

Soproni Egyetem
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**ANALYSIS OF THE INFLUENTIAL FACTORS OF EFFICIENCY IN
TENDERING IN THE SME SECTOR IN THE LIGHT OF REPORTS AND TAX
RETURNS**

Theses of the doctoral (PhD) dissertation

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Supporting signature of the Supervisor

1. Goals and hypotheses

During the compilation of the research plan the focus of attention was the European Union tendering system, including the tendering opportunities of the SME sector and the process of their evaluation. The choice of theme was based on the author's workplace, as she was and is still in contact with business applications and candidates in her daily work.

Before joining the European Union government agencies took steps to teach the Hungarian SME sector how to write applications correctly. The purpose of this was to get more and more resources to develop, expand and create new jobs.

The sector of agriculture received the highest amounts of money since the accession, as this sector has always been a driving force in Hungary's economic structure. However, as all Member States have put the greatest emphasis on the use of this resource, the EU is increasingly reluctant to expand its support.

Tourism, business development and the use of renewable energy sources are given more and more attention. The development and expansion of opportunities for SMEs in our country is becoming increasingly important at national and European level.

When evaluating applications, the competent authorities try to make decisions on the basis of the data obtained from the reports and tax returns to discover and analyze the risks which can affect both the implementation and sustainability issues.

Unfortunately, the available data, existing reports and tax returns do not always fully support the application. In such cases, the greatest emphasis is put on determining revenue and profit, as the competent organizations can get a good picture of the applicant by this information. However, in order to obtain real and reliable information, an additional appendix to the report is also required, including data on employees and affiliates.

The author examined, among other things, the distribution of companies belonging to the SME sector as a starting point for future investigations. After that, she analyzed the correlations between the winning of applications and the content of the tax returns, reports of the companies.

Based on these researches the following hypotheses were set:

H1: The scoring system applied for the operational program for economic development applications does not necessarily help to select the right business companies which will be successful in long term.

- H2: There is not enough data available to select companies which will probably be successful on the long term, when evaluating the applications of the economic development operational program.
- H3: The objectives of the operational program and the profile of the companies wishing to develop are in sync with each other.
- H4: The evaluation criteria of the applications help the realization of the operational program.
- H5: The prerequisites for financial sustainability can be traced in the reports and appendix of the successful applicants.

2. The content, method and justification of the research

The SME sector plays a significant role in Hungary's economy. 99.8% of businesses belong to this sector, with a significant share in employment and production.

The Hungarian economy has undergone many changes since the change of regime. The role and market importance of Hungarian micro, small and medium-sized enterprises has become more and more important in this period. However, the greatest emphasis was only given to the audited group prior to joining the European Union in 2000, when it became possible to strengthen the entrepreneurial sector through applications with the primary objective to catch up.

During this period, significant advances have been made, which have increasingly encouraged entrepreneurship and helped to create new businesses.

With secondary research methods, the author analyzed the databases of the Central Statistical Office on the number of enterprises involved. With the help of Excel spreadsheet, the author analyzed the distribution of enterprises by economic form and number of employees, drew conclusions on the SME sector, and compared the national, regional and county data.

In addition to analyzing the situation of Hungary, she also examined the SME sector, which is the backbone of the European economy, at the European Union level. SMEs are key to Europe's economic recovery, taking into account a number of aspects:

- two out of three private sector jobs come from them and the number of employees is raising twice as fast as those of larger companies;
- they need help in accessing funds and recruiting skilled employees and are better off to economic changes;
- they can only remain competitive in the global market if they increase their efficiency, improve the quality and uniqueness of their products, services and marketing activities.

The European Commission is therefore working to promote the success of businesses and improve the business environment for SMEs.

Improving access to finance is a top priority, where the European Union, through a number of financial instruments, provides SMEs with balanced access to finance through the Structural Funds, through research and innovation programs, the Progress Microfinance Facility and the European Investment Bank loans.

In Hungary, there are also many opportunities to involve external resources, such as:

1. small business support programs

2. programs to support technological development
3. enterprise development foundations
4. affiliated commercial banks
5. EU applications

Among these tools, the dissertation focuses on the system of applications, and within that of EU co-financed applications.

In case of successful evaluation of the submitted applications, the non-refundable grants will be paid by receiving a certain part of the investment amount - supported by the European Union and domestic budgetary resources - primarily by promoting the implementation of economic policy goals such as strengthening competitiveness, creating jobs or reducing the environmental load. During the period of review, the announcements of the New Hungary Development Plan and the New Széchenyi Plan made it possible to draw resources.

From 2014 onwards, new applications have been launched under the Széchenyi 2020 program, where the aims are identical to the basic objectives of previous applications.

Between 2007 and 2013, 90 constructions were opened at national level for SMEs, so the author describes their main features. It is important to note that calls for tenders are identical everywhere in the Convergence regions, the only difference can be in the intensity according to 37/2011 (III.22.) Government Regulation which defines regional aid map. In each of the reviewed applications, consideration was given to examining the headcount data, assuming the mandatory headcount, and thus, in spite of the current crisis, maintaining jobs and maintaining the level of employment.

Between 2014 and 2020, a new timing has started in the European Union tendering system. New applications have appeared, providing new resources to individual countries, including Hungary. The specificity of the system is that no specific applications can be made until the operational programs containing the general objectives have been adopted in Brussels, with the aim of achieving the most effective alignment with the EU strategy, which may even involve multiple recasting. As a result, there may be a delay of 1-1,5 years at the beginning of the period, before the expected announcements will actually be eligible. However, countries have the opportunity to publish and tender for their own responsibility, which can later be implemented by the beneficiary applicants under EU co-financing operational programs.

In the new period, previous development guidelines are being pursued as the primary objective is to develop the business sector and thus the economy. Between 2014 and 2020, the priority axes are characterized by different divisions, which are as follows:

- Improving the competitiveness of SMEs
- Research, technological development and innovation
- Infocommunications developments
- Energy
- Employment
- Competitive employees
- Tourism

Since there are different conditions and criteria systems for the two different periods, the examination is done separately.

Criteria for judging in the period 2007-2013 of New Hungary Development Plan and New Széchenyi Plan programs

In the case of content criteria, it can be said that they consist of 4 main parts:

1. The judging criteria system starts with questions aimed at the reality of the project proposal and its budget base.
 - o If yes, further considerations will be considered,
 - o While the negative response will lead to rejection of the application..
2. Next, the "Applicant's Data" section describes the operation and the economic results.
3. In the next part of the review, the data of the project will be examined to determine how significant the economic effect of the development is.
4. The last part of the criteria system is the examination of compliance with the horizontal objectives.

The highest emphasis was typically given to the applicant's data and project data in the evaluation system of the applications. In the case of the examined calls, the two sub-areas together accounted for 80-90% of the available 100 points.

Approximately 50% of the scores can be obtained from the indicators of economic feasibility in the tendering schemes published during the period of 2007-2013, which means emphasis was placed on analyzing the economic situation and stability of the applicant in the evaluation of all the applications. The analysis of liquidity, profitability and capital structure indices is indispensable for all applications, as with these data it is possible to gain an insight into the management of the enterprise, and it is in the interest of the funders that in the future, potentially viable, sustainable businesses receive funds for their investments and developments.

The analysis of profitability and capital structure was found in all constructions, giving about 50% of the available score ($\pm 5\%$ difference). In the event that the total cost of a grant, which is made of the grant amount and the applicant's own resources, exceeded the balance sheet total of the previous year, the tender did not receive a point for the current partial aspect, even though it could mean up to 20 points in a particular design as it is one of the most important indicators of economic feasibility.

It is important to emphasize that if a candidate had very good economic indicators, he or she received a 90% probability of receiving the grant. However, if the company had a very good idea, and even assumed over 50% of the terms to be offered, but the economic indicators were not good, then it was not certain that it would receive the grant. In such cases, companies tend to apply for eligibility conditions, as there were fewer aspects to be met and there was a 70-75% chance of receiving funds.

The competent authorities sought to develop the economy more efficiently during the development of the evaluation criteria system. However, it can be said that in many cases, stricter limits have been set than might have been necessary in order to be able to meet all the requirements of subsequent European Union inspections.

Criteria for judging in the period of 2014-2020 at the Széchenyi 2020 program

The criteria for the new period's calls can be examined from two sources, on the one hand, based on tenders opened for own responsibility at the end of 2014, and on the basis of new opportunities issued in 2015. Based on these, it can be stated that the judging criteria system has been revised, the new possibilities will not be judged according to the scoring of the previous evaluation criteria, and different order of importance will be defined among the aspects.

In the case of *applications opened for own responsibility*, compliance with the requirements defined as eligibility criteria in the previous period will also be subject to compliance testing, which will check some of the economic feasibility of the project.

The basic deviation from the previous years is the implementation of the development linked to the operation of several years - at least 3 years - and the minimum level of sales of the previous closed business year.

Furthermore, there is a significant difference in the fact that the production sector is especially supported, the enterprises operating in the production sector are the target groups and beneficiaries of the new announcements.

In the case of the 2014-2020 period calls, it is not specified what the data of the applicants are, what the economic feasibility is and what the territorial restrictions are. The criteria for judging the constructions were divided by the type of indicators.

80-85% of applications do not have territorial restrictions, horizontal commitments. During this period, this group of criteria is obligatory, there is no special scoring for it.

Methods Used in Research

The author used primary and secondary research methods to perform the examination. For the examined area the main indicators and criteria for evaluation were retrieved from document analysis, using Excel tables. For the in-depth analysis of the data, Excel's graph function was used both for the period 2007-2013 and 2014-2020.

The author examined how the weighting of points depends on the achievement of the objectives of the operational program.

She then went to the results of the tender for the selected area, which were analyzed on the basis of statistics available on the Széchenyi 2020 website. She summarized the number, priority and status of projects submitted and winning applications after merging the area and period under review with Excel table.

After aggregation, she summarized the reporting data of the year of submission in excel format for applicants in the SME sector by the e-report page and personal data collection, together with a statistical questionnaire.

The results of these surveys were evaluated by document analysis, the interim evaluations were analyzed, and the author focused on the reports of the successful candidates of the selected period.

During the international outlook, the European Commission's synthesis studies have helped to explore the scope of development trends and opportunities for the SME sector. The analyses and data from Eurostat and the statistical offices of each Member State were used to prepare the analyses.

In addition, with the help of SPSS, the analysis of the correlation between the balance sheet and the realization was carried out with the help of the analysis of the asset situation, which

allows a more accurate picture of the effect of the asset and resource composition of the enterprises on the realization.

After analyzing by SPSS, she performed an analysis of profitability, performance, and efficiency indicators from the report data in Appendix 1, using excel functions. The resulting values were shown using graphs. The figures made from the indicators greatly facilitated the drawing of conclusions and contributed to supporting the examination of the hypotheses.

She used the statistical data of Széchenyi 2020, which was arranged in tabular form and then illustrated by using pie charts. The results were compared with the status of the projects listed in Appendix 1, and were complemented with the 2014-2020 projects.

The data was analyzed until 31.07.2017. Since there was no significant decision on the submitted applications in the last half of 2017, the data obtained from the statements have not been changed.

In order to examine the H3 hypothesis to get a more nuanced picture and to draw more accurate conclusions, she chose to conduct a deep interview as a method to be performed. Among the most successful winning applicants, she searched the effects of implemented projects on economic life. For the representativeness of the analysis, 15% of all the winning and completed projects were based, each of which had a judging criteria system, and the auto-scoring projects did not distort the results.

3. Research results, new and novel scientific results

The research is based on a comprehensive study of the literature, which was supplemented by document analyses, it was made more accurate by deep interviews as primary research.

After examining the hypotheses the following theses were defined:

1. The development of the scoring system applied in the calls for proposals of the Economic Development Operational Program has proved successful in meeting the condition of successful long-term business support.

In the course of the evaluation, the applicants were scored on the basis of the indicators used in the economic analyses, so the operation so far was decisive for the projects that received the support. Although the results of the judging point system are distorted by practice, ie the number of applications that have been supported by automatic evaluation, the maintenance period has also been successfully completed and fulfilled, so long-term operation is realized.

2. There is not enough data available for the selection of long-term successful companies at the evaluation of the applications of the economic development operative program, as it is not possible to decide on the basis of eligibility tests, whether the selected and the winning enterprises will be operational in the long-term, while on the basis of the evaluation criteria the factor can be considered taking into account the previous trends.

3. The objectives of the operational program and the profile of the companies wishing to develop are in sync with each other.

The definition of the thesis was helped by the 15% sample from the implemented projects, which was used for in-depth interviews with the implementing companies.

The invitations to tender provided an opportunity to implement different types of developments according to the needs of the enterprises. From a wide range of options, all companies have found the one suitable for gaining a competitive position in the market. Enterprises have also contributed to the achievement of the targets by boosting their headcount and stimulating the local economy.

4. The evaluation criteria of the applications help the realization of the operational program, because the examined tenders were realized with probability of 73.83% within the supported ones. In the case of calls with the evaluation system, nearly 3/4 of the positive judgments have been achieved, and this ratio is expected to be met in the current period, as this is only available on the basis of evaluation criteria.

5. The prerequisites for financial sustainability cannot be traced in the reports and annexes of the winning applicants.

In the case of the winning tenderers, it was always observed that in the long-term the operation was aimed at further development. The additional notes showed the development of profitability and profitability indicators, which gave rise to optimistic estimates for already operating businesses.

However, due to the specificity of the 2007-2013 period, in 2014-2020, unpredictable sustainability forecasts are being eliminated. The most important measure related to this is that, in the current period, no tenders were submitted for automatic eligibility conditions.

4. Conclusions and recommendations

The studies that the doctoral dissertation aimed at were carried out for the 2007-2020 tender period, including, among other things, the economic indicators and factors that depend on the proportion of successful SME companies in the Central Transdanubian region, including Komárom - Esztergom County. The tests were carried out by the author in the case of tenders related to the possibilities of the economic development and the economic development and innovation operational program, because this is the most significant tender and support resource for the SME sector.

With the help of the applied secondary analysis methods, it was found how the number of SMEs changed in the examined period. Continuous fluctuation was observed, until 2008, the number of companies that had ceased to exist was predominant, followed by the number of all enterprises, and from 2012 the start-ups were predominant.

Regional and county data showed a different picture, and since 2008 the number of enterprises has been growing steadily. The crisis, despite the fact that it felt the same effect in these areas, did not result in the closure of businesses, and in 2009, almost 5,000 new micro-enterprises were registered. This growth was so high that the decrease in the number of small, medium and large companies was not able to reverse it altogether.

After analyzing the number of SMEs, the author took the most important opportunities for establishing the financing structure, from which she went into detail in the EU support system. The most important EU support instruments are the Structural and Cohesion Funds, the national strategy for allocating their funds for the period 2007-2013 is included in the New Hungary Development Plan between 2007-2010, in the New Széchenyi Plan between 2011-2013 and in the Széchenyi 2020 program from 2014. The available resources were allocated under 8 Sectoral and 7 Regional Operational Programs in 2013 and will be fully allocated from 10 operational programs from 2014.

Access to finance for SMEs and business development is primarily linked to the Economic Development Operational Program and from 2014 to the Operational Program for Economic Development and Innovation.

In the documentary analysis of the tenders of the examined area, the main indicators and evaluation criteria were obtained with the excel tables and for the in-depth examination of the obtained data using the excel graph-making function. In the 2007-2013 period, regarding applications for which non-automatic evaluations systems were applied economic feasibility was the basis of assessment, as it was around 50-70 points of the total score. The indicators from the economic analyses and the company's previous operating time were scaled in the period, so the longer operating

and the better companies achieved more points for each aspect. In the case of the 2014-2020 period calls, it is not specified what the data of the applicants are, what the economic feasibility is and what the territorial restrictions are. Based on the type of indicators, the evaluation criteria of the constructions were allocated, and the data of the applicants were given greater emphasis.

With the help of the SPSS program, the author implemented the analysis of the correlation between balance sheet and realization in connection with the analysis of the asset situation, which allows a more accurate picture of the impact of the asset and resource composition of enterprises on the realization. Then, she examined the profitability, effectiveness, and efficiency indicators from the report data in Appendix 1 with the help of excel functions. The resulting values were shown using graphs. The figures made from the indicators greatly facilitated the drawing of conclusions and contributed to supporting the examination of the hypotheses.

The data was analyzed until 31.07.2017. Since there was no significant decision on the submitted applications in the last half of 2017, the data obtained from the statements have not been changed. To examine the hypotheses and for an accurate conclusion, the author created in-depth interviews about 15% of all the winning and completed projects, each of which had a judging criteria system, and the auto-scoring projects did not distort the results.

Since the effectiveness of the tender has not been studied in the light of economic factors, it was important to explore this information and results in this approach.

The results of the analyses reflect that the realization of the operational program depends on the realization and implementation of well-founded, operational development ideas. The results of the hypothesis examination fully support this. The judging system for the 2007-2013 period was not sufficiently substantiated with regard to grants for grants with automatic eligibility, and was also not in line with EU directives, so the 2014-2020 period is a completely different approach.

In the current period, each of the applications is characterized by a judging criteria, and this is expected in the future. Despite the fact that the judgements based on economic results require much stricter input conditions than before, they expect better returns in the long-term due to the difficulty. The maintenance of the individual applications from the institutional, the evaluator's side makes them less risky, and the objectives of the operational program are also more likely to be realized.

From the point of view of the applicants, the sector breakdown provides more opportunities for manufacturers and producers, which is currently receiving greater emphasis on developing the country's economy. This, of course, does not mean that the service and trade are completely overshadowed, but it should be considered to extend the scope of non-refundable support to the latter two sectors in the light of the country-specific activities.

In the 2014-2020 period, there are no asset purchase and real estate development opportunities available, only for the producers, so the range of the most favored applicants is greatly restricted. In order to bring about the recovery of the whole economy, it is worth considering the possibilities of a non-refundable support, combined with the resources to be repaid.

Publications of the author related to the topic of the dissertation

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