

Article

# The Sustainable Performance of Small and Medium-Sized Enterprise: Case from Latvia

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**Abstract:** An enterprise as a core of any economic system has a great impact on sustainable development of a state or region. The operations and development of an enterprise as an economic entity depends on various factors, identification and evaluation of which is crucial for any enterprise. In the opinion of the authors the enterprise's performance is influenced by factors which can be grouped into three blocks: macroeconomic factors, demand factors and structure of industry sector. The authors present the conceptual model of factors influencing enterprise's performances and analyse factors' interactions and manifestations of their impact. In order to study an attitude of entrepreneurs towards influence of external environment factors, the authors carried out empiric research with an aim to assess influence of sixteen external environment factors on performance of the enterprise. Besides, the authors create a model of sustainable performing of SMEs on the base of the results obtained from qualitative and quantitative research. External and internal business environment factors influencing effective performance of the enterprise and performance indicators that are to be supervised principally, according to the enterprise life cycle phases are included in the model. The developed model of SME sustainable performing has been tested in the sector of printing in manufacturing industry. Calculations and data processing were carried out using Microsoft Excel and EViews software.

**Keywords:** SME, Sustainable performance, model, factors

## 1. Introduction

An enterprise is a basic element of the state economic system on whose capability for a long-term activity a sustainable development of the state or region depends. The most popular form of commercial activity in Latvia among its subjects is a limited liability company (Ltd). Statistical data on the registration and liquidation of a specific form of commercial activity for the last 21 year reveal the

issue of viability of the enterprises. For October 2012 32.8% of the enterprises registered in 2005 as limited liability companies did not survive 7 years.

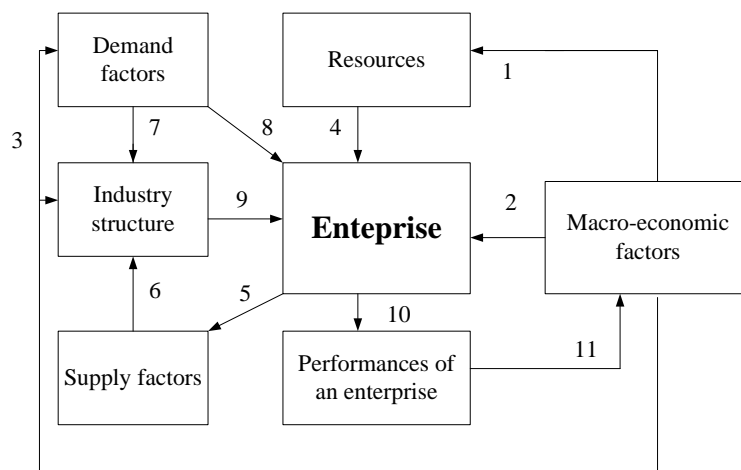
The goal of the research is, studying the performance of SMEs and the factors affecting performance achieving, to propose performance measurement concept encouraging the sustainable development of SMEs and to suggest performance evaluation approach according to company's life cycle. The object of the study is SMEs from the sub-sector of manufacturing industry in Latvia. The authors create a model of sustainable performing of SMEs on the base of the results obtained from qualitative and quantitative research. External and internal business environment factors influencing effective performance of the enterprise and performance indicators that are to be supervised principally, according to the enterprise life cycle phases are included in the model. The developed model of SME sustainable performing has been tested in the sector of printing in manufacturing industry. Calculations and data processing were carried out using Microsoft Excel and EViews software.

The long-term existence of the enterprise depends on its ability to rationally use resources and make profit taking into consideration the influence of the environmental factors. It becomes especially topical during the time of economic recession since preserving the business processes requires flexible actions, ability to identify the unimproved resources and finding rational decisions in a short period of time. The results of the research will enable sustainable harmonious development of the entrepreneurs making the process of redefining the strategy for the sustainable development easier for them.

## 2. The development of the conceptual model of factors influencing an enterprise's performance

The authors conclude that in difference from M. Porter's model of five forces, which is based on external forces (external competition environment) and according to which internal environment of the enterprise hasn't been revised, exactly resource-based approach (resource-based view on the firm) unites influence of external environment and abilities and resources possessed by the company. Within this theory, an enterprise is being viewed as a collection of unique resources, which unites not only physical and human, but also organizational (abilities) resources. The authors hold a view that the totality of all the resources of enterprise forms factors influencing the offer of the enterprise. In the context of the enterprise effectiveness, the authors summarize factors of external and internal environment in a conceptual model (Figure 1).

Figure 1. Conceptual model of factors influencing performances of an enterprise



According to the authors' viewpoint, performances of an enterprise are influenced by three important factors blocks: macroeconomic factors, demand factors and structure of the sector. Factors of influence are mutually interactive, and they are affecting the enterprise in the following way: 1 – quality and availability of resources are related to the national economy, its infrastructure and other macroeconomic factors; 2 – macroeconomic factors determine the form, liabilities and duties of formation and organization of an enterprise as an economic subject; 3 – structure of the sectors and market orientation depend on the economic policy implemented by the state, as well as on provided support tools for development of the sector, which form requirements of the intermediate and final consumption market, including consumer purchasing power; 4 – for operations of the enterprise, resources, which are mainly found outside the enterprise, are needed; 5 – resources, after arriving to the enterprise and in combination with technologies and other internal factors of the enterprise, form the totality of offer factors, which characterizes, for instance, a certain assortment of products and possible production capacities; 6 – enterprise with its potential and actual amount of products is to be considered as an element belonging to the particular sector, and it influences development of the sector; 7 – basis of demand factors are clients: both legal and physical entities, who create demand for the production manufactured by the enterprise or services provided by the latter. Economic benefits created by the enterprise are classified according to the particular sector; 8 – demand of clients is a basis of enterprise performance. It is based upon the particular amount of products and parameters of price and quality, and it has been completed with expressions of intangible forms; 9 – enterprise depends on transformations and development of the sector, and this expression contains both stimuli and restrictions to the performance of the enterprise; 10 – result of the performance depends on the fact whether an enterprise is able to combine, organize and manage resources, taking into consideration demand, specifics of the sector and macroeconomic factors; 11 – achieved results of the performance return to the national economy through taxes and duties, thus influencing fulfilment of the state functions and business environment.

Conceptual model of factors influencing performances of an enterprise gives an opportunity to view interconnections of influence as: 1) influence of macroeconomic factors through laws, taxes and duties policy implemented by the state, as well as through implemented incentives for starting up business, provided support and infrastructure services; 2) influence of demand factors, which results from the level of market development, according to which «minimum set of requirements» for the performance of the enterprise in the particular sector is being formed; 3) offer factor, influence of the sector's structure and influence of its transformations on results of the enterprise performance.

### **3. Classification of factors**

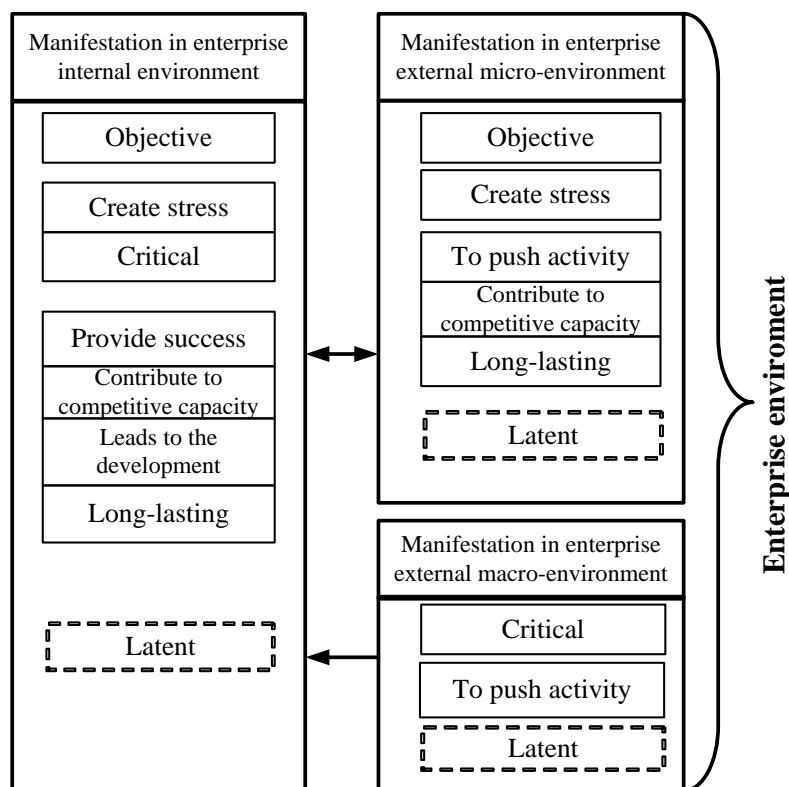
After analyzing works of different authors [4; 6; 8; 9; 10; 14; 18; 20; 21; 22; 23; 28; 30; 31; 32; 33; 35; 38; 37; 40], the authors of the research conclude that several approaches in classification of factors influencing performance of the enterprise exist: 1) traditional classification of factors: factors of internal and external environment; 2) external environment factors with direct influence (external micro-environment) and with indirect influence (external macro-environment); 3) by carrying out research in the particular field, factors are classified within that particular research work. For instance,

factors of influence for assessing e-commerce investment are classified as follows: strategic factors, structural factors, enterprise governance factors.

Using content analysis of the literature sources, the authors classify factors according to their way of manifestation (Figure 2), as well as according to the environment, which maintains or initiates influence of the factor in a way that it could be connected with achieved results.

Manifestation of factors may be as follows: 1) objective, based on facts – possessed exactly by small enterprises; 2) it may create stress conditions (pull); 3) critical, because it may influence existence of the enterprise; 4) it may serve as encouragement or push to activity (push); 5) it may drive the enterprise towards development 6) it may form competitiveness of the enterprise; 7) it may ensure success; 8) it may work in long-term – connection with the length of enterprise life cycle; 9) difficult to identify, it may stay hidden (latent).

Figure 2. Ways of manifestation of factors influencing performance and development of the enterprise in content of environment, based on content analysis



In order to study attitude of entrepreneurs towards influence of external environment factors, the authors carried out empirical research with an aim to assess influence of sixteen external environment factors on performance of the enterprise, using survey conducted among entrepreneurs from mechanical engineering and metal working sub-sector of the Latvian manufacturing industry (53 enterprises). The split of respondents was as follows: 52% - Riga and Riga region; 13% - Kurzeme; 13% - Zemgale; 13% - Vidzeme; 9% - Latgale. Respondents confirmed significance of the factor's influence by the following choices: high influence; medium influence; small influence; insignificant influence. To estimate obtained answers the following evaluation system was used: high influence – 3 points; medium influence – 2 points; little influence – 1 point; insignificant influence – 0 points. MS

Excel PivotTable tools were used to generalize, group and range data. Taking into consideration the foundation years of the enterprises, respondents were united in groups: 1<sup>st</sup> group - 11 enterprises (21%), which have been registered till 1991; 2<sup>nd</sup> group - 19 enterprises (36%), which have been registered during the period from 1991 till 1997; 3<sup>rd</sup> group - 23 enterprises (43%), which have been registered after 1997.

In data processing, a range for a particular factor was created. It was done using the average evaluation and additional analysis of how respondents estimate external environment factors according to significance of their influence, as well as taking into consideration regional affiliation of respondents. Further ranging was made according to the enterprises age group, where an average index for each factor of the entrepreneurship environment was determined. In this analysis the classification offered by authors was used.

In the result of the study, the authors come to the following conclusions: 1) the longer the enterprise operates, the bigger significance it assigns to all factors of external environment; 2) despite different age groups, factors creating stress conditions and critical impact on the enterprise performance are considered more important; 3) as enterprise gets older, evaluation of importance of positive and driving factors that promote competition significantly increase; 4) among three age groups (1<sup>st</sup> group - registered till 1991; 2<sup>nd</sup> group - registered during the period from 1991 till 1997; 3<sup>rd</sup> group - registered after 1997), the lowest evaluation of critical factors is presented by the group of the youngest enterprises.

Simultaneously with constantly changing external factors of influence, also the enterprise faces constant process of changes, because its performance and development is cyclic, and it indicates that: 1) influence of external environment factors on the performance and development of the enterprise is not the same during the whole period of enterprise existence (start-up, activation and development of business); 2) age of enterprises and their operational experience differ, and this may be connected with different needs during the enterprise development cycle; 3) influence of the factor may be strengthened or weakened by other factors, or new factors, existence or significance of which haven't been evaluated before, form according to the actual economic situation.

#### **4. Methodological justification of an enterprise sustainable development**

Based on various scholars' researches on issues of sustainable development [2, 3, 11, 13, 16, 24] the authors conclude, that the main point of the concept of «sustainable development» presents coordinated and systemic advancement of an enterprise towards its aims which takes place only when all the three dimensions of sustainability: social, economic and ecologic are incorporated simultaneously into subject's activities. In this respect the following factors of sustainable development, that are common to all enterprises, can be mentioned: 1) income, which is formed by consumers (clients) while utilizing products and services produced by the enterprise; 2) financial stability and positive dynamics of profitability; 3) competences and skills of the personnel; 4) inclusion of ecological issues in the process of enterprise management; 5) positive attitude of the society towards the performance of the enterprise.

The authors conclude that sustainability of an enterprise depends on the management system of the enterprise, which provides effectiveness and efficiency of sub-systems, taking into consideration deviations from the state of equilibrium. It demands concretization of the possibilities of practical

application of sustainable development concept in the enterprise, taking into consideration the fact that all the processes which support sustainability of an enterprise: 1) are mutually connected, 2) interact, and 3) functional process of each management level is implemented through dimensions of sustainability. Thus, the quality of an enterprise management influences the total result, including as well innovative potential of the enterprise.

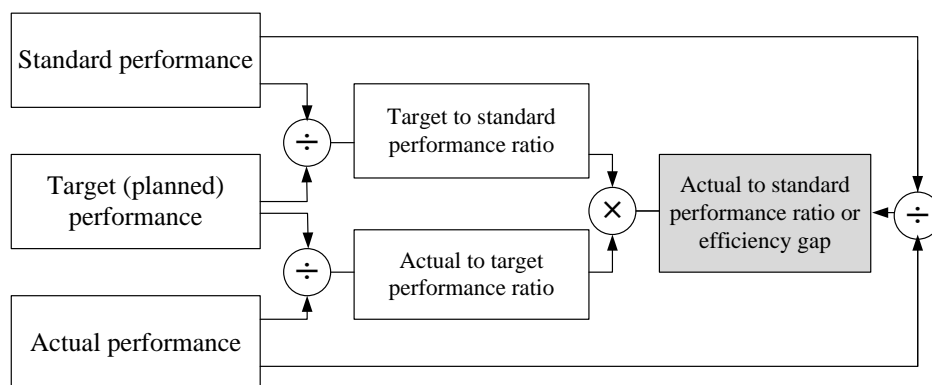
A human being as a special element and factor of the enterprise system complicates functionality of the system with his social expressions, because only a human being can create an idea in this system and implement it. The authors conclude that viability of an enterprise in a long-term period depends on the innovative potential, which is based upon a creative approach that is implemented by all stakeholders of the enterprise – not only employees, but as well shareholders and customers [13]. It is justified by the results of the activities implemented – discussions in the enterprises.

Important factors for the sustainability of an enterprise are formed in the social environment. Social capital [9, 26, 29, 36, 39, 41, 42] can be considered as one of the potentials of the enterprise development, which increases return from the use of other capitals. Therefore, to provide a possibility to acknowledge the linkage of the social capital with the enterprise performance in the context of sustainable development, the management of social and customers' capital has become of vital importance. It influences productivity, competitiveness and sustainable development of the enterprise (minimizes operative expenditures for obtaining information, accelerates circulation of information, lessens asymmetry of information and enhances development of new knowledge).

In order to improve efficiency of the system, which results from both enterprise's management and government efficiency; as for small enterprises, they should pay special attention to evaluation of their performance [4, 5, 19, 25, 31, 32]. Performance measures characterize the fulfillment of goals, but they can be used also as a strategic tool for the enterprise management.

Completing Stafford Beer's [7] idea about the significance of enterprise indicators (liquidity, profitability and productivity) in providing sustainability of the system, the authors consider that three levels of performance are being formed in the enterprise: *actual*, *target (planned)* and *standard* (see Figure 3).

Figure 3. Authors' proposal for performance measurement on different management levels of an enterprise



*Actual performance* of the enterprise is being formed in the current time as an actual return from the utilization of existing resources, taking into consideration existing restrictions. *Target (planned)*

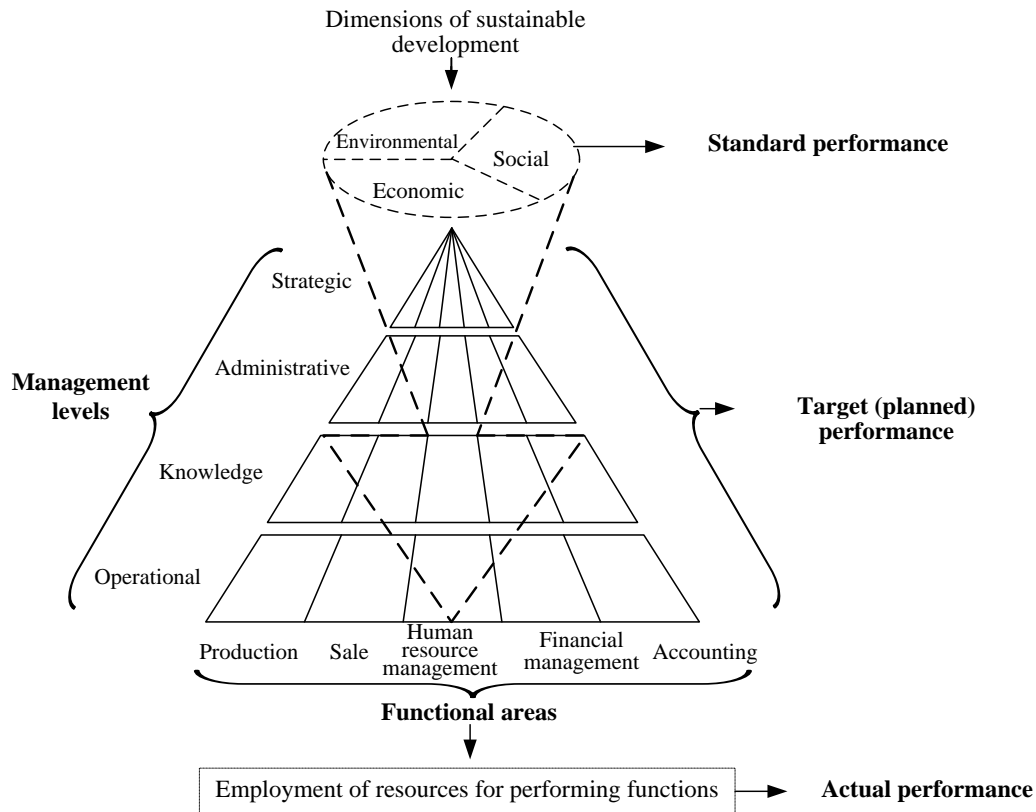
*performance* corresponds to the return that the enterprise plans to obtain from the utilizing of existing resources, taking into consideration existing restrictions. On its turn, *potential (standard) performance* of the enterprise is an eventual return that can be obtained by the enterprise if it develops existing resources, takes off the restrictions and uses the opportunities, which can be achieved taking into consideration influence of factors maintaining sustainable development of the enterprise. Potential performances of the enterprise include unused opportunities, which are the subject of possible development through using innovations and competent enterprise management.

The authors consider that it is possible to improve efficiency by utilizing the enterprise's performance measurement system, which includes dimensions of sustainable development in combination with the elements – processes supporting sustainable development of the enterprise: 1) *production process* is characterized by specifications of technical equipment and exploitation of production technologies (capacity, economy, modification possibilities); 2) *sales process* incorporates strategically justified choice of products and market orientation; 3) *personnel management process* provides rational and stable internal structure of the enterprise, coordination between structural units; 4) *financial management process* incorporates circulation, structural efficiency and utilization of financial resources; 5) *accounting process* results in forming the grounds for management decision-making by using synthesis of management functions.

As a result of interaction between management levels and functional fields and taking into consideration management level, the following issues and characteristics incorporated in performance measures are being formed: 1) strategic level – strategic layout of production machines, choice of placement, development of new products, planning of labour force long-term development, providing profit, selection of accounting technical solutions; 2) administrative level – management of production flows and schedules, development of production price policy and sales promotion campaigns, providing wages, social benefits and acquisitions, analysis, budget planning, supervision of expenses and income, supervision of prime costs; 3) knowledge level – development and designing of new products, analysis of the market situation, research, identification of clients, forecasting employees development and careers, analysis of customers cash flow and survey of possibilities for decreasing risks, forming investment portfolios; elaboration of accounting methodology in the enterprise; 4) operational level – performance of production machines, load control, quality and material consumption analysis; resources and time invested in customers' service; personnel training and environment maintenance expenses, supervision of customers' cash flow and accounting transactions, implementation of accounting operations.

According to the authors' viewpoint, sustainable development drives the enterprise to changes, which are connected with a process of achieving results and their assessment: 1) on the level of enterprise management, especially in strategic and knowledge management level and 2) in functional fields, where the role of personnel as an element of social capital is emphasized. The authors demonstrate their approach to enterprise performance measurement in the context of sustainable development, which is incorporated in the levels of enterprise management and functional areas, in a pyramid shape Figure 4.

Figure 4. Application of an enterprise sustainable performance measurement system



The authors consider that it is impossible to apply standardized, identical indicators for performance assessment to all enterprises, because each enterprise is a unique formation, which is characterized by its belonging to the particular sector, organizational structure, enterprise management style, sector's market share and other significant differences.

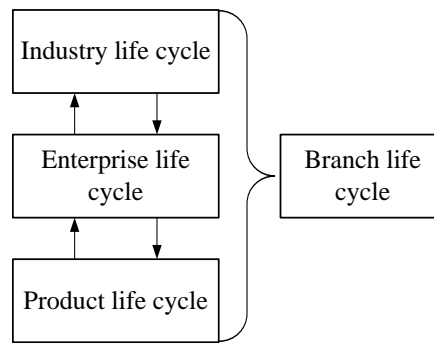
Works [4, 5, 19, 25, 31, 32], where different authors study methods of results assessment, indicate two directions of research: 1) which indicators are to be included in the system of performance assessment and 2) which characteristics indicators of an integrated results assessment system should possess. It is being recognized that models and proposals for effective management, which are created based upon research carried out in large companies, are not to be applied to small enterprises directly, not only because of limited resources, but also due to other factors, for instance, kind of management organization differs. As well features of enterprise life cycle should be considered in this context.

During the period of its existence, the enterprise as a social-economic system passes through different functional stages, which in literature are defined as enterprise life cycle. Concept of the enterprise life cycle (ELC) [1, 11, 15, 17, 27, 34] was created within the enterprise management theory with an aim to explain changes in the enterprise in the context of time. The life cycle of a particular enterprise is tightly connected with a life cycle of the sector, which, on its turn, is determined by the life cycle of a particular industry, enterprise and product or service.

According to the authors' point of view, there is an interaction among these levels of economic manifestations, and it is shown in the Figure 5.



Figure 5. Interaction and interconnection of life cycles of a branch, industry, enterprise and product



Several related industries may operate within one branch. They may be in a certain life cycle stage (growth, maturity, decline), where enterprises operate in different stages of their development and produce goods, which, on their turn, are subjected to evolutionary processes in the same way. Life cycle stages of the industry may be different in different countries, because needs of customers differ according to their life level.

Total life cycle of an enterprise consists of phases and stages. Phase is period of time, during which organization changes substantially, for instance, system of values or management approaches. According to the aim, phases may be divided in stages. One phase may include several stages and each of these stages possesses characteristic features. In literature there is no uniform division of enterprise life cycles in stages, as well there is no uniform approach regarding number of stages and methodological grounds for defining the stages. Defining borders of the stage period is difficult, because: 1) particular characteristics are being observed through the whole life cycle of the enterprise and have no defined boundaries; 2) different authors use different approaches to divide enterprise life cycle emphasizing various unique parameters of the cycle stages, which may be connected with different objects chosen for research. A common feature of all the models of the enterprise life cycle is that cyclic development of the enterprise can be foreseen, and the enterprise shall be able to function under the existing conditions with a future vision, where development possesses consequent and qualitative changes.

After being introduced to opinions of experts about the opportunities and limitations of the use of ELC concept, the authors define the practical opportunities and limitations of the use of enterprise life cycle phases in the Table 1:

Table 1. Opportunities and limitations of the use of enterprise life cycle model

Opportunities	Limitations
1. To foresee consequent stages of enterprise development	1. Impossible to define unequivocally separate stages
2. To characterize qualitatively each stage of enterprise development	2. Impossible to define particular time of the beginning and end of the stage
3. To choose the most appropriate performance strategy for the particular stage of development	3. Impossible to define length of the stage

The authors conclude: 1) enterprises can get through separate stages (phases) at a different pace; 2) age of the enterprise is not tightly connected to life cycle stages (phases); 3) each of these stages (phases) possesses different problems, which are determined by qualitative and quantitative changes in both external and internal environment of the enterprise; 4) enterprise performances are connected with certain parameters, which change along with a transfer from one stage (phase) of life cycle to another; 5) threats and risks in different stages (phases) of life cycle differ.

Therefore, enterprise management, which is oriented towards solving problems, which are characteristic to the particular stage (phase) of enterprise life cycle, shall be considered as a condition enabling the enterprise to maintain sustainable performance.

## 5. Design of empirical research

The authors carried out empirical research with an aim to find out opinion of respondents (experts) about external and internal factors influencing the enterprise's performances, significance of performance measures in different stages of the enterprise's life cycle, and how the process of achieving goals is influenced by cooperation with business partners.

Survey questions were about the linkage between macroeconomic factors and factors determining demand and enterprise internal environment factors, which influences an enterprise performance in general. Survey contained 89 questions, which formed qualitative evaluation of problems faced during achieving performance.

Questions were divided into 6 groups:

- the 1<sup>st</sup> group characterized critical influence of macroeconomic external environment and demand factors on the enterprise performance in different phases of ELC (questions 1–6);
- the 2<sup>nd</sup> group comprised questions about level of skills and abilities to be identified in the internal environment of the enterprise, which define forming of the enterprise offer and influence also performance (questions 7–21);
- the 3<sup>rd</sup> group are about performance features, which are the basis for indicators describing performance (question 22–28);
- the 4<sup>th</sup> group represents questions connected with the social dimension of the enterprise sustainable development, which is characterized by social relations between employees and customers and the influence of these relations on achieving goals of the enterprise and its performance (questions 29–50);
- the 5<sup>th</sup> group are about acknowledging significance of various resources according to investment of these resources into the final product (questions 51–57);
- the 6<sup>th</sup> group contains questions, which are about identifying unfavorable factors that are being formed in both external and internal environment of the enterprise and on the level of social relations (questions 58–63).

In total, 23 questionnaires were processed, and they present the following statistics: 1) according to the position of respondents in the enterprise, 13.0% of them are owners–managers of the enterprise; 2) 5.3% – hired managers of the enterprise, 21.7% respondents correspond to the status of medium level managers; 3) according to the size of the enterprise – 13.0% of them belong to the group of microenterprises, 65.2% – comply with the parameters of small enterprises and 21.8% are medium-sized enterprises; 4) according to the length of enterprise existence – 21.7% of these enterprises exist

for less than 5 years, 43.5% are 5-10 years old and 34.8% are older than 10 years; 5) according to the affiliation to the sector – 82.6% of them are connected to the manufacturing industry, but 17.4% – with trade.

Data obtained from the questionnaires were generalized, grouped and ranged by using *MS Excel PivotTable* tools. In order to obtain ordinal scale (rank) measurement, a bigger or smaller rank has been assigned to each factor on the ordinal scale. According to answers given by respondents, evaluation is made according to a 5-point system according to 5 criteria: *does not influence at all* – 1 point; *does not influence significantly* – 2 points; *partly does not influence* – 3 points; *influences* – 4 points, *influences a lot* – 5 points. The authors accept that separate phases of the cycle form the total life cycle of the enterprise, and obtained evaluations are gathered to assess influence of each element over the whole life cycle of the enterprise.

As in analysis process of separate factors, conditional evaluation, which is based on determining ranks, was used, for defining interaction (linkage closeness) between separate factors and features, the authors carried out a correlation test. Coherence of rank features are defined using Spearman's ( $r_s$ ) and Kendall's ( $r_k$ ) rank correlations coefficients (using EViews 6.0 software). In order to obtain statistically valid determination of interaction between separate external environment factors and other manifestations influencing effectiveness of enterprise performance over different phases of the enterprise life cycle (ELC), the authors select those pairs of factors, which are characterized by Spearman rank correlation coefficient  $r_s$  at the  $n$  number of observations ( $n=23$ ), with the degree of freedom  $v = n-1$ , if the following conditions is fulfilled: 1) coherence is statistically significant at the two-sided significance level with validity level ( $\alpha = 0.05$ ), if  $r_{s \text{ computed}} \geq r_{s \text{ critical}}$ , where  $r_{s \text{ critical}} = 0.428$ ; 2) coherence is statistically significant at the one-sided significance level with validity level  $i$  ( $\alpha = 0.05$ ), if  $r_{s \text{ computed}} \geq r_{s \text{ critical}}$ , where  $r_{s \text{ critical}} = 0.368$ .

In order to evaluate influence of external environment, the authors chose six external environment elements/ factors of influence. The classification of factors and their choice is justified by theoretical and empiric research carried out by authors within frames of this research: 1) *obstructive factors, expressions of which may cause stress, critical impact on enterprise performance and results* – tax law; availability of qualified labour force; availability of financial resources; infrastructure of business; 2) *driving factors, which create positive influence enhancing competitiveness* – consumer purchasing power, entrepreneurship support policy.

## 6. Results of the empiric research work

Results of the empiric study confirmed the results of the theoretic research results and the approach for assessing of SME performance according the ELC phases. External and internal factors influencing performances of the enterprise and performance indicators to be supervised principally according to the phases of the ELC in correspondence with their significance, were justified, as well as model of sustainable performing of small and medium-sized enterprises, taking into consideration phases of the enterprise life cycle, was elaborated (Table 2).

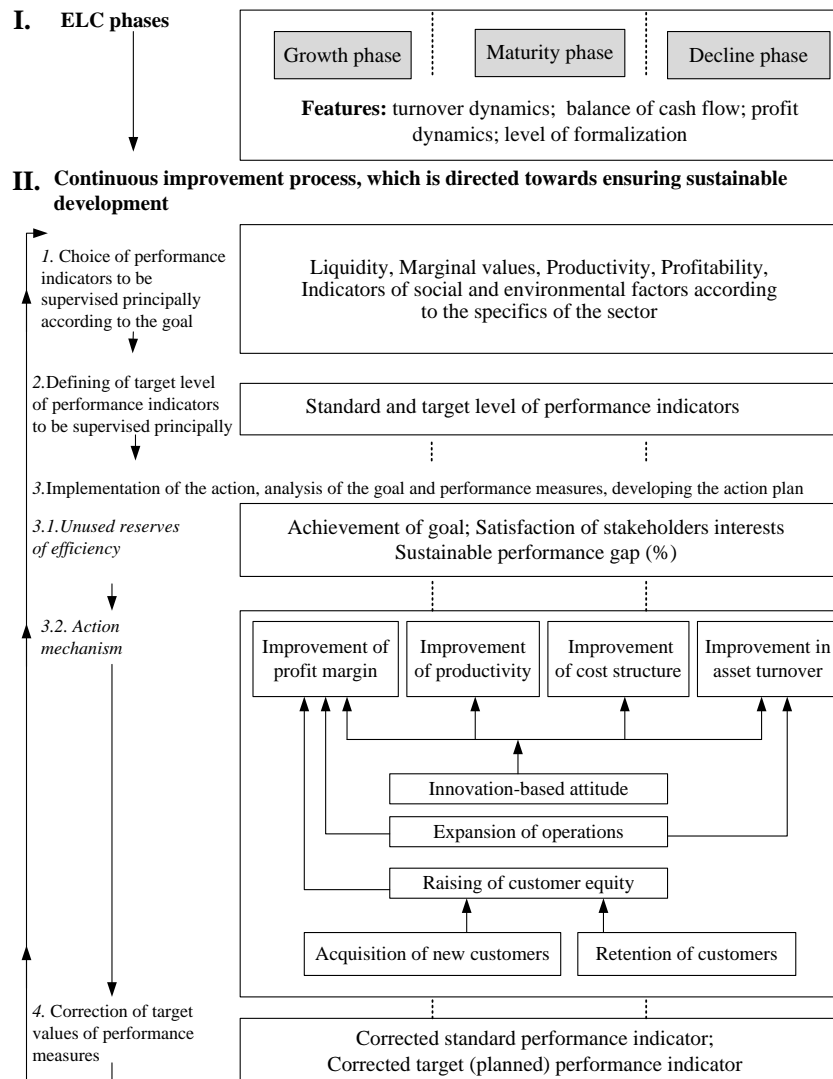
Table 2. Factors influencing the enterprise performance and performance measures corresponding to the phases of ELC according to their significance

	<b>ELC phases</b>		
	<b>Growth phase</b>	<b>Maturity phase</b>	<b>Decline phase</b>
<i>Factors of external environment influencing performances according to their significance:</i>			
External macro-environment	Tax laws (OF)	Tax laws (OF)	Tax laws (OF)
External micro-environment	Consumer purchasing power (DF); Qualified labor force (DF); Contacts with business partners in external environment (DF); Resource access (OF).	Consumer purchasing power (OF); Qualified labor force (DF); Obtaining new information (DF); Equal partners (DF).	Consumer purchasing power (DF); Qualified labor force (DF); Availability of external financial resources (OF); Relations with clients (DF).
<i>Factors of internal environment influencing performances according to their significance:</i>			
Social	Quality level of clients' servicing; Secure and stable relations with clients; Intercommunication among employees.	Quality level of clients' servicing; Secure and stable relations with clients; Intercommunication among employees.	Secure and stable relations with clients.
Environmental	Ability to improve products.	Ability to improve products; Wide assortment of goods and services; Ability to react to changes in market; Ability to introduce innovations.	Ability to improve products; Wide assortment of goods and services; Ability to react to changes in market; Possibilities to improve manufacturing processes.
Goal achievement	Value system of the enterprise, which is suitable for business partners; enterprise-wide uniform value system; mutual trust of employees		
Performance features according to their significance	Rate of asset turnover; Ability to provide revenues; Cost structure.	Rate of asset turnover; Ability to achieve goal (productivity); Ability to provide revenues.	Ability to achieve goal (profitability); Rate of asset turnover; Cost structure.
Performance indicators to be supervised principally according to their significance	Liquidity Marginal revenues + Indicators of social and environmental factors according to the specifics of the sector	Liquidity Productivity + Indicators of social and environmental factors according to the specifics of the sector	Profitability Liquidity + Indicators of social and environmental factors according to the specifics of the sector

OF – obstructive factors; DF – driving factors

Taking into consideration significance of the performance features in each phase of ELC, in each phase of life cycle a totality of performance indicators that are to be supervised principally, is being formed. It indicates enterprise ability of sustainable development in long-term period, taking into consideration requirements of short-term stability, which provide possibility to manage the enterprise effectiveness. In the model of SME sustainable performing several stages are mentioned and performance of them shall be in a particular order, which is demonstrated by the authors in the Figure 6 [12].

Figure 6. Model of sustainable performing of small and medium enterprises in the context of ELC



First of all, the *phase of enterprise life cycle* shall be determined. Afterwards *continuous improvement process, which is directed towards ensuring sustainable development*, shall be implemented (determining performance measures to be supervised principally and their target values, according to the goal; performance and analysis of the goal and performance measures; development of the action plan and adjustment of the target values of performance measures).

The developed model of SME sustainable performing has been tested in the sector of printing in manufacturing industry.

## 7. Conclusions

During developing the model of sustainable performing of small and medium enterprises in the context of ELC, the following conclusions have been made:

1. Factors influencing an enterprise performances form interrelations of conceptual impact. The sector is one of the most important factors of influence, which can both endanger existence of SME and provide new opportunities for this group of enterprises in particular.

2. In addition to traditional classifications of factors influencing enterprise performance, the factors of influence can be grouped also according to their ways of expression and environment that sustains the manifestation of the factor.
3. The results of empiric research revealed that the influence of certain external environment factors, which are connected to the age of the enterprise, is not steady as regards the enterprise performance over a long-term period. It is so, because enterprises are located in different regions, their development is cyclic and influence of the factor may be strengthened or weakened by the other factor. Besides, new factors, existence or importance of which has not been evaluated earlier, are developing.
4. Ability of the enterprise to function in a coordinated and systemic manner, without losing capacity of performance in indefinite future, shall be connected with sustainable development, which incorporates all three dimensions: social, economic and ecologic. The basis for implementing sustainability is formed by the enterprise management systems, which provide functional efficiency and effectiveness of sub-systems, taking into consideration principles of sustainable performance.
5. Significant factors providing sustainability of the enterprise are formed in the social environment, because, in the context of an enterprise performance, management of knowledge, human and social capital is the «process of value creation», which shall be maintained taking into consideration the peculiarities of human resources management.
6. It is impossible to apply standardized, identical indicators for performance assessment for all the enterprises, because each of them in a way is a unique formation identified by belonging to a particular sector, as well as organizational structure and management style of the enterprise.
7. Development of the enterprise is cyclic. It is being created as a totality of stages, which forms uniform phases characterized by specific goals and tasks. Fulfillment of which fully drives the enterprise towards sustainable development.
8. An enterprise sustainable performance is connected with certain parameters, which change along the transfer from one stage of the life cycle to another. These parameters change, because goals, strategy, organizational structure, processes, technology and culture change. Thus the enterprise management, which is directed towards solution of the problems that are characteristic to the respective phase of the enterprise life cycle, is to be considered as a pre-condition enabling enterprise sustainable performance.

Several proposals how to increase efficiency and effectiveness of small and medium-sized enterprises were made:

1. In order to improve results achieved by small and medium-sized enterprises and maintain sustainable development, the authors recommend complementing indicators of the enterprise management system with economic, environment and social indicators, which correspond to the specifics of the sector of the particular enterprise. It shall be done to define standard and planned indicators in each dimension of sustainability.
2. Indicators, which are to be supervised principally and correspond to the phase of enterprise life cycle, shall be included in the competence of the enterprise financial and management accounting along with other indicators selected by the enterprise and characterizing

enterprise performances. It shall be done to provide sustainable development and management decision-making in due time to reach this goal.

3. In case factors influencing an enterprise performances change or new ones that are unknown up to the current situation and related to the latter, develop, methodology, according to which significance of factors influencing enterprise performance and performance measures in correspondence with phases of the enterprise life cycle is determined, shall be improved. Specifying manifestations of factors of influence, the enterprise performance can be increased.
4. Taking into consideration phases of enterprise life cycle and applying the developed model of sustainable performing for small and medium-sized enterprises that can be used for performance control and management in the context of sustainable development, SMEs can improve their action mechanism according to the actual needs of the enterprise.
5. Publicly available statistical data shall be complemented with the following indicators: investments in human resources – *improvement of knowledge and professional skills, which is financed by the employer*, and *number of sick-leave days (hours) within the accounting period* in order to obtain complete quantitative information about processes that characterize investment of enterprises in solving environmental and social issues by sectors and in the state in general, which is necessary to determine standard performance measures of the enterprise.

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