of the audit:

The procedure of the audit was started in October 2009 and completed in June 2010.

The team of the audit:

The audit manager – Urmet Lee, auditors –Piret Tõnurist and Ermo Liedemann

The National Audit Office of Estonia thanks the enterprises which at the beginning of 2010 participated in the research carried out by the Statistics Board.

The National Audit Office of Estonia expresses its gratitude for carrying out the audit to Kaja Sõstra, the Head of the Department of Methodology at the Statistics Board, and to the senior methodologist Ene-Margit Tiit, to Aet Tummeleht, the Head of the Departement of Registers at the Tax and Customs Board, to all others who were connected with carrying out the entrepreneurial questionnaire of the National Audit Office of Estonia at the Statistic Board. The National Audit Office of Estonia`s thanks are also due to the interviewed and focus group participating scientists, experts, representatives of entrepreneurial organisations, the Enterprise Estonia and KredEx enterprise advisers and client administrators. The team of the audit is thankful to the contact persons with the National Audit Office of Estonia – Priit Nirgit (the Enterprise Estonia) and Lehar Kütti (KredEx) for their help in carrying out the audit.

Contact data

Additional information about the audit is available at the Communication Service of the National Audit Office of Estonia

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The electronic copy (pdf) of the audit report is in the homepage www.riigikontroll.ee

The summary and the full text of the audit report is also available in English.

The draft law of the audit report is available in the document management system of the National Audit Office of Estonia 2-1.7/19/70011/4.

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Earlier audits of the National Audit Office of Estonia in the field of economy

25.8.2003 – **The state`s activities in allocating money for supporting entrepreneurship**

30.1.2004– **The resultativeness of the enterprise supports in creating new jobs in regions**

11.10.2004 – **The results of the product development projects supported by the Enterprise Estonia**

All the reports are accessible in the National Audit Office of Estonia home page www.riigikontroll.ee

Appendix A: The sample of the National Audit Office of Estonia

To analyze the impact of enterprise supports on the competitiveness of Estonian economy, the NAOE harmonized with the Ministry of Economic Affairs and Communications which fields of activity are considered to be the fields in economy with a higher added value and economic potential:

- information and communication technology (ICT) and electronics,
- bio- and material technology,
- business services,
- financial services,
- transport and logistics,
- mechanical engineering and metal industry,
- timber and timber industry,
- wellness industry (medical and care services),
- other types of production.

Proposed by the Ministry of Economic Affairs and Communications, the NAOE proceeded in establishing the sample for the questionnaire from the branches of economy included in the implementation plan “The plan of activities of Estonian foreign investments and export in 2009-2011 titled “Made in Estonia” which was a part of “The Estonian entrepreneurial policy in 2007-2013”. In addition to this document the key technologies from the development plans “Science –based Estonia” I and “Science-based Estonia “II entered the sample and the NAOE included its additions (in the analysis of the category “Other types of production”). The NAOE added to the proposal of the Ministry of Economic Affairs and Communications the branches of economy which in “Made in Estonia” have been described as the enterprises which “in Estonia have a considerable turnover and have international business activities (which in the comparison with the OECD and Eurostat Division of Technology scope are in conformity with the main focus of the audit - the growth of export and added value, Proceeding from the division of technology scope, the field of tourism and food processing industry, proposed for the audit, have been left out. These branches are also not in the focus of the Ministry of Economic Affairs and Communications.

The NAOE added the following fields of entrepreneurship to the list:

- EMTAK 2008(20) – the production of chemicals and chemistry products,
- EMTAK 2008(22) – the production of rubber and plastic goods,
- EMTAK 2008(21) – the production of main pharmacy products and medicaments,
- EMTAK 2008(32,5) – the production of medical and dental instruments and materials (proceeding from bio-and medical technology fixed in “Made in Estonia”)

From the key branches of the export division of the Enterprise Estonia, the NAOE added into the sample:

- EMTAK 2008(23) – the production of other goods from non-metal minerals,
- EMTAK 2008(29,30) - the production of transport vehicles: motor vehicles, trailers, half- trailers and other means of transport,
- EMTAK 2008(31) – the production of furniture.

Table 2. The sample of fields of activity according to EMTAK 2008 in the National Audit Office of Estonia`s questionnaire

Field of activity	EMTAK 2008 code
ICT and electronics	26, 27, 46.5, 61, 62, 63
Bio- and material technology	72.11, 72.19
Business services	64, 65, 66
Financial services	69, 70, 71, 73, 74, 77, 78, 79, 81, 82
Transport and logistics	49, 50, 51, 52, 53
Mechanical engineering and metal industry	24, 25, 28
Electronics and electrical installation industry	26, 27
Timber and timber industry	16, 17
Medical and care services (wellness industry)	86, 87, 88
Other types of production	20, 21, 22, 23, 29, 30, 31, 32.5

Table 3. The fields of activity of processing industry excluded from the sample of the National Audit Office of Estonia

Excluded field of activity	Reason
Production of foodstuffs (EMTAK 2008(10))	Low technology in the OECD classification*
Production of drinks (EMTAK 2008(11))	Low technology in the OECD classification*
Production of tobacco production (EMTAK 2008 (12))	No priority (Ministry of Economic Affairs and Communications)*
Textile production (EMTAK 2008(13))	Low technology in the OECD classification*
Clothes production (EMTAK 2008(14))	Low technology in the OECD classification*
Leather processing and leather goods production (EMTAK 2008 (15))	No priority (the Ministry of Economic Affairs and Communications)*
Printing and copying of recordings (EMTAK 2008(18))	Low technology in the OECD classification*
Production of coke and purified oil products (EMTAK (19))	No priority (the Ministry of Economic Affairs and Communications)*
Other production (EMTAK 2008(32) – excluding 32.5 (medical and dental instruments and material production)	No priority (the Ministry of Economic Affairs and Communications)*
Repairs and installation of machinery and equipment (EMTAK 2008(33))	No priority (the Ministry of Economic Affairs and Communications)*

* The branches of economy will be entered into the list of priority according to their proportions R&D in the added value or the total production output of the branch (in addition to the added value, also contains the intermediate consumption) (OECD 2007). Eurostat (Eurostat 2008) also proceeds from the similar methodology in classifying the branches.

At the moment of starting the audit, in the fields of activities audited by the NAOE there were 25,937 enterprises according to the data of the Statistics Board. To get an assessment about the impact of the supports, the NAOE asked the opinion from 4,262 enterprises among which there were the enterprises which had received the support in the audited fields (2,062 enterprises) or the enterprises which had applied for the support (483 enterprises). In addition, together with the experts of the Statistics Board, a proportionally formed control group, consisting of the enterprises which in the years 2004-2009 did not apply for the support (1,716 enterprises) entered the audit. The control group was formed in proportion with the fields of activity, turnover and the number of employees in the supported enterprises. The responses on the basis of which the conclusions of the audit have been made came from 1,900 enterprises (954 support recipient enterprises, 747 enterprises from the control group and there were 180 respondents from the enterprises which had applied for the support but did not get it).

Table 4. Mean supports, applications and the number of supported enterprises

Fields of activity		Sum total of EAS supports	Number of EAS supports	Sum total of KredEx support	Number of KredEx support	Number of EAS application	Number of KredEx application
Information and communication technology (ICT) and electronics	Mean	1123575,3	2,24	1654006,2	1,20	1,50	1
	N	100	100	15	15	50	5
Bio- and material technology	Mean	38115544,5	3,73	12385850	2,60	2	1
	N	26	26	10	10	12	1
Financial services	Mean	22517,4	1,32	402947,4	1,13	1,16	1
	N	91	91	8	8	25	2
Business services	Mean	235468,2	1,52	1547377,3	1,17	1,17	1
	N	223	223	30	30	86	2
Transport and logistics	Mean	137163,1	1,60	4914107,3	1,20	1,24	1,33
	N	75	75	20	20	29	3
Mechanical engineering and metal industry	Mean	1668850,2	2,45	4412259,7	2,17	1,58	1
	N	107	107	29	29	64	4
Timber and timber industry	Mean	1225590,5	2,63	7541047,7	6,05	1,58	2,93
	N	76	76	40	40	50	14
Wellness industry	Mean	783 385	2,08	1253576,5	1,20	1,57	
	N	53	53	10	10	21	
Other types of production	Mean	1344169,3	2,71	7825495,8	8	1,43	2,39
	N	110	110	34	34	75	18
Total	Mean	1892331,3	2,06	5126508,7	3,58	1,42	2,08
	N	861	861	196	196	412	49

Mean – statistical average, N - the number of the support recipient enterprises, EAS – the Enterprise Estonia

Appendix B: Groups of enterprise supports

The National Audit Office of Estonia analyzed the impact of enterprise supports in the following seven groups of supports

As the audit covers 57 different supports, the statistical analysis of which could become impossible, the NAOE, proposed by the Enterprise Estonia and KredEx, divided them into seven groups of supports formed on the basis of the aims of the support. The supports of the Enterprise Estonia are grouped according to the three first aims of impacts in the card of results of the foundation:

1. more sustainable and quickly growing enterprises,
2. the bigger export capacity and internationalisation of Estonia enterprises,
3. the bigger product development and technological capacity of enterprises.

The NAOE assessed the first three aims of impact of the Enterprise Estonia, in the third “The bigger product development and technological capacity” separately the supports targeted to the growth of productivity (EAS 3 b) and the supports targeted to increasing developmental activities (EAS 3a) were assessed:

- Supports to start-up companies: “More sustainable and quickly growing entrepreneurs” (EAS 1)
- Export supports: “Bigger export capacity and internationalization” (EAS 2),
- Development supports “Bigger developmental activities of enterprises”(EAS 3A),
- Loan sureties (KredEx 1)
- Loans (KredEX 2)
- Export guarantees (KredEx 3)

Grouping of supports

More sustainable and quickly growing entrepreneurs (EAS 1):

1. Start-up enterprises` starting and growth support; the growth supports
2. Start-up enterprises` starting and growth support: the starting support
3. Starting entrepreneurs` start-up support
4. Starting entrepreneurs` start-up support programme (the Estonian money)
5. Entrepreneurship incubation programme

Bigger export capacity and internationalization of Estonian enterprises (EAS 2):

1. The support for involving developmental employees: international marketing
2. The programme of the export plan: implementation
3. The programme of the export plan: implementation (the Estonian money)
4. The programme of the export plan: designing the plan

5. The export marketing support
6. The shipping support for the merchant ships sailing under the colours of Estonia
7. The support for participating in the foreign trade fairs
8. The support for joint marketing

The bigger developmental activities of enterprises (including R&D-agencies bigger capacity to offer commercializing solutions)(EAS a):

1. The support for involving developmental employees: product development
2. The support measure for the innovation shares
3. The programme of the awareness of innovation: prior application
4. The programme of the awareness of innovation: full application
5. The support for the investment into the infrastructure of experimental and semi-industrial laboratories
6. The supporting of R&D projects: prior research
7. The programme of supporting for R&D projects: prior research
8. The programme of supporting for R&D projects: applied research
9. The support of R&D projects: applied research
10. The supporting of R&D projects
11. The programme of supporting R&D projects (international cooperation networks)
12. Technology development centres
13. The programme of technology development centres (the Estonian money)
14. Target-financing of technology development centres
15. Supporting of technology development centres

Bigger productivity and added value of enterprises (according to measurable aims) (EAS 3 b):

1. The support for involving developmental employees: the product design and processes
2. The support for developing the infrastructure of entrepreneurship
3. The support for developing clusters
4. The programme for training: the employees` continuing education and requalification (the Estonian money)
5. The support for training
6. The programme of the support for training (the Estonian money)

7. The support for advisory services
8. The programme of the support for advisory services (the Estonian money)
9. The support for developing knowledge and skills
10. The support for developing knowledge and skills: the training share
11. The support for the technology investment of the industrial entrepreneur: up to 750 million EEK turnover
12. The support for the technology investment of the industrial entrepreneur: joint applications
13. The support for the technology investment of the industrial entrepreneur: more than 750 million EEK turnover

Loan sureties (KredEx 1):

1. EIF growth surety
2. EIF small surety
3. Investment loans surety
4. Turnover loan and overdraft surety
5. Bank guarantee surety
6. Property buyout surety
7. Small loan surety
8. Small loan surety from the bank
9. Loan surety

Loans (KredEx 2):

1. Success-based loan with the interest
2. Project-based loan
3. The loan with the fixed interest
4. The start-up loan
5. The direct loan

Export guarantees (KredEx 3):

1. A short-term guarantee
2. Export guarantee

Table 5. The assessment criteria in the groups of supports (the measurable economic indices in the Enterprise Estonia and KredEx)

Group of supports	Expected impact primarily on these indices
More sustainable and quickly growing entrepreneurs (EAS 1)	Rate of survival. Number of employees
Bigger export capacity and internationalization of Estonian enterprises (EAS 2)	Export turnover. Added value/growth per employee
The bigger developmental activities of enterprises (including R&D-agencies bigger capacity to offer commercializing solutions) (EAS a)	Growth of R&D innovation investments of enterprises. R&D costs. Growth of revenue (R&D institutes)
Bigger productivity and added value of enterprises (according to measurable aims) (EAS 3 b)	Export turnover Added value/Added value growth per employee. Growth of investments into fixed assets
Loan sureties (KredEx 1)	Added value per employee. Growth of turnover. Involved private sector investments into machinery and installation. Growth of export turnover
Loans (KredEx 2)	Added value per employee. Growth of turnover. Involved private sector investments into machinery and installation. Growth of export
Export guarantees (KredEx 3)	Added value per employee. Growth of turnover. Growth of export turnover

Appendix C: The assessment of the impact of enterprise supports – the methodology of the analysis

The aim of the questionnaire for enterprises and the analysis of economic indices carried out in the framework of the audit was to assess the impact of enterprise supports, given to enterprises through the Enterprise Estonia and KredEx in the years 2004-2009, on the competitiveness of Estonian economy. For analyzing the impact of enterprise supports:

- With the help of the Statistics Board 1,881 enterprises in the sample of the NAOE were questioned (see: Appendix A). The questionnaire included the assessment of the impact of supports, the application for supports by enterprises, the assessment of the activities of entrepreneurial organisations and speciality associations. The questionnaire included the present problems of enterprises (both in today‘s market situation, introducing innovation and in the development of the cooperation between enterprises and R&D institutions). The NAOE studied with the questionnaire whether and how the strategic behaviour of support recipient enterprises had changed under the influence of supports and what influenced the strategic choices of the enterprises which did not get a support (the control group). As the impact of supports may appear in the more distant future and the economic crisis had influenced the results of enterprises (the enterprises were given a possibility to overestimate the potential positive impact to the growth of export revenue and other economic indices in the near future), then in the present audit the assessment of enterprises comes first. Relying on it, the NAOE is not looking for the impact of supports from the economic indices of the enterprises which themselves did not assess the impact as significant (i.e. the enterprise‘s success, outer influence (including the economic boom) cannot be considered the impact of the support one to one).

- The responses to the questionnaire (including the assessments of the impact of supports by enterprises) were analyzed according to the groups of support (see: Appendix B) in conformity with the fields of activity of enterprises (see: Appendix A), the size of the enterprise (the number of employees, turnover). Separately the impact of the average sum of the support, the frequency of applying for the support and the proportion of the support in the turnover were analyzed. The assessments of the enterprises were compared with the assessments of enterprises in the case of the deadweight of the support (i.e. whether the enterprise would have put the project into practice without the support). The bigger the deadweight of the supports, the smaller is the adding effect or the impact of the support, or the state supports successful enterprises which use the support as an additional money and the support as such does not create added value to the activities of enterprises. In the support groups the deadweight of supports was also analyzed according to the size of enterprises.

- On the basis of the responses to the questionnaire (including the impact of supports, the problems of enterprises and the expectations of enterprises to get the support from the state) factor analyses were carried out (showing the connection between the assessments of respondents) (see: an example in Appendix F). Also, the responses of enterprises were assessed in the correlation analysis or observed whether the assessments or impacts were positively correlated between themselves. Also, the correlation analysis was added the initial data of the formation of the sample (the field of activity, the size of the enterprises according to their turnover, the number of employees in the enterprise). As on the basis of the fields of activities very few supports were distributed (excluding developmental supports in the very small field of bio- and material technology), the connections between impacts and fields of activities in the correlation analysis do not exceed 0.2 (i.e. 4% of the level of description) or all are very weak.

- The responses of the questionnaire were joined with the economic indices of EKOMAR (see: Table 6)

Table 6. Economic indices of EKOMAR

Economic indices of macroanalysis (2004-2008)	Calculation formula
Number of enterprises in the sample	The number of enterprises belonging to respective group in the EKOMAR sample
Number of enterprises in total	The number of enterprises in total assessed by weighing in the EKOMAR research
Number of employees	–
Sales revenue*	Sales revenue with direct support (thousand crowns)
Total added value	Thousand crowns (Added value = (salary costs per year + amortisation costs per year + net profits)/average number of employees per year.)
Total productivity (on the basis of the added value) (thousand crowns)	Total productivity on the basis of added value= total added value/ Total costs
Total productivity (on the basis of the sales revenue) (thousand crowns)	Total productivity on the basis of the sales revenue = Sales revenue/ Total costs
Productivity per hour (on the basis of the sales revenue) (thousand crowns)	Productivity per hour on the basis of the sales revenue (crowns)= Sales revenue/ Number of working hours)
Export revenue	Thousand crowns
Average labour costs	Average labour costs (thousand crowns) = Labour costs/Number of employees
Investments (into material basic stocks)	Investments into material basic stocks (thousand crowns)
Total investments	Investments together with immaterial basic stocks (thousand crowns)
R&D costs	Thousand crowns
Residual revenue (thousand crowns)	Residual revenue (thousand crowns) = Total crowns) added value – (costs + labour costs)

- In assessing the impact, the development of economic indices was viewed according to support groups (see: Appendix B) (i.e. the average indices of the enterprises, which assessed the impact significant, rather significant or assessed the absence of the impact or did not see at all the described development of their economic indices, were separately analyzed). Fourteen different aspects of the impact were separately assessed (the improved quality of products and services, the market position, marketing of products, management and organisation of work of the enterprise, cooperation with other enterprises; the public sector, R&D institutes; decrease of costs; the growth of productivity and export; the increased or preserved number of jobs; the growth of the level of skills of employees; alleviated monetary problems, new additional development projects; new developed technologies and the strategy of the enterprise has significantly changed), the assessments of enterprises to those aspects where compared with the dynamics of economic indices (see: Table 6). The comparison was also made against the expected impact (see: Appendix B) in support groups.

- The NAOE compared all the recipients of support in the observed groups with the enterprises, having received supports, in the fields of activities included in the sample of the NAOE. On the basis of the existing EKOMAR data, the developments of average economic indices in the period 2004-2008 were expressed in a document for all the support recipient enterprises (see: Appendix B) and for the enterprises in the NAOE sample (see: Appendix A).

- According to the year of receiving the support, the development of economic indices (Table 6) in the period of 2004-2008 of all the enterprises in the sample of the NAOE (not only the enterprises which responded to the questionnaire) were analyzed.

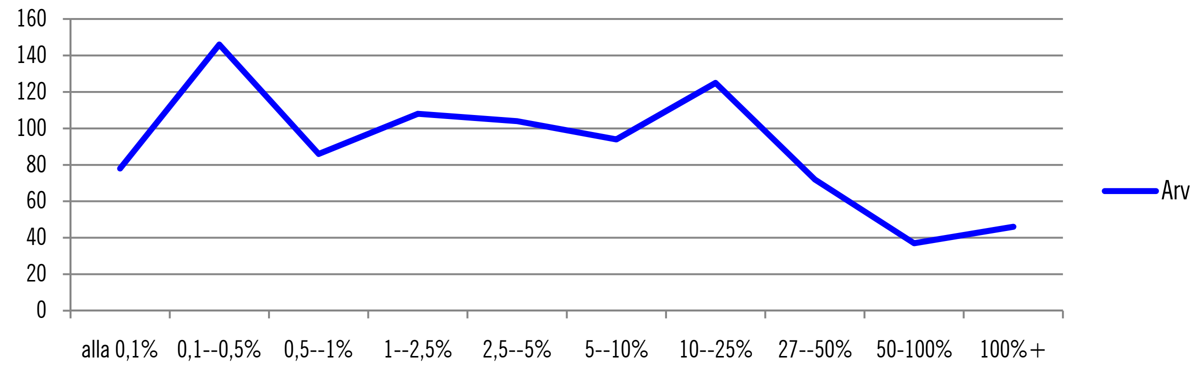
- In the Pearson correlation analysis connections were searched between the economic indices by support groups – the net revenues, the added value, investments (and the difference between their growths, i.e. in two succeeding years) – Also the relation between the fact of getting the support and the amount of support was investigated (see: examples in Appendix N). The analysis shows the connection between getting a bigger support and the higher economic indices of enterprises, or perhaps the fact whether the higher economic indices of the earlier years (the success of an enterprise) correlate with the bigger support and whether the better economic indices of the following years are connected with the size of the support. Here we have the part of the analysis describing the support system showing only the connections between the enterprise‘s economic indices, their changes and the supports but not the impact of supports.

- For explaining the impact, in addition to the analysis of economic indices (made congruent with the assessments of enterprises) also the help of regression models was used, but as the enterprises were given few supports (and even less in the NAOE sample), the description rates of models remained small and in the rest of the analysis were more visualizing the reasons than serving as the basis of the NAOE conclusions. The Statistics Board made several groups of models:

  - The first group of models used initially measured features (i.e. turnover, size, the sum total of the Enterprise Estonia supports, the sum total of KredEx supports and the fields of activity). The potential arguments, out of which the optimal argument and the number of optimal arguments were automatically selected, were the fields activity (formed according to indicator features), turnover, the number of employees, the sums of supports. All the presented models are statistically significant but the level of their description is low in general, mostly remaining lower than 10%.

  - In the second group of models the derived features have been used: in addition to fields of activity, the number of employees and turnover, the sum total of supports and the ratio of supports and turnover have been used. Considering them, there are also many more objects in the model. For the analysis a new feature “Ratio” was formed, it is calculated as the ratio of the sum total of supports and the annual turnover being expressed in percentage. The ratio of the sum total into the enterprise‘s turnover was calculated according to the following formula: Support/annual turnover %= 100* support/12*1000. It was not calculated in the case of these enterprises, the turnover of which was zero or the average monthly turnover was not shown. As some enterprises had a very small turnover, the value of the ratio may grow rather big (see: Figure 22). Again, from the second group of models it becomes evident that the description rate of models is very small, the best model describes the 10% of the impact of the support on export. It is revealed that the impact is bigger in the case of machines, ICT and timber while the impact is bigger in the case of a bigger support money, but also in the case of enterprises with a bigger turnover. It is evident from the model that thanks to the supports the skills of employees have risen in the financial field but not in the field of timber and other fields of activity. The supports have a certain impact on the growth of the number of employees and stabilization which depends on the size of support money, the size of supports and turnover while it does not function in bigger enterprises, in the business and the financial field. The description rate of both last models is 7%.

Figure 22. The distribution (%) of the sum total of supports and the turnover index



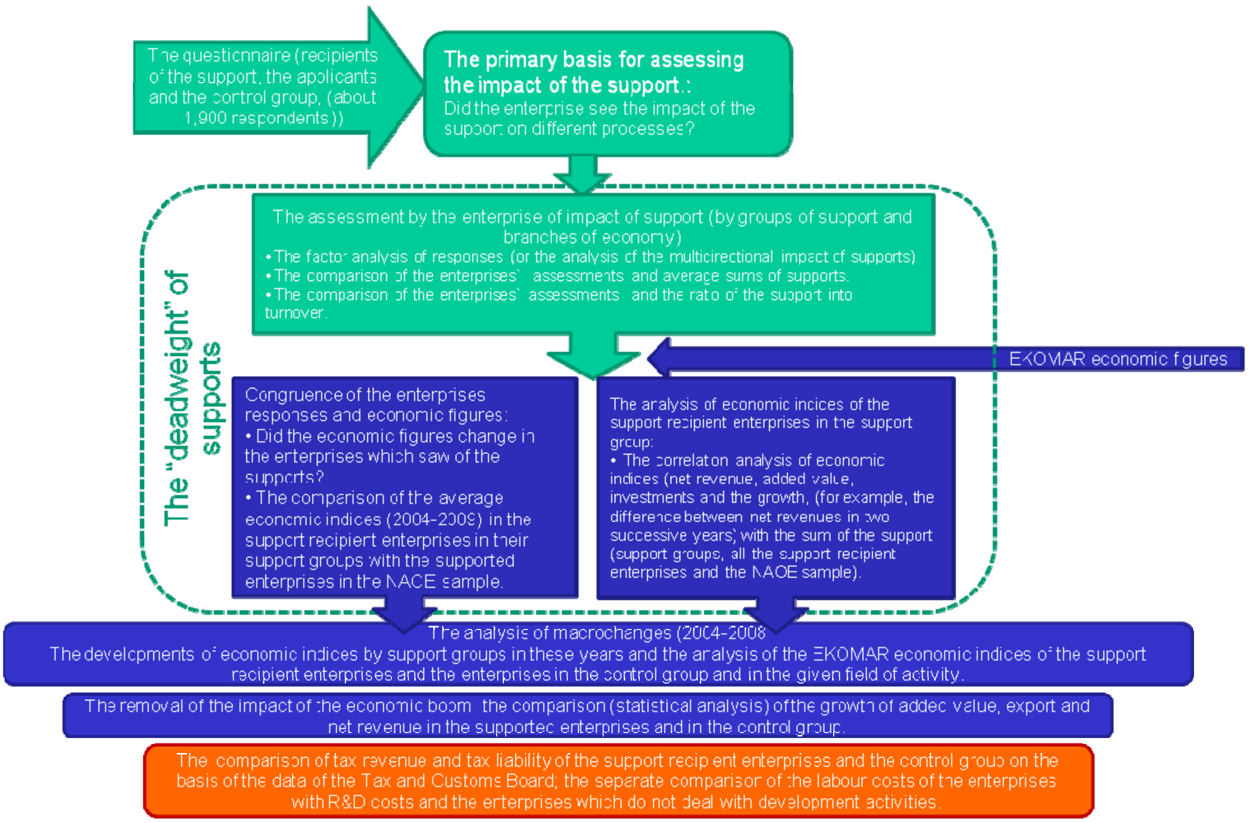
- The EKOMAR economic indices were also used to compare the enterprises which had development costs and which had not (it was revealed that the labour costs in all the fields of activity were somewhat bigger in the enterprises having development costs, on the basis of fields of activities it is varying which may be caused by a too small sample in some field of activity – at the same time the indices of productivity are a little better in the enterprises having development costs.

- To assess the real growth, or for removing the influence of the boom economy from economic indices, in the correlation analysis, the support group enterprises were compared with the control group presuming that the economic indices of the enterprises, having received support should grow more quickly than in the proportionally formed group during the period .In the analysis the changes in the growth of the enterprises´ sales revenue, export revenue and residual revenue were observed in the support groups. (As a result of the analysis, it became clear that in the support group EAS 3b the sales revenue and the export of 2007 (statistically significantly) grew quicker than in the control group. At the same time, in the given period the residual revenue of the supported enterprises remained lower than in the control groups. In 2008 the connection also in the given support group became negative or the enterprises of the control group developed even quicker than in the support recipient group).

- To describe the influence of the support recipient enterprises on the tax revenue of the Republic of Estonia, the data of the support recipient enterprises and the control group enterprises in the NAOE sample were added the data of the revenues and tax liabilities from the Estonian Tax and Customs Board. The average tax revenues of the enterprises in the control group and in the support recipient group were compared in the years 2004-2009. Also, the speed of appearance of tax liabilities not the size of the tax liability were compared according to the fields of activities and comparing the groups of the supported enterprises and the control group (it became evident that the tax liabilities have a small tendency of growing but the control group and supported enterprises are rather similar in this sense. The tax liabilities have grown especially quickly in the group of other production and the growth of tax liabilities in timber industry has been different – the tax liabilities of the enterprises which did not get a support have grown more quickly in comparison with all the enterprises in sample).

The stages of the above-described analysis are used by the NAOE for giving an assessment (Figure 23 describes the stages of the analysis and the overall results of the analyses).

Figure 23. The stages of the analysis of assessing the impact of enterprise supports



Appendix D: Persons interviewed during the audit

Persons interviewed during the preliminary study

Date	Name	Occupation
25.9.2009	Rainer Kattel	Tallinn University of Technology, Professor and Chair of Innovation Policy and Technology Governance Department of Public Administration
1.10.2009	Lauri Tammiste	Ministry of Economic Affairs and Communication, Head of Economic Development Department
	Henry Kattago	Ministry of Economic Affairs and Communication, Economic Development Department, Director of Enterprise Division
	Mihkel Randrüüt	Ministry of Economic Affairs and Communication, Economic Development Department Director of Technology and Innovation Division
5.10.2009	Urmas Varblane	University of Tartu, Department of Economics and Business Administration, Vice Dean (research), Prof. of International Business
	Dorel Tamm	University of Tartu, Department of Economics and Business Administration, Project manager (Doctoral School in Economics)
7.10.2009	Marina Kaas	President of Estonian Association of Small and Medium-Sized Enterprises

	Kersti Kracht	Vice-President of Estonian Association of Small and Medium-Sized Enterprises
	Kersti Kraas	CEO of Estonian Association of Small and Medium-Sized Enterprises
8.10.2009	Siim Raie	Estonian Chamber of Commerce and Industry, Director General
	Peter Gornischeff	Estonian Chamber of Commerce and Industry, Director of Services
8.10.2009	Lehar Kütt	Estonian Credit and Export Guarantee Fund, Head of the Enterprise Division
9.10.2009	Kitty Kubo	Estonian Development Fund, Head of Foresight Division
	Heido Vitsur	Estonian Development Fund, Economy expert of Foresight Division
12.10.2009	Klas Klaas	Government Office, Deputy-Director of Strategy Unit
	Märt Loite	Government Office, Advisor to Strategy Unit
12.10.2009	Priit Nirgi	Enterprise Estonia, Deputy Director of Development Unit
	Varmo Pilt	Enterprise Estonia, Expert of Development Unit
13.10.2009	Tarmo Kriis	The Estonian Employers' Confederation, Chairman
14.10.2009	Tarmo Kalvet	Tallinn University of Technology, Senior research fellow

Persons interviewed during the preliminary study

Date	Name	Occupation
1.10.2009	Tea Varrak	Ministry of Finance, Secretary-General
	Urmas Koidu	Ministry of Finance, Head of Public Finance and Strategies Department
	Mart Laatsit	Ministry of Finance, Analyst to the Public Finance and Strategies Department
	Tiina Soomre Tuisk	Ministry of Finance, Coordinator to the State Budget Coordination and Monitoring Department
1.10.2009	Klas Klaas	Government Office, Deputy-Director of Strategy Unit
	Märt Loite	Government Office, Advisor to Strategy Unit
4.12.2009	Andrus Treier	Estonian Credit and Export Guarantee Fund (KredEx), CEO
	Helen Mikk	Estonian Credit and Export Guarantee Fund (KredEx), CFO
	Liis Elmik	Estonian Credit and Export Guarantee Fund (KredEx), Economic analyst
7.12.2009	Marika Priske	Ministry of Economic Affairs and Communications, Secretry-General
	Ahti Kuningas	Ministry of Economic Affairs and Communications, Deputy Secretary General
	Lauri Tammiste	Ministry of Economic Affairs and Communications , Head of Economic Development Department
7.12.2009	Ülari Alamets	Enterprise Estonia, Head of the Board
	Tarmo Leppoja	Enterprise Estonia, Member of the Board
	Kristjan Kitvel	Enterprise Estonia, Member of the Board
	Priit Nirgi	Enterprise Estonia, Deputy Director of Development Unit
28.1.2010	Tea Danilov	Ministry of Economic Affairs and Communications , Director of

		Economic Development Department
	Henry Kattago	Ministry of Economic Affairs and Communications , Economic Development Department, Director of Enterprise Division
	Jarmo Tuisk.	Ministry of Economic Affairs and Communications , Economic Development Department, Executive Officer of Technology and Innovation Division
9.2.2010	Priit Nirgi	Enterprise Estonia, Deputy Director of Development Unit
	Anu-Maaja Pallok	Enterprise Estonia, Expert of Development Unit
	Varmo Pilt	Enterprise Estonia, Expert of Development Unit
9.2.2010	Andres Võrang	Enterprise Estonia, Consultant to the Business Environment Division
9.2.2010	Sven Valliste	Enterprise Estonia, Investment and Trade Development Division, Senior Export Information Consultant
9.2.2010	Kaido Sipelgas	Enterprise Estonia, Business Environment Division, Coordinator, County Development Centres
	Romet Väljataga	Enterprise Estonia, Business Start-Up´s Division, Business Consultant
10.2.2010	Reet Truuts	Enterprise Estonia, Investment and Trade Development Division, Senior Advisor, Foreign Investments and Trade
10.2.2010	Marja-Liisa Kruusimäe	Enterprise Estonia, Business Consultant of Export Division
	Margus Matsal	Enterprise Estonia, Business Consultant of Export Division
10.2.2010	Tiiu Evert	Enterprise Estonia, Enterprise Capability Division, Manager of the Cluster Development Programme
10.2.2010	Jaan Vool	Enterprise Estonia, Director of Internal Audit Unit
	Tarmo Tikk	Enterprise Estonia, Auditor of Internal Audit Unit
11.2.2010	Mihkel Pukk,	Enterprise Estonia, Export Division, Manager of Export Grants
	Toomas Molok,	Enterprise Estonia, Export Division Client Relationship Manager
11.2.2010	Tõnu-Lauri Leevald	Enterprise Estonia, Innovation Division, Client Relationship Manager (Technology Development)
	Harri Faiman	Enterprise Estonia, Innovation Division, Coordinator (Technological Development Centre Support Programme)
11.2.2010	Maarika Neudorf	Enterprise Estonia, Innovation Division, Development Consultant (Innovation Awareness Programme)
	Regina Herodes	Enterprise Estonia, Innovation Division, Development Consultant (international co-operation networks)
11.2.2010	Olavi Otepalu	Enterprise Estonia, Innovation Division, Manager of the National Biotechnology Programme
	Jaanus Sahk	Enterprise Estonia, Innovation Division, Manager of the National Energy-technology Programme
11.2.2010	Airi Vekmann	Enterprise Estonia, Monitoring Unit, Senior Specialist
	Katrin Tammis	Enterprise Estonia, Monitoring Unit, Specialist
12.2.2010	Madis Maripuu	Enterprise Estonia, Enterprise Capability Division, Senior Consultant (Technology Investments Programme)
12.2.2010	Pille-Liis Kello	Enterprise Estonia, Director of Enterprise Capability Division
	Toomas Valge	Enterprise Estonia, Enterprise Capability Division, Manager of Knowledge and Skills Support Scheme (Training Programme;

		Consulting Programme; Procurements for Central Trainings)
12.2.2010	Ilmar Pralla	Enterprise Estonia, Director of Innovation Division
12.2.2010	Aali Lilleorg	Enterprise Estonia, Innovation Division, Manager of Innovation Capability
	Meeli Vaikjärv	Enterprise Estonia, Business Start-Up´s Division, Client Relationship Manager
	Mari Vavulski	Enterprise Estonia, Business Start-Up´s Division, Senior Consultant
	Anneli Reinsalu	Enterprise Estonia, Business Start-Up´s Division, Business Consultant
15.2.2010	Kersti Liiva	Ida-Viru County Development Centre, Business Consultant
	Kadri Rist	Ida-Viru County Development Centre, Business Consultant
16.2.2010	Rita Tamm	Tartu Business Centre, Senior Business Consultant
	Tiiu Toots	Tartu Business Centre, Senior Business Consultant
17.2.2010	Imre Toodu	Head and Development Consultant of Pärnu County Development Centre
17.2.2010	Aivar Lainjärv	Head of Lääne-Viru County Development Centre
18.2.2010	Priit Kingo	Estonian Credit and Export Guarantee Fund (KredEx), Head of Marketing and Development Department
18.2.2010	Mihhail Knut	Estonian Credit and Export Guarantee Fund (KredEx), Enterprise Department, Client Manager
18.2.2010	Jaak Tikko	Estonian Credit and Export Guarantee Fund (KredEx), Enterprise Department, Client Manager
18.2.2010	Heidy Sadrak	Estonian Credit and Export Guarantee Fund (KredEx), Risk Management Department, Product Development Specialist
30.3.2010	Ülari Alamets	Enterprise Estonia, Head of the Board
	Tarmo Leppoja	Enterprise Estonia, Member of the Board
	Kristjan Kitvel	Enterprise Estonia, Member of the Board
	Maria Alajõe	Enterprise Estonia, Member of the Board
1.4.2010	Tea Danilov	Ministry of Economic Affairs and Communications , Director of Economic Development Department
	Henry Kattago	Ministry of Economic Affairs and Communications , Economic Development Department, Director of Enterprise Division
	Raul Allikivi	Ministry of Economic Affairs and Communications , Economic Development Department, Director of Economic Policy Division
	Jarmo Tuisk	Ministry of Economic Affairs and Communications , Economic Development Department, Executive Officer of Technology and Innovation Division

Audit focus-groups

Date	Name	Occupation
27.4.2010	Tarmo Kalvet	Tallinn University of Technology, Senior research fellow
	Urmas Varblane	University of Tartu, Department of Economics and Business Administration, Vice Dean (research), Prof. of International Business
	Heido Vitsur	Estonian Development Fund, Economy Expert of Foresight Division
	Katrin Männik	Technopolis Group, CEO
	Anne Jürgenson	Centre for Policy Studies PRAXIS, Expert
	Imre Mürk	Estonian Development Fund, Foresight Division, Expert
28.4.2010	Tea Danilov	Ministry of Economic Affairs and Communications , Director of Economic Development Department
	Henry Kattago	Ministry of Economic Affairs and Communications , Economic Development Department, Director of Enterprise Division
	Raul Allikivi	Ministry of Economic Affairs and Communications , Economic Development Department, Director of Economic Policy Division
	Tarmo Kriis	The Estonian Employers' Confederation, Chairman
	Mihkel Randrüüt	Ministry of Economic Affairs and Communication, Economic Development Department Director of Technology and Innovation Division
	Mart Laatsit	Ministry of Finance, Analyst to the Public Finance and Strategies Department
	Miia Mänd	Ministry of Economic Affairs and Communication, Director of Department of Foreign Funding
	Priit Nirgi	Enterprise Estonia, Deputy Director of Development Unit
	Liis Elmik	Estonian Credit and Export Guarantee Fund (KredEx), Economic analyst

Appendix E: Interviewed trade and professional associations

Trade and professional associations which replied to the questioner	
1.	Connect Estonia
2.	Estonian Association of Small and Medium-Sized Enterprises (EVEA)
3.	Federation of Estonian Engineering Industry (EML)
4.	The Estonian Employers' Confederation
5.	Estonian Association of Information Technology and Telecommunications (ITL)
6.	Estonian Business Software Alliance
7.	Estonian Information Technology Society (EITS)
8.	Estonian Bio-Medical Technology and Medical Technology Association (EBMÜ)
9.	Estonian Traders Association
10.	Estonian Association of Architectural and Consulting Engineering Companies
11.	Estonian Insurance Association
12.	Estonian Association of Surveyors
13.	Estonian Association for Personnel Development PARE
14.	Estonian Ports Association
15.	Association of Estonian International Road Carriers (ERAA)
16.	Estonian Purchasing and Supply Chain Management Association
17.	Estonian Society of Transportation and Roads (ETTÜ)
18.	Estonian Society for Electrical Power Engineering (ESEPE)
19.	Estonian Society of Electronics Industry
20.	Estonian Association of Electrical Enterprises
21.	Association of Construction Material Producers Of Estonia
22.	Estonian Woodhouse Association
23.	Estonian Forest and Wood Industries Association
24.	Estonian Woodworking Federation
25.	Federation of Estonian Chemical Industries (FECI)
26.	Estonian Plastics Industries Federation
27.	Estonian Oil Association
28.	Estonian Chamber of Commerce and Industry
Comments sent to NAOE by e-mail	
29.	Estonian Association of Designers
30.	Estonian Banking Association (EBA)

Questions to the speciality associations

The National Audit Office of Estonia requests the speciality associations to answer the questions, bearing in mind the enterprises represented.

Respondent:	
Organisation represented:	
Date:	
E-mail address (if you wish to have the audit report of the National Audit Office of Estonia):	

1. What are the main problems of the enterprises in your speciality under present economic situation?

Will you, please, choose the suitable variant for answering and mark it with “X”. If you see the presence of several problems, mark it with numbers 1,2,3,etc. (1= the most important problem, ect.).

If you wish to give reasons for your answer in a free wording, we are most thankful.

The fall of the Estonian sales revenue (domestic market)	
The fall of the sales revenue at the foreign markets	
Access to loan capital	
Access to credit insurance	
Low productivity (Productivity = sales revenue/total costs)	
Limited capacity to invest into machinery and installation	
Limited capacity to invest into new product and service development	
Limited capacity to invest into entering new markets	
Difficult to find an investor	
Availability of the labour force with good knowledge and skills	
Changes in the taxation environment connected with entrepreneurship	
Changes in the legal environment connected with entrepreneurship (including standards)	
Limited knowledge of entering foreign markets	
Insufficient cooperation with scientific and educational establishments	
Insufficient cooperation with other enterprises	
Problems of liquidity (difficulties in servicing loans and paying taxes)	
Loss of orders for goods and services and cooperation partners	
Other problems, please, identify	

2. What are the main problems of the enterprises in your speciality, located in Estonia, which present obstacles for the growth of innovation, added value and export capacity in enterprises?

3. According to your assessment, what are the most important obstacles in the cooperation of the enterprises in your speciality?

<u>Consultation</u>

Since 2006 in the Estonian public sector the document “Good engagement practice” is enforced, according to it the establishment, initiating involvement, ”organises the registration of interest groups to guarantee the dissemination of information to all the influenced parties about the working out of the strategic document and/or the initiation of consultation” and “for consulting and participation the parties are involved in working out the draft law as early as possible and during the whole process” *(while the consultation for analyzing the impact of strategic documents, draft laws, etc. should last 4 weeks as a minimum in the early stage of drawing up the documents). According to the tradition all the involved parties shall be notified about the results of involvement.*

4. Has the Ministry of Economic Affairs and Communications involved you in working out the strategic documents or legal acts connected with entrepreneurial policy (for example, "Estonian entrepreneurial policy in 2007-2013" and its implementation plans, the Estonian R&D and innovation strategy. "Science-based Estonia in 2007-2013" (Science-based Estonia II)?

5. Do you think that the Ministry of Economic Affairs and Communications has taken "Good engagement practice" into consideration? How?

6. Have the Ministry of Finance, the Ministry of Economic Affairs and Communications and the State Chancellery`s Strategy Bureau involved you in planning the EU structural funds resources (for example, "The Estonian State Strategy of Structural Funds in 2007-2013", "The Implementation Plan for Developing the Economic Environment")? How? Was your opinion taken into consideration?

7. According to your assessment, do the present entrepreneurial policy and the structure of its measures (supports, taxes, regulations, also standards, etc.) take the needs, business models and competition conditions of the enterprises of your speciality into consideration? How?

8. How do you assess the levels of the Ministry of Economic Affairs and Communications and the Ministry of Justice in analyzing the impact of regulations, taxes and standards? Do you have examples of the situation where the unsatisfactory analysis of impacts of regulations, taxes, standards has significantly influenced the competitiveness of the enterprises of your speciality?

<u>The Enterprise Estonia and KredEx supports</u>

9. Have the Ministry of Economic Affairs and Communications, the Enterprise Estonia or KredEx involved you in working out support measures for enterprises? If yes, in which?

10. Have you submitted your opinions about the support measures given in Appendix 1 (in the context of drawing up their lists, their assessment)? Was your opinion taken into consideration? (If you want to share your earlier presented opinions with the National Audit Office of Estonia, you can add them to the present questions).

11. If you know the Enterprise Estonia and KredEx supports, which problems with supports from the point of view the enterprises in your speciality do you see? Make "X" in the box.

The application process in complicated (the required amount of information is big and it is not clear when and whom to contact)	
The administration of projects is compacted (the number of the required reports is big)	
The possible maximal amount of the support is too small	
The support provider`s competence in counselling is low (getting acquainted with the enterprise`s needs, help in the process of application and offering the suitable support)	
After the first application for support the application for the next support is not simpler (the application rules change constantly)	
The demand for self-financing is too big	
Much time/ money was needed for making the application (for writing the project outside help was needed)	
Others, will you, please, specify	

The competitiveness of your filed of activity

12. Were you involved in working out The Plan of Activities for Estonian Foreign Investments and Export in 2009-2011 “Made in Estonia””?

13. Are you aware of the sectors which are indicated as key sectors in “Made in Estonia” ?

14. Are you aware that ”Made in Estonia“ assigns the following tasks to speciality associations in the field of cooperation and division of labour?

“The speciality associations constitute a channel through which the entrepreneurs receive information about the situation of the foreign markets, the offers there, etc. The associations represent the interests of entrepreneurs, collecting and intermediating the proposals of entrepreneurs, helping them considering the circumstances that it is often difficult for the entrepreneur to go to a foreign marketing alone, it is recommendable in the future to work out common marketing and representation channels for the entrepreneurs with similar interests on the basis of speciality associations. Through speciality associations it is possible to make the cooperation of entrepreneurs more successful, for example, fulfilling big orders together. This way it is possible to overcome the problems caused by a small production capacity. The speciality associations fulfil the following tasks:

- *compiling the catalogues of European and other requirements for the entrepreneurs;*
- *organising the participation in specialized exhibitions;*
- *organising market research;;*
- *supplying the producers with the information of foreign markets – the change in demand, prices, taxes, standards, marketing channels, the main competitors, their economic indices, etc.;*
- *promoting the cooperation of producers with the purpose of making common marketing channels and fulfilling joint orders.“*

15. Have you been given information about fulfilling these tasks in the field of foreign investments and the export plan of activities? Do these activities differ from your present-day activities?

16. Will you, please, assess which public sector supports would be necessary in particular for increasing the competitiveness of the enterprise in your speciality? Make “X” in the box.

The public sector should:

support management training, obtaining knowledge from entrepreneurship.	
support purchasing of new equipment and updating technology.	
offer information about the situation at export markets, including different fields. support export (giving export supports/guarantees).	
support making export contacts and export marketing.	
help finding foreign investors through state structures (the Ministry of Foreign Affairs and economic representatives of the Enterprise Estonia).	
support cooperation with other enterprises (including the development of new products and services)	
support cooperation with educational and research establishments (including the development of new products and services)	
support the development of new innovative products, services and technologies.	
support the recruitment of foreign specialists to bring new knowledge into enterprises	
offer financing (for example, favourable loans or credit sureties) for developing new products and services	
others, will you, please, specify,	

17. Which other measures/changes of the public sector would help increase the competitiveness of the enterprises of your speciality? Your opinion, examples.

18. Are you satisfied with the present taxation system? Which changes in taxation would help increase the competitiveness of the enterprises in your speciality? Your opinion, examples.

19. Which changes in the education and continuing education system would help increase the competitiveness of the enterprises in your speciality? Your opinion, examples.

20. Which changes in the administrative capacity, prescribed by the state to enterprises, would help increase the competitiveness of the enterprises in your speciality? Your opinion, examples.

Appendix F: Correlation and factor analyses of the impacts of supports

Table 7

		1	2	3	4	5	6	7	8
1	Sum total of EAS supports	1	,266	,259	-,008	,056	-,018	,074	,08
2	Number of EAS supports	,266	1	,229	,116	,471	,085	,358	,395
3	Sum total of supports	,259	,229	1	,286	,117	,547	,431	,444
4	Number of supports	-,008	,116	,286	1	,061	,8	,211	,216
5	Number of EAS applications	,056	,471	,117	,061	1	-,121	,236	,267
6	Number of applications	-,018	,085	,547	,8	-,121	1	,329	,327
7	Turnover group	,074	,358	,431	,211	,236	,329	1	,812
8	Size of the enterprise	,08	,395	,444	,216	,267	,327	,812	1

In the factor analysis it was revealed if the enterprise sees an impact of the state support, the influenced aspects are accumulated in three different factors::

1. The impact on the enterprises developmental activity, technology development, the cooperation between enterprises and R&D institutions and the strategic behaviour of enterprises.

2. The impact on the productivity of the enterprise, the quality of products and services and the efficient use of money.

3. The impact on the management of the enterprise and the quality of employees (on the growth of the skills of employees).

Table 8

	Factor analysis*			Correlation analysis** of the enterprises assessments (the impact is negative if the enterprises, having received respective supports, assessment is lower than the average)						
Aspects of impact of supports	Factor 1	Factor 2	Factor 3	EAS 1	EAS 2	EAS 3a	EAS 3b	KredEx 1	KredEx 2	KredEx 3
Impact of support: cooperation with other enterprises has improved	,725	,068	,178	,000	-,058	,264	-,104	-,018	,048	-,056
Impact of support: new development projects added	,723	,155	,286	-,082	,044	,214	-,101	-,022	,055	,045
Impact of support: new technologies developed	,701	,190	,179	,026	-,048	,328	-,160	-,028	,018	-,030

Impact of support: increased (not decreased) part of export	,606	,368	-,118	-,043	,230	,061	-,218	,063	,053	,145
Impact of support: the enterprise`s strategy significantly changed	,605	,153	,286	,039	-,025	,079	-,102	,022	,104	-,006
Impact of support: alleviated money problem	,572	,284	-,173	,077	,012	,134	-,268	,130	,136	,023
Impact of support on the growth of the enterprise`s productivity	,144	,764	,116	,246	-,040	-,049	-,110	-,039	-,003	,010
Impact of support on the decrease of the enterprise`s costs	,194	,665	,105	,110	,014	,023	-,104	-,020	-,001	,053
Impact of support on the quality of products and services	-,001	,621	,426	,221	-,088	,008	-,046	-,086	,023	-,086
Impact of support on the enterprise`s market position	,325	,617	,108	,105	,097	,032	-,162	-,011	,036	,054
Impact of support: the number of jobs has increased/not decreased	,452	,490	-,105	,202	-,010	,136	-,213	-,045	,038	,033
Impact of support on marketing the enterprise`s products	,412	,481	,106	-,023	,145	,030	-,104	,000	,016	,086
Impact of support: the level of the skills of employees has grown	,154	,032	,807	-,198	-,094	,073	,273	-,177	-,017	-,018
Impact of support on the improvement of the management and work arrangement of the enterprise	,131	,259	,718	-,133	-,041	-,089	,195	-,062	,047	-,001

* EAS1 influenced factor 2: EAS2 influenced factor 1 but did not influence factor3; EAS 3a influenced factor 1; EAS 3b influenced factor 2 but the impact was rather weak; KredEx 1: there were no significant differences of impacts in comparison with the average level; KredEx 2: there were no significant differences in comparison with the average level and the group was very small for analyzing; KredEx 3: influenced factor 2 and the impact is significant in spite of the smallness of the group

** Statistically significant connections are marked in colour.

Table 9

	Aspect of impact*	Turnover group	No of employees, classif.	No of employees	Sum total of support	Turnover	Ratio of support money and turnover	No of supports
1	Impact of support on the quality of products and services	-,106	-,085	-,038	,042	-,045	,055	-,096
2	Impact of supports on the enterprise`s market position	,010	,021	,003	,077	-,005	,056	-,038
3	Impact of support on the decrease of the	-,015	-,005	,022	,010	,055	,027	-,053

	enterprise`s costs							
4	Impact of support on the enterprise`s productivity growth	-,083	-,059	-,013	,008	,032	,028	-,089
5	Impact of support on the improvement of the enterprise`s management and work arrangement	,011	,018	,012	-,061	,059	,025	-,048
6	Impact of support on marketing of the enterprise`s products	,036	,016	-,014	,061	-,024	-,002	,064
7	Impact of support: the number of jobs has increased/not decreased	-,062	-,106	-,041	,131	-,029	,128	-,071
8	Impact of support: new development projects added	,020	,021	,030	,141	,060	,108	-,052
9	Impact of support: new technologies developed	-,020	-,038	-,049	,154	-,051	,116	-,056
10	Impact of support: the part of export has grown (not fallen)	,148	,122	,018	,113	,019	,016	,088
11	Impact of support: the level of the skills of employees has grown	,024	,030	,054	,019	,054	-,006	,026
12	Impact of support: alleviated money problems	-,033	-,040	-,021	,144	,006	,097	-,027
13	Impact of supports: improved cooperation with other enterprises	-,070	-,097	-,077	,096	-,080	,103	-,044
14	Impact of support: the enterprise`s strategy has significantly changed	-,077	-,081	-,011	,030	,002	-,022	-,023

* In the correlation table the connections of the impacts of supports with the following indices have been dealt with: Turnover (natural values and classified), the number of employees (naturally and classified), the total sum of supports, the ratio of supports into turnover, the number of supports. It is revealed that some supports have a positive correlation between the total sum of supports, and also the ratio of support money and turnover, but again it is very weak. The impact decreases when the turnover and the number of employees grows, surprisingly when the number of supports increases. Again, all the impacts are extremely small.

Appendix G: The influence of the proportional size of the supports on the assessment of enterprises

Table 10

	EAS1 support group relationship into turnover (%)	Significant impact	No impact	Small impact	Not right
1	The quality of products and services has improved	48	33,4	17	35,2
2	Improved market position	28,2	59,9	42,4	37,7
3	Decrease of costs	45,5	39,5	37,3	33,5
4	Growth of productivity	28,9	70,1	58,6	7,1
5	Management and the work arrangement of the enterprise have improved	36,8	38,9	35,0	65
6	Marketing of products has improved	34	44,2	32,9	72,2
7	The number of jobs has increased (not decreased)	39,4	47,6	26,1	59,8
8	New development projects have been added	43	49	28,1	21,8
9	New technologies have been developed	41,7	43,5	46,9	21,6
10	Growth of export	17,7	53,4	28,1	37,3
11	The level of the skills of employees has improved	39,8	49,7	24,9	32,4
12	Alleviated money problems	28,3	51,5	38,6	34,5
13	Cooperation with other enterprises, the public sector, R&D institutes has improved	58,9	49,2	24,4	16,4
14	The enterprise`s strategy has significantly changed	27,2	43,8	54,3	37,7

Table 11

	EAS 2 support group relationship into turnover(%)	Significant impact	No impact	Small impact	Not right
1	The quality of products and services has improved	7,7	9,7	6,2	4
2	Improved market position	7,2	7,5	6,2	18,4
3	Decrease of costs	4,7	8,3	5,5	11,6
4	Growth of productivity	4,6	5,9	9,3	13,7
5	Management and the work arrangement of the enterprise have improved	6,7	6,2	7,2	12,4
6	Marketing of products has improved	8,2	11,2	3,4	1,2
7	The number of jobs has increased (not decreased)	13,3	6,6	3,2	7,6

8	New development projects have been added	6,6	6,2	8,2	6,4
9	New technologies have been developed	6,6	6,1	8,9	9,3
10	Growth of export	7,0	9,2	4,3	9,8
11	The level of the skills of employees has improved	5,1	9,3	8,2	7
12	Alleviated money problems	7	9,4	7,7	3,4
13	Cooperation with other enterprises, the public sector, R&D institutes has improved	6,8	8,3	2,7	8,6
14	The enterprise`s strategy has significantly changed	9,9	8,1	5,7	18,4

Table 12

	EAS 3a support group relationship into turnover(%)	Significant impact	No impact	Small impact	Not right
1	The quality of products and services has improved	580,4	35,7	29,8	73,7
2	Improved market position	552,1	47,4	141,9	137,1
3	Decrease of costs	79,4	41	1125	198,2
4	Growth of productivity	142	44,2	689,1	300,4
5	Management and the work arrangement of the enterprise have improved	717,4	118,4	93,8	215,6
6	Marketing of products has improved	70,9	120,4	151,7	1768,1
7	The number of jobs has increased (not decreased)	1270,1	31,9	38,1	32,1
8	New development projects have been added	713,2	51,7	91,3	6,7
9	New technologies have been developed	512,9	41,4	37,3	19,1
10	Growth of export	108,7	86,3	159	1141,5
11	The level of the skills of employees has improved	112,4	124,4	1158,3	28,3
12	Alleviated money problems	635,4	26,5	122,8	194,1
13	Cooperation with other enterprises, the public sector, R&D institutes has improved	522,3	34,8	27,1	89
14	The enterprise`s strategy has significantly changed	119,2	577,5	124,6	137,1

Table 13

	EAS 3b support group relationship into turnover(%)	Significant impact	No impact	Small impact	Not right
1	The quality of products and services has improved	8,6	3,3	3,8	2
2	Improved market position	3,4	9,4	4,1	2,8
3	Decrease of costs	3,9	4	10,5	2,5
4	Growth of productivity	13,8	2,4	4,7	1,9
5	Management and the work arrangement of the enterprise have improved	9,2	2,6	4,6	1,7
6	Marketing of products has improved	14,2	3,2	2,7	2,1
7	The number of jobs has increased (not decreased)	18	3,5	4	2,5
8	New development projects have been added	14,3	2,4	4,3	2
9	New technologies have been developed	20,3	3	2,9	2,2
10	Growth of export	5,5	3,2	16	2,6
11	The level of the skills of employees has improved	4,2	13,3	2,5	3
12	Alleviated money problems	7,6	6,8	5,8	2,3
13	Cooperation with other enterprises, the public sector, R&D institutes has improved	6,6	3	13,3	2,3
14	The enterprise`s strategy has significantly changed	3,6	7,5	5,1	2,8

Table 14

	KredEx 1 support group relationship into turnover(%)	Significant impact	No impact	Small impact	Not right
1	The quality of products and services has improved	53,4	40,4	13,7	21,5
2	Improved market position	61,5	22,4	15,5	21,8
3	Decrease of costs	22,1	17,9	21,6	78,5
4	Growth of productivity	70,4	19,7	14,7	40,5
5	Management and the work arrangement of the enterprise have improved	27,2	54,5	14,6	22,1
6	Marketing of products has improved	40,8	39,9	24,3	18,8
7	The number of jobs has increased (not decreased)	104,9	26,1	15,7	18,8
8	New development projects have been added	69,5	18,2	13,2	40,1
9	New technologies have been developed	90,5	18,5	17,4	36,2

10	Growth of export	56	24,1	23,2	39,7
11	The level of the skills of employees has improved	30,6	41,5	15,1	48,7
12	Alleviated money problems	32,7	16,1	24,9	99,5
13	Cooperation with other enterprises, the public sector, R&D institutes has improved	82,2	30,8	16,2	16,5
14	The enterprise`s strategy has significantly changed	37,7	31,2	48,8	21,8

Table 15

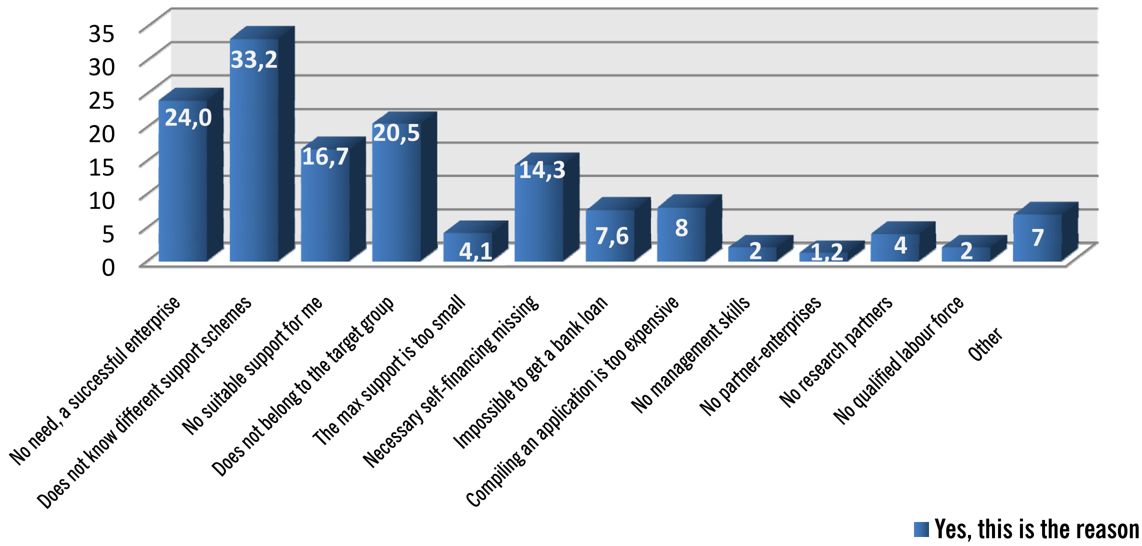
	KredEx 2 support group relationship into turnover(%)	Significant impact	No impact	Small impact	Not right
1	The quality of products and services has improved	42,2	39,2	45,4	8,5
2	Improved market position	54,2	25,8	19,6	8,5
3	Decrease of costs	20,7	36,2	57,7	36,3
4	Growth of productivity	35,5	43,2	38,2	33,7
5	Management and the work arrangement of the enterprise have improved	84	21	39,7	22,8
6	Marketing of products has improved	53,7	39,2	21,1	7,3
7	The number of jobs has increased (not decreased)	89,6	31	23,8	22,3
8	New development projects have been added	40,4	4,1	73,3	31,9
9	New technologies have been developed	18,8	52,4	60,6	35,1
10	Growth of export	32,7	56,1	39,2	39,5
11	The level of the skills of employees has improved	35,3	38,2	43	48,6
12	Alleviated money problems	39,6	9,7	50,7	75,3
13	Cooperation with other enterprises, the public sector, R&D institutes has improved	45,9	48,4	38,7	23,1
14	The enterprise`s strategy has significantly changed	57,1	33,4	39,7	8,5

Table 16

	KredEx 3 support group relationship into turnover(%)	Significant impact	No impact	Small impact	Not right
1	The quality of products and services has improved	24,1	11,2	24,3	12,8
2	Improved market position	27,7	8,9	6,1	10,1
3	Decrease of costs	15,7	12,5	25,4	20,6
4	Growth of productivity	20	16,3	7,3	37,1
5	Management and the work arrangement of the enterprise have improved	13,9	16,6	4,9	23,7
6	Marketing of products has improved	19,8	8,8	8	37,8
7	The number of jobs has increased (not decreased)	20,1	15,1	7,1	26,8
8	New development projects have been added	20,5	9,7	15,1	26,6
9	New technologies have been developed	22,8	14,6	13,7	20,7
10	Growth of export	19,6	8,2	9,1	38,8
11	The level of the skills of employees has improved	17,8	19,3	10,3	8,3
12	Alleviated money problems	25,8	7,5	22	13,8
13	Cooperation with other enterprises, the public sector, R&D institutes has improved	22	14	12,7	27,9
14	The enterprise`s strategy has significantly changed	12,1	12	19,4	10,1

Appendix H: Application of supports

Figure 24. The reasons why enterprises in the control group did not apply for the support (%)



The main reasons why enterprises in the control group have not applied for support are the awareness of different support schemes (33.2% of respondents), the need for supports or the enterprise is "successful" anyhow (24%), the opinion that they do not belong to the target group of supports (20.5%)

Figure 25. The Enterprise Estonia (EAS) supports for start-up enterprises: the problem is applying

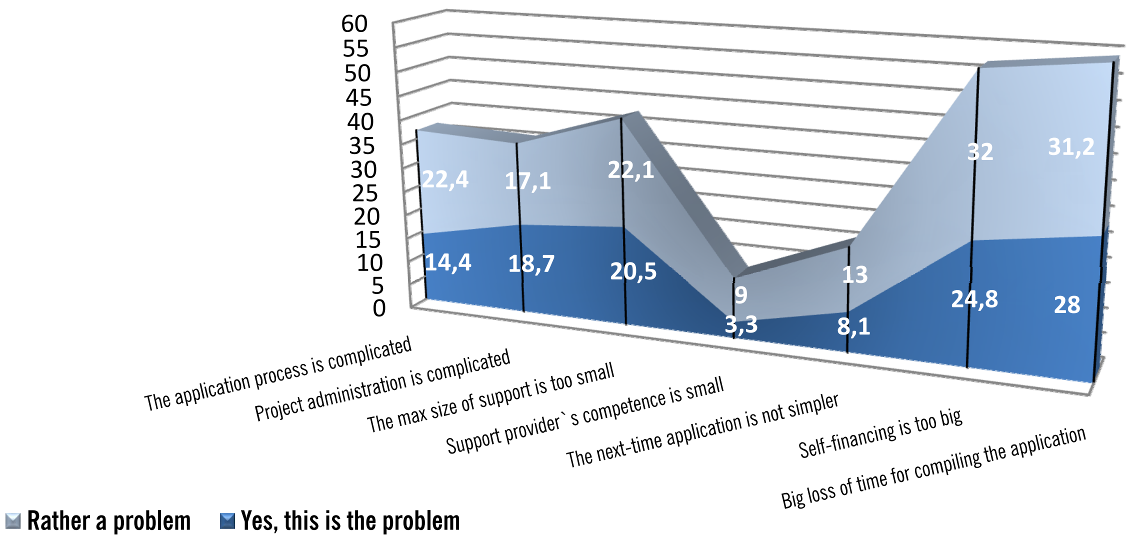


Figure 26. EAS export supports: problem in applying

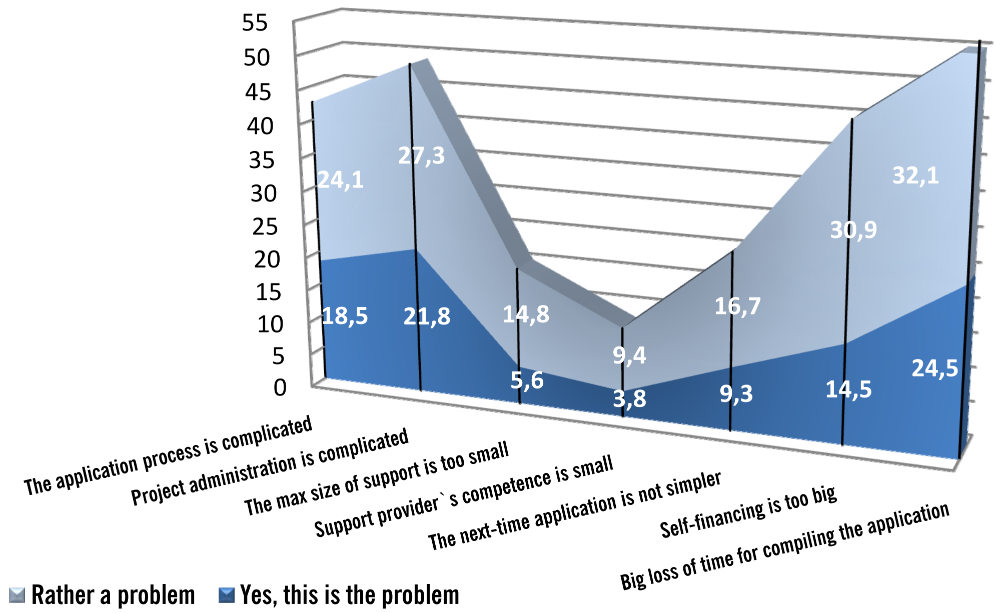


Figure 27. EAS developmental supports: problems in applying

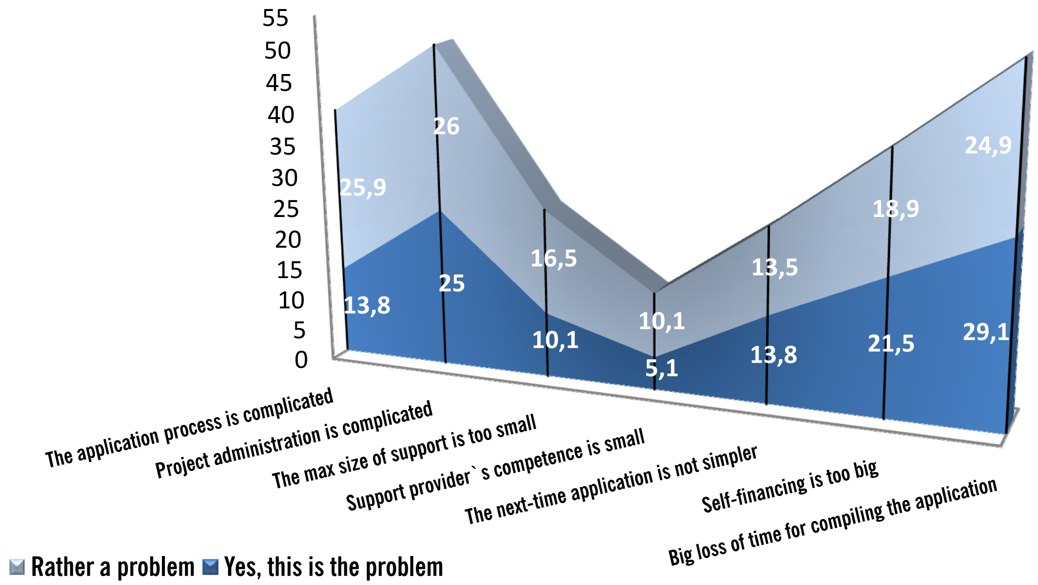
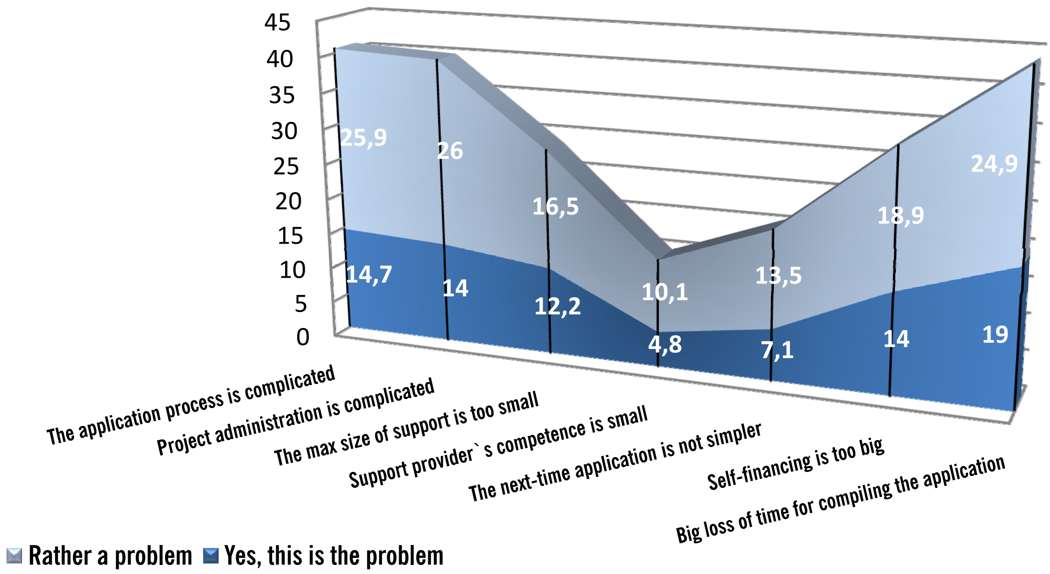


Figure 28. EAS productivity increasing support: problems in applying



Appendix I: The impact of supports according to the size of enterprises and the support group

Figure 29. The impact of supports to enterprises – according to the size of enterprises

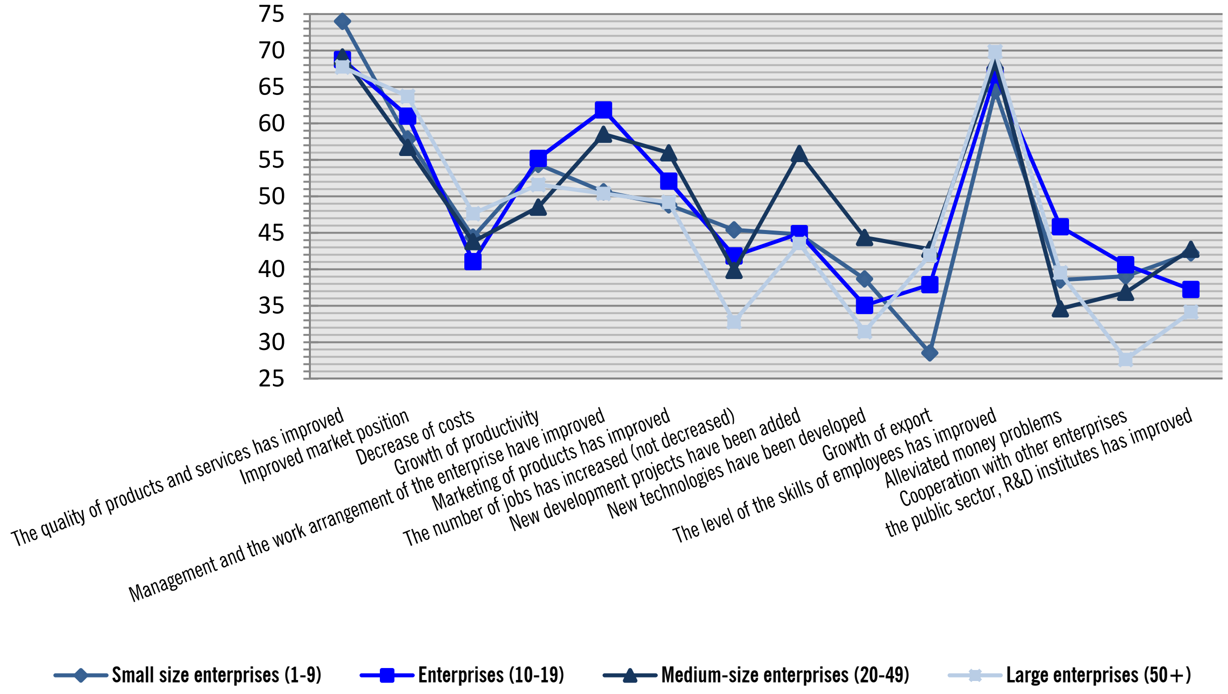


Figure 30. The assessment of the impact by the enterprises of the EAS start-up enterprises support (% of respondents)

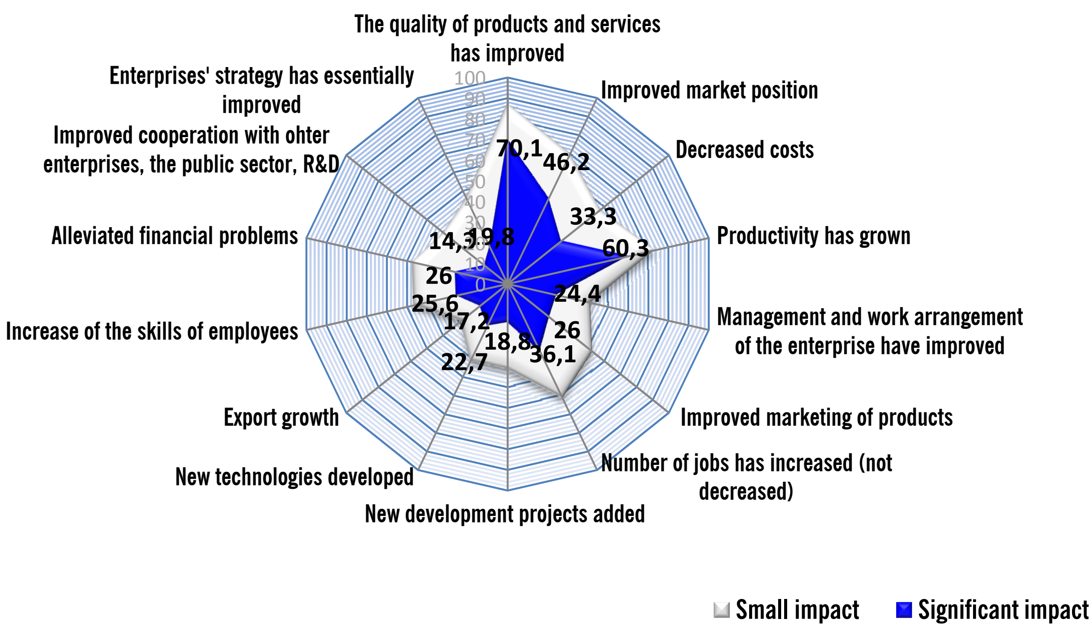


Figure 31. The assessment of the impact by enterprises of the KredEx loan sureties (% of respondents)

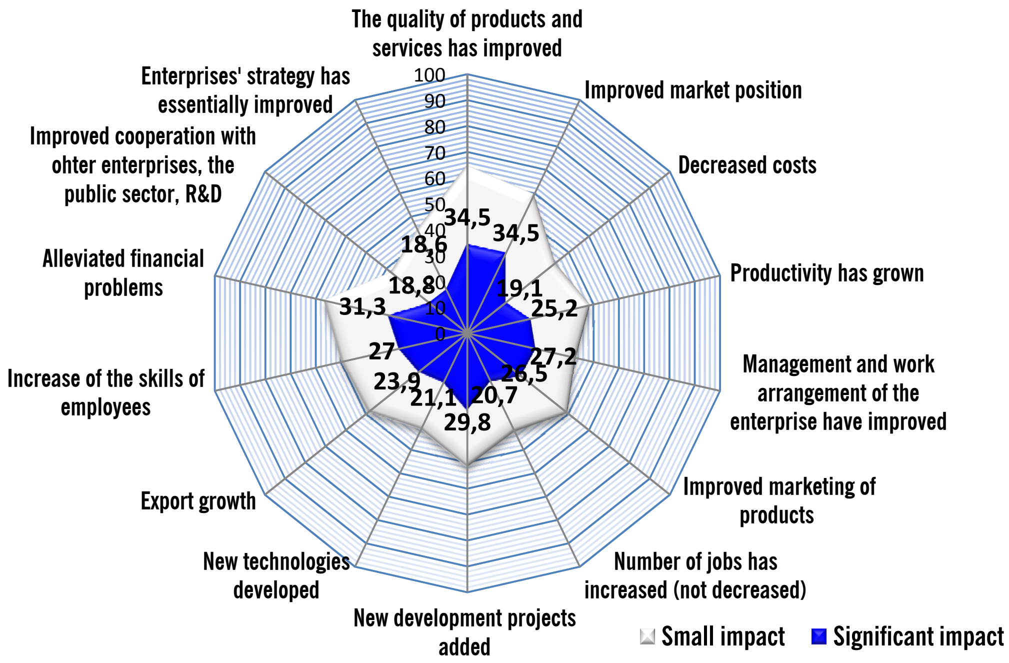
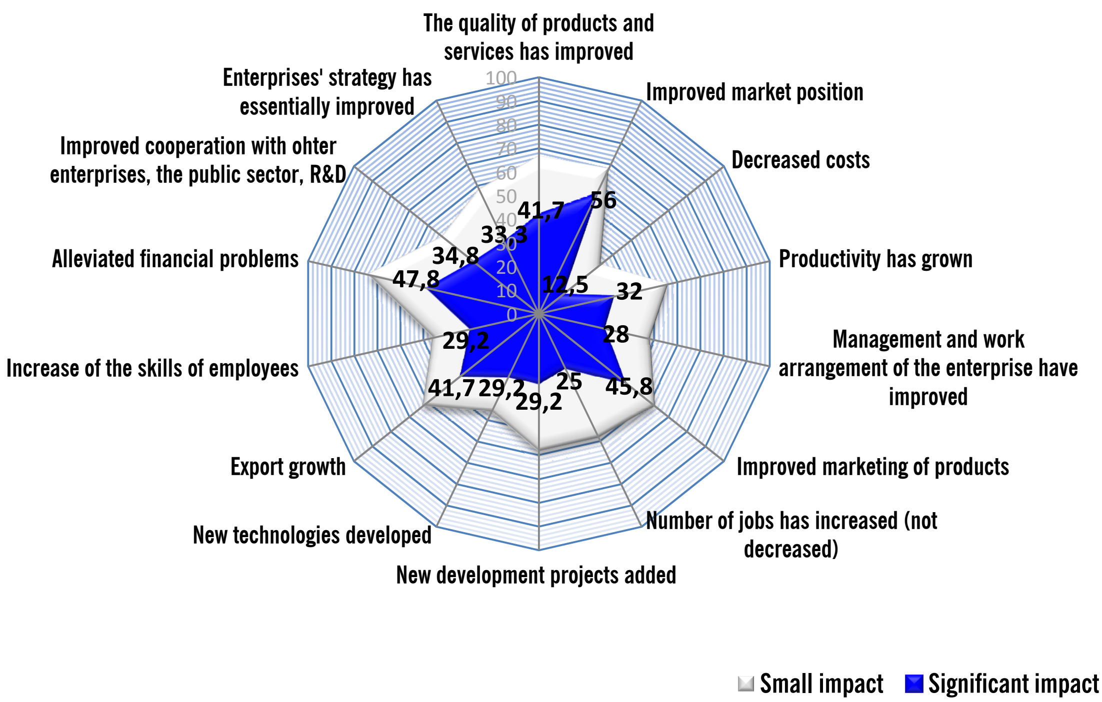


Figure 32. The assessment of the impact by the enterprises of the KredEx loans (% of respondents)



Appendix J: The present problems of enterprises in the audited fields of activities

Figure 33. The comparison of assessments of supported enterprises with the assessments of the enterprises in the control group concerning economic problems (%)

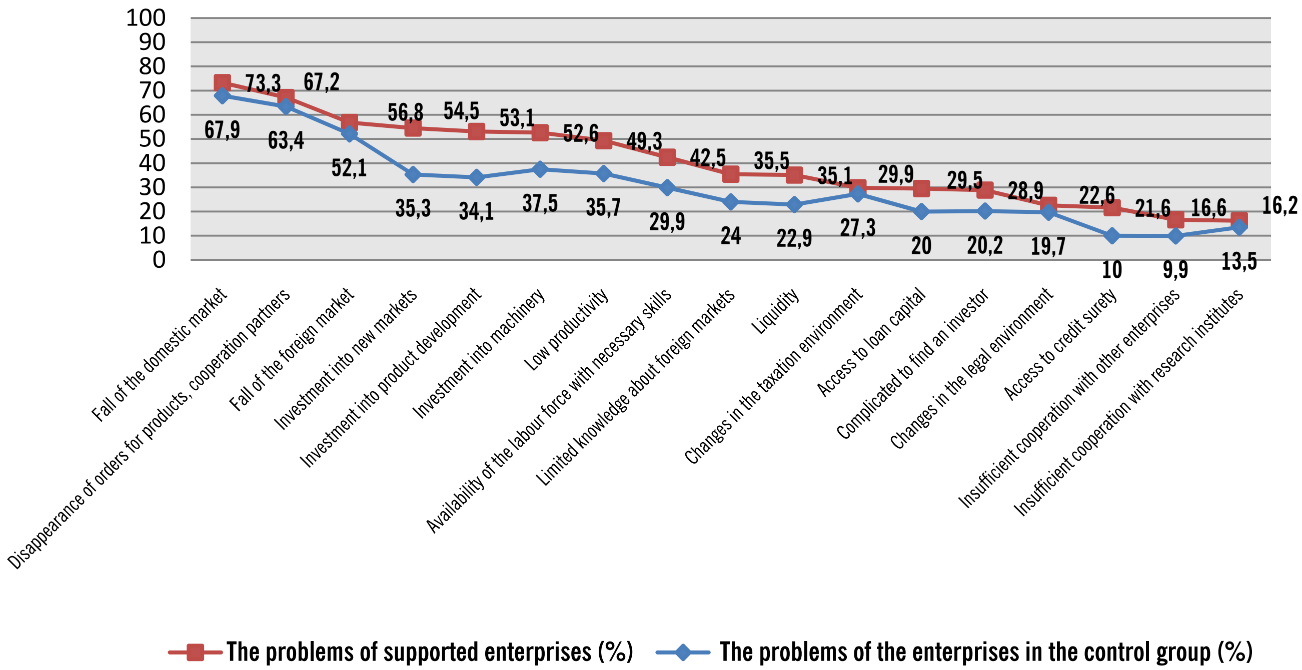


Figure 34. The assessment by the ICT enterprises of the economic problems (%)

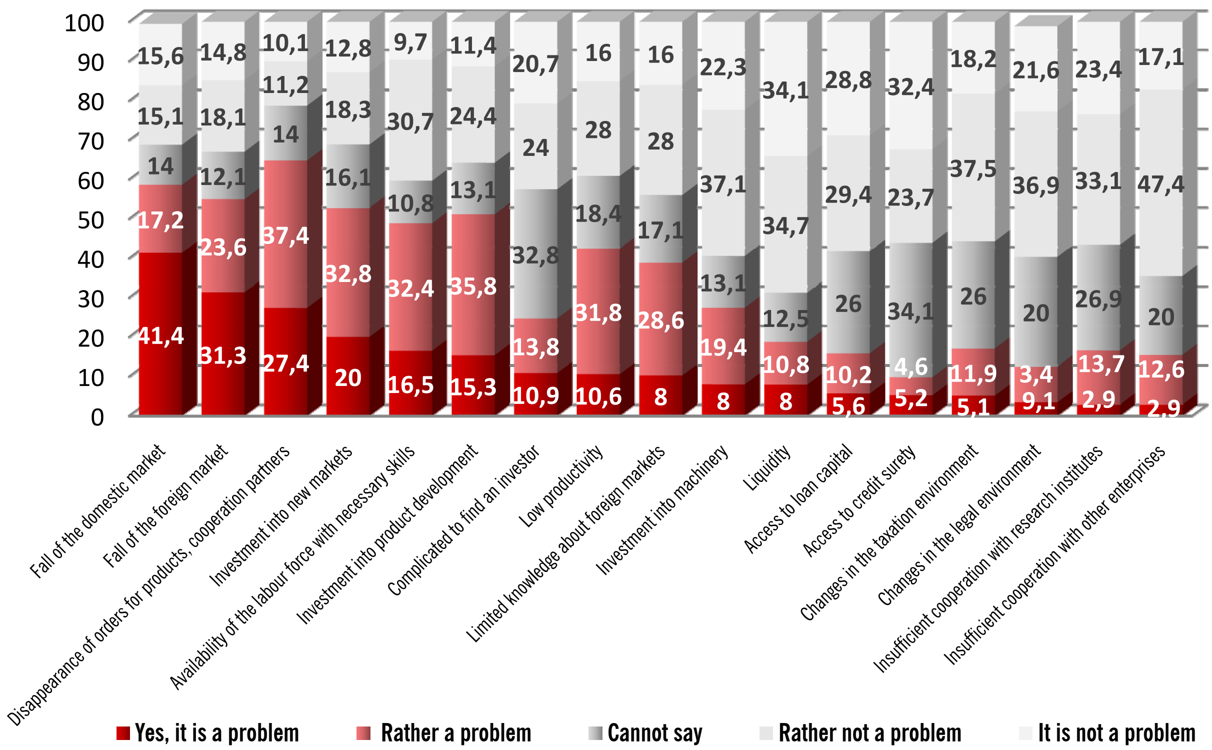


Figure 35. The assessment by bio- and material technology enterprises of economic problems (%)

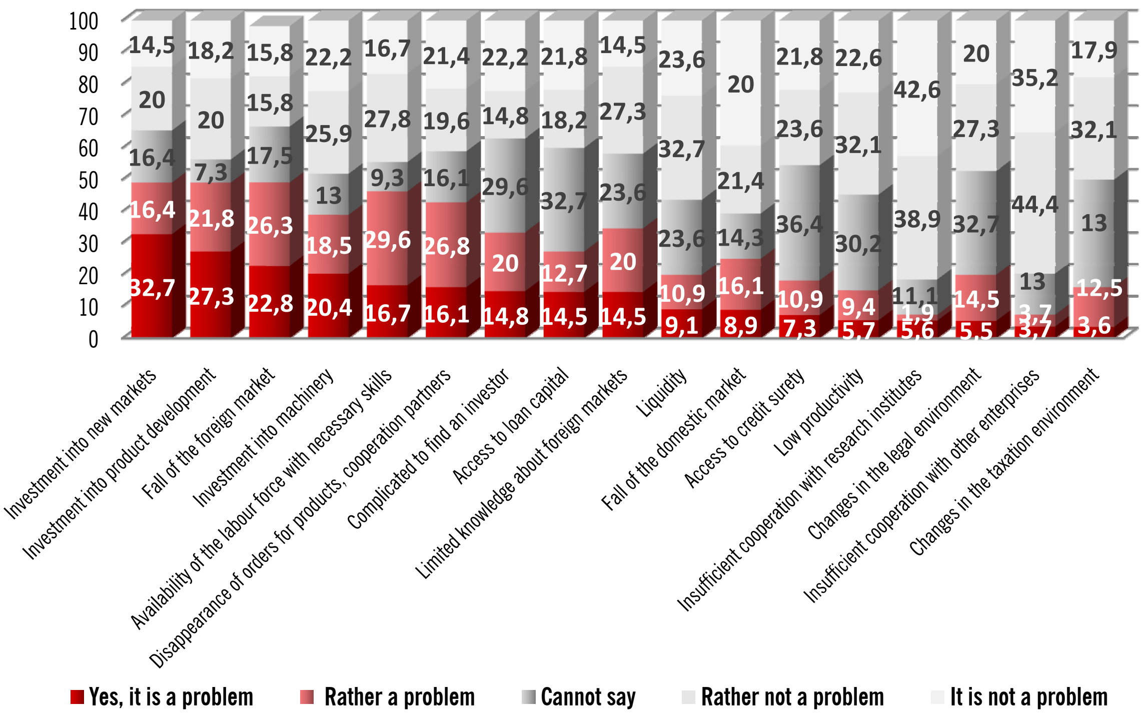


Figure 36. The assessment by the enterprises of financial services of the economic problems (%)

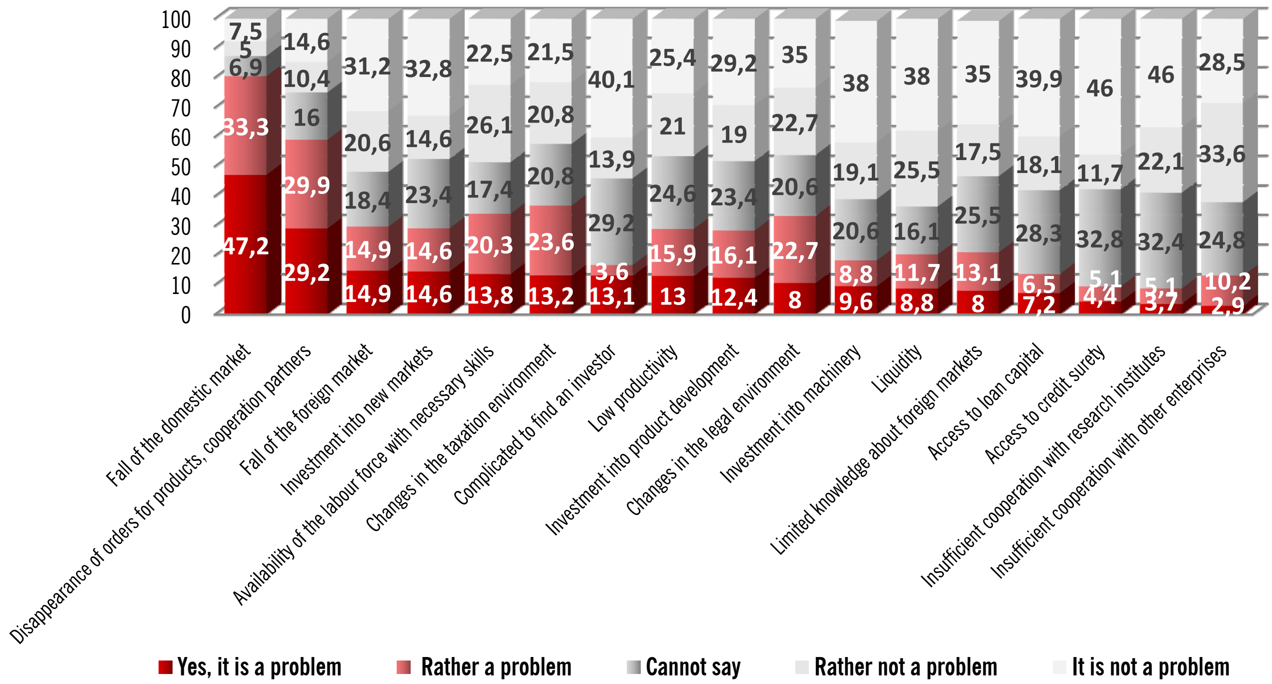


Figure 37. The assessment by business services enterprises of the economic problems(%)

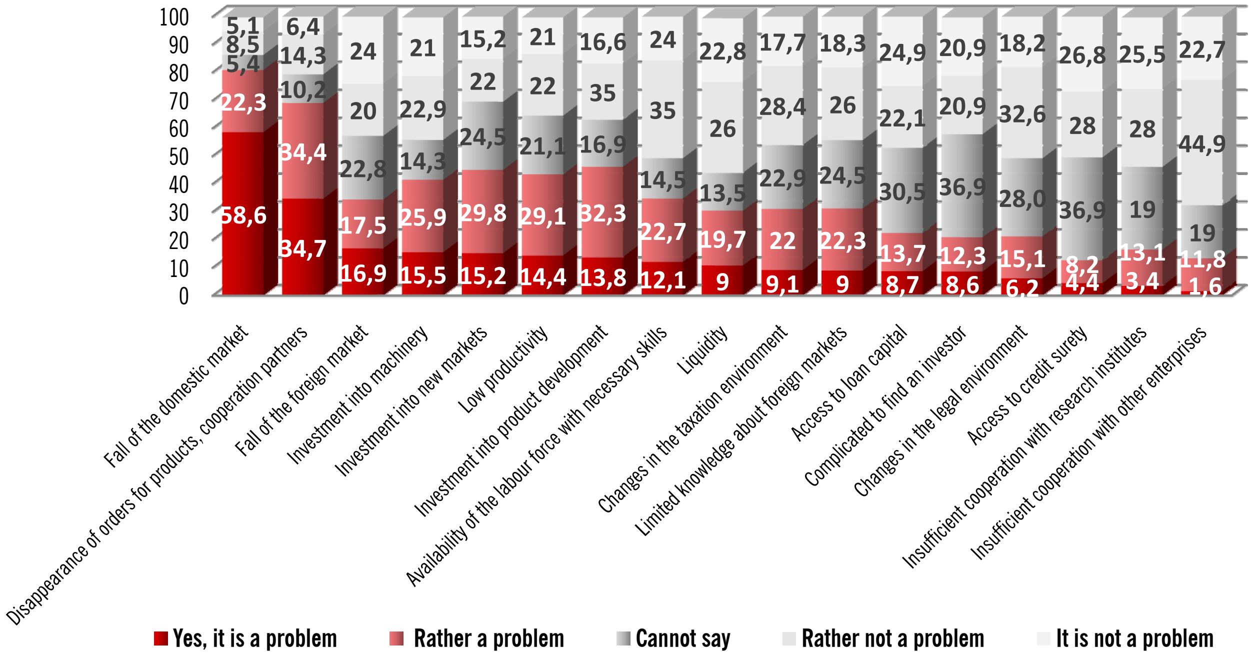


Figure 38. The assessment by transport enterprises of the economic problems (%)

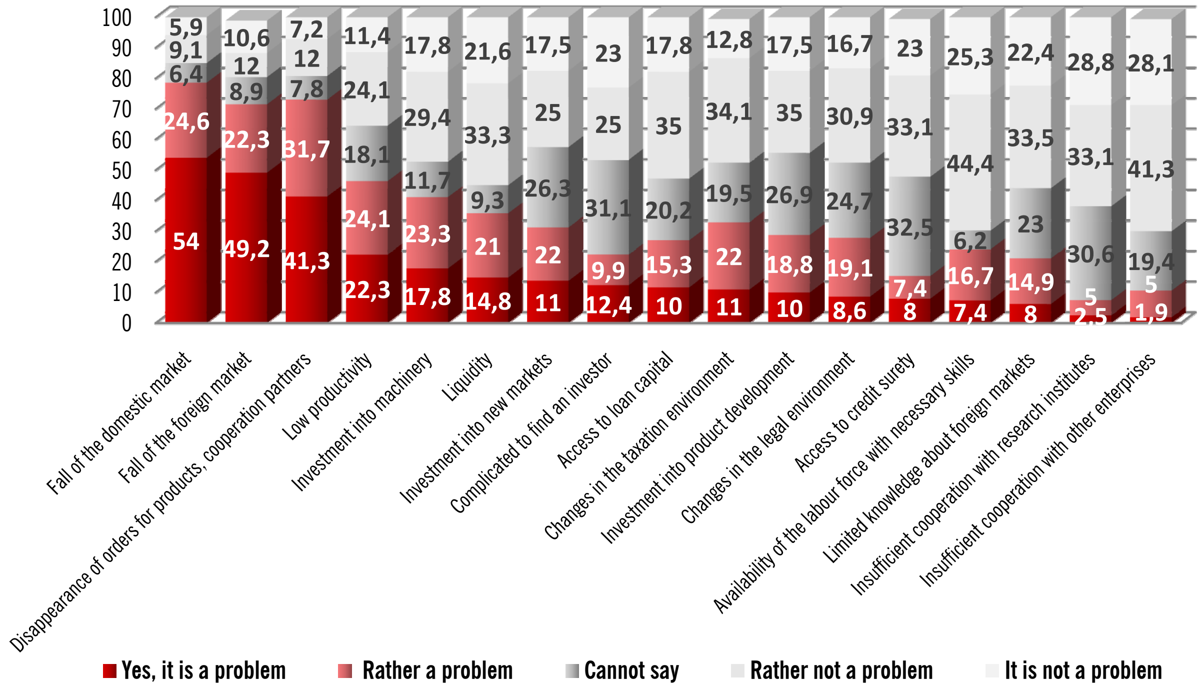


Figure 39. The assessment by the mechanical engineering and metal industry enterprises of the economic problems (%)

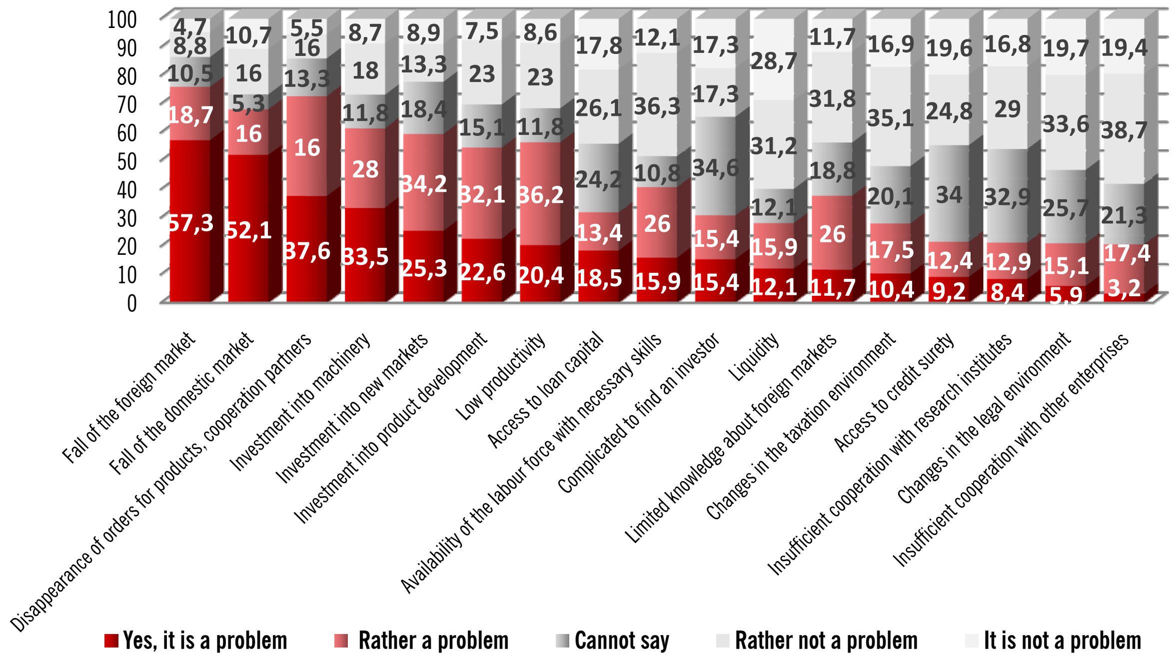


Figure 40. The assessment by timber industry enterprises of the economic problems (%)

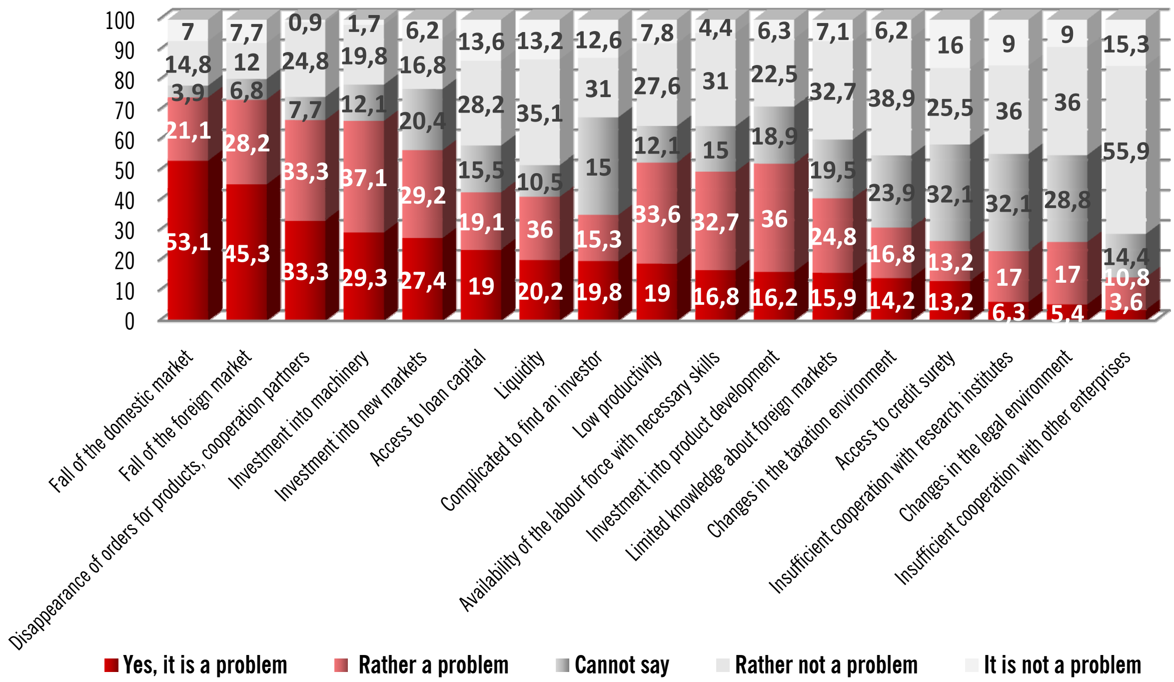


Figure 41. The assessment by wellness industry enterprises of the economic problems (%)

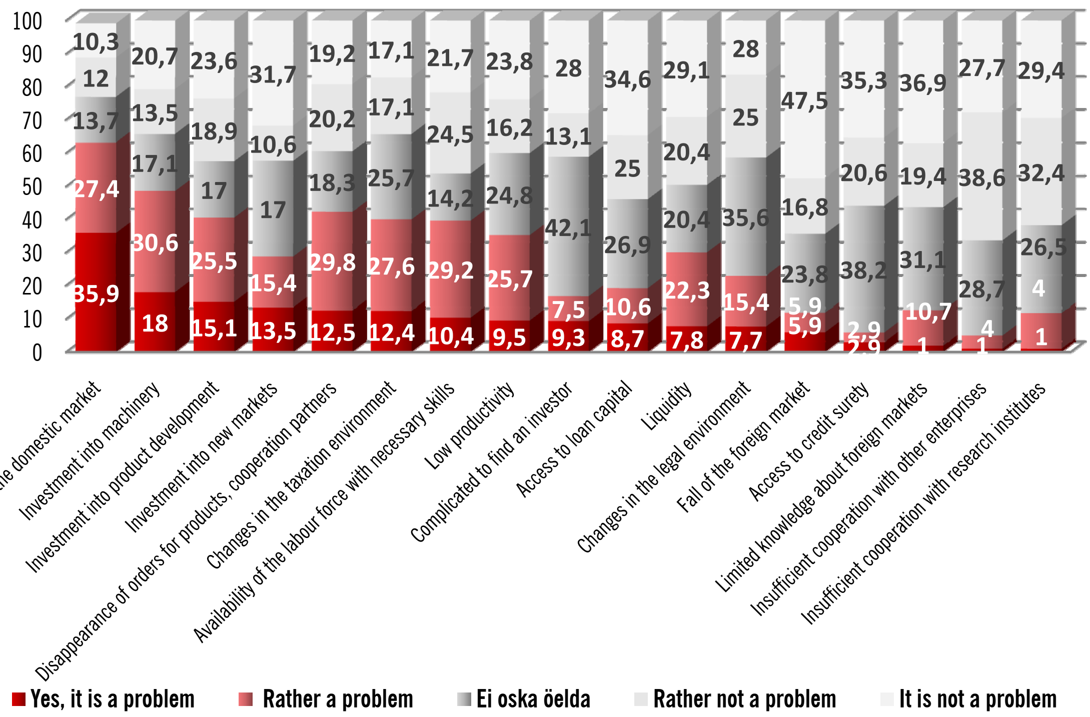
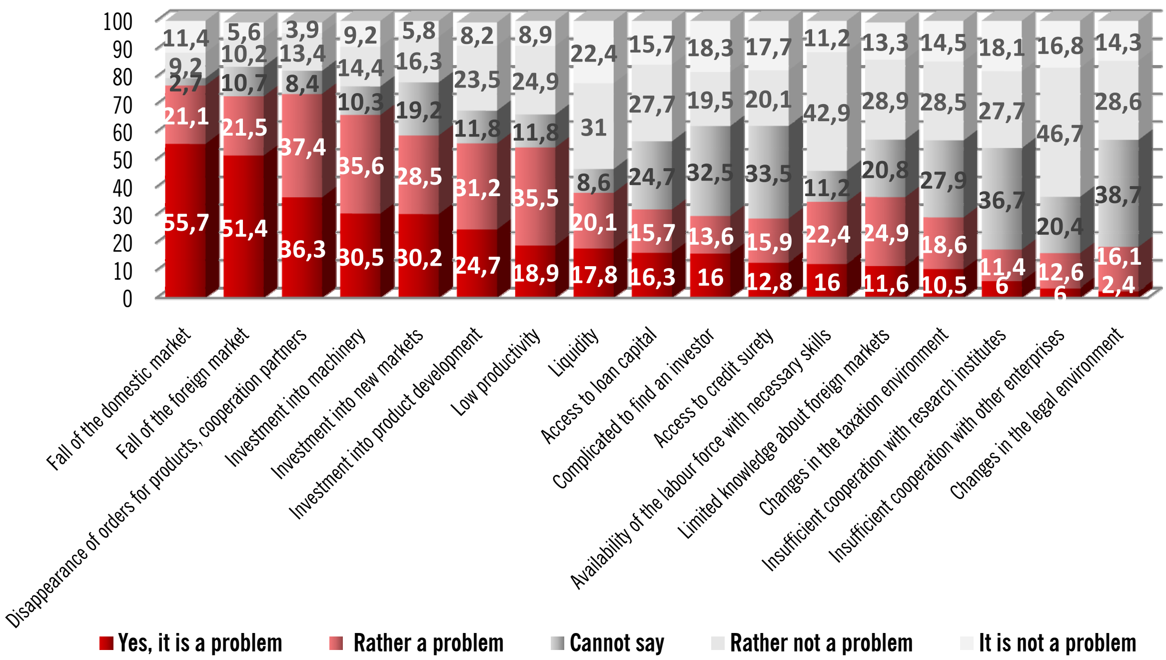


Figure 42. The assessment by the support group "Other" enterprises of the economic problems (%)



Appendix K: The need of enterprises for supports

Figure 43. The enterprises` assessment of which support, assistance from the state is necessary (necessary and rather necessary together)(%)

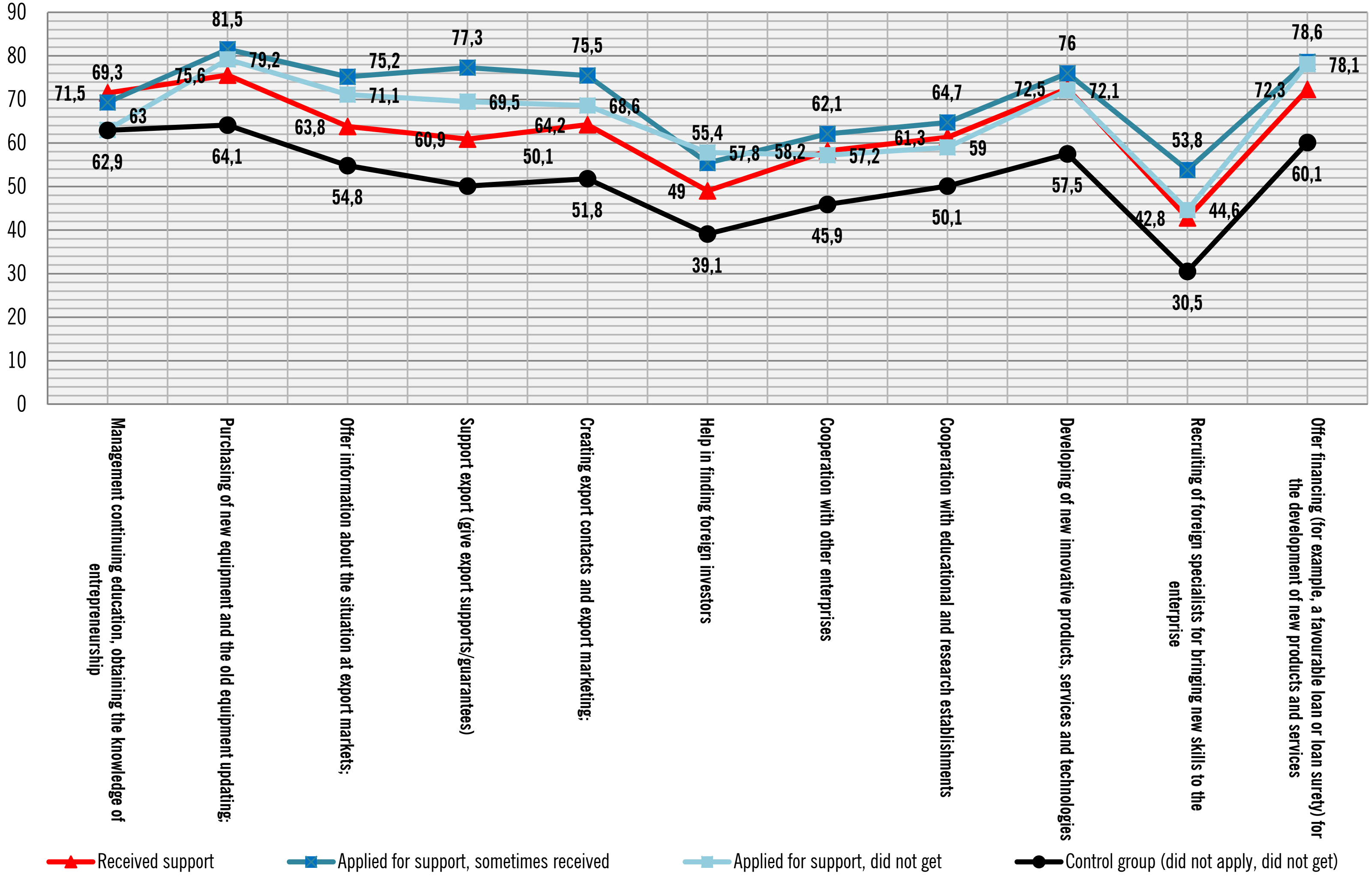
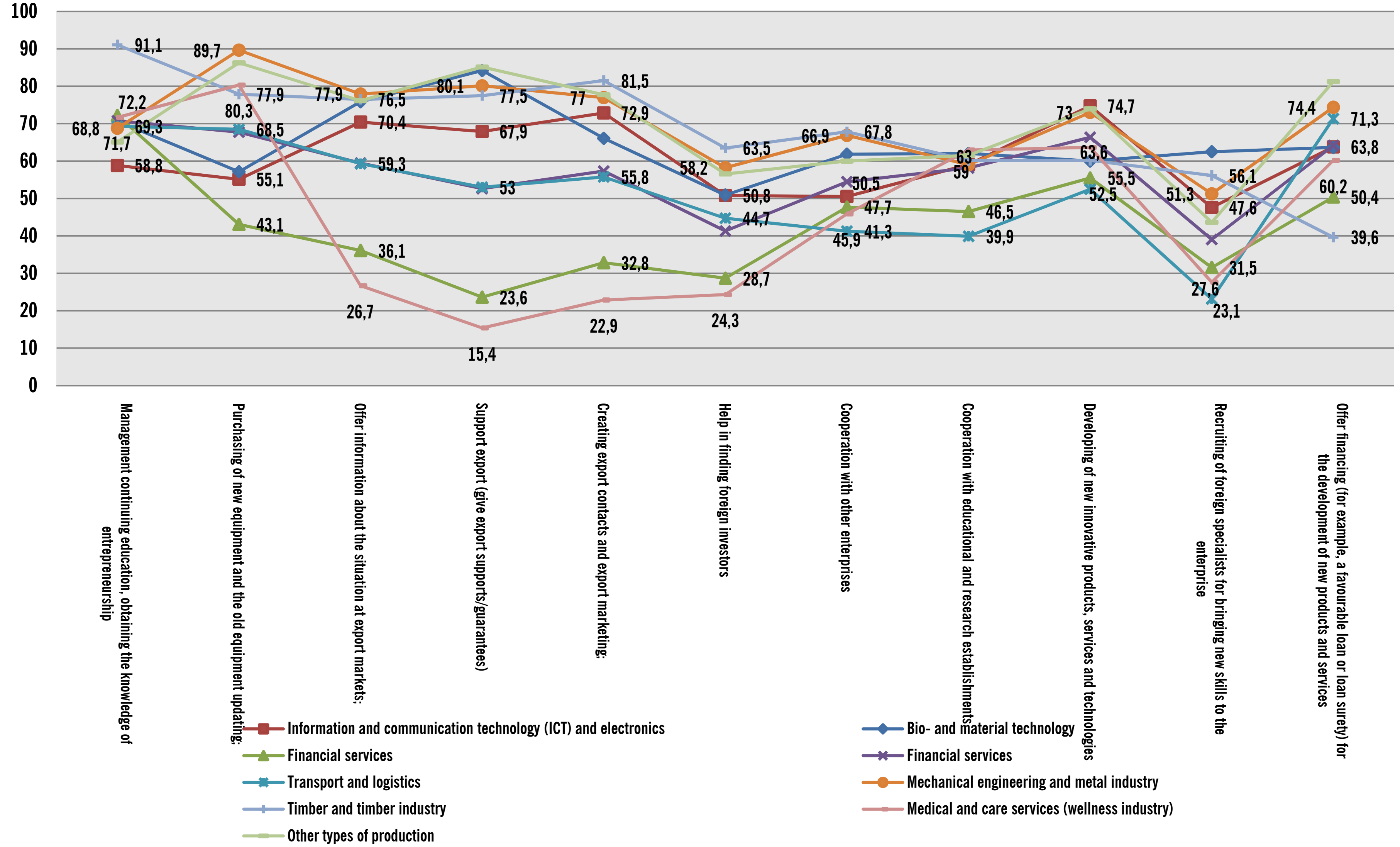
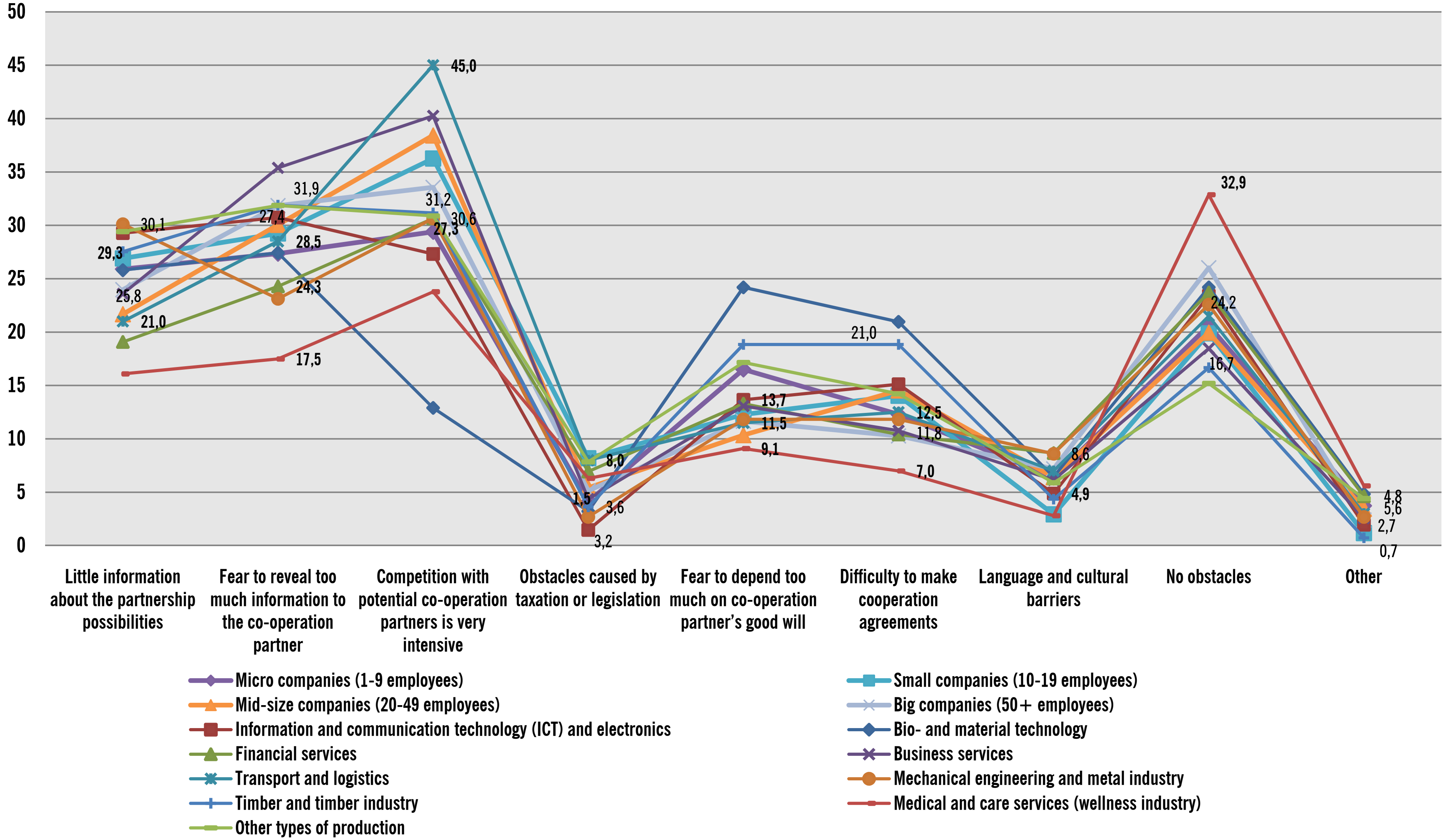


Figure 44. The assessment by enterprises according to their fields of activity to which support, assistance from the state is necessary (necessary and rather necessary together), %

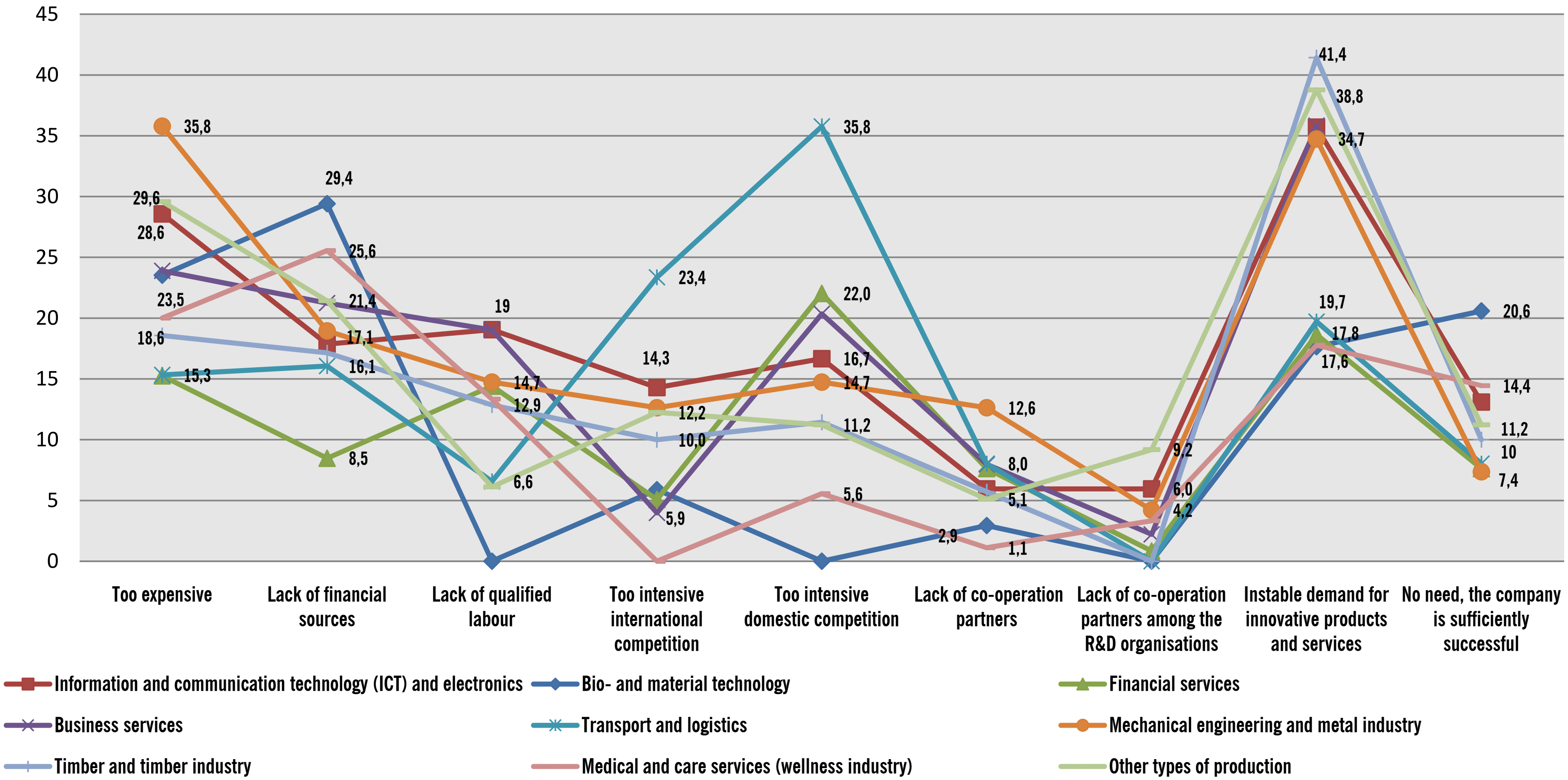


Appendix L: Enterprises` cooperation obstacles. Figure 45



Appendix M: The reasons why the working out of new products and services has not been completed by enterprises

Figure 46



Appendix N: The connection between the sum of the support and net revenue, added value and the growth of investment

Table 17. The connection between the sum of the support and the growth of economic indices: the Pearson correlation coefficient for the enterprise of the field of activity in the National Audit Office of Estonia sample**

Growth per employee employee		Start up enterprise supports						Export supports (EAS)						Development supports (EAS)						Supports for increasing productivity					
		T1 2004	T1 2005	T1 2006	T1 2007	T1 2008	T1 2009	T2 2004	T2 2005	T2 2006	T2 2007	T2 2008	T2 2009	T3a 2004	T3a 2005	T3a 2006	T3a 2007	T3a 2008	T3a 2009	T3b 2004	T3b 2005	T3b 2006	T3b 2007	T3b 2008	T3b 2009
Growth of sales revenue	2005	,150	,614	.a***	.a	.a	.a	-,012	-,011	-,1	-,603	,040	,079	,026	,033	,167	,151	,198	,115	-,039	-,120	,043	,005	,063	,010
	2006	-,114	-,641	-,075	.a	.a	.a	,016	,020	,081	,114	-,095	,037	,129	-,172	-,075	-,146	-,166	-,076	,073	,012	-,112	-,021	-,018	-,004
	2007	,041	,036	,146	,35	,897	1	-,003	-,011	,000	,121	-,018	-,110	-,016	,007	-,015	-,067	-,075	-,033	,033	,026	-,007	,001	,009	,000
	2008	-,178	-,138	,247	-,401	,4	-,149	,032	,072	,047	,021	,032	,105	,006	,032	,013	,177	,005	,030	-,016	-,016	-,039	,002	-,030	,004
	2009	,146	,165	-,021	,956	-,66	-,447	-,054	-,062	-,23	-1,00	-,076	-,154	,448	,301	,171	-,306	,393	,239	-,429	-,054	-,078	-,127	-,017	-,006
Growth of added value	2005	,051	,795	.a	.a	.a	.a	,026	-,042	-,08	-,311	,170	,072	,231	,039	,169	,151	,181	,095	-,137	-,263	,025	,022	-,024	,015
	2006	-,194	-,428	,114	.a	.a	.a	,028	,054	,107	,021	-,033	,037	-,076	-,213	-,222	-,059	-,326	-,145	,135	,111	-,062	,020	-,002	,005
	2007	,063	-,006	,003	,383	,929	1	,029	-,070	-,05	-,029	-,011	-,250	-,084	,112	-,019	-,124	-,149	-,001	,009	,032	,004	-,008	-,001	-,015
	2008	-,149	-,269	,254	-,404	,356	-,294	-,077	,077	,049	,268	-,036	,131	,182	,175	,044	,418	,156	,098	-,063	-,017	-,048	-,034	-,025	,010
Growth of investments	2005	-,154	-1,0	.a	.a	.a	.a	-,076	-,030	-,20	-,66	,258	,062	-,130	-,004	,610	-,040	,211	,145	-,142	-,234	,092	,018	,004	,008
	2006	-,273	-,217	,008	.a	.a	.a	,104	-,024	,186	,504	-,245	,012	,250	-,093	-,054	,011	-,192	-,059	-,093	-,171	-,150	,002	-,006	-,006
	2007	,135	,007	,063	,564	-1	-1	-,051	-,032	,041	-,256	,091	-,080	-,096	-,074	-,100	-,222	,215	-,011	-,099	-,161	-,104	-,007	,014	,000
	2008	-,110	-,478	,028	-,536	,318	-,114	-,091	,083	,131	,446	-,083	,047	-,036	,137	,011	,228	-,179	,021	-,056	-,035	-,055	,004	-,006	-,004

* The Pearson correlation coefficient shows the strength of the connection between two features. The coefficient is unit free and obtains values between -1 and +1. The closer the coefficient is to -1 or +1, the stronger the connection. The value round zero shows very weak or missing connection. The positive value shows the connection in the same direction (if one indicator has bigger values, then the other indicator has also bigger values).

** Here and hereinafter the statistically significant connections (sig.(2-tailed)<0.05) are marked in colour in the tables. In the case of the other values the connection is rather showing a tendency (the supported enterprises are few)

*** Here and hereinafter the 'a' means unsuficient data for analyses.

Table 18. The connection between the sum of the support and the growth of economic indices: the Pearson correlation coefficient for all the support recipients in all the seven groups (giving according to the year of the support)

Growth per employee		Start up enterprise supports						Export supports (EAS)						Development supports (EAS)						Supports for increasing productivity					
		T1 2004	T1 2005	T1 2006	T1 2007	T1 2008	T1 2009	T2 2004	T2 2005	T2 2006	T2 2007	T2 2008	T2 2009	T3a 2004	T3a 2005	T3a 2006	T3a 2007	T3a 2008	T3a 2009	T3b 2004	T3b 2005	T3b 2006	T3b 2007	T3b 2008	T3b 2009
Growth of sales revenue	2005	-,030	-,060	-,269	a	a	a	,027	-,083	,088	-,603	,188	,040	,026	,029	,166	,119	,168	,052	-,008	-,053	,006	-,003	,053	,007
	2006	-,085	-,052	-,037	a	a	a	,026	,010	,072	,114	-,180	,030	,088	-,173	-,074	-,119	-,166	-,054	,014	,016	-,070	-,018	-,010	-,002
	2007	,089	,099	,044	,333	,535	,945	-,036	,020	-,017	,121	,084	-,017	-,016	,005	-,018	-,052	-,129	,000	-,003	,017	-,022	-,001	,005	-,001
	2008	-,154	-,240	-,076	-,216	,580	-,385	,036	,024	,030	,021	-,098	,044	-,010	,064	,022	,145	,161	,010	,005	-,017	,002	,000	,007	,004
	2009	,071	,124	-,399	-,120	-,641	-,148	-,060	-,063	-,120	-1,00	-,110	-,209	,088	,170	,152	-,194	,359	,188	-,080	-,021	-,060	-,153	-,065	-,024
Growth of added value	2005	,023	,048	-,215	a	a	a	,077	-,070	-,080	-,311	,019	,004	,222	,031	,165	,142	,188	,056	-,088	-,197	-,004	-,014	,011	,017
	2006	-,145	-,056	,021	a	a	a	-,016	,044	,103	,021	-,121	,035	-,103	-,198	-,219	-,082	-,360	-,118	,060	036	-,034	,013	-,004	,003
	2007	,152	,051	-,005	,429	,689	,955	,030	-,029	-,058	-,029	,061	-,197	-,056	,128	-,025	-,113	-,222	,014	-,006	,008	-,005	-,005	,000	-,011
	2008	-,177	-,201	-,058	-,298	,638	-,388	-,067	,044	,042	,268	-,094	,102	,122	,128	,059	,404	,283	,100	-,006	-,014	,008	-,020	-,006	,011
Growth of investments	2005	-,207	,043	-,326	a	a	a	-,063	-,054	-,168	-,660	,273	,045	-,116	,016	,583	-,034	,209	,133	-,118	-,204	,081	,012	,001	-,004
	2006	-,206	-,190	-,016	a	a	a	,086	-,028	,150	,504	-,230	,026	,196	-,011	-,046	,019	-,148	-,035	-,012	-,040	-,137	-,008	-,002	-,001
	2007	,069	,292	-,016	,177	,400	,144	-,058	-,016	,047	-,256	,168	-,075	-,107	-,083	-,110	-,193	,229	-,021	-,028	-,015	-,046	,000	,003	-,004
	2008	-,022	-,273	-,066	-,123	,630	-,371	-,079	,077	,104	,446	-,150	,028	-,059	,104	,037	,216	-,187	,018	-,037	-,031	-,049	-,010	,011	,002

Table 19. The connection between the sum of support and the economic indices: the Pearson correlation coefficient for the enterprise of the field of activity in the National Audit Office of Estonia sample (according to the year of giving the support)

Growth per employee		Start up enterprise supports						Export supports (EAS)						Development supports (EAS)						Supports for increasing productivity					
		T1 2004	T1 2005	T1 2006	T1 2007	T1 2008	T1 2009	T2 2004	T2 2005	T2 2006	T2 2007	T2 2008	T2 2009	T3a 2004	T3a 2005	T3a 2006	T3a 2007	T3a 2008	T3a 2009	T3b 2004	T3b 2005	T3b 2006	T3b 2007	T3b 2008	T3b 2009
Sales revenue	2004	,121	.a	.a	.a	.a	.a	,066	-,187	-,049	.a	,067	-,044	-,260	,255	,044	-,195	-,548	-,169	,160	,316	,244	,076	,029	-,021
	2005	,138	1,000	.a	.a	.a	.a	,144	-,204	-,081	-1,00	,130	,058	-,210	,174	-,046	-,091	-,079	,016	,225	,041	,353	,094	,169	-,005
	2006	-,129	,564	,546	.a	.a	.a	,216	-,183	,056	1,00	-,133	,178	-,175	-,498	-,364	,075	-,554	-,194	,283	,082	,153	,107	-,015	-,009
	2007	,151	,288	,333	,350	,897	1,00	,084	-,193	,061	1,00	-,138	,108	-,262	-,434	-,394	-,010	-,491	-,187	,364	,142	,122	,132	,093	-,001
	2008	-,146	-,165	,021	-,956	,660	,447	,054	,062	,230	1,00	,076	,154	-,448	-,301	-,171	,306	-,393	-,239	,429	,054	,078	,127	,017	,006
Growth of added value	2004	,057	.a	.a	.a	.a	.a	-,021	,174	-,149	.a	-,114	,091	,531	-,178	,443	-,124	-,178	-,097	,249	,385	,068	-,010	,004	-,054
	2005	-,225	1,000	.a	.a	.a	.a	,052	-,009	-,086	1,00	,163	,131	,324	-,132	,006	-,049	-,008	,017	,031	-,148	,235	,076	-,124	-,020
	2006	-,355	,598	,774	.a	.a	.a	,134	,088	,167	1,00	,069	,192	,019	-,598	-,568	-,007	-,542	-,333	,297	,183	,124	,054	-,019	,000
	2007	,018	,264	,191	,383	,929	1,00	,170	-,220	-,039	1,00	,036	-,225	-,223	-,630	-,417	-,222	-,610	-,245	,286	,189	,091	,182	-,020	-,015
	2008	-,200	-,429	,037	-,329	,513	,998	-,095	,149	,130	1,00	-,018	-,055	,082	-,042	-,267	,531	-,196	-,012	,295	,159	,030	,145	-,047	,010
Growth of investments	2004	,596	.a	.a	.a	.a	.a	-,039	,127	-,400	.a	-,313	-,112	-,186	,051	,339	,278	-,246	-,071	,236	,385	-,019	-,029	-,008	-,032
	2005	-,351	-1,000	.a	.a	.a	.a	-,116	-,009	-,259	-1,00	-,061	-,092	-,444	,013	,806	-,192	,131	,212	,228	,338	,245	-,027	-,007	-,001
	2006	-,581	-,358	,120	.a	.a	.a	,055	-,066	-,222	1,0	-,354	-,042	,135	-,251	,057	,336	-,302	-,061	,162	,272	,198	,004	-,025	-,011
	2007	,119	,398	,367	,564	-1,000	-1,000	-,004	-,080	-,097	1,000	-,239	-,102	,303	-,243	-,062	-,204	,342	-,096	,116	,067	,117	-,031	,023	-,019
	2008	-,203	-,552	-,060	,997	,440	-1,00	-,188	,120	,220	1,000	-,203	-,218	-,161	-,128	-,044	,545	-,288	-,070	-,002	-,044	-,011	-,047	,048	-,049

Table 20. The connection between the sum of support and economic indices: the Pearson correlation coefficient for the enterprise of the field of activity in the National Audit Office of Estonia sample (according to the year of giving the support)

Per employee		Loan sureties (KredEx)						Loans (KredEx)			Export guarantees (KredEx))					
		T1 2004	T1 2005	T1 2006	T1 2007	T1 2008	T1 2009	T2 2007	T2 2008	T2 2009	T3 2004	T3 2005	T3 2006	T3 2007	T3 2008	T3 2009
Sales revenue	2004	,528	-,065	,308	,233	,193	-,025	.a	.a	,456	,200	,083	,262	,042	,803	,487
	2005	,739	-,012	,252	-,005	,032	-,075	.a	.a	,569	,257	,142	,285	,038	,807	,245
	2006	,720	-,132	,056	,282	,053	,057	.a	.a	,515	-,065	,070	,230	,094	,648	,401
	2007	,426	-,111	,173	,384	,341	,143	.a	.a	,662	,022	,030	,158	,031	,479	,352
	2008	,599	-,227	,243	,187	,239	,231	.a	1,000	-,440	,012	-,066	,052	-,057	,463	,284
Growth of sales revenue	2005	,256	-,089	-,068	-,134	-,132	-,061	.a	.a	,006	,062	,025	,000	,005	-,005	-,043
	2006	,122	-,017	-,014	,137	-,011	,073	.a	.a	,296	-,105	-,007	-,013	-,003	-,022	,039
	2007	-,224	,098	,074	-,034	,123	,001	.a	.a	,255	,007	-,030	-,003	,004	-,055	,010
	2008	,057	-,031	,042	-,011	-,075	,010	.a	-,207	-,307	-,005	,020	,014	,021	-,025	,019
	2009	-,599	,227	-,243	-,187	-,239	-,231	.a	-1,000	,440	-,012	,066	-,052	,057	-,463	-,284
Added value	2004	,548	-,055	,635	,343	,320	-,066	.a	.a	-,067	,120	,150	,297	,001	,851	,542
	2005	,643	-,043	,296	,027	,253	-,174	.a	.a	,551	,176	,197	,402	,101	,823	,021
	2006	,657	-,163	-,032	,225	-,145	-,018	.a	.a	,574	,023	,065	,213	,046	,709	,191
	2007	,340	-,135	-,053	,146	,042	,093	.a	.a	,776	,150	,152	,108	-,036	,404	,455
	2008	,305	-,344	,175	,117	,106	,136	.a	-1,000	-,361	,067	-,005	,154	-,081	,367	,335
Growth of added value	2005	,144	-,121	-,142	-,163	-,087	-,112	.a	.a	,156	,001	,004	,005	,038	-,054	-,163
	2006	,180	-,051	-,037	,135	-,122	,083	.a	.a	,329	-,018	-,014	-,035	-,046	-,055	,046
	2007	-,166	,101	,021	-,104	,045	,011	.a	.a	,301	,034	,051	-,014	,007	-,096	,004
	2008	,036	-,086	,090	,005	-,028	-,010	.a	-,793	-,211	-,063	-,041	,067	,068	-,025	,061