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Title:

The Impact of External Support on SMEs Growth: Evidence from Macedonia

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INTRODUCTION

1.1.   DEFINITION OF THE RESEARCH ISSUE

There are numerous evidence-based researches that proves the substantial contribution of SMEs to employment and growth of a country. This is the reason why both researchers and policy creators pay attention and emphasis on SMEs growth, although there are different motivational drives to understand growth and this derives different aspects in the definition of growth. For the entrepreneurs, indication of growth is vitality and health of the new firm. For the policy creators, the importance of SMEs growth lies in its ability to contribute to job creation and economic development. As a topic, SMEs growth has found its place in many researches among the scholars.

There is a dual understanding of the term "growth" (Penrose E. , 1959). On the one hand, growth indicates increase in amount (output, export, sales). From this perspective, growth can be measured with a range of different indicators however 1) sales and 2) employment are the ones most frequently used when measuring the growth of the new ventures (Weinzimmer, NystromSarah, & Freeman, 1998) (Davidsson, Delmar, & Wiklund, 2006) (Gilbert, McDougall, & Audretsch, 2006). On the other hand, growth indicates a change in the internal characteristics of the firm, describing a process of development through life-cycle or stage growth models (Greiner, 1998).

Most of the literature focused on SMEs growth is looking into the topic from two angles: factors of growth and rates of growth. The determinants of SME growth, particularly in the case of high-growth businesses have drawn a lot of attention from recent researchers (Henrekson & Johansson, 2010). For the purpose of this research, it is of high importance to understand SME growth, the factors of growth and how SMEs grow in order to be able to assess the impact of different types of external support to SMEs growth. For the academic researchers it will be very important to understand *how* SMEs grow since little information exists about this issue (Gilbert, McDougall, & Audretsch, 2006) (Wiklund, Patzelt, & Shepherd, 2007) . For the policy creators the topic is even more of interest especially when creating different support programs for SMEs.

There are several approaches that have tried to explain why some new and existing businesses grow faster than the others. In order to find the answer, determinants influencing growth should be understood better. They can be divided into three main groups:

- Individual-level factors dealing with the background and characteristics of the entrepreneurs themselves. This thesis is not particularly interested in these factors but rather for the following two groups of factors influencing the growth of already established SMEs. Moreover, the focus of the study is on the impact of the available external support for SME growth in Macedonia.

- Firm-level factors. Under the resource-based theory (RBT) (Wernerfelt, 1984) ; (Barney, 1991); (Tecee, Pisano, & Shuen, 2007), firms are considered "collection of productive resources" (Penrose E. , 1959). Resources within a firm could be classified as tangible (physical and financial), intangible (technological and organizational) and human resources (motivation, knowledge, skills). There has been research that has proven that SMEs with higher availability of external finance tend to grow faster than the rest of the firms (Becchetti & Trovato, 2002). Nevertheless, according to Storey and Greene (2010) finance may be a consenquence rather than the cause of growth and should be taken into consideration especially by policy makers in the design of direct subsidy measures. In other words, access to finance might not necessarily lead to growth of the firm. While, securing tangible resources are primarily linked to the survival of a venture, intangible resources are related to the actual growth of the SMEs (Dobbs & Hamilton, 2007).

- Environmental-level factors. There are various external restrainering factors and opportunities that can influence the growth processes of a firm. According to Hannan and Freeman's (1977) population ecology perspective firms' growth can be largely dependent on external forces. External factors can be devided into: environmental (national economy, technology, government and regulations, and natural , demografic structure and social structure) and industry factors (customers, suppliers and competitors). Researches as Welter and Smallbone have proven that creation and development of new firms may be substaintially influenced by the institutional context (2011).

Understanding better the factors that influence SMEs growth through scientific researches and studies, policy makers could have insight when creating external or outside support in order to assist firm's growth through accessing wider base of resources.

1.2. THE OBJECTIVE OF THE STUDY

This study has the objective to empirically identify different existing types of external support to SMEs growth, to assess and measure the impact of specific types of the external support to SMEs growth and factors influencing their growth in Macedonia. In this regard two particular types of external support to SME growth in Macedonia will be examined- **government business support programs** and **international support programs.** The research will include SMEs from different sectors including: tourism, IT industry and organic agriculture in Macedonia.

1.3. RESEARCH QUESTION

The following research question has been formulated:

"Do different types of external support have influence on SME growth and what is assessed impact from different types of external support?"

For the purpose of the study, the following specific research questions have been formulated:

RQ1: What are the different types of external support for SME growth available in Macedonia?
RQ2: Which type of external support is most beneficial for SMEs growth?
RQ3: What are the factors influencing better absorption/benefit from external support to SMEs growth?

The study will start with better understanding of SME growth, factors influencing SME growth and different existing types of external support. The research will try to find the answers in regards to the impact of external support on SMEs growth in Macedonia and therefore research will be undertaken through empirical data analysis on different types of external support in several sectors in Macedonia.

2. THEORETICAL BACKGROUND

2.1. SMEs growth

2.1.1. Explaining Growth

Growth has been importantly defined by Edith Penrose (1959) explaining its two-fold meaning:

- Growth as a change (or increase) in amount or size of the firm and
- Growth as a change in the internal characteristics of the firm.

 "The term 'growth' is used in ordinary discourse with two different connotations. It sometimes denotes merely **increase in amount**; for example, when one speaks of 'growth' in output, export, and sales. At other times, however, it is used in its primary meaning implying an increase in size or improvement in quality as a result of a **process of development**, akin to natural biological processes in which an interacting series of **internal changes** leads to increases in size accompanied by changes in the characteristics of the growing object" (Penrose E. , 1959)

From the change-in-amount perspective, growth can be measured with a range of different indicators.

According to Whetten (2003), size is an absolute measure and growth is a relative measure of size over time.

Many studies prove that firm size and firm age are statistically related to firm growth (Geroski 1995; Sutton 1997; Audretsch et al. 2004). This does not necessarily improve our insight into the role of growth processes and strategies for firm growth, as firm size and firm age can be indicators for multiple mechanisms (e.g., economies of scale, learning effects, reputation effects). Notwithstanding this limited explanatory value, these are important dimensions in classifying the nature of firms.

Many studies on growth in the entrepreneurship field are based on either young-growth firms or high-growth firms. Young-growth firms are relevant to entrepreneurship as they represent "successful" start-ups, while high-growth firms are of interest because of their contribution to innovation and job creation. Continuously growing firms are less common in entrepreneurship

studies, as they—by definition—are older and thereby fall somewhat outside the traditional entrepreneurship domain. (Achtenhagen, Naldi, & Melin, 2010).

There is a vast array of researches that had growth in their focus and most of them are comprehensive, nonetheless none of them is restricted to the standpoint of a specific academic stream or to a single descriptive pattern for growth. In attempt to explain growth, relevant conceptual frameworks have been systemized and existing business growth theories have been classified by O'Farrel & Hitchens (1988) into four main groups:

1) Mostly static equilibrium theories coming out of the field of industrial economics are not satisfactorily concerned with the dynamics of growth. On the contrary, these theories have a tendency to have their attention on the accomplishment of economies of scale and minimisation of long-run unit costs. Their adherents exaggerate the importance of large firms to be eventual constant result of growth and that there is not at all alleged size restriction for a firm to accomplish (O'Farrell & Hitchens, 1988). In this regard, Penrose's (1959) interpretation is that the most important for the growth in a business to happen is the availability of managerial time and expertise.

2) Stochastic models of firm growth developed mainly in the field of economics advocates that 'many factors affect growth and, therefore, there is no dominant theory' (O'Farrell & Hitchens, 1988). In this regard, Gibrat's (1931) law of proportionate effect suggests that business growth rates are independent of enterprise size. O'Farrell & Hitchens (1988) cite empirical evidence which supports Gibrat's law for manufacturing SMEs and they also indicate to empirical support for the proposition that the variability of growth rate decreases with increasing enterprise size.

3) The so-called strategic management perspectives on SME growth have focus on the strategic dimension of achieving sustained growth and the mode in which the owner-manager responds to business and personal environmental indicators (O'Farrell & Hitchens, 1988). Therefore, the attention is on finding the owner-manager's policies and strategies for running and development of the business and their succeeding transfer into managerial action that will lead to sustained business development. These business strategies are thought to be determined by insights of what the owner-manager desires

and abilities to spot the opportunities and constraints for the business to grow. The aspirations and perceptions of the owner-manager are thought to be partly determined by personal characteristics.

The strategic management literature perceives that not all SME owner-managers have the wish, or indeed the capability in terms of resources and expertise to grow their business (Perry, 1987); (O'Farrell & Hitchens, 1988) (Davidsson P. , 1989).

4) Theories that have their origins in the field of economics according to which SME growth is viewed as a series of phases or stages of development through which the business may pass in an enterprise life-cycle. These are the most prevalent illustrative strategies used by researchers and policy-makers for explaining growth in SMEs. Over time there have been a great many stage models of growth proposed in the literature and there is a wide range from which to choose for the purposes of research and policy-making.

As a conclusion on the attempts to explain SME growth, O'Farrell & Hitchens (1988) state that 'As in so many aspects of the social sciences, it is easier to provide a critique of contemporary theories than to present a definitive new conceptual framework within which to study small-firm growth'.

2.1.2. Defining Growth

There are many aspects taken into consideration when defining growth. Analyzing the researches undertaken in this topic, several definitions could be observed:

- "The term 'growth' ... sometimes denotes merely increase in amount; for example, when one speaks of 'growth' in output, exports, sales. At other times, however, it is used in its primary meaning, implying an increase in size or in improvement in quality as a result of a process of development..." (Penrose E. , 1959)

- Growth is an organizational outcome that results from the combination of firm-specific resources, capabilities and routines (Nelson & Winter, 1982).

- "Growth is defined as a change in size during a determined time span", (Dobbs & Hamilton, 2007)

- Expansion of demands for products or services that "first results in a growth in sales and consequently in investments in additional production factors to adapt itself to new demands", (Janssen, 2012)
- Entrepreneurs´ conceptualization on growth would be the following: increase in sales, increase in the number of employees, increase in profit, increase in assets, increase in the firm´s value and internal development. Internal development covers development of competences, organizational practices in efficiency and the establishment of professional sales process. (Achtenhagen, Naldi, & Melin, 2010)
- Growth may be related to new markets, especially in the case of technology firms, with reference to diversification, (Davidsson, Delmar, & Wiklund, 2006)
- Growth defined as "geographical expansion, increase in the number of branches, inclusion of new markets and clients, increase in the number of products and services, fusions and acquisitions" (G.Brusha, J.Cerua, & Blackburn, 2009).
- Firm growth is an increase in certain attributes, such as sales, employment and/or profit of a frim between two points in time (Hakkert & Kemp, 2006).

According to Dobbs and Hamillton (2007), there are six approaches related to SME growth based on research that has been conducted in the past:

1) Stochastic approach argument is that there are plenty influences that affect growth.
2) Descriptive approach argument is that SMEs adopt themselves internally in order to grow.
3) Evolutionary approach argument is that SMEs growth depends on the interaction between internal and external factors.
4) Resource-based approach argument is that growth is primarily the result of distinctive arrangements and management of resources.
5) Learning approach argument is that positioning the learning created by the employees facilitates business growth.
6) Deterministic approach argument is that there are variations in growth based on various variables related to the people, the firm and the environment.

2.1.3. Importance of SMEs Growth as a Topic

Firm growth is multidimensional and complex therefore consequently the topic has attracted a lot of attention from different scholars that have conducted various researches in the quest to explain its complexity. The World Bank Review on Small Business establishes the commitment of the World Bank Group to the development of the SME sector as a core element in its strategy to foster economic growth, employment and poverty alleviation.

Academic scholars and entrepreneurs do not talk about the same thing when they say "business growth (Achtenhagen, Naldi, & Melin, 2010)":

- For *Entrepreneurs,* growth usually signals vitality and health of the new firm.
- For *Policy-makers,* business growth is always related to the contribution to job creation and economic development. In policy motivated research, the measurement of new job openings on micro level of a firm is related and interpreted as equivalent effect in employment in aggregation part of the analysis,
- For *Academics,* venture growth is a topic receiving much attention in the academic literature. There have been many researches that support the previous fact. What might have been hampering researches in the past was one-size-fir-all approach on understanding firm growth without recognizing the heterogeneity of firm growth that asks for different methods in measuring the growth. Firm growth should be observed as a multi-dimensional phenomenon rather than uni-dimensional and linear phenomenon and different forms of growth may have different antecedents and effects (Delmar, Davidsson, & Gartner, 2003).

The process of growth is ascribed to significantly to the process of internal development. Firm growth is frequently related to success (Low & MacMillan, 1988) (Slevin & Covin, 1997) and (Smith, Baum, & Locke, 2001). Nevertheless, growth can also lead to a number of undesirable consequences or 'growing pains' (Flamholtz & Randle, 2007). Small firm owner-managers are generally aware that growth can have both wanted and unwanted effects, and hence growth is something of a dilemma for them. Researches dealing directly with small firm owner/manager's expectations in regards to possible negative and positive consequences of

growth have revealed that the leading growth trigger is not the expectations of economic gain but rather all respondents expect both negative and positive results, and that usually more frequent more frequent or noticeable expectations are the negative ones rather than the positive ones (Davidsson P. , 1989); (Wiklund & Shepherd, 2003).

2.2. Firm Growth Models

Many scholars have the perspective to observe SME growth as a series of phases or stages of development through which the business may pass in an enterprise life-cycle. These researches have been explored intensively by researchers and policy-makers for explaining growth in SMEs.

According to Brocks and Evans (1989) there are several models of firm growth: stage growth models, the stochastic model, the human capital model and the learning-by-doing model. The different models of firm growth summarize different elements of growth of small firms. Random factors, human resources and learning ability all influence firm growth. Understanding these and other different models of growth can assist in setting up clearer theoretical framework when it comes to firm growth and determinants of firm growth.

A) Stage Growth Models

From the internal-change perspective, growth is described as a process of development through life-cycle or stage growth models (Greiner L. E., 1972) (Greiner L. , 1998) (Scott & Bruce, 1987) and (Hanks, Watson, Jansen, & Chandler, 1994).

These growth models assume a number of different stages through which businesses pass as they age.

Lewis and Churchill (1983) developed a model relevant to small and growing businesses that defines five stages of firm development:

1) existence, this stage is concerned with garnering customers and delivering the product or service contracted for

2) survival, in this stage firms have demonstrated that they are workable business entities, and I this stage the key dilemma is whether there is enough money for the firm to break even and stay in business

3) success, in this stage the dilemma that stands in front of the firm owners is whether to exploit the company's accomplishments and expand or keep the company stable and profitable, providing a base for alternative owner activities

4) take-off, this stage is concerned with how to make the firm grow rapidly and how to finance this growth and

5) resource maturity, in this stage companies have the advantages of size, financial resources, and managerial talent and will be a difficult force in the market if they retain their entrepreneurial spirit. Each of these five stages is characterized by an index of size, diversity, and complexity and described by five management factors: managerial style, organizational structure, extent of formal systems, major strategic goals, and the owner's involvement in the business.

In addition, this research identifies eight factors prominent in determining firm success or failure. They include: financial, personnel, systems and business resources and the owner's goals for him/herself, operational abilities in doing important jobs, managerial ability and willingness to delegate, and strategic ability for looking to the future.

The Greiner's model (1972) (1998) model makes a parallel between living organisms and organization when they experience several phases. Every transition between growth phases is accompanied by resistance. In the model, time factor is the only variable, so age of the organization is marked out against size of the organization. Additionally, five key dimensions appear: organization's age and size; its stages of evolution and revolution; and growth of its industry.

Originally, the model had five phases that later on had additional phases added in the model (Figure 1).
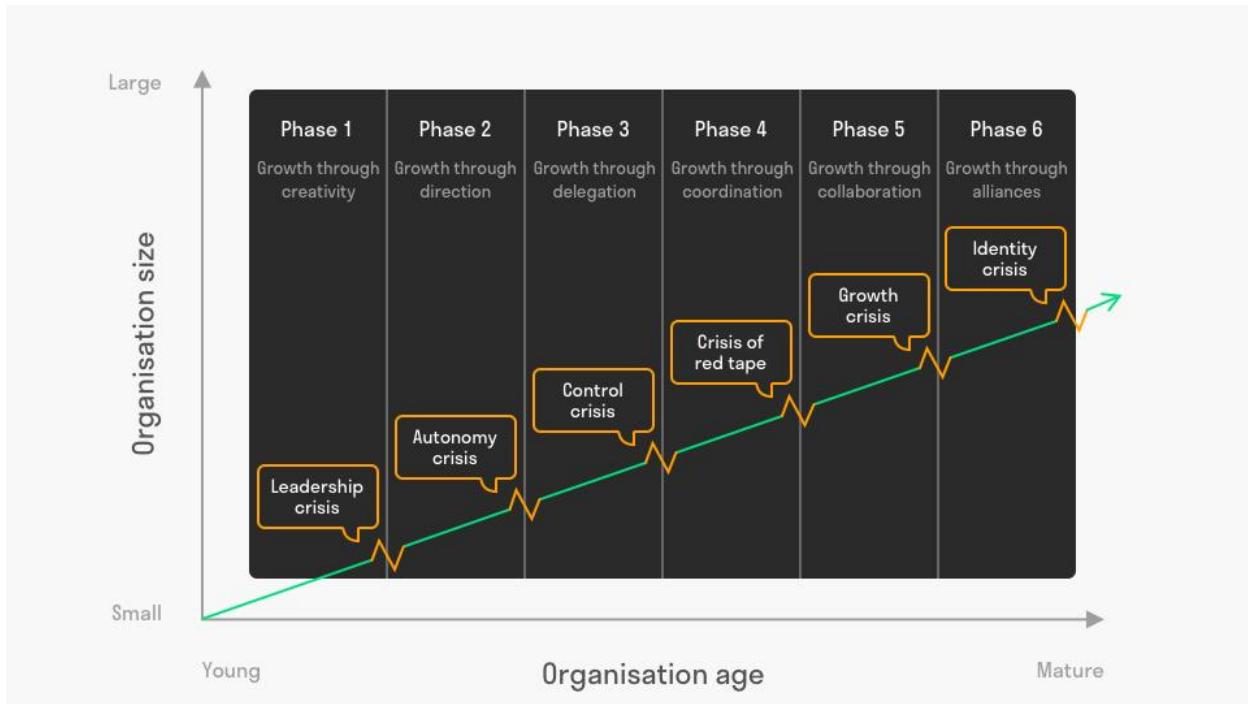
Figure 1: Grainer's Growth Model and Its Six Phases

Phase 1: Growth through creativity. This is the birth phase of the company that is small and young. The organization is flat. The employees are loyal communicating frequently and informally. At one point of the growth, additional management responsibilities arise and at this point *crises of leadership* appear since coordination and internal control can no longer be managed by one person.

Phase 2: Growth through direction. At this point, middle management is introduced to control. Communication among employees becomes more formal and impersonal with introduction of hierarchy. Rules and procedures become formalized and standardized. Consultation grows and cannot be controlled by one person on the top of the hierarchy, so middle management are thorn between following procedures and taking initiatives on their own, so *crises of autonomy* arises.

Phase 3: Growth through delegation. In this phase, decentralized organizational structure is introduced with more responsibilities to middle managers. Communication

from top is infrequent and appears in a form of correspondence, telephone and brief visits. At this point, top managers feel that they are losing their control and thus *crisis of control* emerges.

Phase 4: Growth through coordination. Formal systems for coordination by top-level executives taking the responsibility for the initiation and administration are introduced in this phase. More employees are placed in the headquarter. The company has grown too large and complex to be managed through formal and rigid systems. The systems put in place do not justify their usefulness, therefore a *crisis of red-tape* appears.

Phase 5: Growth through collaboration. In this phase, as an attempt to overcome red-tape, strong interpersonal collaboration and spontaneous management is practiced. Formal control is substituted by social control and self-discipline. Real-time information systems, matrix structure and team performance rewards are used. Frequent consultation lead to crises of growth and this can mean end for the organization unless it develops further through external alliances.

Phase 6: Growth through alliances. In this phase, external contracts and alliances are needed and this can happen through mergers, alliances and extensive networks. In such cases, the organization is taken over entirely and there is a risk that the core-business disappears in *identity crisis*.

Based on research conducted on data from manufacturing SMEs in US from high technology industries, (Hanks, Watson, Jansen, & Chandler, 1994), the taxonomy of growth stages configuration has been explained deriving to a life-cycle model with four development stages and two disengagement (or arrested development) stages. Different development stages (Figure 2) are described as:

- Start-up – young, small enterprises with simple organisational structures. The organisation is highly centralised and quite informal. There is little functional

specialisation. Product development appears to be the focal priority. Mean sales revenues growth is 91% per annum, and mean employment growth is 29% per annum.

- Expansion, slightly older and larger enterprises with more complex organisational structures. The organisation is still very centralised and is a little more formal than in the start-up stage. Functional specialisation is generally adopted. Product commercialisation appears to be the focal priority. Mean sales revenues growth is 297% per annum, and mean employment growth is 94% per annum.

DEVELOPMENT STAGES

START-UP
Mean number of employees: 6.46 persons
Mean annual sales revenues: US$0.27 million
Mean age: 4.29 years

EXPANSION
Mean number of employees: 23.64 persons
Mean annual sales revenues: US$1.40 million
Mean age: 7.36 years

MATURITY
Mean number of employees: 62.76 persons
Mean annual sales revenues: US$3.71 million
Mean age: 6.66 years

DIVERSIFICATION
Mean number of employees: 495.40 persons
Mean annual sales revenues: US$45.76 million
Mean age: 16.20 years

DISENGAGEMENT STAGES

LIFE-STYLE
Mean number of employees: 7.00 persons
Mean annual sales revenues: US$0.41 million
Mean age: 18.71 years

CAPPED GROWTH
Mean number of employees: 24.65 persons
Mean annual sales revenues: US$2.05 million
Mean age: 12.65 years

Figure 2: Hanks et al. (1993) Enterprise Life-Cycle Model

- Maturity, although not necessarily older than in the expansion stage, enterprises in this stage are typically more than twice as large. Organisational structures are more complex. Centralisation is declining and formalisation increasing. Mean sales revenues growth is 99% per annum, and mean employment growth is 28% per annum.
- Diversification, enterprises are generally medium-sized with increasing tendency to have divisionalised structures. Centralisation is low, and formality is highest for any stage in the life-cycle model. Mean sales revenues growth is 37% per annum, and mean employment growth is 57% per annum.

Aside from the four developmental stages, in this model there are two seemingly stable and sustainable disengagement stages:
- Life-style, enterprises that are slightly larger than those in the start-up stage, but are generally much older. In most other respects, they are organisationally like start-up businesses. Mean sales revenues growth is 34% per annum, but there is no growth in employment. These enterprises appear to have disengaged from the growth process after establishing their viability at relatively small size following start-up.
- Capped growth, these enterprises are slightly larger than those in the expansion stage, but are generally much older. Organisationally, they are somewhat less complex than typical businesses in the expansion stage. Mean sales revenues growth is 44% per annum, but mean employment growth is only 4% per annum. These enterprises appear to have disengaged from the growth process after successfully expanding to modest size following start-up.

Stages of growth models provide an intuitive view of the venture's evolution, but they suffer from several shortcomings (Levie & Lichtenstein, 2010) (e.g. Levie & Lichtenstein, 2010; (Storey & Greene, 2010):
- Too deterministic and unidirectional view;
- Number of stages and crises;
- Lack of robust empirical support.

B) Stochastic Model

The stochastic firm growth models have two main objectives: to detect the existence and persistence of the stochastic factors affecting firm behaviour and to detect the presence of inequality and concentration among firms. There are three main stochastic growth models of those of: Gibrat (1931), Kalecki (1945) and Champernowne (1973).

This model is closely linked to the Law of Proportionate Effects by Gibrat in 1931. In its simplest form Gibrat's law suggests that the predictable growth rate of a given firm is independent of its size at the beginning of the period examined (Gibrat, 1931). In other words, there is no relationship between the size of a firm and its growth.

Kalecki (1945) formulated a stochastic growth model that assumes that the logarithmic variance of size is constant over time and, therefore, that the logarithm of size and the logarithm of the random variables are negatively correlated. In this model the stochastic process of firm growth is as in Gibrat's Law.

According to Champernowne (1973) firm growth is independent of firm size. the "growth" process remains non-dissipative but in a much more restrictive sense. Champernowne imposes a stability condition that causes the expected value of variations to be negative for all firms. Consequently, concentration decreases.

Simon and Bonini (1958) further showed that firm growth is unrelated either to size, its prior growth or its age.

The most elementary fact about corporate growth based on econometric work on both large and small firms suggests that firm size, most often measured by employment, follows a random walk (Paul A. Geroski, 2002). The size distribution of firms at a given point in time is the product of a stochastic process resulting from cumulative random shocks over time (O'Farrell & Hitchens, 1988). In this stochastic model the probability of firm growth is built on pure coincidental occasion and the size distribution of firms in an industry reflect these stochastic processes.

C) Human Capital Model

One of the first researchers to promote human capital model was Lucas (1978) together with some another scholars (Storey D. J., 1994); (Vivarelli, 2007).

According to Lucas (1978) it is the human capital formation itself that, by non-decreasing marginal returns, creates endogenous growth. In short, to achieve endogenous growth, the effort needed to produce an extra unit of human capital should be the same, independently of the level of human capital. The assumption he had was linked that particular business or management skill of an individual entrepreneur has influence on the success of the business. As a result, the size distribution of firms is based on the relative legacy of entrepreneurial talents and skills of employees.

This human capital model is also associated to firm growth effect model discussed by Penrose (1959) which encompasses two different arguments. One is the 'resource push' argument which sees firms as a bundle of resources bound together by set of administrative skills or capabilities which are used to organize them as effectively as possible. The other argument is the managerial limits to growth hypothesis. There is a boundary of managerial capacity that limits the expansion of the firm.

Human capital are important characteristics of the internal environment of the firm, for instance, personal and leadership characteristics of the entrepreneur. There have been other researches that stress the importance of the demographic characteristics of the entrepreneur such as: the owner's age, attitudes to growth, occupational background, personal objectives, management style, level of owner's education and training, and personal values and attitudes and the kind of impact they have on the firm growth (O'Farrell & Hitchens, 1988).

D) Learning Model

The learning model has been introduced by Jovanovic (1982). As a model, it has been further elaborated intensively in regards small firm growth from other researches (Storey D. J., 1994) (You, 1995). The model hypothesis is that management ability varies between entrepreneurs. It is an information that is not known to the entrepreneur at the moment when the new business

is set up, but the true efficiency of the firm can only be known gradually after the firm starts the production. Once the production starts, the entrepreneur can learn for the true capacity after which adjustment of the behavior can happen. The firm choice always is to maximize profit on the basis of imperfect information. This model has important implications and shows that both, firm age and size are crucial for firm dynamics. It predicts that firm failure rates and growth rates will be contrarywise related to the age and size of the firm (Liedholm & Mead, 1999). Thus, this learning model is a synthetic attempt of the basics of the human capital model and the stochastic model. Nevertheless, learning model assumes that firms have the ability at birth with an unknown value of time-invariant characteristics. The model does not take into consideration the evolution of a firm's abilities. Thus, Pakes & Ericson (1998) called Jovanovic's model a *passive learning model*. They then anticipated an *active learning model* in which managerial ability is increased through human capital formation. This can be observed as an extension of Jovanovic elementary learning mode (Liedholm & Mead, 1999).

Firms enter the industry at the suboptimal scale in order to learn and expand if successful (You, 1995). In an empirical study of retail and manufacturing industries (Pakes & Ericson, 1998) presented that the manufacturing sector is reliable to the *active learning model* while the retail sector is well-suited with Jovanovic *passive learning model*.

Neither active nor passive learning models, specify what the key factors of managerial ability are, or how other important variables might affect firm dynamics. The models also do not present the crucial part of the dynamic process in which the capabilities of firms evolve overtime (You, 1995). Indeed, the ability to adapt and learn from the experience of dealing with both the external environment and internal environment is the key factor in sustaining the growth of a business (O'Farrell & Hitchens, 1988).

2.3.   Different Forms of Growth

Delmar et al. (2003) identified seven types of growth:

a) super absolute growth, when enterprises have absolute growth in employment and sales;

b) robust growth in sales, in absolute terms, but negative in employment;

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c) growth through acquisition, positive in sale and total employment but negative in organic employment, or rather, growth in employment mainly occurs through acquisition;

d) super relative growth, with great development in super relative terms;

e) irregular growth, or rather, negative in absolute sales but relatively positive in average;

f) growth in employment, or rather, negative in absolute sales;

g) high growth, or rather, firms demonstrate differences in growth standards.

Organic Growth vs. Acquisitions

Organic growth is growth through new appointments in a firm, while acquired growth is growth through acquisitions and/or mergers. Organic growth and acquired growth may also be denoted internal growth and external growth, respectively. (Henrekson & Johansson, 2010). Organic growth is supposed to have a larger effect on net employment than acquired growth. It is possible that single-establishment firms mostly grow organically. To remain a single establishment when acquiring other firms indicates that acquired formations have to be shut down and employment transferred to the formation of the acquiring company. This is not predominantly probable, but one or several of the attained formations are likely to remain in operation.

McCann (1991) investigated that supremacy for internal venturing among young and relatively inexperienced firms is not astonishing as such firms scarcely have the resources to grow aggressively via acquisitions. Kraemer and Venkataraman (1997) focused on firms that possessed inventions at start-up and found that these firms were more probable to venture internally than through acquisitions or strategic alliances.

When considering the question how small firms achieve growth, it is important to remember that most of small firms do not grow. Davidsson and Delmar (1997) researched the complete population of Swedish firms that had 20 or more employees in 1996 and backtracked their development in the previous ten years verifying that small (and young) firms had a much stronger tendency to grow organically than large firms had.

The results from researches reveal that the great majority of firms grow in volume within a single industry or engage in related diversification. Very few firms engage in vertical integration or unrelated diversification. Licensing, alliances and joint ventures are important for high growth firms. Consequently, Barringer and Greening (1998) revealed that about half of the firms in their sample of high growth firms had engaged in strategic alliances. It is likely, nevertheless, that their focus on geographical expansion led to a high estimation.

There are not many researches undertaken to investigate issues of modes of small firm growth (other than internationalization). According to Davidsson & Delmar (1997) studies are needed that can confirm that there is a very strong relationship between (small) firm size and the tendency to grow organically.

Internal Growth vs. External Growth

Total and internal growth for high growth firms of different sizes (Davidsson & Delmar, 1997). Perhaps surprisingly, the distinction between organic growth and growth through acquisitions has not been sufficiently made in prior research (Delmar, Davidsson, & Gartner, 2003)

When possible, it seems a good decision for researchers to use a data collection procedure that allows them to distinguish different growth modes (Davidsson et al, 2006).

Research of high-growth Swedish companies conducted by Davidsson and Delmar (1998) has shown that the smaller the firm, the larger is the part of total employment growth that is organic (Figure 3).

Total and Organic Growth for High-Growth Firms of Different Size, (Davidsson & Delmar, 1998)

Size class	No. of cases	Total employment growth	Organic employment growth	Organic as percent of total
20-49	342	8124	7963	98.0
50-249	532	44320	34208	77.2
250-499	127	22340	12497	55.9
500-2499	127	57752	15682	27.2
2500+	25	52728	10310	19.6

Figure 3: Total and Organic Growth for High-Growth Firms of Different Size, (Davidsson & Delmar, 1998)

The results indicated that start-ups are new -jobs creators and they grow substantially (and organically) during their early development. However, one should be sceptical in regards to these findings. Specificities of each country and the Swedish case in this case might not be the same as in other countries, particularly in other developing countries and needs further research to back up this statement.

Hybrid mode of growth

There is also a hybrid mode of growth that is neither internal nor external but falls somewhere in between (inter-firm collaboration)

This mode can take a number of forms (McKelvie & Wiklund, 2010):

- Strategic alliances. Strategic alliance is an agreement between two or more parties to pursue a set of agreed upon objectives needed while remaining independent entities. It means collaboration of two entities without forming third entity legally. Strategic alliance can be grouped in three categories: 1) Ownership Alliance. Two or more companies work together to own and manage another company. 2) Network Alliance. Two or more companies work together to work on a project/business proposal. 3)

Licensing Alliance. This is where one company grants the right to another company to use its competences, resources or brand name to operate in the market.

- Licensing. Licensing refers to offering a firm's knowhow or other intangible asset to a foreign

  company for a fee, royalty, and/or other type of payment.

- Franchising. Franchising is a licensing option where the franchisor offers a local franchisee the use of the business model.

- Joint ventures. Joint ventures involve the transfer of capital, manpower, and usually some technology from the foreign partner to an existing local firm.

The hybrid mode of growth helps to avoid a number of problems concerning a lack of resources or control (McKelvie & Wiklund, 2010).

Collaboration is important for growing SMEs (Barringer & Greening, 1998).

However, different modes of growth require different sets of resources and capabilities (Zhou & Wit, 2009).

Growth barriers

On the one hand there are some factors that influence growth mainly as facilitators. On the other one, other factors perform mainly as growth disincentives (Davidsson P. , 1989). Some researchers mainly emphasize the negative influence of certain factors (Barber, Metcalfe, & Porteous, 1989). Institutional factors are often discussed from this perspective. For example, Davidsson and Henrekson (2002) hold that the consistency of the theoretical arguments and empirical data makes a strong case for the notion that certain institutions have systematically discriminated against the growth of independent businesses. The specific institutions they investigated included, e.g., regulation of certain sectors of the economy; taxation; wage-setting institutions, and labour market legislation. Carlsson (2002) employs a broader perspective on institutions in his comparison of technology clusters in Sweden and Ohio. The factors he investigates include the science base, mechanisms for technology transfer, density of networks, and what he calls 'entrepreneurial

climate'. Again, the conclusion is that Swedish institutions have hampered firm growth.

2.4.   Growth-oriented strategies

According to Ansoff (1957), product-market strategy is defined as "a joint statement of a product line and the corresponding set of missions which the products are designed to fulfil". Based on this, there are four strategies in which a firm can grow and those are presented in Figure 4:

Growth Strategies according to Ansoff (1957)

Products Markets	Existing	New
Existing	MARKET PENETRATION	PRODUCT DEVELOPMENT
New	MARKET DEVELOPMENT	DIVERSIFICATION

Figure 4: Growth Strategies According to Ansoff (1957)

- *Market Penetration*

The focus is on expanding sales of the existing product in the existing market: it is known the product works, and the market holds few surprises. In other words, to increase sales without departing from the original product-market combination.

- *Product Development*

It is a strategy that is slightly riskier since the focus is to develop products that have new and different characteristics and sell them in existing markets.

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- *Market Development*

The focus here is on putting an existing product into an entirely new market. It can be done by finding a new use for the product, or by adding new features or benefits to it i.e. to introduce existing (or slightly modified) products into new markets (usually geographic).

- *Diversification*

It is the riskiest strategy of all options. The focus is on introducing a new, unproven product into an entirely new market that you may not be fully understood. It means to enter into a new business or industry. It can be related (aimed at exploiting synergies) or unrelated (to diversify a firm's global risk)

- *Vertical integration*

Vertical integration has a meaning of an integration within the firm of different activities of the value chain. It can improve profitability but also increases risk and organisational complexity. Only a few SMEs tend to diversify into unrelated businesses or vertically integrate (Davidsson, Delmar, & Wiklund, 2006)

Research on strategic decisions related to the "how" and "where" firms should grow has generally been neglected.

2.4.1. Internationalization as a route to growth

Internationalization is another course to growth, and it is frequently based on alliances and networks. Internationalization activities appear to be increasingly important for a venture's ultimate survival and growth.

Business internationalisation is "*an integrated set of strategic decisions and operations which make it possible for a firm to establish links abroad by means of a proactive and intended process of increasing international involvement*" (Welch & Loustarinen, 1988).

Over the last two decades, researchers have focused on what has been labelled "international new ventures" (Gilbert, McDougall, & Audretsch, 2006) or "born globals" (Madsen & Servais, 1997).The role of networks has long been an extensive topic in entrepreneurship research, both in regards to discussion of entrepreneurs' personal networks (Birley, 1985) and also related to firm networks. A number of studies explicitly make connection between networks and firm growth (Donckels & Lambrecht, 1995; Hansen, 1995; Jarillo, 1989). A network dimension has also been applied in different studies of firm internationalization. For example, Chetty and Campbell-Hunt (2003) explore the relationships between rapid international growth and business networks. In their study, business networks were the only tool for internationalization out of a small domestic market in a sudden internationalization process, when large increases in capabilities were involved, and when it involved specialization. The connection between networking and internationalization is built on establishing and maintaining the essential contacts with business partners, customers, suppliers, and governments (Welch & Welch, 1996).

Networks or not, there is a rising quantum of literature whose goal is understanding firm growth through internationalization. Due to today's low-cost, rapid world-wide communication and transportation, the domain in which firms operate and expand is becoming truly international (McDougall & Oviatt, 1997). This seems particularly factual for small countries (Julien & Ramangalahy, 2003). Thus, the globalization of markets and the subsequent requirement for crossing national boarders does not only concern large and established firm (Bloodgood, Sapienza & Almeida, 1996). "Internationalization is no longer regarded as an alternative but rather as an essential prerequisite for growth, also for small businesses" (Hurmerinta-Peltomäki, 1994: 24).

The international expansion of small and medium sized firms is regarded as an entrepreneurial act since it entails the opening up of product markets (Thorelli, 1989; Ibeh, 2003). The same is true for any geographic expansion. Interestingly, however, geographic expansion is almost exclusively discussed in the context of internationalization. Opening a new geographic site is similar to a start-up process in that a firm must select a location, hire and train staff, establish organizational legitimacy, motivate and supervise employees, and develop a structure to

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accommodate future growth. This resonates well with Davidsson's (2003; 2004) argument that geographical expansion is a form of entrepreneurship although he rather emphasizes the similarity with the start-up situation from the perspective of the market effects.

Researchers interested in international entrepreneurship have focused mainly on what has been labelled 'international new ventures' (McDougall, Shane & Oviatt, 1994), 'high growth new ventures' (Bloodgood et al., 1996), or 'born globals' (Madsen & Servais, 1997).

These are 'new entrepreneurial ventures with high aspiration and potential for growth' (Bloodgood et al., 1996) and "business organization that from inception, seek to derive significant competitive advantage from the use of resources and the sale of output in multiple countries" (McDougall et al., 1994: 153). Autio, Sapienza and Almeida (2000) found that the earlier in their development firms venture into international competition and the greater their knowledge intensity, the more rapidly these firms expanded internationally.

The research on international growth of new and small firms has so far not yielded many strong generalizations. In part this may be due to the even greater complexity involved in such research, when the development of firms serving home markets of vastly different size is compared. In part it may also be due to this stream of research not yet having achieved the same level of theoretical and methodological sophistication as the best exemplars of 'determinants of growth' research.

2.5. Measuring Growth

Measurement of SME growth is a complex topic and there are various approaches as how one can take. There are two basic ways that SME growth can be investigated: 1) through quantitative empirical analysis and 2) through analysing subtile qulaitative features of the SME growth and the structural change processes happening in a growing organization. Therefore, the complexity of measuring growth can simply be captured if researches try to go beyong mere econometric operation to calculate growth rate of the SME in a given timeframe and involve qualitative explanations to the numbers as well.

Growth can happen in different aspects of the operations of a firm. Precesely, growth can occur in the firm's cash flow, customer base, sales, employment, and market share (Murphy, Trailer, & Hill, 1996).

When it comes to venture growth, there cannot be defined one sole dominant measure and literature review recommends three most relevant measures in relation to new venture growth and they are: 1) sales, 2) employment, and 3) market share (Gilbert, McDougall, & Audretsch, 2006)

 Although empirical evidence confirms that there is an existance of strong corelation among these three different measures of growth (Baysinger, Meiners, & Zeithaml, 1982), there are different thoughts that explain separate measure of growth.

Outcome-based indicators are mostly used when measuring of growth and these indicators represent an increase in size (employment) or amount (sales).

Sales growth in essence is nothing more than how revenues change over time. In other words it describes the level to which customers are increasingly accepting the products or services of the firm that offers them (Robinson, 1999). One of the most frequently used measures of the growth of new ventures are sales (Murphy, Trailer, & Hill, 1996); (G.Weinzimmer, C.Nystrom, & J.Freeman, 1998). Once sales growth is registered, this means that there is a possibility for it to be invested again into capacity buidling or increase of resources. Nevertheless, it should be born in mind that there are firms and particular industries that need to dedicate more years into product development and therefore, for such industry as high technology, more relevant would be to measure growth in employment.

Employment growth designates that a change happened in the organizational composition or strategy of the firm (Hanks, Watson, Jansen, & Chandler, 1994) . In other words, this means that an increase in the number of individuals working in the firm occured. The change in the employment implies that it happened as a result of increased range of firm operations and therefore, the firm is now prepared with needed human capital.

As there are different aspects that can be taken into consideration when measuring growth, during academic researches there is a limitation to gather reliable data as owners/managers are not willing to share all information in regards to the firm.

Sales and employment are the most commonly used indicators of new venture growth (Weinzimmer, NystromSarah, & Freeman, 1998) (e.g. Weinzimmer et al, 1998; Davidsson et al, 2006; Gilbert et al, 2006).

2.1.3. Sales Growth vs. Employment Growth

There are different views to define and understand what growth is comprised of. It sure depends on whose lenses are put on. What is an increase in employment for an entrepreneur is considerably different than what politicians/policy makers would rather achieve? When interviewed entrepreneurs and asked on increase of employment, the answer was that this indicator is not even seen or observed as a goal for them. The topic of employment for them goes even further in a direction that entrepreneurs would rather use different models through networking or virtual organization in order to evade engagement of additional staff. There are cases when the view of the entrepreneur on the increase of employment depends in the context in which the business operates. One aspect that influences the entrepreneurs' perspective on employment or their attitude towards job creation is the outside pressure to be recognized by the peers within the same profession or the respectable status within the local community (Achtenhagen, Naldi, & Melin, 2010). In other words, employment growth signals that the venture is making to the community from which it operates. However, employment growth not always highly correlates with sales growth because there are some growing firms that outsource heavily.

Job contribution can be discussed in terms of gross job creation, i.e., total employment gains in studied units; gross job destruction, i.e., total employment losses in studied units; and net job creation, i.e., the difference between the two during the same time period (J.Davis & Haltiwanger, 1999).

Delmar et al. (2003) differentiates two categories of employment growth specifically organic growth and acquisition growth. Organic growth is the growth in employees that the firm establishes through internal growth, mainly caused by sales growth. Acquisition growth is the growth in employees that is established through acquisition of other organizations.

Sales growth is the preferred indicator for entrepreneurs as oppose to job growth that is not conceived as success by them. It is considered to be the favorite indicator when the firm has a product ready to sell and not suitable when the firm sales comprise from sales from several countries and/or there are different inflation rates.

Internal development can be constituted of many different activities, which are often related to developing the range and quality of products, developing the resource base, and building a stronger organization, including an efficient work organization (Achtenhagen, Naldi, & Melin, 2010). Internal development might lead to growth as an outcome in terms of higher profit or sales.

2.5.1. Firm Size and Growth

Empirical work and researches conducted in UK (Dunne & Hughes, 1994), US ((Dunne, Roberts, & Samuelson, 1988), (Evans D. S., 1987), Latin America and Africa (Liedholm C. , 2002) indicate that there is a relationship between firm growth and firm size and firm age. These studies have investigated the relationship growth-size-age and confirmed that firm growth decreases with firm size for firms of the same age, and decreases with firm age for firms of the same size.

There is growing empirical indication to advocate that firm growth decreases with firm size for firms of the same age and decreases with firm age for firms of the same size, thus contradicting Gibrat's Law that indicates that a firm's growth rate is independent of its size. On the other hand, there are researches done that question and confront this with hypothesis that there is conflicting correlation in the size-growth relationship.

There are researchers that tested whether there is independent relationship between growth and firm size for US small firms (Evans D. S., 1987). The conclusion that was drawn from the test was that Gibrat's Law cannot be applied to the small firm sector. He concluded that there is a negative relationship between growth and size that later was applied to other sector, single-unit and multi-unit manufacturing plants in US and this indicated that mean growth rates decline with size. The same was concluded through researches in UK (Storey, Keasey, Wynarczyk, & Watson, 1987). In additional research analyzing UK firms, it was recommended that the smallest companies grow faster than the larger ones (Dunne & Hughes, 1994). There is

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a research that concludes that small firm growth is contrarywise in regards to initial size in African countries. Consequently, smaller firms when in a startup situation produce more jobs per firm than did their larger counterparts (Liedholm & Mead, 1999).

There are different indicators that represent the performance of the firm depending on the angle that is taken into consideration, both financially and economically. Typically when performance of a firm is discussed it encompasses growth in profitability, efficiency, and output. Other times firm performance may be observed from the side of the financial outcomes it creates for instance: sales growth or market growth, customer satisfaction. Additionally, firm performance could be analyzed by exports and market share (Olsen, Lee, & Hodgkinson, 2008) or a change in customers (O'Farrell & Hitchens, 1988).

Nevertheless, the scholars have not been consistent in the use of indicators when conducting research in regards to firm growth.

Some researchers analyze firm growth as employment; others as profits, value-added, turnover, and total assets (O'Farrell & Hitchens, 1988). In the wide area of researchers dedicated to small firm growth, the situation is further complicated since literature is highly fragmented and there are few conversations between the different theoretical perspectives (Wiklund, Patzelt, & Shepherd, 2007). This means that individual studies cover only a fraction of the variables of firm growth that are considered important.

It should be taken into consideration that there is an aspect of reallocation of resources. To make this more understandable it should be noted that a precondition for the growth of firms is the process of creative destruction functions where efficient new and expanding firms can attract resources from inefficient firms, resources that are released through decrease and exits. This dynamic reallocation can hinder the growth of firms, regardless of their inherent growth potential.

2.5.2. Growth and Profitability

One of the very significant aspects of the outcome on firm level is the effect that growth has on profitability. Research noted that 40 percent of the small firm owner/managers did not believe growth would improve their personal income, in that way one relevant reason to aim at growth

has been diminished (Davidsson P. , 1989). There are solid arguments that support the theory in explaining that growth boosts profits and profit boosts growth, yet there are also facts that are based on researches that note the weak relationship and association between growth and profitability.

2.6.   Growth Antecedents and Determinants

There exist different patterns of growth among young and small firms (Almus, 2002).
New ventures tend to exhibit different patterns of employment growth (Capelleras, Mole, & Greene, 2004). In order for a firm to achieve rapid growth, there is a need for three factors that intersect to make the influence and those are:

- pre-start factors, human capital is important factor that determines growth and the human capital contribution of the founder adds to the speed of the growth. Other factors prior to set up the business may positively influence growth, such as the use of external advice (Robson & Bennett, 2000).

- at-the-start factors, elements in regards to the firm itself, such as: sector, legal form. For instance, there are studies that show that limited companies experience more rapid growth than sole proprietorship (Storey D. J., 1994) (Almus, 2002). There are studies that explain that industry is a significant variable when analysing and measuring growth (Almus & Nerlinger, 1999). One of the other factors that is used in order to find a way to explain growth is the age of the firm. Studies explain that younger the firm growth more rapidly than the older firms (Almus & Nerlinger, 1999).

- Post-start factors, factors related to the strategy in regards to introduction of new product, formal planning, workforce training etc. Studies researched that firms that have made an introduction of a new product grow more rapidly than the ones that have not introduced new product (Brüderl & Preisendörfer, 2000). Business planning enhance the survival of new ventures (Delmar & Shane, 2003). Firms that grow are more likely to boost the training of their workforce.

Based on the changes in the number of employees over time, firms can be classified into:
- Decliners, firms with negative employment change

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- Statics, firms with no change in the number of jobs
- Slow growers, firms with a positive employment growth but experiences only small gain of jobs

Fast growers, firms which have created at least five additional jobs over time.

SME growth as a phenomenon attracts more and more attention as SMEs have a role in the contribution to gross domestic product and employment. Therefore, knowing and understanding the factors/determinants that influence SMEs growth can be beneficial for decision-makers and policy creators in creating future national/local policies, but also for entrepreneurs in defining future development strategies of the business. There are many growth determinants of small business that can be summarized and classified into three main dimensions: individual, organizational and environmental determinants (Zhou & Wit, 2009).

Internal vs. External Factors that Influence Growth

According to Nichter and Goldmark there are four types of factors (Nichter & Goldmark, 2009):
- individual entrepreneur characteristics
- firm characteristics
- relational factors (such as social networks or value chains) and
- contextual factors (such as the business environment).

Other studies have revealed a number of factors influencing growth from wide range of perspectives that can be mainly classified into:
- Individual-level factors: entrepreneurs' background and characteristics
- Firm-level factors: internal resources and strategic orientation of the new firm
- Environmental-level factors: industry context, geographic location and institutional conditions

These three groups of factors influencing growth can further be sub-divided and are explained in order to better understand what influences firm growth (Figure 5).

Determinants of SME Growth

INDIVIDUAL FACTORS	Attitude to grow	
	Motivation to start the business	
	Age and gender	Venture creation speed
	Personality traits	Entrepreneurial team
	Knowledge and skills	Personal network

FIRM FACTORS	Firm's initial size and age
	Firm resources and capabilities
	Competitive strategies
	Business planning ǀ Entrepreneurial orientation

ENVIRONMENTAL FACTORS	External factors
	Industry factors
	Institutional factors
	External support

SME GROWTH

Figure 5: Determinants of SME Growth

Individual-level factors

The owner of a small business or the entrepreneur has the main role in a small business. He predominately determines the decisions and actions taken by the small business. Therefore, SME growth can be explained to a certain extend as a decision that the entrepreneur as an individua makes and the factors that influence his/her decision-making process. There are several factors that are integrated in the individual (owner/manager) of firm that predetermine firm growth and they can be classified in:

a) **Attitude to grow**

The decision to grow (or not grow) the business is an important choice made by the business founder.

The majority of founders start their firm with no intention to grow (Storey D. J., 1994) or have modest growth aspirations (Davidsson, Delmar, & Wiklund, 2006).

Aspirations are positively related to actual growth but this depends on access to resources and opportunities (Wiklund & Shepherd, 2003).

According to Hakkert and Kemp (2006), there are four types of small business owners: the "must grower", the "proactive grower", the "reactive grower" and the "non-grower". In the period when the small business is not economically viable, the firm must grow and therefore the small business owner is categorized as a "must grower". The "proactive grower" is the one that actively searches to growth through looking new opportunities. As oppose to the "active grower", the "reactive grower" is more passive and needs external stimulus to grow. The "non-grower" does not want to grow.

b)   Motivation to start the business

SME growth is also dependent on the motivation to start the business.

The motivation can be triggered by drive to exploit an opportunity in the market (pull factors) or to avoid unemployment or dissatisfaction with present employment (push factors).

A business which has been set up because of pull factors is expected to have a higher propensity to grow than a business for which the main drivers are push factors (Dobbs & Hamilton, 2007).

c)   Age and gender

Evidence on the effects of age and gender on SME growth is not conclusive.

Earlier researches presented that entrepreneur with any prior entrepreneurial experience and experience in the industry has positive influence on the performance of a firm. Recent literature reviews (Storey & Greene, 2010) point to an inverted U-shaped relationship between the entrepreneur's age and firm growth.

There is evidence that the size of firms owned by women are significantly lower in comparison to the ones owned by men. Moreover, researches show that there is a lower growth amongst businesses owned by women. Gender has become an

increasingly important policy concern and specific policy programmes have been developed to target women-owned and managed SMEs.

d) Personality traits

This approach assumes that particular personality traits have a positive impact on SME growth.

A distinction has to been made between attitudes and personality traits. A difference between an attitude and a personality trait is that an attitude is always related to an external object while personality traits do not focus on a particular external object.

Research has shown that personality traits have indirect effects upon venture growth (Smith, Baum, & Locke, 2001).

Traits have a lower impact on entrepreneurial outcomes than knowledge and skills (Wright et al, 2007)

e) Knowledge and skills

Empirical evidence tends to show a positive impact exerted by founders' human capital attributes on SME growth (Capelleras & Rabetino, 2008).

Education and experience are common proxies used to measure human capital attributes.

Educated individuals may be better able to cope with demands of running growth business.

Detailed knowledge of sector (i.e. prior industry experience) can identify growth opportunities.

However, some authors argue that prior experience does not necessarily influence growth (Jovanovic, 1982).

f) Entrepreneurial team

Businesses established by a group of founders are more likely to grow faster than those founded by one individual (Storey D. J., 1994).

A team provides the firm with a wider range of skills and greater resources.

Teams may be initially important but became less so later on (Stam & Schutjens, 2006).

g) Personal networks

Entrepreneur's personal networks and contacts may enhance the growth of the new venture (Brüderl & Preisendörfer, 1998; (Capelleras & Hoxha, 2010).

Nevertheless, evidence on the association between networking and growth is mixed. Their effect seems to depend on the characteristics of the network (Storey & Greene, 2010).

h) Venture creation speed

Another potential determinant of SME growth is the time taken by entrepreneurs to create the new venture (i.e. venture creation speed).

Several studies have shown a positive relationship between faster speed of decision making and subsequent outcomes in the context of large, established firms (Judge & Miller, 1991); (Baum & Wally, 2003).

Recent studies have shown that, for new ventures, the time taken to launch the business may facilitate faster growth later (Brush et al, 2008; Capelleras et al, 2010).

Firm-level factors

Classical firm characteristics refer to firm size and firm age.

a) Firm's initial size and age

Gibrat's (1931) law states that the rate of growth of a firm is independent of its size. This has not been found to hold for new and small ventures, which may need to grow fast to survive (Storey & Greene, 2010).

Similarly, empirical studies typically do not find support for the independence of growth from age (Davidsson, Delmar, & Wiklund, 2006).

b) Firm resources and capabilities

Under the resource-based theory (e.g. (Wernerfelt , 1984); (Barney, 1991); (Tecee, Pisano, & Shuen, 2007), firms are considered as a "collection of productive resources" (Penrose E. , 1959).

Resource-based theory assumes that a firm's resources and capabilities are the primary drivers of competitive advantage and economic performance. Resources are the tangible and intangible assets of a firm and are used to conceive of and implement strategies. Capabilities, on the other hand, are a subset of resources that enable a firm to take full advantage of other resources. Different types and examples of firm resources and capabilities are presented in Figure 6.

Firm Resources and Capabilities

Resources	Type	Examples
Tangible	Physical	Plants, equipment, raw materials
Tangible	Financial	Cash, borrowing capacity
Intangible	Technological	Know-how, patents
Intangible	Organizational	Reputation, culture
Human Resources		Motivation, knowledge, skills

Function	Capability
Corporate Management	Coordinating business units
R&D	Development of new units
Operations	Continuous improvement
Marketing	Responsiveness to market trends
Sales & distribution	Customer service

Figure 6: Firm Resources and Capabilities

Financial resources

SMEs with higher availability of external finance tend to grow faster than the rest of firms (Becchetti & Trovato, 2002).

However, finance may be a consequence rather than cause of growth (Storey & Greene, 2010).

Human resources

Employees contribute positively to SME growth by helping the entrepreneurs execute their objectives (Chandler & Hanks, 1994).

Fast-growing firms need to manage their human resources accordingly (Dobbs & Hamilton, 2007).

Intangible resources

While the survival of a venture will depend upon its ability to secure tangible resources with which to do business, growth will depend more upon its ability to develop intangible assets (Chrisman et al, 1998)

c) Competitive strategies

While a venture's strategy has been considered important for its growth, results of empirical studies have yielded mixed results.

The strategy-growth relationship is contingent on the resources the venture has to support the strategy being executed (Chandler & Hanks, 1994)

Moreover, strategy needs to be adapted to the environment that the firm faces (Davidsson, Delmar, & Wiklund, 2006).

d) Entrepreneurial orientation

In order to grow, firms may need to adopt an Entrepreneurial Orientation, which is a combination of three dimensions (Miller, 1983); (Covin & Slevin, 1989):

- Innovativeness
- Proactiveness
- Risk-taking.

Entrepreneurial orientation dimensions may have differential effects on firm growth and performance (Lumpkin & Dess, 1996)

These entrepreneurial orientation effects are moderated by environmental dynamism and capital availability (Wiklund & Shepherd, 2003).

e) Business planning

Advantages

Ansoff, the so-called "father of strategic management" says formal planning leads to better outcomes.

Business planning accelerates product development and venture organizing activities (Delmar & Shane, 2003).

Business planners are more likely to win external funding because it legitimizes business (Delmar & Shane, 2004).

Disadvantages

(Mintzberg, 1990) says trial-and-error is better. Well-developed strategies worth nothing if not implemented effectively.

Those founders that produced business plans are influenced by coercion and mimetic forces and do not achieve better outcomes (Honig & Karlsson, 2004).

Business planners are slower at entering the market and do not necessarily go on to experience higher levels of growth (Capelleras & Greene, 2008).

Overall, there is mixed evidence on plans and it depends on multiple effects (Burke, Fraser, & Greene, 2010)

Environmental-level factors

Environment may largely detemine the growth potential of firms. Environment level determinants can vary in different aspects such as:

a) External factors

There are a number of external constraints and opportunities supporting the SME growth process.

The population ecology perspective (Hannan & Freeman, 1977) suggests that external forces largely determine firm growth. Firm growth is a function of environmental selection. Surviving firms are those that are have a superior fit with the environment. The following factors have been create inertial pressure for the firms operating in that environment: 1) Legal and fiscal barriers for entry and exit from markets limit the breadth of the firms for their adaptation; 2) Internal constraints upon the availability of information are corresponding to external constraints as purchase of information about appropriate environment are costly especially when information is mandatory to have, 3) Legitimacy constraints derive from the environment as well if the interpretation is taken into account that legitimacy is the ability to create asset in manipulating the environment and 4) Collective rationality problem that emphasizes that strategy is hard to be built upon the rational of one decision-maker since it can not be predicted that it will function the same once the rational has been embraced by a large number of decision- makers.

b) **Environmental and industry factors**

By focusing on the industry environment, it is easier to determine macro-level influencers that are important for the firm and how they likely to affect the firm's relations with customers, suppliers and competitors. For researchers and practitioners, it is important to find out how these more general environmental factors (national/international economy, technology, government and regulations, national environment, demographic structure and social structure) affect the firm's industry environment (customers, suppliers and competitors) as presented in Figure 7.

Environmental and Industry Factors
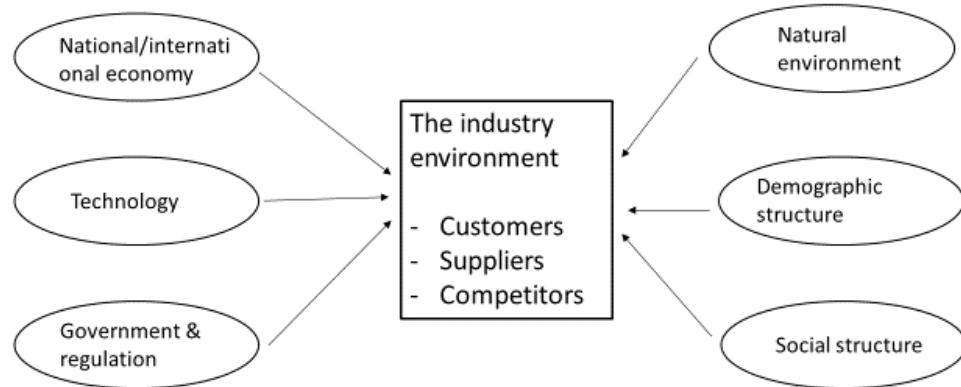
Figure 7: Environmental and Industry Factors

There are forces in the environment or industry (Porter M. E., 1979) where the firm operates that influence the profitability and knowing them can be a powerful tool for understanding the competitiveness of the business environment and identification of the potential for profitability (Figure 8). The focus according to Porter should be on the competitors and analysis of the factors that have influence on the business environment. Five forces were identified as generators of the competitive environment and influencing the profitability and they are permanent parts of an industry structure:

1) Competitive Rivalry comprised by the number and strength of the firm's competitors.

2) Supplier Power determining how easy/difficult the suppliers of a firm can increase their prices.

3) Buyer Power determining how easy/difficult is for the buyers to drive the prices down.

4) Threat of Substitution explained as likelihood of the buyers/customers to find different way of doing what the firm is doing at the moment.

5) Threat of New Entry determined by how easy/difficult others can enter the market where the firm operates.

Porter's Five Competitive Forces
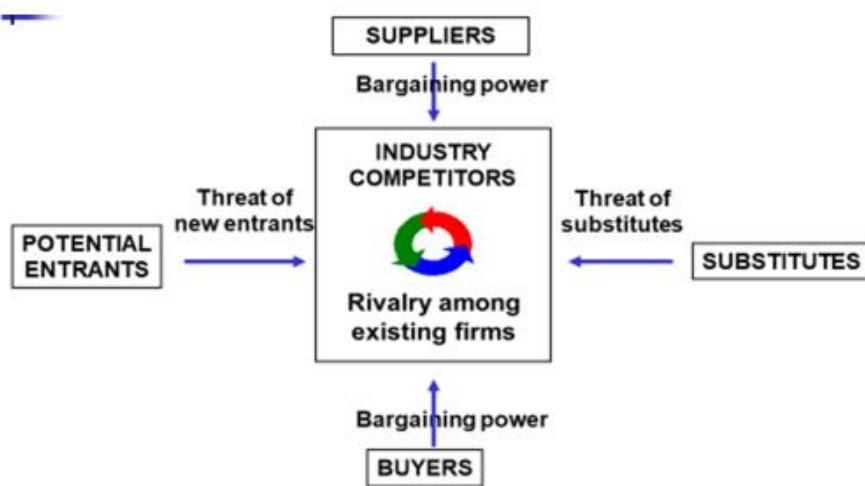
Figure 8: Porter's Five Competitive Forces

Industry life-cycle

Industries experience life cycle as live organisms do. Distinct stages of an industry life cycle are: introduction, growth, maturity and decline. Every industry experiences these stages differently and they last longer for some and pass quickly for others. It should be noted that even within the same industry, various firms may be in different life-cycle stages. Nevertheless, there are evidences that growing industries should see greater numbers of fast-growth (Gilbert, McDougall, & Audretsch, 2006). However, in mature or declining industries, gazelles may be found in fast growing niche markets (Davidsson & Delmar, 1997)

Location

Rapidly growing firms are more often found in dynamic regions ((Carroll & Hannan, 2000). Variations of the local market are expected to affect opportunities for growth. Variations in the cost and availability of local resources may also have an influence. Cluster approach suggests that cognate firms are more likely to grow, but Vaessen & Keeble (1995) argue that 'how' a business did business more important than 'where'

c) **Institutional factors**

Institutional factors establish the environment and choice set in which economic activities take place. The creation and development of new firms may be substantially influenced by the institutional context (Welter & Smallbone , 2011)
According to North (1991), institutions are the "rules of the game in a society" and consist of:
a) formal factors, such as laws and regulation
b) informal factors, such as codes of behaviour and culture

In addition to entrepreneurial factors, SME growth appears to depend on informal obstacles (e.g. corruption, informal economy), especially in challenging environments (Capelleras & Hoxha, 2010).

c) **External support**

External or outsider support can assist a firm's growth by providing access to a broader base of resources.
Empirical evidence on the performance and growth implications of external support is not clear-cut (Bennett, 2008).
However, venture growth is enhanced if the firm receives intangible support before the start-up, whereas other types of support do not have a significant impact on growth (Capelleras, Contin-Pilart, & Larraza-Kintana, 2011).

2.7.   The Labyrinth of External Support

The term external support in the context of support to SME growth can be observed from different angles purely because of the various forms it can take and be applied. One attempt to explain it is that "external resources" are those assets either physical or otherwise, that are used by the firm in its quest for growth and over which the firm has no direct ownership. Scientists theorize that growth-seeking firms use external resources more often precisely because these resources are the key to above-average growth, letting them search for the opportunities that are exposed beyond what their present assets can cover. The utilization of external resources is sometimes conceptualized under the meaning of "networks," for it involves frequently a mindful effort by the entrepreneurial firm to establish long-term relationships with other firms in order to gain and sustain a competitive advantage (Jarillo & Ricart, 1987) (Thorelli, 1986).

Publicly vs. privately funded support

When it comes to origin of support, division of assistance offered to SMEs can be made on: public funded support and private funded support. On the other hand, there are existing numerous external support programmes targeting already established existing SMEs. Decentralization processes in a country impacts also the conceptualization and implementation of governmental support programs regularly in integrating central government support programs with local support frameworks. Nevertheless, research conducted in Britain proofed even through policies for support of SMEs have attempted to be locally relevant and coordinated with government advice, these policies did not increase the market penetration and their use by the SMEs (Bennet & Robson, 2003).

Furthermore, public funded support can differ depending whether the source of funding is the domestic budget, or the budget of another country, so called international support. In Macedonia, they are mainly structured under the EU assistance, nevertheless not exclusively. There are other bilateral and/or multilateral programs aiming at private sector development

that will be researched in the thesis. EU support programs can be classified in several groups: business-friendly environment, promoting entrepreneurship, improving access to markets and internationalization, clusters, access to finance, competitiveness and innovation programs and various support networks (access to information). On the other hand, bilateral support programs exiting in Macedonia follow extreme diverse approaches, from the traditional grants provision to systemic market development approach.

Pre-start vs. existing SMEs support

Publicly funded support can be offered to firms in different phases of their life cycle. There is external support to entrepreneurs in the pre-start conceptual stage of the venture creating process.

Support from tangible vs. intangible resources

The form that this kind of support can take can be tangible (loans, grants, venture capital) and intangible resources (information access, trainings, coaching, mentorship).

Support targeting specific groups vs. generally

re-start public support usually is dimensioned to address serve needs of specific groups (socially deprived and economically disadvantaged people: poor, disables, long-term unemployed young, women etc.). Nevertheless, there are cases when this kind of support targets all potential entrepreneurs. Researchers found out that there are specific factors that can have impact on the SME performance and probability to pursue externally provided pre-start assistance. The richer the founders' preceding entrepreneurial and industrial experiences and involvement, the less probable is that the founder will ask for prestart public support (Capelleras, Contin-Pilart, & Larraza-Kintana, 2011). The same implies for the more intensive prior family business exposure the founder has, the less likely it is that the founder will request pre-start public assistance.

In other words, decentralization of advice and support mechanisms can only slightly increase the use of support by the SMEs although such attempts is expected to increase the costs and administrative complication by ten times (Bennett, 2008)

General and high-growth SME policies

There are SME policies that do not separate different groups of SMEs as their target but rather they aim at supporting all SMEs. These policies are called general SME policies. On the other hand, policies for high-growth SMEs target outstandingly high growth. The instruments of both types of policies may be the same, e.g. easing access to finance, taxation, and regulation etc. They differ then in their specificity in their implementation.

Very important question is what are the performance implication of external support. In other words, what is the impact of the external support to SMEs growth. There are many studies that confirm that there is a limited impact of external support to SMEs growth (Bennet & Robson, 2003), (Wren & Storey, 2002), (Bennett, 2008).

There is no simple answer to the question of how to best allocate resources. There is no magic bullet and there is no simple recipe, neither for improving entrepreneurial framework conditions nor for increasing the number and impact of support on SMEs growth and in the economy. There is constant dilemma which policy is between general or high-growth SME policy. One group of experts argues that governments should create policies for both, generally targeting SMEs and also high-growth SMEs. Other experts favour policies focused on the most promising SMEs (Lilischkis, 2011).

2.7.1. Government Business Support Programmes

When external support to SMEs growth is been investigated, whole ranges of government business support programs emerge as relevant source of support especially because of the arguments that entrepreneurship and small firms are important determinants of economic growth (Audretsch & Audretsch, 2004); (Audretsch D. B., 2007). SMEs are an important phenomenon, as they cover 99% of all businesses in developed Western economies and provide around half of the employment and turnover, which has to be engaged with by government. Government support programmes have direct impact on SMEs development and changes over time in their GDP shares, employment and market orientation.

According to Bennet (2008), four main aspects of policy can be identified:

1) increasing the rate of business start-up;

2) improving the survival or growth prospects of existing SMEs;

3) improving the general environment for all firms, but targeting effort where most benefit accrues to SMEs (e.g. information, skills, access to finance); and

4) reducing the burdens, regulation, and compliance costs for SMEs (e.g. by various special tax and exemption requirements for SMEs).

Another type of support to SMEs is publicly funded one that is offered for new and small firms in virtually all developed countries (Bennett, 2008), (Mole & Bramley, 2006). The support as such can take different forms such as: provision of information, training, advice, loans, or grants to individuals in the venture creation process. The justification for entering into the market with external support by the policy-makers is the failure of the market.

There are cases and countries where governments exploit wide array of tools to strengthen and boost innovation. One of such instruments used are subsidies to R&D. The use of R&D grants boosts small firms' predisposition to underinvest innovative activities. Therefore, SMEs are offered different instruments to overcome such market failures where SMEs limitations with financial means are reflected in their rejection of subsequent innovative activities that can further bring growth in employment, sales, export etc. Using such grants, theoretically it is expected that the increase of R&D investments brings increase in growth. Moreover, the direct effect occurring from such R&D grants is also the improvement of firm's access to external finance and thus combating eventual likely financial limitations (Meuleman & Maeseneire, 2008). Scholars have found out that gaining R&D grants positively influences the probability to attract venture capital (Lerner, 1999). Nevertheless, the general perception in regards to government grants and subsidies is that there is little quantitative assessment of the effectiveness of public subsidy policies (Lach, 2002).

Additional assessments have been conducted for other types of government programmes such as promotion of collaboration among SMEs for improving innovation capacity, development of business incubators, as well as clusters development. Incubator units are identified as effective mechanisms for assistance of growth and development of small businesses (McAdam & Marlow, 2007). The use of a cluster approach among SMEs as an instrument for meeting their challenges

related to globalisation and trade liberalisation is also a mechanism worth investigating in the future (Karaev, Koh, & Szamosli, 2007).

2.7.2. Business Development (Advisory) Services

Imperfect information is a possible reason for underinvestment and this limits the potential that SMEs can benefit from advice, information, or other business services that are available, and/or may be more unwilling to seek them (Gibb & Dyson, 1984), (Storey D. J., 1994). As a result, low use of such advisory services is observed. These arguments can be used to justify government advice and information initiatives, particularly forms of `taster' services provided by external advisors (Storey, 2003). Advice on government regulations themselves may also require policy-support schemes (Bennet & Robson, 2003).

Small Business Development programmes can bring benefit in the attempt to provoke entrepreneurial development. Conventionally, there are certain barriers that hinder the entrepreneurial development and those are linked to the management ability: access to capital, management skills and education of the available work force. Therefore, governments have in the past conceptualized consulting programmes to supply at least one effective tool that might be put in practice as a strategy for overcoming the management skills barrier. In this way it is almost as equipping the entrepreneurs in addressing several key areas where it is expected that gap will happen in the early stages of any new business venture (marketing, financial, operations, etc.) The consultants/advisors that are involved in such programmes serve as members of the entrepreneurial team but at no cost, adding skill and time shortages that otherwise could defeat or seriously hamper the new venture. At the same time, a potential learning effort increases to the entrepreneur that may boost his /her skill base from which to confront future decisions. What can be questionable when establishing such publicly funded advisory services is the argument that private advisory services can be afforded by private sector without any interference by the government.

There are researches that long ago observed whether the clients would be willing and able to procure private support of a similar value (Krentzman & Samaras, 1960). It can be argued that

without the existence of such support many potentially successful ventures might never grow or might even pitfall needlessly. In such cases, there is a possibility that external consultants catch the potential fail and prevents the mistake from happening. Privately funded consulting services to new venture creation are offered in return for high profits and potentially large-scale ventures. In such cases, it happens that there is a gap generated for smaller scale ventures.

Analyzing different programmes and applying it in the context of business advising it happens that the advice provided by skilled advisors is a resource that some firms will be able to combine with other resources to translate into new capabilities. Firms that look for and receive advising/consulting are engaging in thoughtful efforts to learn, and it precisely such deliberate learning that leads to the evolution of dynamic capabilities (Zollo & Winter, 2002). Skilled advising/consulting can provide even seasoned entrepreneurs or entrepreneurial teams with new knowledge that allows them to develop new capabilities. The firms most likely to have the motivation and resources to develop new capabilities based upon what they learn from the advice they obtain are those that are have the high growth and innovation intentions (J.Cumming & EileenFischer, 2012).

2.7.3. Knowledge Spillovers

Resource-based theory (Wernerfelt , 1984) (Barney, 1991) and concept of information asymmetry assumes that businesses can increase their competitiveness and performance by upgrading their strategic and information skills. Furthermore, the use of external advice is one way in which strategic and information skills can be developed (Bennet & Robson, 2003). Governments in most countries have tried to breach resource gaps by supplying either soft information packages, or subsidizing a search and external advisory service (Wren & Storey, 2002).

Obtaining external advice in fields such as business strategy and staff recruitment is connected to positive firm performance. The main positive relationships of advice and performance are dominated by private sector sources such as lawyers, suppliers, customers and business friends/relatives (Robson & Bennett, 2000).

There are researches that have dedicated their work to observing and examining the knowledge management from the external knowledge points of view. Knowledge has been understood to be the key success factor or key resource to an organization of all sizes. Knowledge worker, knowledge intensive business services and knowledge society are some of the terms that are used frequently nowadays. Moreover, external knowledge categories can be identified into:

- The Mentor, who typically has a long and extensive experience of successful business as is willing to share his/her knowledge with younger and less experienced entrepreneurs and managers.

- The Coach, who is a professional with expertise especially in business processes and in their improvement and development.

- The Angel has some financial resources or at least knows where to get these resources for the company. The Angel also knows how to utilize the financial resources that are already within the company.

- The Guru, who has very deep understanding and has very professional knowledge of some specific area of expertise. This expertise can be used to products, production, marketing or any other processes of the company.

- The Politician, who has knowledge about local, national and even international politics that is

  relevant to the business operations.

  The Father, who represents the historical background of the family business. In this role the knowledge is strongly combined with the shared family values.

Nonaka and Takeuchi (1995) point out that human knowledge is created and expanded through social interaction between tacit knowledge and explicit knowledge. This interaction is called knowledge conversion, which finds expression in four different modes:

1) Socialization: from tacit knowledge to tacit knowledge. Socialization is a process of sharing experiences and thereby creating tacit knowledge, such as shared mental models and technical skills. It yields what can be called 'sympathized knowledge.'

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2) Externalization: from tacit knowledge to explicit knowledge. Externalization means a process of articulating tacit knowledge into explicit concepts and combination is a process of systematizing concepts (from different bodies of explicit knowledge) into a knowledge system.

3) Combination: from explicit knowledge to explicit knowledge. Externalization outputs 'conceptual knowledge' and combination gives 'systemic knowledge.'

4) Internalization: from explicit knowledge to tacit knowledge. A process of embodying explicit knowledge into tacit knowledge is internalization. It produces 'operational knowledge.'

Spillovers happen if an innovation or improvement applied by a particular enterprise increases the performance of another enterprise in a way that the benefiting enterprise does not pay any or full compensation. There has been a recognition that spillovers contribute significantly economic growth. Moreover, new growth theory distinguishes spillovers as the engine of growth (LucasJr., 1988) (Romer P. M., 1986), spillovers are the engine of growth. According to Lucas (1988), there are three models that contain some of the main elements of economic growth:

- a model emphasizing physical capital accumulation and technological change,
- a model emphasizing human capital accumulation through schooling, and
- a model emphasizing specialized human capital accumulation through learning-by-doing.

Mackun and MacPherson (1997) in their research in manufacturing sector have concluded that there is relative importance of firms' inhouse R&D in comparison to external technical activity. They recommend that external inputs (for example in the form of spillovers) can intensify the productivity of in-house initiatives of firms.

When it comes to knowledge spillovers and local competition, there are three theories:

1) MAR Theory. This theory has derived its name as an abbreviation of the theorists that developed it: Marshall (1890), Arrow (1962) and Romer (1986). According to them the closer firms are, the greater MAR spillover is. Homogenous firms from one sector

provoke the emergence of spillover. MAR economists find local monopoly positive because in such cases, the biggest share of the profits created by the innovation belong to the innovator itself. According to them, if there is a dominant sector in a region and weak local competition, then there is maximization of regional sector growth. Business parks (many office buildings grouped together) are a good example of concentrated businesses that may benefit from MAR spillover.

2) Porter spillovers. Porter (1990) agrees that spillovers among firms in specialized sectors (concentrated sectors in particular regions) stimulate economic growth. As oppose to MAR, Porter concludes that local competition has positive impact on growth because it fast-tracks imitation and fosters rapid adoption of innovation. In cases where competition is more intensive, the innovator benefit might decrease, but the innovative activity will increase. Competition will make the firms to innovate, because firms that will not improve their products or/and production processes will fall behind their competitors and ultimately be out of business.

3) Jacobs' theory. According to Jacob (1969), knowledge spillovers succeed better among enterprises that practise variety of activities. In other words, enterprises from different industries when being close create knowledge that when spread among them facilitates innovation and growth. It is opposite of MAR theory where the focus of knowledge spillovers is on entreprises from same industry. Therefore, different standpoints should be stimulated to exchange ideas and foster in that way innovation that is primarily inter-sectoral. Based on this, sectors will grow in a region where there are other important sectors as well.

Knowledge spillovers are of utmost importance, yet there is still a gap on a couple of issues that need to be researched further. First, there is unknown dimension on the size of the spillover effects. Secondly, there is a gap of research on what type of spillovers is more significant when it comes to creating growth. Whether spillovers that happen within one sector generate more or less growth in comparison to spillovers that happen between different sectors. Additionally, the impact of local competition on innovation and growth is complex matter that is worthwhile the attention of further research.

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2.7.4. Networks

Networks seems to be vital for small firm growth. Access to networks is supposed to offer potential knowledge resources to support small firm growth. While social relationships are documented to be

important at start up, social, industry, professional and institutional links appear to become more important over time. For the firms to get most benefits from knowledge networks, there are many researchers that promote institutional support for networking activity. Nevertheless, it is not clear when, which networks and what types of relationship are convenient for both, social and business, context of a certain firm. There is a need for additional research in this area. There have been researches that examine the different types of networks (Cooke & Wills, 1999), and different types and depths of relationship that occur within the networks add a layer of complication to the

understanding of how networks can contribute to small firm growth.

2.7.5. Regional Cluster Concept

According to Marshall's theory clusters are known as industrial districts. The interest in clusters was renewed in early 1990s by Harvard Business School and Michael E. Porter, the founder or modern cluster theory. M.E. Porter defining cluster as a set of related industries. The most comprehensive well-known definition for clusters is that a cluster is a geographically proximate group of interconnected companies and associated institutions in a specific field based on commonalities and complementarities. Based on research conducted, regional clusters contain different dimensions:

1) Regional cluster contains enterprises operating in the same industry. Geographical concentration consists mainly of small and medium-sized enterprises that compete, cooperate and complement each other. Ties between enterprises can either be formal or informal. Enterprises can work together to have specialised services, supply, workforce, research and development and these activities will be mainly regulated by agreements, contracts and other legal documents. At the same time companies can

collaborate in innovation and research process and other activities that can be regulated by informal agreements.

2) Regional clusters contain also related companies, mainly related complementary enterprises, offering products and services and serving cluster enterprises.

3) Clusters also consists of government, educational and other institutions, mainly connected with government institutions, financial institutions, education, science, research.

4) Clusters contain other institutions that leads to the availability of governmental support for cluster development, access to finance, non- governmental institution support for knowledge, innovation and technology transfer and other benefits.

5) Regional dimension is considered by some scientists as the main dimension of regional cluster, which ensure that enterprises and institutions are geographically close to each other. The benefits of geographical concentration of enterprises were identified with the explaination that geographically proximate enterprises have lower costs, access to the labour market and resources.

From the different dimentions previously mentioned, regional clusters can be defined as a form of cooperation, informal links between companies and other: informal form of cooperation and interaction between companies in the same industry, involving related and complementary businesses, scientific, educational and government and other related institutions in the same region.

There are researches (Garanti & Berzina, 2013) that claim: 1) positive linkage between regional clusters and firms' productivity and efficiency, claiming that geographical concentration and collaborative ties of companies promote efficiency and productivity; 2) positive linkages between regional clusters and firms' innovative capacity, stating that enterprises that cooperate and collaborate with other enterprises and institutions are creating and implementing innovations more effectively; 3) contribution of geographically concentrated enterprises to the enterprise competitiveness; 4) positive links between clusters and the growth of existing enterprises and creation and survival of startups.

All these leads to regional clusters creators of an environment for business growth and development that leads to the regions' growth and development (Figure 9).
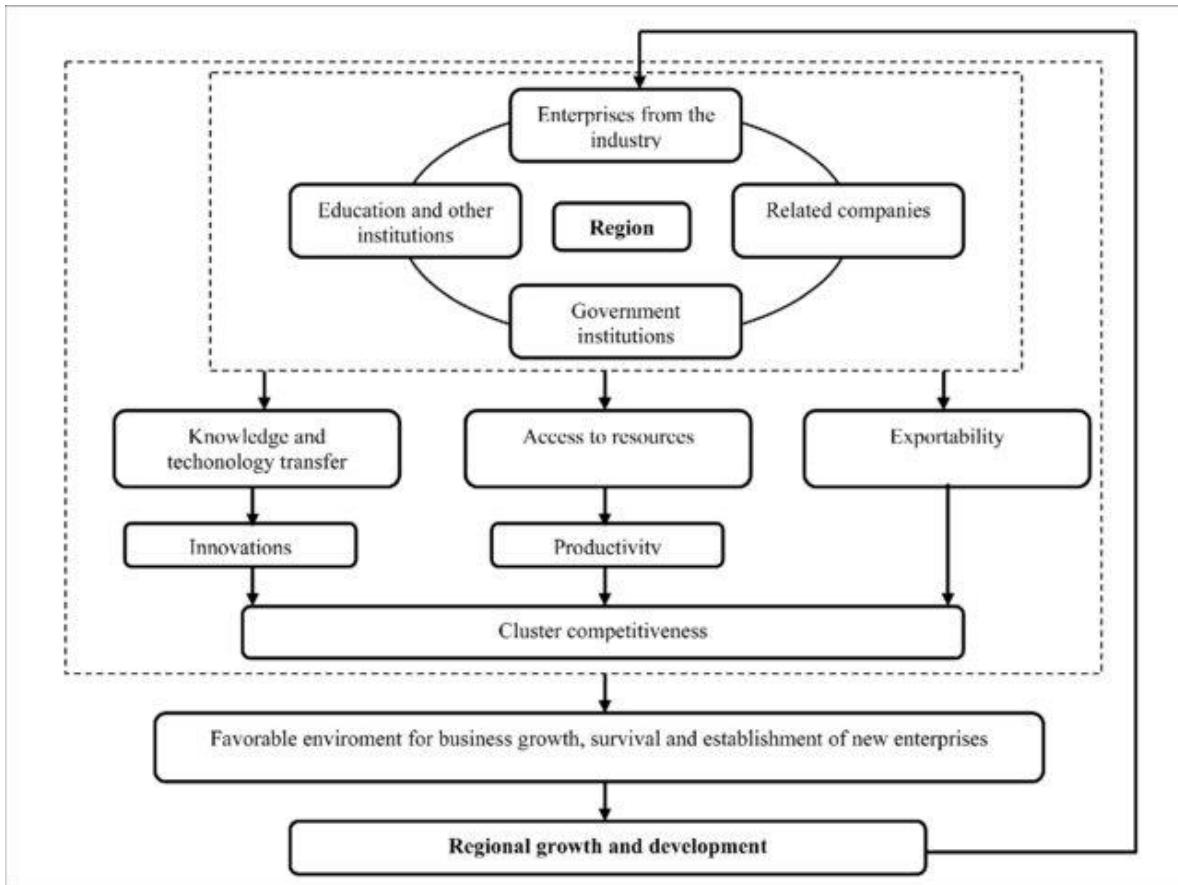
Figure 9: Regional Cluster Effect on Regional Growth and Development

Source: (Garanti & Berzina, 2013)

2.7.6. Support to Entrepreneurship

The contribution of small enterprises in modern economies has been in the focus of the work of many researchers. The role of the small businesses is considered as significant as they are the agents if change, therefore, their entrepreneurial activity is a cause for extensive innovation activity thus provoking industry evolution and generation of considerable amount of newly created jobs. This is the reason why governments are interested to launch support mechanisms to encourage new entrepreneurs and help those entrepreneurs to overcome problems in the start-up phase.

There are evident evidences that external support of entrepreneurship can achieve influence on the growth of the new ventures. Lately, the topics of startups and entrepreneurship is gaining more and more attention capturing different aspects and types of this kind of external support to SMEs growth.

Innovative entrepreneurship support infrastructures.

Empirical evidence confirms that public policies can contribute to economic growth by boosting innovation and strengthening new entrepreneurial projects (Hart, 2003); (Kuratko, 2013). Therefore, governments use different instruments such as innovative entrepreneurship support infrastructure that can mainly be classified into (Roig-Tierno, Alcázar, & Ribeiro-Navarrete, 2015):

A) Incubators that for innovative enterprises are local support instruments for innovation. Incubators usually offer some or all of the following services:
   - Identification of business opportunities in a form of advisory services and information about markets, technology, innovation, financing, legal procedures etc.
   - Creation of viable business plans and trainings for entrepreneurs to gain knowledge and skills in business management.
   - Launching and accompanying new business ventures during their initial years, which are usually critical.
   - Provision of infrastructure and facilities to accommodate new innovative firms in the short term.
   - Development of businesses to consolidate new firms (offering support) by creating a suitable environment that allows firms to develop, create employment, and compete in their local market.

B) Technology centres that aim to promote and disseminate innovation and technological development as a means of improving entrepreneurial competitiveness. Their services can be classified as:
   - Short-term actions in test laboratories to control and ensure the quality of raw materials, products in development, and final products.

- Medium-term services that aim at solving maintenance and improvement of business production processes such as: conception and design of new products to manufacturing and organization.
- Long-term services related to R&D (new production processes, methods, etc.)

C) Universities who are responsible for knowledge creation and transfer and for potential entrepreneurs' education. Hence, universities' technological profile and capacity to respond to challenges can affect innovative business initiatives. Nevertheless, in addition to technology and facilities, people (i.e., talent) represent one of the main contributions universities make to entrepreneurial activity.

Venture growth is enhanced if the entrepreneur received soft (intangible) support before the start-up, whereas other types of prestart support do not have a positive impact on growth. Although the acquisition of financial and other hard assets may be important to new firms, our findings show that it is knowledge resources that are essential to growth.

There are researches that examine the demand side of the public support for new firms (Capelleras, Contin-Pilart, & Larraza-Kintana, 2011). There is valid explanation there that certain support programmes are conceptualized to target the needs of specific groups such as: poor, socially/economically excluded groups etc. In the research conducted by Capelleras, Contin-Pilart, & Larraza-Kintana (2011), follwing conclusions were drown in regards to who asks for public asssiance programmes: 1) Individuals with prior industrial and entrepreneurship experience are less likely to demand publicly funded prestart support, 2) Individuals with more intensive family relatioships tend to decrease the need for publicly funded prestart support.

Gazelles

The term gazelle was invented by Birch to signify a small group of high-growth firms that, according to him, generated most of the new net jobs in the economy. As opposed to the few large (often publicly traded) companies, known as ''Elephants,'' which according to Birch are covering a large share from the employment, but are generating scarce new jobs and grow very little. Therefore, their contribution to the employment growth is not significant.

Birch and his protagonists agreed upon regarding the job contribution of small and large firms. About Gazelles there is a conclusion (Birch & Medoff, 1994) that a moderately small number of

firms create a disproportionately large segment of new jobs. During the 1988–1992 period, 4% of the firms generated 70% of all new jobs among ongoing firms in the USA. These 4% accounted for about 60% of all new jobs in the whole economy during the same period. They were relatively small and in 1993 the average Gazelle firm employed 61 people. Gazelles were found in all industries and every industry had about the same proportion of rapidly growing firms. (Henrekson & Johansson, 2010) . Gazelles are attracting a lot of attention because they are young and small and usually in high-technology industries. As policy creators are mainly interested in boosting economic growth and job generation, most of the policy they create is in the area of high technology industry (Henrekson & Johansson, 2010).

OECD (2008:20) define gazelles as 'enterprises which have been employers for a period of up to five years, with average growth in employees (or in sales) greater than 20 per cent a year over a three-year period and with ten or more employees at the beginning of the observation period' Empirical evidence suggests that such gazelles represent fewer than 10 per cent of businesses (Storey D. J., 1994); (Schreyer, 2000)

Gazelles as rapidly growing firms with great contrition to the economy and net employment are characterized by the aspect of newness/age rather than size (Henrekson & Johansson, 2010). Gazelles have been intensively in focus of several researchers and their studies (Henrekson & Johansson, 2010) and (Parker, Storey, & Witteloostuijn, 2010). Nevertheless, it should definitely be noted that only small proportion from start-up population grow extensively in size. However, new firms that grow to a substantial size are a small minority in the population of start-ups. Furthermore, only few out of these leading fast-growing firms will further develop into industry leaders as for instance Google and Microsoft are. Gazelles also differ regarding industries, firm sizes, firm ages, methods used, and geographical coverage. (Henrekson & Johansson, 2010)

While gazelles create a large share of new net jobs and exist in all industries (Henrekson & Johansson, 2010), they tend to have difficulties to sustain their fast speed of growth (Parker, Storey, & Witteloostuijn, 2010).

2.7.7. Export Support Programmes

The globalization of the markets had influence on the intensified attention on exports and thus on the export performance of SMEs as well. Governments have been particularly interested in the matter since exports contribute to economic development and create jobs. Nevertheless, small business owners are not easily encouraged to undertake export activities for entering foreign markets. Consequently, governments have created export promotion programmes to assist SMEs to gain information, knowledge and experience on the foreign markets usually provided by trade associations. These programmes support small firm internationalization. In other words, internationalization is good for small firms and small firms are good for economies (Fischer & Reuber, 2003).

Moreover, researchers have found evidence that the presence of a distributor in the international channel is vital for the SME exporter as the distributor is the one that has the access to the customers and know-how in regards to marketing on the foreign market. Therefore, export support assistance provided to SMEs targeting the distributor has a strong positive effect on the export performance of the SME itself (Sousa & Bradley, 2009)

2.8.   Different Studies on Growth

Generally, there are different studies on growth can be clustered into the following groups:

- Studies that aim at **assessing growth determinants**. These studies are focused on the analysis of the factors that foster or hinder organizational growth. These determinants could be external or internal factors.

- Studies that deal with the **management for growth**. More precisely, these studies analyse and aim at managing the determinants that foster or hinder organizational growth to further firm growth. This group of studies pay the attention also on the external and internal factors—for example, managing resources (internal factors) or which policy measures (external factors) facilitate the growth of companies.

- Studies that have a goal to conduct **assessment of the effects of growth**. The assessment these studies undertake can be quantitatively in terms of increasing numbers of employees or sales or impact on profitability and qualitatively for example

in terms of delegation crises. These studies that actually attempt at measuring the impact of growth are most often those assessing the effect of different determinants.

- Studies that are preoccupied with the subject of **management of the effects of growth**. Such examples can be: restructuring the organization, implementing new practices that lead in demonstrated patterns of growth. The patterns of growth are primarily in form of stages or transition models.

The first two categories deal with factors/determinants that lead to growth with general assumption that growth is something positive. The latter two categories refer to the outcomes of growth. The gap left between these categories is the process of growth itself—what actually happens with(in) the organization as it grows.

2.9.   Literature Gap on SME Growth

There is a huge interest from scholars to examine the topic of firm growth. Nevertheless, firm growth as a topic is still not covered substantially. On the one hand, the existence of different theories analyze, understand and measure firm growth from diverse array of aspects. On the other hand, the nature of the topic firm growth is characterized with heterogeneity that adds extra layer to the complexity of the matter.

In order to understand its complexity, there us a need to reveal what are the factors that affect firm growth and the performance of small businesses. Moreover, factors that can be influences by the firm itself or society should be of particular interest because of their eventual practicality to be influenced and improved. In this way, there might be a possibility to find out support programmes or activities that a firm can use or undertake in order to improve its performance. On the contrary, factors related to personality traits cannot be influenced in order to achieve better performance. A small business manager or owner who finds out that his/her business could have showed better performance parameters if only he or she had different personality, can take almost nothing to influence the situation. Therefore, it is of utmost importance in pragmatic world to analyze and find out the factors that provoke growth and performance that is durable beyond the support programme used or activities undertaken by the firm. In other

words, practical implications of research on factors that influence sustainable growth should be in the focus of future research.

According to (1994) small firm growth is one of the areas where scholars still have vast possibilities for major contributions. As to empirical studies he notes that these have been conducted independently of each other, and that they frequently address issues of specific interest to the researcher in a way that makes comparability with other studies difficult.

Yet, there is an important literature gap that could in future ambitiously aim at exploration of the different researches undertaken so far in regards to different factors that influence growth in order to set integrative coherent approach as to **how** and **why** growth happens in small firms.

According to Cooper (1993) there is a need of well-developed theoretical frameworks in particular casual effects and more theory driven empirical research. The research so far is so dispersed, providing a review of inconsistent findings that can be observed as a puzzle in a mosaic rather than one coherent image.

To overcome the current literature gap that exists and understand better firm grow, there is need to understand all aspects that lead or prevent growth:

1) range of growth modes (Lockett et al. 2010; McKelvie and Wiklund 2010),
2) growth measures (Coad 2009; Shepherd and Wiklund 2009),
3) types of firms and contexts (Davidsson and Henrekson 2002), and
4) periods of growth.

What is even more essential to understand by scholars and have possible practical implications would be the issue of what drives the **sustained** or erratic growth of firms over many years. Researching the different modes of growth, it should also be relevant to look into other forms of governance that lead to a similar growth of economic activities. New technologies and/or institutions make it possible to expand economic activities in networked coalitions of self-employed. Other institutions constrain growth in one firm, and make it more likely to create and expand new economic activities in different firms within a business group (Iacobucci and Rosa 2010). The attention should also be paid on certain future returns, longer-term

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investments on a relatively large scale. Another valid question to be answered is the extent to which economies of scale, economies of time, and economies of scope can best be earned within a firm, or for example in a constellation of firms within a geographically confined region (cf. Frenken and Boschma 2007).

According to Achtenhagen et al (2010), there is a gap between what business growth means for practitioners and how it is measured by researchers. There is a need to recognise the complexity of growth processes, combine both quantitative and qualitative methods and use different growth indicators.

The complex phenomenon of growth of small enterprises requires further research since several studies have been developed to measure the companies´ growth. Achtenhagen et al. (2010) reviewed studies on growth published between 1997 and 2008 and identified 56 articles, most of which endeavored to explain why enterprises grow (growth as a dependent 420 Machado, H. P. V. Gest. Prod., São Carlos, v. 23, n. 2, p. 419-432, 2016 variable); however, other articles dealt with growth strategies or on growth intentions and desires. Few, however, studied the growth process. Explications on growth or no growth decisions, contextual dimensions, the role of entrepreneurship agency are still lacking (Wright & Stigliani, 2012).

Current analysis comprises discussions on growth, followed by an approach on the antecedents of growth, comprising determinants associated with individuals, firms and **environment**.

In spite of the number of research and publications on the theme, explicatory studies are lacking on the growth episode and on differentiated approaches that would take into account the different types of entrepreneurs or their different contexts. Further studies on the understanding of the growth episode or growth movement by different entrepreneurs and by different stakeholders and by other agents should be developed for a contextual, social and more comprehensive explanation, suggested by Clarke et al. (2014) We argue that we need to reconsider metaphorical expressions of growth processes in entrepreneurship studies in order to better understand growth in the light of contemporary challenges, such as **environmental** concerns (Clarke, Holt, & Blundel, 2014). Another aspect to be underscored is the need for different focuses that would not merely deal with growth from the point of view of economic

rationality (Seifert & Vizeu, 2015). Lack of publications on the subject matter with regard to Brazilian firms was one of the main limitations in current investigation.

The search for necessary mechanisms and contingent conditions for the growth of firms is not likely to be saturated in the near future, given the changes in economy and society, which enable new ways of organizing old and new economic activities. The study of firm growth is likely to remain a fascinating area of research.

There is a lack of research in regards to the utilization of private sector sources of external support such as: suppliers, customers, accountants, consultants, etc. Some research in the future should look into examining whether there is any potential interaction between the use of public and private support. (Capelleras, Contin-Pilart, & Larraza-Kintana, 2011).

Furthermore, for the purposes of this thesis, literature review on external support to SME growth has been conducted and the findings are summarized in the table below in Figure 10.

Ref. article/book chapter	Theoretical framework	Finding/s	Research Gap/Problem
Martina Fromhold-Eisebith and G¨unter Eisebith," How to institutionalize innovative clusters? Comparing explicit top-down and implicit bottom-up approaches", Research Policy ~~34, 2005~~	Cluster Approach: Explicit cluster policies implemented top-down by regional authorities and implicit initiatives that are organized and financed bottom-up by groups of firms.	Some researchers see a main role of cluster policies in concentrating on the formation of new firms and investing in education and support infrastructure (Breschi and Malerba, 2001)	Assist to adequately institutionalize cluster support. The question of effective institutional forms of cluster promotion offers wide scope for further conceptual and empirical refinement.

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Douglass C. North, The Journal of Economic Perspectives, Vol. 5, No. 1. (Winter, 1991), pp. 97-112, (1991)	Institutional Theory	Institutions have a role that they play in the performance of economies.	aises more questions han it answers about nstitutions and the role hat they play in the erformance of conomies. New understanding of performance and economic change. (regional development)
Chrisman (1999) and Chrisman and McMullan (2000)	Theory of Outsider Assistance as a Knowledge Resource	Outsider assistance can be a valuable source of knowledge to entrepreneurs. However, those authors make it clear that the value of outsider assistance does not come	To determine the value of the various components of the assistance process.
Welter and Smallbone, The Role of Government in SME Development in Transition Economies, International	SME development	The development of the SME sector can also contribute to the wider process of social transformation.	The state is a major factor for SME development although more through its influence on the external environment in which business activity can develop than though direct support measures or interventions
Anselin and Varga, Local Geographic Spillovers between University Research and High Technology	Theory of endogenous economic growth	Evidence is found of local spatial externalities between university research and high technology innovative activity, both directly and indirectly via private research and development	Why certain locations have research and innovative activity and others do not.

Dobbs and Hamilton, Small business growth: recent evidence and new directions, International Journal of Entrepreneurial Behaviour & Research Vol. 13 No.5, 2007	Approaches to the study of small business growth may be divided into six broad groups: stochastic; descriptive; evolutionary; resource-based; learning; and deterministic.	Raised issues with established approaches to researching small business growth.	Researchers should adopt longitudinal research designs that enable them to trace the growth path of small businesses to Small business Growth which we can then begin to map the learning processes that can explain the observed. theory that is longitudinal in scope but idiosyncratic in its focus on how and when small businesses learn to grow, treating growth as one phase in an evolving pattern of development. behaviour.
Navarro J. L. B.; Casillas J. C. and Barringer B. (2012) "Forms of growth: How SMEs combine forms of growth to achieve high growth", Journal of Management & Organization, 18(1), pp 81–97, 2012	Five theoretical perspectives are the entrepreneurial orientation perspective (Covin & Slevin, 1989; Miller, 1983); the environment perspective (Stevenson & Jarillo, 1990); the strategic fit perspective (Andrews, 1987; Bourgeois, 1980); the resource-based perspective (Penrose, 1959);	Firms which adopt different combinations of growth present different demographic characteristics and some combinations lead to faster growth than others.	Development of new knowledge relating to the antecedents of each of these strategies and the reasons that some businesses decide to adopt particular strategies while rejecting others.

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Casey J. Dawkins, Regional Development Theory: Conceptual Foundations, Classic Works, and Recent Developments, Journal of Planning Literature, 2003	Regional Development Theory	Three themes are emphasized: (1) the theoretical predictions regarding the convergence or divergence of per capita incomes across regions over time, (2) the assumptions regarding the importance of internal and external scale economies to regional economic growth, and (3) the role of space in shaping regional labor market outcomes.	Theory has much to say about the consequences. The important point here is that although efficiency and equity are often intertwined when we consider the spatial dimension of market failures resulting from knowledge generation, the traditional approach toregional market intervention (i.e., "Intervene on efficiency grounds and equity goals will be achieved automatically.") need not always be optimal.

Figure 10: Literature Review and Gap on External Support to SME Growth

3. THE CONTEXTUAL FRAMEWORK AND HYPOTHESIS

3.1. SME Sector in Macedonia

It should be noted that a standard international definition of small and medium-sized enterprise does not exist. SMEs are defined differently in the legislation across countries, in particular because the dimension "small" and "medium" of a firm are relative to the size of the domestic economy.

There is no universal definition for SMEs in Macedonia. Based on the Law for Trade Companies from 2004 (Official Gazzette of Republic Macedonia, 2004), there is a definition that separates and classifies between large, medium, small and micro traders from the aspect of how accounting is undertaken in these entities. This definition has been aligned with EU definition in regards to the range within which certain entities fall in regards to number of employees but

the ranges in regards to annual turnover and balance state are not yet aligned. Moreover, there are state agencies in Macedonia that use different criteria when providing their services such as the Agency for Promotion and Support of Entrepreneurship (APSTE) identifies SMEs as independent enterprises that have less than 50 employees, annual turnover not more than 1.5 million of EUR and at least 51% of private ownership.

Size of the firm	EU definition	Law on Trade Companies from 2004 (updated in 2013)
Micro	<10 employees <EUR 2 million turnover or balance sheet	<10 employees <EUR 50.000 annual turnover
Small	10-50 employees EUR 2-10 million turnover or balance sheet	<50 employees >EUR 2 million turnover or balance sheet < EUR 2 million assets and liabilities
Medium-sized	<250 employees <EUR 50 million turnover <EUR 43 million balance sheet	<250 employees >EUR 10 million turnover <EUR 11 million turnover (assets and liabilities)

Figure 11: Definitions of micro, small and middle enterprises in Macedonia

No matter of the size of the SMEs in Macedonia, it should be noted that SMEs have a vital role in for the country as they are most dominant segment in the economy. Latest research shows that 99.8% from all enterprises registered in the country are MSMEs. It can be noted that over the years since 2010, MSMEs in Macedonia have decreased their number for 6%. While the number of micro enterprises increased over the years for 21.5%, likewise medium-sized enterprises increased over the years, the biggest decrease can be noted in the small enterprises accounted for almost 38%. More details can be observed in Figure 12.

Distribution of SMEs over the Years

212	205	335	431	459	490	517	523
584	607	631	683	724	725	746	776
34702	25984	20341	20241	19937	20313	20892	21543
39999	46322	53117	49935	49539	48611	49364	48577

Micro ■ Small ■ Medium-sized ■ Large

2010 2011 2012 2013 2014 2015 2016 2017
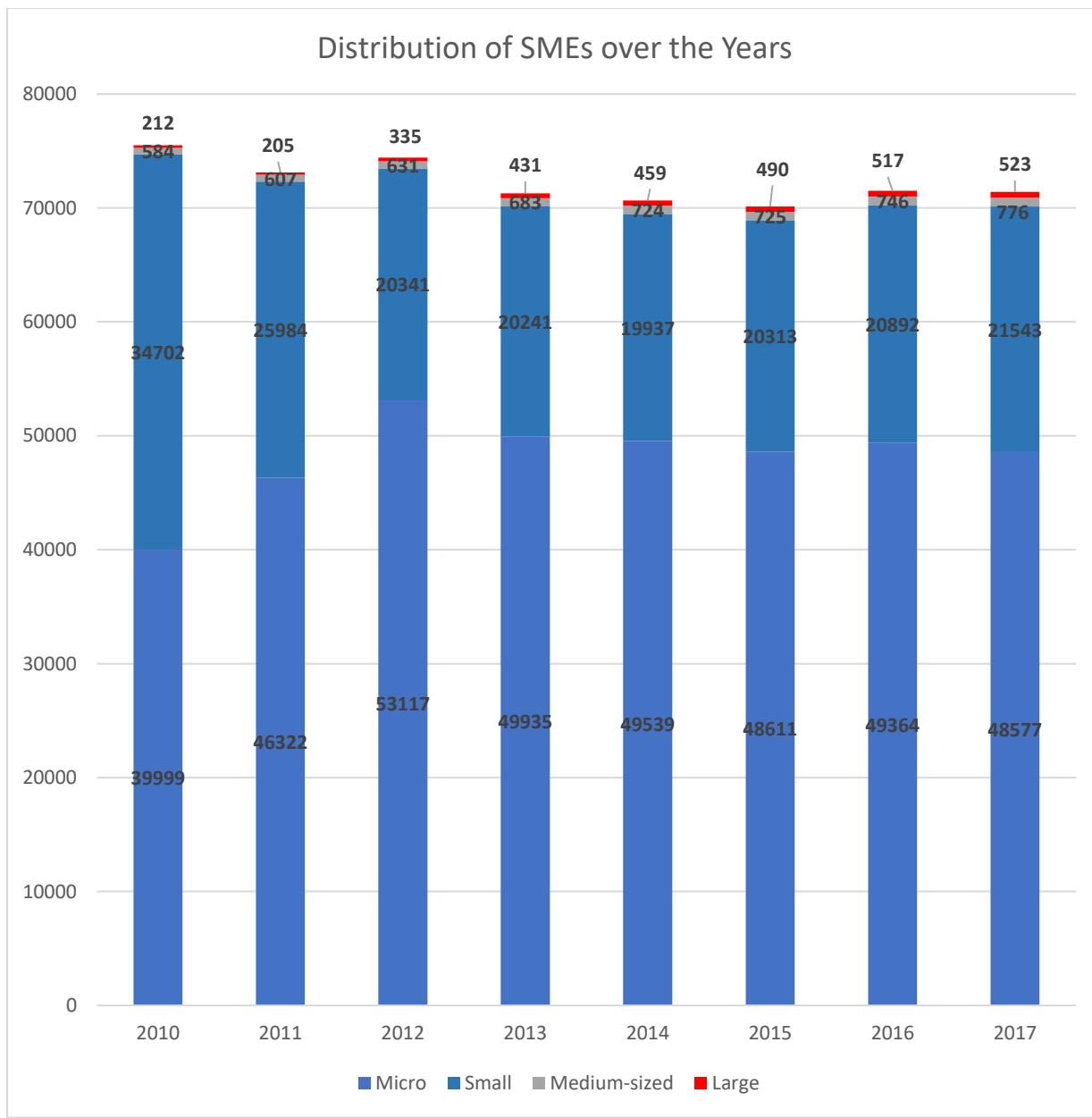
Source: State Statistical Office of North Macedonia

Figure 12: Distribution of MSMEs over the Years

SMEs are also the biggest employer in the country as 43% of all jobs are covered by SMEs and it has been stable over the years in comparison to 2010 and 2017 (Figure 13).

 As oppose to SMEs, large companies in 2017 employ 25% in comparison to 22% in 2010 and the rest are sustained in micro enterprises, 32% in 2017 and 36% in 2010.

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Therefore, the importance of SMEs and their support is becoming even more urgent as the country needs to find a way to stimulate growth of the SMEs as they could employ more people and contribute further in value added.

Figure 13: Number of Employees in SMEs in 2010 and 2017

Based on the research that reviews SMEs official statistical data in Europe presented in a comprehensive SME Performance Review, SMEs in Macedonia account for almost two-thirds of the economy and around three-quarters of all jobs (European Commission, 2017). These parameters are much higher when compared to the average ones in EU respectively.

3.2. Outline of Institutions Supporting SME Growth in Macedonia

The country has undergone in the past several years a broad set of reforms in order to strengthen the economic environment. The outcome of these efforts is evident in the elevation of many regulatory and administrative arrangements for doing business in the country. Furthermore, it has now one of the easiest, fastest and cheapest procedures for starting a business. Paying taxes and getting credit is also rather easy procedure. Moreover, the country has one of the most encouraging regulations on investor protection. According to the 2019 World Bank Doing

Business report (The World Bank and the International Finance Corporation, 2019) the country ranks 10th out of 183 countries on overall ease of doing business.

In regards to state external support to SMEs growth, there are various programmes that can be listed and analysed in Figure 14. Figure 14 summarizes the current support programs targeting SMEs competitiveness in Macedonia with focus on time dimension. As it is evident from *Figure 15*, most of the support schemes are yearly programed and short-term vision limits the results expected from the programmes.

Institutions and Support Programmes for SMEs in Macedonia			
State Institutions	Support Program	Amount in MKD	Phase
Ministry of Economy	**Competitiveness, Innovation and Entrepreneurship Program 2019**	**27.000.000,00**	Yearly
	Development and Support of SMEs and Promotion of Entrepreneurship (up to 75% of project costs, maximum 450.000,00 for 1) Enabling environment, 2) Productivity and competitiveness of the SMEs, 3) Women entrepreneurship and 4) SME capacity for access to finance	4.500.000,00	Yearly
	Direct Subsidies of Micro, Small and Medium-sized Enterprises and Crafts (60% of the costs, but not more than 300.000,00 for equipment, software and consulting services)	21.000.000,00	
	Programme for Development and Promotion of Craft chambers (up to 75% of costs for craft development projects)	1.500.000,00	Yearly
Ministry of Education and Science	Program for scientific and research work, technical-technological development of Macedonia, 2013	68.534.000,00	Yearly
	Program for technological development, 2013	2.000.000,00	Yearly
Ministry of Local-Self Government	Projects for development of the planning regions	189.063.938,00	Yearly

Program for Balanced Regional Development 2018	Projects for development of the areas with specific needs	33.015.875,00	Yearly
	Projects for development of the villages	25.349.371,00	Yearly
Ministry of Social Affairs	Self-employment Program	194.600.000,00	Yearly
Employment Agency	Financial support to SMEs and crafts for generating new employment	9.200.000,00	Yearly
	Employment subsidies	40.920.000,00	Yearly
	Employment subsidies to parentless children	2.480.000,00	Yearly
	Employment subsidies to disabled	192.600.000,00	Yearly
	Training at Known Employer	19.252.500,00	Yearly
	Training at Known Employer with subsidies	9.537.000,00	Yearly
	Training for the needed professions on labor market	13.700.000,00	Yearly
	Training for advanced IT skills	4.152.000,00	Yearly
	Internship as first employment	4.650.000,00	Yearly
Ministry of Agriculture	IPARD Program	5.382.972.000,00	2007-2013
	Financial support to Agriculture	6.885.000.000,00	Yearly
	Financial support for Rural Development	1.057.000.000,00	Yearly
	Financial support for fishery and aquaculture	90.000.000,00	Yearly
	Major subsidies for enterprises, 2018	30.0000.000,00	
Agency for Support to Entrepreneurship	Program for support of entrepreneurship, competitiveness and innovation of SMEs, 2013		Yearly
	Voucher counseling system, 2013	1.000.000,00	Yearly
Agency for Promotion and Support of Tourism	Program for promotion and support of tourism, 2013	52.935.000,00	Yearly
	Subsidies for organized incoming tourist income	60.000.000,00	Yearly
Fund for Innovation and Technology Development	**Forecasted funds for all instruments 2018-2020**	**241.147.965,00**	**2018-2020**
	Accelerators	72.539.617,00	2018-2020

	Technological extension	35.901.950,00	2018-2020
	Start-up and spin off support	15.375,000,00	2019-2020
	Commercialization of innovations	111.750.000,00	2019-2020
Ministry of Local Self-Government and Swiss Development Cooperation	Regional Business Centers	288.746.849,00	2019

Source: Official Gazette of Republic of Macedonia

Support Programmes of the European Union for Support to SMEs in Macedonia	
Support Programme	**Amount in EUR**
Instrument for Pre-Accession	n/a
Competitiveness and Innovation Framework Programme (CIP)	3.6 billion
The Seventh Framework Programme for Research and Technological Development	48.5 billIon
EUREKA	n/a
COSME	n/a
Horizon 2020	9.7%
EBRD SME Finance Facility	977 million
EBRD TAM (Turn Around Management) BAS (Business Advisory Support) Programmes	n/a

Support Programmes of other donors for Support to SMEs in Macedonia	
Support Programme	**Amount**
Education for Employment (Swiss Development Cooperation)	Around CHF 6 million
Increasing Market Employability	Around CHF 6 million
Business Environment Project	Around USD 6 million
Partnership for Better Business Regulation	Around USD 1 milion

Figure 14: Institutions and support programs for SMEs in Macedonia

3.3. Current Policies Addressing and Supporting SME Growth in Macedonia

The preparation of the policy framework that supports SMEs in Macedonia started in 2002, when the country signed the Memorandum on EU Charter for Small Businesses with the European Commission. Based on these occurrences, the country prepared the first National Strategy for Development of SMEs (2002-2013) encompassing as well the Programme of Measures and Activities for Support of the Entrepreneurship and Competitiveness of Small Enterprises and Competitiveness of the Small Businesses in the Period between 2003-2006. Afterwards, it followed an update of this strategy and in 2007, new Programme for Development of Entrepreneurship, Competitiveness and Innovation of SMEs (2007-2010) was brought.

Macedonian government has adopted the latest Strategy for Support of SMEs (2018-2023) in April 2018. This strategy aims at building upon the achievements form the implementation of the previous strategic document. The current Strategy (Ministry of Economy, 2018) applied integrative approach encompassing efforts in three main pillars: to improve the business environment, to increase competitiveness of SMEs and to promote entrepreneurship. In comparison to the previous attempts for support of SMEs through the former Strategy, this time the support to SMEs is mainly systemized in three pillars and the Programmes for support are then classified in these three pillars (Figure 15).

National Strategy for Development of SMEs (2002-2013)	Strategy for Support of SMEs (2018-2023)	
Goals Improvement of policy creating Simplification of the legal and regulatory environment Improvement of access to finance Simplification of taxation Promotion of ICT Strengthening of science, technology and innovation in function of development of SMEs Promotion of entrepreneurship in education and training Encouragement of internationalization of SMEs Improvement of the services for business development Strengthening of dialogue between public and private sector	Favorable enabling environment	Improvement of policy creating and coordination Simplification of the legal and regulatory environment Stregthening and institutionalization of social dialogue Improvement of the coordination for data collection and data use in order to improve support policies for SMEs Better representation of SMEs - National Association of SMEs
	Increase and improvement of opprotunities for SME growth	Improvement of business development services Improvement of access to finance Simplification of internationalization Support to Value Chain development
	Dynamic ecosystem of entrepreneurship and innovation	Increase of entrepreneurship in education and training Improvement of science, technology and innovation in SME development Establishment of science and technology parks and innovation incubators

(right column label: Programmmes)

Figure 15: Overview of Strategies for SMEs in Macedonia over the Years

If the Strategy for SMEs, its pillars and the separate Programmes are further analyzed through the lenses of external support provided for SMEs growth, it is evident that the some of the programmes marked in Figure 15 are directly linked to the provision of external support to SMEs growth as classified in the previous Chapter. Furthermore, it could be attempt to draw a parallel of the Programmes for Support of SMEs on the Strategy for Support of SMEs with the previously explained classification of the types of external support based on available literature review on the topic, presented in Figure 16.

Strategy for Support of SMEs (2018-2023)		Types of External Support to SMEs Growth
Favorable enabling environment	Improvement of policy creating and coordination	
	Simplification of the legal and regulatory environment	Enabling Environment Support Reduction of Burdens, Regulations, Complience of Costs
	Stregthening and institutionalization of social dialogue	
	Improvement of the coordination for data collection and data use in order to improve support policies for SMEs	
	Better representation of SMEs - National Association of SMEs	
Increase and improvement of opprotunities for SME growth	Improvement of business development services	Business Development (Advisory) Support
	Improvement of access to finance	
	Simplification of internationalization	Existing SMEs Support
	Support to Value Chain development	
Dynamic ecosystem of entrepreneurship and innovation	Increase of entrepreneurship in education and training	
	Improvement of science, technology and innovation in SME development	Innovations
	Establishment of science and technology parks and innovation incubators	Start-up Support

Programmmes

Figure 16: Parallel Between Support Programmes for SMEs in Macedonia and Types of External Support to SMEs Growth

There are additional policies that are in the context to support of SMEs growth in Macedonia and are integral element of the detailed and strategic framework of the policies for economic and industrial development. The summary of each policy document with focus on external support to SMEs growth is presented in Figure 17.

Policy Document	Summary
Programme for Economic Reforms (2019-2021)	The document includes 18 sectorial structural reform measures needed for improvement of the competition and growth. These reforms are led by the Ministry of Finance and focus mainly on: 1) Energy and transportation market; **2) Agriculture sector**; **3) Industry sector; 4) Services sector (tourism and hospitality); 5) Enabling environment** and decrease of informal economy; **6) Research, development, innovation and digital economy**; 7) Trade reforms; 8) Education and skills; 9) Employment and labour market; 10) Social protection and inclusion
Plan for Economic Growth, 2018	The Plan is coordinated directly by the Government of the country and encompasses a set of support measures classified in three pillars, 1) Support in creation of new jobs: Support for increase of capital investments, **Support in establishment of departments for technology development and research**, **Support in establishment of relationships with suppliers from Macedonia**, Support of the purchase of funds from enterprises in difficulties, Support of investment projects with significant economy interest; 2) Competitiveness of the companies: **Financial support to companies that increased their competitiveness on new markets**, **Support in access to new markets and sales increase**, 3) Support to SMEs through the Fund for Innovation and Technology Development such as: **Support to SMEs with rapid growth (gazelles)**, **Additional financial support to micro and small enterprises**, **Support to SMEs to improve innovation**; Support of vocational education to newly-employed youth, Preparation of legal framework for venture capital development
Industry Strategy (2018-2027)	Ministry of Economy is coordinating the newly developed Industry Strategy that focuses on the sectors that are most potential to make impact on productivity and growth. The new Industry Strategy focuses on processing industry in six elements: 1) Strengthening the processing industry basis, **2) Increase of productivity, innovation and technology transfer in processing industry**, 3) Catalysis of green industry/production, **4) Stimulation of processing industry export,** 5) Building learning processing industry and 6) Inter-sectorial implementation and coordination

Innovation Strategy 2012-2020	Innovation Strategy was developed to as complementary documentation to the government documents, primarly to previous Strategy for Industrial Policy (2009-2020) and it focuses on 4 strategic objectives: 1) Enhence the business sector's propensity to innovate (Raise awareness of the SMEs on the benefits of innovation, Establishment of a Fund for Innovation and Technological Development , **Encourage private investment in R&D and innovation**) , 2) Strengthen human resources for innovation (Adapt education policy to develop the skills needed for innovation, Stimulation measures for talented students and stimulation measures for the professors, Increase the quality of vocational training and promote lifelong learning, Make tertiary education more innovation-oriented), 3) Create a regulatory environment in support of innovation (Provide an effective regulatory environment for academics and research institutions, Adapt public procurement practices to encourage innovative solutions, Provide for a competitive business environment) , 4) Increase knowledge flows and interaction between innovation actors (**Foster business networks and clusters, Increase knowledge flows and interactions between research institutions and businesses,** Embed FDI and innovative stars into the NIS, Strengthen the linkages with the Diaspora)
Strategy for Entrepreneurial Learning (2014-2020)	The document has a goal to increase the competitiveness of SMEs especially the ones led by women and youth through fostering the employability skills and entrepreneurship competences.
Strategy for Balanced Regional Development (2009-2019)	The Strategy for Balanced Regional Development is focusing on two strategic goals: **1) Competitive planning regions with dynamic and sustainable development**; 2) Better demographic, economic, social and spatial cohesion between the planning regions

Figure 17: Overview of Different Policies Influencing the External Support to SMEs Growth in Macedonia

When it comes to sectoral policies, the country has chosen to focus primarily on agriculture, tourism and hospitality and information and communication technology and this is evident also from the dimensioned some of the measures the framework of the Economic Reform Programme. Additionally, there are annual support programmes for tourism development managed both by the Ministry of Economy and the Agency for Promotion and Support of

Tourism. The Annual Programme for 2018 of the Ministry of Economy consists of support to 16 activities out and was underbudgeted with around EUR 630.000,00. The activities are mainly actions on one occasion and lacks long-term vision on how the sector should develop as there has been a Strategy for Development of Tourism drafted, but not yet been adopted.

With respect to Innovation, the European Innovation Scoreboard defines the country as a modest innovator, with performance gradually increasing over time.

Innovation rates in the private sector remain low. Expenditure on research and innovation remains modest, compared to the EU average, at 0.4 % of GDP (2015), only slightly higher than in 2010. Most of this expenditure falls on public spending and has been increased in recent years. Furthermore, the share of technology-intensive products in exports has mounted, this indication is due to the production by established foreign companies. Therefore, the innovation and technological development in private companies still remains at a low level.

The Fund for Innovation and Technology Development started with calls for support and stimulation of research and development in SMEs in 2015. Its mission is to encourage and support the innovation activity in micro, small and medium-sized enterprises for achieving accelerated technological development. Their approach is based on knowledge transfer, research for development and innovation that contributes to job creation and economic growth and development, while improving the business environment for developing the competitiveness of companies. The Fund in the first couple of years offered two types of financing: co-financed grants for newly established companies: start-ups and spin-offs up to 6 years old, and co-financed grants and conditional loans for commercialization of innovation for businesses of any age. Between 2015–17, the Fund opened four calls for co-financed grants for start-up and spin-off companies and commercialization of innovation for micro-, small- and medium-sized enterprises. The funds were provided by the budget of the Republic of Macedonia. The first instrument provides funding for up to 85% of the total budget of the project, up to a maximum of 30,000 Euros. The remaining amount of the total project budget should be provided by the applicant. In the first 2 years (2015 and 2016) 30 businesses received such grants. The supported projects were in the following industries: ICT, mechanical engineering, electronic engineering, waste management treatment, education, tourism,

creative industries, and construction. The Fund also provides consulting support to its beneficiaries, mostly to strengthen their managerial skills and, based on their need assessments, in other fields of interest such as IP, freedom to operate, licensing, EU programme Horizon 2020 and technology benchmarking. In 2018, the Fund introduced other technical assistance instruments for start-ups, supporting three accelerators.

In the country, there are several donors that are active in support of SMEs: EU, Swiss Development Cooperation, USAID, GIZ, World Bank and others. There is no formal mechanism for coordination of the support from international donors and development agencies in regards to SMEs in the country. Through desk research on the internet, the following existing projects that are supporting SMEs growth in various ways have been listed in Figure 18:

Donor List on External Support to SMEs Growth in Macedonia				
Donor Name	Project Scope and Name	Project Goals	Timeline (Start & End)	Funding Amount
SDC	Increasing Market Employability	Aims at improved access to decent, sustainable employment/self-employment for young women and men	2014-2023	> 5 million CHF
SDC	Swiss Entreprneurship Program	Aims at creation of jobs by strengthening the entrepreneurship ecosystem in six target countries.	2015-2019	> 5 million CHF
SDC	Education for Employment	Aims at catalyzing a synergy between Macedonia's educational institutions, business, and youth.	2018-2022	> 5 million CHF
USAID	Business Ecosystem Project	Aims at increased productivity, revenues, and jobs for micro-, small- and medium-sized enterprises (MSMEs) through building a responsive and sustainable business ecosystem.	2017-2021	> 5 million USD

USAID	Partnership for Better Business Regulation	Aims at micro and small businesses throughout Macedonia improve their compliance with legal requirements and business organizations engage in a constructive dialogue on streamlining of regulation.	2017-2021	< 5 million USD
USAID	Modernizing the Inspection Authorities Project	Aims at improvement of the effectiveness of the inspection bodies, by streamlining of legislation, capacity building and professional development of inspectors, and implementation of an e-governance software solution. This will lead to a modern, business-friendly, and predictable inspection system, and efficient inspection authorities.	2016-2020	< 5 million USD
UNDP	Creating Job Opportunities for All	The Self-employment Programme is an essential part of the country's employment strategy and the national active labor market measures which have been designed to promote smart, sustainable and socially inclusive growth.	2016-2019	4.7 USD
UNDP	Self-Employment Programme	The main objective of this project is to reduce unemployment by encouraging the creation of small businesses that will provide a living for successful entrepreneurs.	2009-2019	19 million USD
EU	Local and Regional Competitiveness Project	Aims at fostering the contribution of tourism to local economic development and improve the capacity of the Government and public entities to foster tourism growth and facilitate destination management.	2016-2020	23 million EUR

Figure 18: Donor List on External Support to SMEs Growth in Macedonia

Regarding policy instruments, most of the annual enterprise and industry programmes are poorly budgeted and weakly coordinated, frequently do not necessarily reflect companies' current needs and are not monitored or evaluated effectively.

4. EMPIRICAL ANALYSIS

For the purposes of the research and how external support influences the growth of SMEs in Macedonia, the data from a donor-funded project over 4 years will be used. Increasing Market Employability (IME) is a programme of the Swiss Agency for Development and Cooperation, implemented by Swisscontact and PREDA Plus Foundation. IME programme in its first phase that lasted from 2014-18 worked on strengthening the business sector in Macedonia, improving the quality of products and services offered, expanding markets and creating an enabling environment in two selected sectors: Green Economy and Tourism and Hospitality.

The goal of the programme was that more working age women and men, in particular young, are engaged in sustainable, decent employment or self-employment and/or are earning higher incomes.

Successful project implementation was envisaged to result in three outcomes:

Outcome 1: Enterprises in Tourism & Hospitality and Green Economy grow by expanding the existing market and accessing new market opportunities;

Outcome 2: Access to improved services (skills support functions, financial services) is enhanced for enterprises in the three sectors;

Outcome 3: The policy and regulatory framework is more conducive for private sector growth in targeted sectors.

The expected key results of the programme (4 years) was to create 1,945 jobs (direct and indirect) and increase the net income of more than 900 companies by CHF 1,350,000 over a period of 4 years. Special consideration was given to the employment opportunities for youth and women.

The programme was working through the Market Systems Development (MSD) approach (formerly known as Making Markets work for the Poor or M4P approach). Using the MSD approach, the programme targeted systemic changes in the market systems to increase growth

in the selected sectors, by addressing the key underlying causes for the bottlenecks that hamper job creation.

The IME Programme during its first phase implemented 46 interventions in three sectors since the inception phase in 2014.

Indicators to Measure SMEs Growth in IME

According to IME programme, an indicator is a "quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor" (OECD, 2004).

IME used so called Logical Frame indicators as defined on the Impact, Outcome and Output level for each intervention. For the purposes of this research, only few indicators will be explained that are relevant to explain and demonstrate SME growth, in regards to employment and profitability.

Indicator Definitions:

Impact Level Indicators:

1. Number of "net" jobs[1] created (# Net new decent[2] jobs (gender and age desegregated)

This indicator is understood as:

Net additional, full time equivalent jobs created in target enterprises as a result of the programme, per year and cumulatively. Jobs can also be created as a result skills intervention as well. "Additional" means jobs created minus jobs lost. "Per year" comprises 240 working days. Potentially Jobs saved or sustained may be reported separately.

All jobs claimed must be gender and age segregated.

"Decent job":

What was mostly difficult to explain and have a common understanding in the definition was the term "decent" job. Especially regarding the Organic Agriculture sector which is the most labour intensive sector. IME programme identified clarification of decency for three sectors, but

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[1] Net additional, full time equivalent jobs created in target enterprises as a result of the programme, per year and cumulatively. "Additional" means jobs created minus jobs lost. "Per year" comprises 240 working days.

[2] The notion of decent work was developed by the International Labour Organization (ILO) and is based on four pillars: (1) Promotion of employment: Work and a fair income, sufficient to meet their basic needs, allow a life in dignity. (2) Social security: (3) Compliance with core labour standards (4) Social dialogue

the main base was the National Legislation and regulation (Labour Law) which incorporates the ILO labour standards on decent work. This meant that part time work, seasonal work as long as it is regulated with the Labour Law can be considered as a decent job.

Also, people under the age of 29 are considered as youth.

"Indirect jobs"- Multipliers are used to assess indirect job creation in the three sectors. For Tourism sector multipliers are based on World Tourism and Travel Council's report for Macedonia (2014) and are recognized best practice in the tourism industry; For Green Economy sectors the multipliers are based on indicators calculating global energy sector jobs: 2012 METHODOLOGY by US building council and Green Jobs for a Revitalized Food and Agriculture Sector. For Creative Industries the multipliers are based on EUROSTAT data base indicators. The multipliers are explained in details per source in Annual Aggregation spread sheet.

All data per indicator will be collected and disaggregated by gender and age.

IME will measure jobs through the entire value chain, including jobs created on the service providers' level. [3]

Application per sector:

Tourism & Hospitality. Number of employed people in the targeted business within T&H (segregated by gender and age), including # of employed full time/ seasonal/part time/ any other form.

In some situations, proxy indicators may be used. Based on the research, the following correlation is made for tourism sector: For one (1) new employment to occur on annual basis in Tourism & Hospitality sector, an average of 25,000 Euro additional revenues should be generated, or 89 additional new tourists[4].

Creative Industries: Number of employed people in the targeted business within the whole value chain of the IT sector (segregated by gender and age), including number of employed full time/ seasonal/part time/ any other form (male/female).

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[3] For additional description follow the DCED (Donor Committee for Enterprise Development) Implementation guidelines for Defining indicators: http://www.enterprise-development.org/wp content/uploads/2_Implementation_Guidelines_Indicators_May_2015.pdf
[4] Early impact signs assessment report, Case study Mavrovo, February 2015

Number of employed people in the Product design sector; # of employed people in the Product design function within processing companies from Furniture, Light manufacture and food processing industries (targeted business within the whole value chain).

<u>Green Economy.</u> Number of employees/ registered and not registered (but working for) in construction sector and specifically in the sustainable building sector.

Number of freelancers/ installers offering Sustainable Building services.

Number of employed/ registered farmers (segregated by gender and age).

Number of employed in the collection centres /cultivators.

2. Net additional income increase[5]

Understanding of the indicator:

Additional net income (additional sales minus additional costs) accrued to targeted enterprises as a result of the programme, refers to 4 years.

3. Volume of additional sales by targeted enterprises (expenditures per client)

Volume of sale is the revenue that is achieved by targeted enterprises as a result of IME interventions. Sales is measured on every level of the beneficiary and includes the sale of the IME direct partners as well, contextually adapted to the tiny market.

Baseline data describe the current situation of the system actors and allowed to forecast the expected impact. Ideally baseline studies should include a control group in a similar geographical/demographic area where no other pro- jects/programs are intervening. This allows comparing and analysing achieved changes within the target group(s) without over-relying on secondary data. This is however an ideal, sometimes theoretical case: often it is not possible to know precisely who will benefit in what and who will be part of a control group. Gathering baseline data too soon involves thus the risk of not having relevant data at the time of the start of the intervention either due to the timeframe or to the population. For this matter ad hoc baselines were conducted related to each intervention to describe the current status of the actors and at the same time allowing to forecast the expected impact in an informed way.

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[5] Additional net income (additional sales minus additional costs) accrued to targeted enterprises as a result of the programme, refers to 4 years.

Baseline information was gathered for each indicator, which was specified as well who, how and when this information will be collected. To collect the information, several possibilities existed:

- Pre-intervention baseline, for example during the research phase: the information was collected before the intervention started. This might require separate data collection, but was also done as part of the market research, during which sufficient data might be gathered. However, this required that the target enterprises and beneficiaries have already been identified.

- A retrospective baseline was established after interventions have started. Such a baseline was needed in particular when the beneficiary group was not known in advance. Several methods for collecting a retrospective baseline are possible (Source: DCED[6] Auditor Guidelines):

• Recall: individuals or groups are asked to recall the situation at a given moment (before the project interventions). Special attention will be given to the reliability of this data, as people's perceptions change over time.

• Written records of partners, in particular businesses

• Data from other regions with similar demographics or situation

• Other secondary data such as economic studies, statistics, etc.

IME has collected baseline information for the log frame indicators for Tourism & Hospitality sector, IT& Software service, organic Agriculture and Sustainable building sub sectors. Cross-components Gender and Youth were mainstreamed. The baselines also included comprehensive data information relevant for the skills component. In the design stages of the interventions several mini baseline are conducted, collecting information from the field, partners and reliable local consultants.

Different Types of External Support to SMEs Growth: Case-by-Case Evidence from Macedonia

Analyzing the various forms that externals support can take for the purpose of the research and based on adopted classification provided by different researchers so far, the following

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[6] DCED – Donor Coordination for Enterprise Development

classification of 6 different types of external interventions (support) for SMEs growth will be used:

1) Start-up Support

2) Existing SMEs Support

3) Innovations

4) Enabling Environment Support

5) Reduction of the Burdens, Regulation, and Compliance Costs for SMEs

6) Business Development (Advisory) Support

For each type of the external support, first explanation based on literature review is given as an introduction followed by a case study that has been developed and measured in the framework of interventions implemented through IME programme and concluded with the findings from the research for each case study conducted.

4.1. Types of External Support to SMEs Growth: Case Studies from Macedonia

4.1.1. Case Study: Start-up Support

<u>Introduction</u>

In the new global economy, startup firms have been considered a key player in economic development. The reasons for their importance are their contributions to job creation (which increases employment) and economic growth at the regional, national, and industrial levels. There are several startup definitions:

- Start-up is a temporary organization in search of a scalable, repeatable, profitable business model (Blank & Dorf, 2012)

- Start-up as a human institution designed to create a new product or service under conditions of extreme uncertainty (Ries, 2011)

- Start-up as an organization with limited experience, working with inadequate resources, and influenced by several factors, such as investors, customers, competitors, and the use of dynamic product technologies (Crown, 2002)

Whenever support to start-ups is considered, usually it targets the ecosystem of the startups. Appropriate ecosystem settled around startups is vital to form and support these firms. Therefore, it is very important that researchers and practitioners understand how to support such startup ecosystem. Nevertheless, there are not many literature researches that covers the topic of startup ecosystem in a systematic manner (Tripathi, Seppänen, Boominathan, Oivo, & Liukkunen, 2019).

In a biological sense of the word, an ecosystem encompasses a community of living beings whose members interact with one another and with nonliving elements in their environment. The ecosystem concept is also used in the business field, such as a business ecosystem forming a network of companies that collaborate to produce systems that hold value for customers (Moore, 1996). There is a support system linked to the startup ecosystem and can be divided into several elements:

a) Incubators. During the early stages of start-ups, the role of incubators is crucial. They conduct programs on a particular location to attract talent by providing mentorship to founders and entrepreneurs. During the incubation period of start-up's, incubators work together with other entities, such as mentors, in a co-working space with the objective of providing entrepreneurs with the opportunity to transform their ideas into a real growing start-up. Incubators can obtain support from both public (e.g. government funding) and private sectors.

b) Accelerators. After incubators provide support, if the founders have developed a start-up that has an inventive business idea and a business potential to disrupt the existing market, they require advanced support, that is, further funding and intensive mentorship to accelerate their business. This step is done by accelerators, who provide further mentorship through the accelerator programs in a working space.

c) Co-working space. A co-working space, also referred to as a studio or a laboratory, is a spot where interested entities, such as incubators, venture capitalists, and others, collaborate (sometimes in a single building) to support founders and entrepreneurs in developing start-ups and creating innovative projects.

d) Events. Events are created and organized to find co-founders, talented individuals, and investors, and it is also where start-ups can give their pitch to attract investors' attention.

e) Government. A key support factor is the government. The government's responsibility includes the creation of an environment that is conducive for the growth of start-ups and new businesses in a region, which can drive investors to invest in the region. For example, some governments collaborate with incubators by providing funds to incubator programs that can offer mentoring to start-ups.

f) Legal framework. When choosing the potential market region for its product, a start-up should consider the legal aspects in that region, which could be in the form of taxes, intellectual property rights, and the level of bureaucratic intervention.

g) Media. The general use of media including social media (e.g. Twitter, Instagram, and Facebook), can help in creating awareness and generating interest in a start-up's product or its events.

h) Mentor. During incubator and accelerator programs, the role of mentorship comes into play. The type of mentor involved is critical, especially for early-stage founders and start-up teams that have reached a later stage of development.

i) Availability of financing. One of the most important obstacles to start businesses is considered to be the availability of finance (Organization for Economic Co-operation and Development, 2000). Irrespectively of the existing various financial instruments for the firms, substantial number of SMEs that are not having adequate information or knowledge to fully take advantage of the obtainable instruments (European Commission, 2014).

Case Study 1
Startup Support: Access to Accelerator Services for IT companies

<u>Background</u>

The Creative Industries' sector in the Republic of Macedonia suffers from lack of skilled labor that results from the weak collaboration between the private sector, education and private training providers, as well as the underdeveloped practical work and career center models. Macedonian ICT companies face difficulties in accessing foreign markets and have negative effects from the subsidies to the foreign direct investors as part of the policy favoring foreign companies against domestic ones. The growth potential of the sector is also hindered by the lack of social services infrastructure, high entry barriers and low use of funding opportunities for start-ups.

Taking into consideration the main shortcoming in the sector, IME made a decision to design intervention that will address all above-mentioned issues through supporting initiatives and development of new creative business in Macedonia in cooperation models with 5 partners (Figure 19):

1) Start-up Zone, initiative which organized several hackathons on university level supported to establish a legal entity and increase their portfolio of services.

2) Bit Hub: university programme supported to establish pre-incubation service.

3) Seavus Incubator, a private sector incubator supported to launch its first pre-acceleration programme with international mentors.

4) SEEU Tech Park, university programme supported to conduct company valuation service.

5) Create Hub: business chamber programme conceptualization on creation of products and services for start-ups.

Intervention: Access to Accelerator Services for IT companies

| Idea Generation | Pre-incubation | Incubation and pre-acceleration | Company valuation | Creation of products/services |

| Start-up Zone | BIT HUB | Seavus Incubator | SEEU Tech Park | Create Hub |
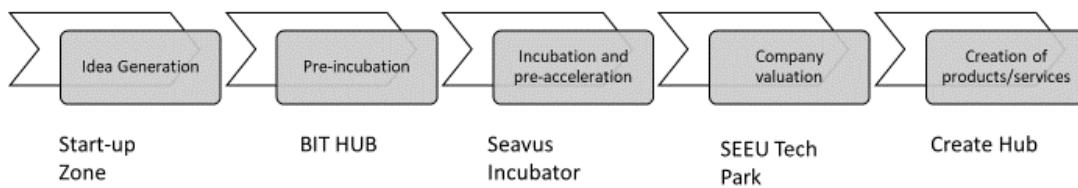
Figure 19: IME Intervention Access to Accelerator Services for IT Companies

Intervention Overview

The main specifics of the selected partners are as follows:

1) Startup Zone

The external support from IME programmme to Development Association Startup Zone in 2016 was in regards to the institutionalization and promotion of new set of services for support of infrastructure for youth start-ups.

This resulted in establishment of legal entity, followed by development and promotion of the new portfolio of services with impact to generate direct employments and increase earning income of the IT start-ups that will be engaged as users of their services (CodeFest, StartQube, CodeQubate.me).

2) BIT Hub

Cooperation agreement with the Faculty of Information and Communication Technologies, University "Ss. Kliment Ohridski "- Bitola (FIKT UKLO) was signed in 2015 (amended in 2016) for

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the establishment of an IT business accelerator BIT-Hub, with aim to provide the region with new support services for the IT companies and IT professionals through specific models of cooperation. In addition, Bit HUB was planned to offer co-working space and environment to motivate and foster development of creative ideas and appropriate infrastructure and support for the launch of new products/services.

3) Seavus Incubator

Cooperation agreement was signed in 2016 to collaborate on development of pre-acceleration program. The main goal was to support individuals or teams who have an idea to start a business in the field of information technology, contribute to the development of entrepreneurial spirit and development of new products/services that will be ready for access to domestic and international market.

Seavus Incubator developed and executed two pre acceleration programs with IME support (in 2016 and 2017).

4) SEEU Tech Park

IME Program signed a cooperation agreement with SEEU Tech Park in 2016 in order to support the development of service for IT companies' evaluation. Taking into consideration that there was no such service on the market before, it was expected to contribute to higher added value of the Tech Park. Currently, the companies are valued based just on their assets, while equity is not included in the final value. The lack of a decent method of evaluation leads to difficulties during negotiations for investment in or sale of the company, as well as presentation of the real value of the company in front of potential partners.

The logic of the intervention is based on the assumption that if the start-ups are supported and capacitated in development of new/improved products/services and in access to finance (investors) they will have increased capacity to access markets which will make them sustainable. On the other side, if there are capable institutions who will foster more dynamic grassroots entrepreneurial community and support the start-up community, that will to job creation and increase of the earning income of the start-ups.

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5) Create Hub

IME Program has signed a cooperation agreement with Economic Chamber of North-West Macedonia in 2016, in order to support the development of Create Hub as a unique model of a Hub, driven by the needs of the Chamber members businesses.

Currently, the curricula for the end users was developed and the first open call was planned to be launched in first quarter of 2018.

Research Methodology

Mix of several methods were used to assess the impact of the external support in this intervention supporting startup ecosystem players. First, desk research was applied and later on-line surveys and on-site in-depth qualitative interviews of the respondents, as well as methods of analysis, synthesis and comparison.

Desk research mainly focused on the review of relevant documents provided by IME Program and implementing partners Start-up Zone, Bit Hub, Seavus Incubator, SEEU Teck Park and Create Hub. The documentation comprises of cooperative agreements, project reports from the partners, performance monitoring plans, event agendas, scenarios and attendance lists, internal database used for companies, promotional materials, etc.

Field research has been implemented through interviews with all five startup ecosystem players and their beneficiaries.

Questionnaires for in-depth interviews included questions for understanding the changes which occurred as a result from the interventions at the five partners directly involved in the program, as well as effects on the end-beneficiaries, tackled through the partners.

Results and Discussion

The assessment of the institutional growth of each of the supported entities and their end-beneficiaries was done in purpose to get insight into their progress after their inclusion in IME's intervention(s) and, at what extent, the impact has been driven by or resulted from IME external support.

The indicators for measurement of the impact of IME Programme were selected in purpose of getting information about the main economic changes of the partners/end-beneficiaries, i.e. changes with regards to growth of the entities, financial strength (incomes, etc), number of employed staff, list of services provided, number of customers using their services etc.

The final cumulative results derived from individual assessments of each startup ecosystem player are presented in Figure 20.

Cumulative results from Case Study: Access to Accelerator Services for IT Companies

Indicator	Start-up Zone	BIT Hub	Seavus Incubator	SEEU Tech Park	Create Hub	TOTAL
1. # net jobs created	61	5	28	2	Not operational	96
2.a. Volume of increased income in CHF of beneficiaries	373,296	21,210	161,196	8,484	Not operational	564,186
2.b. Net additional income increase	n/a	n/a	n/a	n/a	Not operational	
3. Volume of additional sales for the startups	n/a	No data	No data	No/data	Not operational	

Figure 20: Cumulative Results per Indicator on Startup Support Case Study

Starting from idea generation at Start-up Zone (33 start-up teams created in 2016, and in 27 start-up teams 2017 created in), followed by pre-incubation at university level (Bit hub: 3 teams created), up to incubation and pre-acceleration support and access to finance at Seavus Incubator (21 teams enrolled), and then company valuation with SEEU TECH PARK programme (2 companies valuated), IME has done tremendous move forward in the startups' ecosystem, thus directly affecting over 300 entrepreneurs in path for their business development and scaling up.

The gathered and processed data from five partners have indicated that the most common positive effect could be located into the area of job creation and innovation of new

products/services, while financial effects are subject of limited time period of implementation of the interventions, i.e. in most of the partners they are not measured.

Conclusion

- Growth consequent path in start-up support. When it comes to support of start-ups, there are certain specificities that are evident based on the analysis of the data in this case study as well. Namely, it is obvious that growth is measured when it comes to jobs created, but when it comes to sales, there was either lack of data or the sales did not happen simply at the moment of the measurement. Moreover, the total number of jobs created within the supported programmes was higher in the beginning than when the measurement took place, 2 years after. This indication can be explained as lack of sustainability, or rate of survival in start-ups which rather low and most of the start-up ideas fail. The main argument to continue with the support to the risky start-ups is that they bring innovation, talented IT professionals can be found as main resource in such startup support programmes and not always this can be put into measurable results. Finally, everyone is expecting the new gazelle to appear and this company will fulfil the gap for all previously invested funds in failed ideas bridging the invested time and resources of all the other start-ups.
- The structure of the support to start-ups is important. The new service that was launched by SEEU Tech Park, developed methodology for valuation of the companies' real value of start-ups. Although this new service is the first of its type in the region and was developed taking into consideration the real need for it and request from various entities, as companies and start-ups really need such a valuation, especially when they enter negotiations for investments or sale of the company, the service itself did not bring much of value in the initial stage. It was concluded that the valuation service needs to be paired with additional networking service with potential investors where the output of the service will give actual tangible value.
- Indirect effect that is very difficult to be measured. Apart of the analysed indicators, it could be argued that, in overall, by building partnerships and supporting selected

partners' initiatives to bring their new innovative products and services on the market, IME Programme has done significant step forward for the start-ups' ecosystem. Besides capacity building of the partners and start-ups, the IME Programme has conducted several extensive PR campaigns, particularly resulting in awareness rising of young individuals and wider public about the innovation processes.

Further collaboration among actors is recommended in order to scale up the results, including support and facilitation to other initiatives and partners in the country and globally, in purpose of proper and timely response to the trends relevant for faster development of the Macedonian ecosystem for startups.

4.1.2. Case Study: External Business Assistance to Existing SMEs Support

Introduction

When it comes to external support to existing SMEs, it aims at improving the survival or growth prospects of existing SMEs. According to the resource-based theory, there are competitive benefits that SMEs can gain if seeking and taking external business assistance. Bennet and Robson (2003) have explained the argument that external sources of advice increase the strategic knowledge that leads towards competitive benefits (new or improved products or services) and increasing the business potential (new or expanded markets). External support to SME owner/managers can take different various forms and is delivered by a variety of providers, operating within different market environments and interacting with clients in various ways (Ramsden & Bennett, 2005).

Therefore, there are several divisions that can be found between the prevailing types of external support to existing SMEs and some of them will be observed further:

Informal vs. Formal Assistance

Informal assistance is the advice that is delivered for free in a casual setting usually by family, friends and business associates, so called external advice network (Chacar, 2009). Formal assistance is paid advice provided by private sector consultants and professional

organizations. It can be subsidized advice through government sponsored business support agencies.

Generic codified Knowledge vs. Tacit Knowledge

Generic codified knowledge is the information acquired through external advice on government regulations and corporate taxation, while tacit knowledge is highly context dependent such as strategic advice relating to alternative paths of development (Chrisman & McMullan, 2004).

Transactional Assistance vs. Strategic Advice

Transactional assistance is the information delivered to support the day-to-day operation of the business. On the other hand, transformational support is the strategic advice provided to assist achieve a gradual change in the growth and development of the business (Michael L. McDonald & Westphal, 2003).

Operational vs. Strategic Services

Operational services can be regarded as 'objective' as they are clear and independent of the relationship between the client and service provider at one end. On the other hand, strategic services are 'subjective' and dependent on the relationship between client and service provider at the other (Hjalmarsson & Johansson, 2003). This explanation advocates that external business support and the acquired knowledge is embedded in this relationship between the client and the service provider and the context in which this service is 'produced'.

Initially, generic and codified knowledge might be exchanged between a business owner/manager and the adviser but this may evolve into a more symmetric relationship involving tacit and contextualized knowledge as the level of trust and confidence increases (Mole, North, & Baldock, 2017)

This is why, there are arguments that the value of outsider assistance does not come simply or mainly from the knowledge that an adviser transfers to business owner/manager. The value of outsider assistance mainly derives from the opportunity for knowledge generation in the context of a specific decision-making for the owner/manager. Thus, it is argued that a

contextual learning process, directed and facilitated by an experienced outsider, may lead to the creation of a combination of tacit and explicit knowledge (Chrisman & McMullan, 2004).

Case study 2
External Business Assistance to Existing SMEs Support: Product Development in Ohrid in Preparation for Adventure Travel

<u>Background</u>

Ohrid is Macedonian most visited (summer) destination by domestic and certainly the biggest share of the total visit of international tourists in Macedonia. It is the (UNESCO protected) lakeside, historical sites and the value of cultural heritage that attract people to the destination. Although there was evidence of an increase in tourist arrivals since 2010 for the Southwest planning region, similar to the developments at national level, in 2014 the number of arrivals of domestic visitors were slightly declining over the last 3 years. Domestic tourist arrivals dropped from 170,127 tourists in 2009 to 130,020 in 2013. International visits for the moment were subsidized and did not present clear picture of the quality of the offer. In 2014, the destination suffered serious concentration of tourism offer during 2 months in the summer period (July-August) for which, there was no constant effort to perform better in the rest of the year. Domestic tourists coming for leisure summer tourism were mostly present in the peak summer season that lasts two months from July to August, with a documented off-season in May-June and September-October. On the other hand, peak season was not so sharply determined by foreign tourists and it stretched from May until October with constant arrival numbers. The most visited sites were Ohrid Lake (visitors come only for leisure and swimming in the lake rather than any other activitie). Due to several incidents with transport and rescue services, the Lake was overregulated and active tourism was not being further developed. As well, there was concentrated program of 40 days (July and August) of summer festival but nothing similar in the rest of the year.

International tourists showed also interest in other activities apart from Lake tourism and several tours with foreign tour operators were developed for outdoor activities in Galichica National Park, rural tourism and sightseeing. The local stakeholders did not have access to Adventure Travel market and rarely any of them were prepared to offer seriously developed offer involving high standards of operation along the entire value chain (from adventure guide, to transport, accommodation and knowledge). An opportunity approached the destination – the upcoming Adventure Next Balkans – regional conference of the Adventure Travel Trade Association (ATTA) and Agency for promotion of tourism to be hosted in Ohrid. The Conference planned to host 300 tour operators from the world best performing agents.

IME Programme assisted the destination with establishing Destination Management working group, consisted of the local association of private sector and public institutions such as the municipality, port authority and the National Park. They were capacitated on the Destination Management Methodology developed by St. Gallen University, Switzerland (Beritelli, Bieger, & Laesser, 2014) in order to understand and prioritize demand driven product development and focus on profitable initiatives for growth of the sector and the destination.

Regarding the Adventure Next Balkan's conference IME Programme approaches this challenge with intention to prepare the destination with 20 Itineraries in Ohrid and close region for Adventure Travel. As well security plan and standard operating procedures for safety preventing measures will be developed in Ohrid and surrounding destinations for the 20 itineraries. Additionally, 50 private sector businesses were educated, 30 adventure travel guides in order to be able to service global 300 tour operators in May 2016.

The act of organizing an international regional conference according to highest travel standards in the region also required a serious approach of compactization of the event management industry in tourism.

Research Methodology

The data collection was conducted by IME Tourism and Hospitality sector facilitators and external consultant engaged by IME programme. The consultant received extensive set of

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documents divided by intervention to be reviewed. In addition, some of the data were collected from the website of the State Statistical Office, while other raw data were collected from IME partners in the interventions.

The assessment plan was developed by IME and clearly outlined what data should be collected in order to inform the selected indicators and provide information regarding the achievement to date in the components subject to this assignment.

Based on the desk review of the documents sets of questions were developed to obtain quantitative and qualitative data. The request for gathering quantitative data was sent to partners in the interventions (hotels, travel agencies) and other relevant institutions such as the Agency for Promotion and Support of Tourism. The set of questions to guide the interviews conducted with partners' representatives and collect qualitative input were also developed.

For the purposes of analysing the raw data, Excel documents were developed for the different interventions and they will be available for IME programme in future.

An integral part of the data collection is the measurement of the level of satisfaction that beneficiaries demonstrate on different aspects of the IME programme interventions. For the purposes of this report, the following scale of measuring the satisfaction is used: not at all satisfied, partly satisfied, satisfied, more than satisfied and very satisfied.

The data collection was conducted through face to face in-depth interviews and e-mail correspondence.

Results and Discussion

Since the initial support in the development of the adventure tourism in 2016 with the capacitation of travel agencies on the requirements of the international adventure market, the introduction of safety measures, improvement of itineraries and the increased marketing capacity of agencies, the share of adventure tourism on the service providers level has increased for 10-15%. the ATTA Next Balkans conference, additional support provided access to 16 markets (Canada, USA, Norway, UK, Estonia, Switzerland, Germany, Poland, France, Island, Hong Kong, Israel, Sweden, Italy, Kosovo and Albania) and enabled 8 travel agencies and 7 stakeholders (hotels) from Macedonia, with Baltic and Scandinavian markets being accessed for

the first time in adventure travel in this scale. To date this resulted in 17 organized adventure tours with 2,394 overnights, resulting in CHF 335,158 volume of sale, benefitting over 125 local businesses. Two additional fam-trips in 2017 were organised as a last step before concluding a deal for tours that should be organised in 2018. The increased number of visitors also increased the share of incoming tourism in the overall business of the agencies, making incoming adventure tourism dominant in their business models. This provides extended stability of their businesses due to the long-term nature of the adventure travel contracts and will contribute to the future growth of the Tourism sector. The integrated results of the intervention are presented in Figure 21.

Results from the Case Study: Product Development in Ohrid in Preparation for Adventure Travel

Indicator	Results
1. # net jobs created	15
2.a. Volume of increased income in CHF of beneficiaries	26,550 CHF
2.b. Net additional income increase	88,790 CHF
3. Volume of additional sales for the startups	355,158 CHF

Figure 21: Results from the Case Study: Product Development in Ohrid in Preparation for Adventure Travel

Conclusion

Indirect impact. Although the direct impact of the intervention was 15 net jobs creates, it should be taken into consideration that tourism and travel industry has indirect contribution that according to World Travel & Tourism Council (2015) is the impact that direct contribution has on travel and tourism investment spending, government collective travel and tourism spending and the impact of purchases from suppliers (for e.g. purchases of food and cleaning

services by hotels, of fuel and catering services by airlines, and IT services by travel agents). Therefore, tourism and travel directly supported 9,000 jobs according to World Trade and Tourism Council and indirectly 33,000. This means that for 1 direct job created, 3.7 indirect jobs have been supported. In other words, the 15 direct jobs created from the case study, 40.5 jobs (15 x 3.7 – 15).

Multiplying effect on impact. External support to SMEs growth targeting directly SMEs will bring growth on firm level and if enough effort is put it can be measurable. Nevertheless, the direct impact has often multiplying effect on other enablers for the business to be conducted, such as municipality and other public bodies that also contribute into the product development as a pre-requisite before attracting new clients that will support the growth further. In this intervention, adventure travel asks for additional policy on safety measures (safety SOS number and rescue teams necessary as a support to adventure tourism businesses to grow.

Systemic changes. The introduction of adventure tourism in Ohrid, has brought a systemic change and inclination of the entire sector toward incoming adventure tourism. This led to a response from the public sector by including additional number of adventure fairs in the annual programme of Agency for Promotion and Support of Tourism, and introduction of sustainable tourism practices from business sector which are complementary to adventure tourism through the promotion of the Global Sustainable Tourism Council standards in Macedonia.

4.1.3. Case Study: Innovations

SMEs are significant and vital source of innovation. There were conventional thoughts that innovation is the exclusivity of large companies. Nevertheless, Acs and Audretsch challenged this that SMEs have the capacity for radical, new - to - the - world innovation (2003). However, their innovation models and activities differ from those of large firms. Although SMEs are usually more flexible, less formalized, and quicker to make decisions, their financial resources for internal R&D are limited. They can lack the resources and capabilities in manufacturing, distribution, marketing and extended R&D funding, which are crucial for converting inventions into products or processes (Lee, Park, Yoon, & Park, 2010). As a result of the size of SMEs and limited resource, they cannot cover all the innovation activities essential to successfully realize

an innovation. Therefore, strategic and multi-actor alliances are critical drivers of innovation and help them access critical resources, extend their technological competencies, and build legitimacy and reputation (Baum, Calabrese, & Silverman, 2000).

As opportunities of SMEs might be restricted when building ties to large companies, innovative SMEs are more likely to make external networks with other SMEs, universities or private research entities.

As not all sources are of equal value to innovating SMEs, therefore there are different sourcing strategies among SMEs boost innovation performance.

External knowledge sourcing may span various kinds of external innovation partners, who relate to different knowledge flows and can provide access to widely differing knowledge domains such as science, technology, **design**, societal trends, customer insights and product - market trends (Hippel, 1988).

There are different sources of innovations that SMEs can access (Brunswicker & Vanhaverbeke, 2014):

Interactions with Direct and Indirect Customers

SMEs can find good source along the traditional value chain. They might search downstream to access "sticky information" on the customer for instance: customer needs, customer context, and customer experience. The contribution of indirect customers/users (e.g., drivers rather than manufacturers of car parts) may provide new insights into new business opportunities beyond existing products and markets ((Enkel, Kausch, & Gassmann, 2005).

Interactions with Suppliers

SMEs may also explore vertically along the traditional value chain to profit from suppliers' expertise (usually technological) with a view to involving them in their new product development. Suppliers can provide ideas for enhancing technological solutions or process innovations.

Interactions with Universities and Research Organizations

For SMEs, both universities and research organizations are a relevant source for inventive and preindustrial knowledge as science may significantly alter the search for inventions (Fleming & Sorensen, 2003). However, there are a range of barriers to external knowledge sourcing in university–industry relationships, such as, for example, cultural differences, long-term scientific research versus exploitation-oriented research of industrial organizations and incompatible rewards systems—with universities focusing on publishing and firms protecting results.

Interaction with Experts on Intellectual Property (IP) Rights

To access technological knowledge, SMEs may rely on intermediate service providers. Experts on IP rights can provide crucial information services that help to bridge the gap between a technological opportunity and its successful commercialization. They may support a search for technological trends and ideas outside the firm's boundary services or ideas on how to appropriate value from a firm's knowledge assets. However, the involvement of IPR experts is costly and also requires SMEs to deal with complex regulations and drawn out patent protection procedures. Thus, it may make it more difficult to quickly move an idea to the commercialization stage.

Interaction with Network Partners

Relationships with network partners are usually long - term and aim to create joint value creation rather than efficient transactions. They build upon trust and are characterized by mutual understanding among partners. At the same time, network partners offer SMEs access to complementary innovation assets and also operational complementary assets such as manufacturing, marketing, and access channels. Due to the synergetic nature of interactions, network relationships make it easier to identify, access, and absorb external ideas. Network partners and other sources just discussed are not mutually exclusive but may coexist. Considering the driving role of network ties in innovation for SMEs, network partners can be an important source for new ideas if SMEs use them purposively.

Case study 3

Innovations: Improved Collaboration Between Designers and Food Processing Industry

Background

IME Programme worked in Creative Industries covering two sub-sectors: Software and ICT services and Product Design. The main constraints Product Design sector faced are: (1) Missing access to market for designers; (2) Limited use of designers in the product development process; (3) Limited access to inputs, design services and post product development activities (production, market placement, marketing strategies); (4) Weak links between the designers and producers (food processing, light metal manufacturing and furniture industry).

Hence, value chain interventions aimed at higher level of engagement of domestic designers in product development includes:

- Improving cooperation and linkages between market actors (processing and manufacturing companies, marketing/design agencies/freelancers) and
- Strengthening their position through introduction of new services, promotion of design, increasing managerial capacities and implementation of modern business practices at designers' level (post-design activities, involvement in the product development process, pricing).

Intervention Overview

The fruit and vegetable processing industry plays a very important role within the Macedonian agribusiness sector. The industry is very export oriented, continuously improves its performance in terms of increase in production and export value over the last decade and is very labor demanding.

The general characteristic of this industry is low level of utilization of installed production capacity. According to MAP (Macedonian Association of Processors), the average utilization in 2014 amounted to approximately 45%. The overall installed capacity for processing of fruits and vegetables is around 120.000 t. of final output. The processing industry continuously improves

its exporting performances, reaching a record high volume in 2015 of 48.8 thousand tons with the total value of 55.4 Million Euros.

Yet, the Macedonian processed products have relatively low export value (around 1.14 CHF per 1kg.). This categorizes the processed goods as "commodity" rather than products with added value. Also, producing and selling of branded products is lower than producing under private labels. As a result, the industry is building its export strategy primarily on competitive prices, rather than supply of value-added products. In 2016, IME completed a Market demand research and analysis on product design needs targeting food-processed food industry, where the main findings of the study were the following:

- The companies' product portfolio varies significantly and depends primarily on the type of processing activity that they perform. Most of the companies have more than 10 products in their product portfolio.

- Regarding new product development and rebranding or refreshing brands, the analysis showed some balance. Most companies introduce 1-3 products per year, while a considerable portion of the sample were quite conservative and did not introduce new or re-designed products in 2014 and 2015.

- Only two companies (6.7%) had product designers as full-time employees in their companies (one per company) in 2015 while the remaining 28 (93.3%) had no employed designers. Half of the sample firms – 15 (50%) did not cooperate with external design related service providers in both 2014 and 2015. When asked about product design related activities and external support needs for 2016 and 2017, majority of the companies – 23 (76.7%) responded that they plan design related activities and would need external support.

Additionally, the Macedonian fruits and vegetables processing industry exports low values in relative terms (around 1.14 CHF per 1kg.). This categorizes the processed goods as "commodity" rather than products with added value. Production and sales of branded products is only a fraction of private label production. As a result, the industry has been building its export strategy primarily on competitive prices, rather than supply of value-added products.

However, in the past couple of years this situation has been changing somewhat. Companies are realizing that an own brand allows for a higher value added and higher profits.

These results of this survey were preparatory work for the intervention that followed; facilitating cooperation between the designers and processors interested in design management interventions. The intervention was focused on developing new sales channels and capacities of the designers facilitating access to the food processing industry.

The output of this intervention were four companies which worked on developing new designs for 35 products, aimed to be 112commercialized and placed on domestic and international markets. At the same time the product design management function was tested and eventually led to increased exports of the new/improved products. Improved Product design played an important role in the success of the food processing companies to export their products on the international market as new branded products. It is still difficult to understand to what extent design contributes to higher sales. At the same time, it is very difficult to measure the results achieved by the companies who have grown based on the improved design management function. IME Programme applied an attribution strategy in measuring the impact and in the above-mentioned cases it is difficult to define the attribution ratio. For these purposes, IME has previously carried out a survey assessing the influence of design as a factor in the decision process that consumers make while purchasing processed food products. According to this survey done on a sample of 1340 respondents, over half (53% exactly) stated that design influences their decision to buy a certain product or not with a ratio of more than 50%. This means that the majority of consumers base half of their purchasing decision for a packaged food product on its design. This case study tried and revalidated this influence that design has in supporting the processing companies' growth.

Research Methods

The methodology used for the preparation of this case study was a mix on-line research on design management and design value, data collection from analysis of previously prepared reports by partners of the project on the topic, and on site and telecom in-depth qualitative interviews of the participants in the project. The interviews were done following a predefined

flow of questions, using different sets for different respondents. The Questionnaires included some selected questions aimed at understanding the "Before" scenario of the impact of the interventions. The interview also included questions capturing the indirect benefits the companies had from their participation in the project. Some proxy questions were used to get the answers as accurate as possible. The case study was developed to add some detail on the intervention regarding reporting changes. The Case Study gives an overview of the main achievements aggregated per indicators and by pairs of companies (design – processor matches). Attributable and systemic change is clearly presented and reflected in the report. The sample frame included the following respondents segregated by categories (Figure 22):

Type of the respondent	Number of entities	Selection process	Sources of information/ Research tools proposed
Processing companies	8	All involved in the intervention	In-depth interviews, desk research
Designers	8	All involved in the intervention	In-depth interviews, desk research
Business Support Organization (Macedonian Association of Processors)	1	IME partner in the intervention	In-depth interview

Figure 22: Data Sources in the Case Study: Improved Collaboration Between Designers and Food Processing Industry

Results

Qualitative results. How does design factor into this? As one company reported, "I received an order just by sending my potential customer a description of the product and a picture of the label". All the interviewed companies were very aware that design is an integral part of the brand building exercise. One of the companies competed with a branded product from start are and will continue to constantly invest in design. Others were looking to get more value from their sales by refreshing their packaging and diversification to new products, while others yet are moving in a totally new for them direction with building a brand from scratch.

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All have noted that taking the cycle of processing, starting with heavy investments in raw material procurement, production and packaging, moving to distribution only to be paid after 9-12 months, makes investment in design sometimes is a taxing necessity. This is why everyone without an exception confirmed that the support was very welcome. Some even mentioned that this support motivated them to undertake more elaborate projects than originally planned. As for the "designers", a "soft" result from the support is that all of them continued collaboration with their clients post project intervention. Two are designers, three are micro enterprises and three are small companies. For some of them, this project has meant a "discontinuous leap", an opportunity to move in a short period of time into a whole different level of operation, adding new services and capacities to be offered to future clients. For others well positioned marketing agency and the individual designers, this project was a doorway to new business, even new markets out of the country.

Quantitively results. Measurable, aggregative results in regards to jobs, income and sales are presented in Figure 23.

Results from the Case Study: Improved Collaboration Between Designers and Food Processing Industry

Indicator	Processors	Designers	Total
1. # net jobs created	0	20	20
2.a. Volume of increased income in CHF of beneficiaries	0	26,579 CHF	26,579 CHF
2.b. Net additional income increase attributable to the support	203,125 CHF	0	203,125 CHF
3.a. Volume of sales 2017	21,417,000 CHF	n/a	21,417,000 CHF
3.b. Volume of additional sales attributable to the support	1,138,110 CHF	n/a	1,138,110 CHF

Figure 23: Results from the Case Study: Improved Collaboration between Designers and Food Processing Industry

<u>Conclusion</u>

Industry trend. It is very important to undertake deep analysis and understanding on the trend of development of the industry before designing any type of external support, especially innovation. The potential for growing of the food processing industry was evident due to high potential to add value on the current products. In addition, the unoptimized capacity of the processing facilities opens further area for adding value once market is expanded. There might be cases where there would be a decision to start external support in industry in decline and with the purpose to slow down or interrupt the negative trend. In such cases, one should be aware that growth terminology would be better to be replaced with sustained jobs and sustained sales for the SMEs. This does not mean that the relevance of such industries should not be of focus of policy makers. On the contrary, governmental external support might be crucial for the certain geographical outreach where it happens, just the time dimension plays high importance in such case. It should be a short-term external support that stabilizes the SMEs before considering long-term possibilities.

4.1.4. Case Study: Enabling Environment Support

Enabling Environment Support for all firms (targeting mostly for SMEs to benefit) (e.g. information, skills, access to finance).

There has been an important increase in attention of researches when it comes to the topic that examines the role of government in the development of SMEs in developing countries (Atherton & Smallbone, 2013). SMEs are often enabled and/or constrained by wider economic, social, political, and institutional surrounding that are not always in control of the SMEs. The influence to these environments and its authority is directly linked to SME development (Smallbone & Welter, 2001). Despite the focus of government on direct support policies and measures, there are other conditions that government create and can be a burden or enabler for the SME development. Several ways in which the government can influence SME development:

- Macroeconomic environment. This is most evident in states where reforms were not undertaken smoothly and there is unstable macroeconomic environment that influences the behaviour of SMEs as well.

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- Government legislation. Same legislation can have different effect and influence on firms with different sizes. In this regard, there might be two types of costs linked to legislations: 1) Direct costs which fall on firms and 2) Compliance costs needed to understand the legal requirement from the legislation.
- Tax burden. This is a role of government if not practised correctly can encourage many entrepreneurs to move into informal sector i.e. grey economy.
- Direct support policies and programmes. The reason for undertaking different types of support policies is the contribution of SMEs in the process of economic development.
- Economic institutions. Influence on developing economic institutions that are part of the market economic, for instance: business support infrastructure, banks and other financial intermediaries. Government has a particular role into the type of support infrastructure that develops. There are different types of support infrastructure in different countries.
- Value placed on enterprise and entrepreneurship within society. In other words, this is connected to the encouragement of people to start and develop their own businesses and the behaviour of politicians and government officials in their dealings with entrepreneurs.

Case study 4 (Enabling Environment): Mavrovo Destination Management

<u>Background</u>

Mavrovo is a destination (national park) with high potential for tourism development, currently present with winter peak season, but also in introduction and upgrade of products in the summer season. Existent operating Ski center, Lake Mavrovo, vast municipal territory being under the National park, existing cultural and heritage sites and events, existing hotels and hospitality capacities, all provide great basis for tourism development. Main constrain for tourism have been no experience and lack of coordination between tourism sector stakeholders, in addition to different seasonal market's needs and lack of managerial and local tourism worker skills, and lack of managerial and tourism workers skills. The opportunity to synchronize tourism efforts of each stakeholder and individual sector maker has been used with approaching different types of tourism with better resource management.

The main constraint in Mavrovo is the lack of collaboration among local stakeholders, which has resulted in inconsistent and disintegrated tourism offer of the destination. The public and private sector do not meet regularly and do not have regular update on mutual basis on main constrains in tourism. This has resulted in no tourism product development, which would change the situation and improve the required additional industry services. The underlining cause for this is that the sector is not organized and it functions as isolated island, with disaggregated offers, which leads to weakness for powerful promotion. There is existing overlapping of responsibilities between the National Park and the Municipality, both in geographical and operational aspects. Most of the administrative territory of the municipality is under the management of the National Park Mavrovo, thus often complicating procedures due to power struggle of authority, or not cleared responsibilities.

Intervention Overview

IME supported Destination Management process by a newly established Working Group that prioritized in a dialogue, Strategic Visitor Flows, development of demand driven facilities. The dialogue was initiated to assist the development and promotion of joint winter offer. The costs of the joint promotion of the upcoming winter season was facilitated to be covered by different source: by the municipality (public sector), by the Ski Center (private sector) and by IME, Swiss Development Cooperation (external support).

Research Methods

First, extensive set of documents was reviewd. In addition, some of the data were collected from the website of the State Statistical Office, while other raw data were collected from IME partners in the interventions.

Based on the desk review of the documents sets of questions were developed to obtain quantitative and qualitative data. The request for gathering quantitative data was sent to partners in the interventions (hotels, travel agencies) and other relevant institutions such as the Agency for Promotion and Support of Tourism. The set of questions to guide the interviews conducted with partners' representatives and collect qualitative input

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were also developed. For the purposes of analysing the raw data, Excel documents were developed for the different interventions and they will be available for IME programme in future.

An integral part of the data collection is the measurement of the level of satisfaction that beneficiaries demonstrate on different aspects of the IME programme interventions. For the purposes of this report, the following scale of measuring the satisfaction is used: not at all satisfied, partly satisfied, satisfied, more than satisfied and very satisfied.

The data collection was conducted through face to face in-depth interviews and e-mail correspondence. The structure of the report is based according to the interventions implemented.

Sampling. The interventions included both direct and indirect beneficiaries. Nevertheless, the direct results of the interventions were measured with the involved beneficiaries, including volume of sale, net income, created new jobs. The beneficiaries targeted are presented in Figure 24:

Targeted beneficiaries to measure impact of the intervention

Type of respondent	Number	Selection rational
Hotels	5	Accommodation facilities included in the interventions
Ski Centre	1	Directly involved through organizing the calendar of events
Travel Agencies	2	Direct collaboration with the hotels
National Park	1	Local stakeholder that should gather all relevant actors in tourism development in Mavrovo
Restaurants	8	Directly involved and benefited from the campaign to attract foreign tourists

Figure 24: Targeted Beneficiaries in the Case Study on Enabling Environment

Market Demand Survey in Mavrovo has been executed for three years now and it contributes to understanding the changes that are happening in the destination in terms of structure of the

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tourists, their needs and requirements. Its findings also provide ideas for necessary changes that should be undertaken in different areas, but with a common aim – to satisfy the tourists.

Results

The structure of the tourists according to their origin (domestic/foreign) has changed drastically. While in the winter season 2014/15 there were only 7% foreign tourists included in the research, in 2016/17 winter season, foreign tourists represent 31%.

Mavrovo as winter destination is increasingly attractive for a group traveling together, which this year according to the survey represents 66% compared to family with friends.

The length of stay in Mavrovo is more or less unchanged over the years. In most cases, the tourists are either in Mavrovo just for the day, or they stay for two nights (weekend stay). Hotel accommodation is first option for majority of tourists, since the private accommodation, especially the one for renting is still in the early stages of presenting organized offer for potential tourists. The daily expenditure is similar over the years. Tourists that are only for a day spent less than 3.000 MKD, while tourists staying in hotels in majority spent more than 3.000 MKD. Ski pass is constantly for three years the highest expense for the tourists, despite the fact that it has been offered as part of a combined offer (accommodation, ski equipment) for lower price.

Tourists were well informed about the events organized in Mavrovo. In the latest survey, 67% were informed about the event, which is increase by 14% compared to the first year of preparing organized calendar. Last season, tourists were not informed about the events, but IME did not provide any support at that time.

Majority of tourists are returning visitors to Mavrovo, while the first comers over the years represent 5-15% of the total number of tourists that visit Mavrovo. Interestingly, for more than half of returning tourists over the years nothing has been changed in Mavrovo, which indicates that more visible changes or promotion of changes should be tackled in future regardless of whether they are large or small scale.

Infrastructure and entertainment are constantly reviewed as very negative characteristics of Mavrovo as opposed to accommodation for example. While the infrastructure is responsibility

of the local government, the entertainment is depending solely on the service providers and should be improved through synchronized action of collaboration among different service providers.

The business cooperation between the hotels in Mavrovo and travel agencies from the region has been examined.

Also, the influence of the promotional campaign in Kosovo and Albania to attract more tourists from these two countries is measured. For the promotional purposes, 26 one pagers were developed for the hotels, villas, restaurants and other stakeholders in order to promote the diverse offer in Mavrovo.

The integral impact from the external support in this case study is presented in Figure 25:

Results from the Case Study: Mavrovo Destination Management

Indicator	Results
1. # net jobs created	10
2.a. Volume of increased income in CHF of beneficiaries	18,440 CHF
2.b. Net additional income increase	68,617 CHF
3. Volume of additional sales for the startups	164,679 CHF

Figure 25: Results from the Case Study: Mavrovo Destination Management

Conclusion

In order to measure the impact of certain external support especially when it comes to creating favorable enabling environment for SMEs to grow, there is a need to take integral approach. To measure impact merely of the direct beneficiaries from a certain support measure is too limiting and does not reflect the reality. Tourism as a sector especially demonstrates this, as

there are direct jobs that are created in the industry, yet there are indirect jobs that are influenced by support measures in the sector.

As there are many public services such as waste management and rescue services for safety reasons, tourism is demonstrated as one of the sectors that is highly sensitive to enabling environment created primarily by the local self-government but not excluding central government policies as well. Tourism was chosen deliberately to present the importance of enabling environment on the growth of SMEs.

4.1.5. Case Study: Reduction of the Burdens, Regulation, and Compliance Costs for SMEs

<u>Introduction</u>

Compulsory regulation and burden on businesses can have substantial consequences not only for business costs but also for the overall competitiveness and growth of the economy (Ntaliani & Costopoulou, 2012). There are researches that prove that there is more intensive administrative burden on SMEs than large ones. If one wants to quantify this, large enterprises spend €1 per employee to comply with a regulatory duty, a medium-sized enterprise might have to spend around €4 and a small enterprise up to €10 (European Commission, 2007). There is no standardized definition on administrative burden

In economic literature, there is no standard definition of administrative burdens (Giuseppe Nicoletti, 2000) According to the European Commission, administrative burdens are the part of administrative costs, which are not incurred irrespective of the legislative obligation and do not regard normal operating activity for business. Usually administrative burdens are addressed as the cost compulsory for businesses, when complying with information obligations stopping from government regulation. According to the agency theory, administrative burdens are envisaged to be part of the bonding costs. Bonding costs consist mainly of compliance costs, which also include the costs of informing the government specifically administrative costs (Alemano, Butter, Nijsen, & Torriti, 2013). Therefore, there is a need for measuring

systematically the administrative costs as a starting point for reducing red tape and safeguarding the prosperity of businesses.

Administrative simplification and burden reduction for businesses have been a political priority in EU and in most OECD[7] countries. There are various appropriate practical applications and efforts on reducing administrative burdens that can be classified in several categories (Ntaliani & Costopoulou, 2012):

- Regulation. Practices that affect the regulation(s) imposing information obligations and can be in a form of the following sub-categories: 1) Removal/reduction/merging/improvement/simplification of regulations and information obligations; 2) Use of alternatives to regulation (e.g. voluntary code of practice); 3) Simplification of regulation terminology; 4) Use of standard definitions in legislation and 5) Clarification between compulsory and voluntary requirements.

- Population. Practices that affect the number of stakeholders that regulation concerns and can be in a form of the following sub-categories: 1) Focus on/exempt from regulation businesses of specific size or sector and 2) Change of thresholds of regulation.

- Process. Practices that affect the procedure for complying with regulation and can be in a form of the following sub-categories: 1) Removal/reduction of forms; 2) Size reduction of forms; 3) Clarification of language used in forms; 4) Design improvement of forms; 5) Populating of forms before the deadline of compliance time; 6) Availability of regulations, process to be followed, and forms on the Internet and capability of electronic reporting; 7) Application of interactive/"intelligent" forms requesting only relevant data; 8) Reengineering of public processes related to compliance; 9) Reallocation of responsibilities and activities between government departments/administration levels.

- Time: Refers to practices that affect the time required to comply with the regulation and can be in a form of the following sub-categories: 1) Increase of data sharing among public agencies to retrieve information/combination and collaboration of different information channels to retrieve information; 2) Development of one-stop-shop systems

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[7] Organization for Economic Cooperation and Development

with electronic services for serving businesses; 3) Provision of public services through different communication means.

- Frequency. Practices that affect the frequency of administrative activities performed to comply with information obligations and can be in a form of the following sub-categories: 1) Reduction of reporting frequency/increase intervals between information requests/provide requests on exceptional and not on regular basis; 2) Reduction of inspections on law-abiding businesses (risk-based inspection).

- Support. Practices that affect the overall attitude of businesses toward complying with information obligations such as: 1) Provision of timely information to businesses before new legal and regulatory measures come into effect; 2) Provision of education/guidance/assistance/explanatory material to businesses for using (electronic) tools (e.g., for record keeping) and familiarizing with/"decoding" regulation without hiring external staff/specialists (e.g., accountant).

The absence of information on horizontal (information among farmers) and vertical (information among farmers and other relevant stake holders in the network) can pose a major barrier and obstacle for developing effective distribution channels for organic products (Atanasoaie, 2011). Therefore, the network aspect of the supply-chain can be seen as one important approach in identifying factors influencing the information for organic production, as well as the actors that contribute in the diffusion of this information (Medicamento & Gennaro, 2006). Formal and informal social relations may also serve as valuable explanatory variables in organizational research, since each individual is enfolded to a specific network of others (alters), and the structure of this network is expected to expose certain patterns of behavior and attitudes (De Lange et al., 2004).

Case Study 5

Reducing the burdens, regulation, and compliance costs for SMEs: Registry of Organic Producers

<u>Background</u>

Organic production is an emerging sector worldwide, as a response of the increased demand for safe and healthy food produced without artificial inputs. In Macedonia, there is notable development in recent years in organic crop production with certified area of around 3,000 ha, as well as livestock organic or in conversion rearing of 92 thousand sheep, 8.5 thousand cattle, 3.8 thousand goats and 7.7 thousand bee families. In 2017 the area under organic crops in Macedonia decreased, but the number of operators grew as compared to 2016.

The survey of organic producers included 117 farms (85% individual holdings and 15% companies; 34% livestock farms, 22% bee farms and 44% crop farms). In 2017, the production output has decreased for about two-thirds of the respondents, mainly due to the adverse weather conditions. This especially affected bee and crop farms' yields. The total sample turnover amounted to 50 million MKD, or at population level with 95% confidence interval, the organic production turnover in the country is estimated to range between 303 and 557 million MKD. The price of organic products is often same as the one for conventional production and this issue needs to be addressed: a price premium would compensate some of the partial cost/income disparities and would act as an additional stimulus for the organic farmers.

IME supported companies reach out to 26% of the sample farms; in addition, most of the farms cooperate with the major certification bodies, Biocert and Procert. In terms of IME's impact in turnover, the impact is more evident with crop producers. This finding suggests the main focus of the current IME support, but also indicates that different strategic and operative approaches could further enhance the impact of the program activities in all types of organic farms in the country.

Family labour dominates in the sample, mainly male, and most of them at age of over 30. The IME related farms account for about 25% of the sample, but employ about 28%, due to the higher average number of employees per farm. IME is estimated to have a gross impact on 300

to 530 employees and 270-480 seasonal workers, contributing to the total earning in the sector with about 6 to 11 million MKD.

<u>Intervention Overview</u>

One of the identified constraints of the value chain of organic products is the lack of linkages between the organic producers, and the organic producers and their markets (distribution, trading partners). The general observation is that the organic farmers are rather isolated and alienated, rarely communicating, either in terms of sharing or acquiring information. On horizontal level, farmers acquire information mainly based on informal, friendship basis or on formal with the representatives of the certification bodies, which are considered as one of the most reliable sources of information regarding the organic farming. The fact that many of the farmers did not report to have relations with any of the trading partners, only confirm the severity of the problem and constraints of the value chain of organic products, and the lack of linkages between the organic producers and their markets (distribution, trading partners), and emphasize the necessity on further development of the horizontal and vertical relations and information sharing in the network of organic producers in the country.

In general, the most of organic farmers did not know where to find certain information. Almost half of the sample knew where to find information on soil fertility, equipment, mechanization and the market, but other types of information seemed to be out of their reach. Agricultural companies had a better information access than individual producers. Traders were not considered as major providers of information to organic farmers.

Information transfer deficiencies appear in the organic production's information system. There are organizations that support information transfer in organic production, however, they are small in capacity and do not have a well-established network. Institutional settings need to be strengthened, especially those that show potential.

In relation to one of the general aims of this project, which targets the "Value chain development for the domestic consumption of organic products", as well as the identified constraint – lack of linkages between the organic producers and markets (distribution); the aim of this part of the report is to identify the information diffusion channels for producing organic

products among the different actors in the supply chain, by mapping the structure of their personal social network.

Research Methods

Social Network Analysis (SNA) - Questions for the formal and informal relations of organic farmers is included in the general questionnaire and will be part of the Social Network Analyse. By applying the SNA methodological approach, the objective is to understand the network aspects of the relations and information channels among the actors in the supply chain for organic products. This objective will be achieved through mapping information diffusion or identifying the information networks regarding organic production and distribution channels i.e.: i) Horizontal level - farmer's decision to involve in organic farming, or transfer the conventional production into organic; ii) Vertical level – information provided by the distribution and trading partners, as well as other important actors in the organic value chain which would be identified to have copying effects on the beneficiary level.

This part of the analysis is based on a questionnaire, specially designed for the purpose and the selected method of analysis, part of a larger multi-purpose questionnaire and survey. Social Network Analysis is a specific methodological approach which requires distinctive type of questions in order to construct and map relations among the pre-defined network of actors. However, due to the large costs, the whole-network approach is often unavailable and the data very often evades important information. Therefore, in order to develop an understanding on the general pattern of connections, we focus on the personal-network design which compensates for the issue of losing relations. The network boundaries are often determined by the research question, and most groups have unclear boundaries. Therefore, the advantage of this type of data collection design is that this approach simplifies the issue of "bounding" the network, but also provides richness of the data in terms that, no costs are involved in allowing respondents to mention any other individuals outside the pre-determined list of network members (Everett, Broccatelli, Borgatti, & Koskinena, 2018). Although random sampling is not so common, in this type of research it is often applied, however, it is preferred that the sampling is preformed from a previous ethnographic pre-study of the studied group (Everett,

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Broccatelli, Borgatti, & Koskinena, 2018). The structure of the relations in the different types of networks may help the understanding and predicting the behaviour of the existing actors (stakeholders) (Medicamento & Gennaro, 2006).

In our case, the sample is based on a pre-studied and recorded group of organic producers. A total number of 117 farmers were interviewed. Each of the surveyed farmers were asked to nominate certain number (most often three to five) of other people (farmers, trading partners, specialized stores for organic products, certifying bodies, associations), with whom they discuss or share information on important issues regarding the production of organic products. The number of nominations is usually given as motive for more nominations, since limiting this number could lead to measurement errors. After the nominations from the interviewed farmers, a total of 193 actors in the network of horizontal ties were identified. In addition to the first network which is comprising the horizontal network relations in terms of information diffusion with the relevant (nominated) actors (stakeholders), a different network (sociogram) was generated, based on the information on the commercial relations that the organic farmers form with their trading partners (five), with the exporting companies (eleven) and the certifying bodies (two). This is a more specific, two-mode network which gives inside on the commercial relations that the farmers establish with these firms; therefore, the networks have a more specific form, with resemblance to an ego-network form.

Figure 26 (Information diffusion) summarizes the general questions and the "Name generating table", which is a table that collects information on each farmer's personal networks; relation to other actors in the supply chain (alters) as well as the relations that alter (nominated farmers) have among them (Wasserman & Faust, 1994). The "name generator" also includes part termed as the "name interpreter" which refers each nominee's attributes in regards to their type of relation and production.

NAME GENERATING TABLE	
	Relation to each of the nominated alters:
Nominating persons with whom you discus important issues regarding the production of organic products.	1. Type of relation
	2. if nominated alters are also organic producers
	3. If the nominated alters have motivated the organic production process
	4. Type of advice
	5. Type of information
	6. Frequency of information sharing
	7. Whether the nominated persons are members of cooperatives

Figure 26: Name Generating Table in Organic Agriculture Case Study

The analysis was executed using adjacency matrices (NxN in terms of number of nodes) the actors in the network were coded (1 in the case of an existing relation and 0 when the relation was absent). The total network of all the participants in the information channel network) and the structure of the information network are presented through sociograms. The SNA data was analysed using UCINET, specialised software tool for analysing social structures (Cross, Borgatti, & Parker, 2002), and their visualization presented using NetDraw (Cross, Borgatti, & Parker, 2002).

Results and Discussion

Nature and motives for information sharing:

Majority of the relations of the surveyed farmers in or sample are based on friendship. Another important source of information was revealed in the category "other", with half of the farmers specifying that the relations are based on" formal", official communication, or information sharing. Very few of the farmers expressed their opinion on whether they motivate other farmers to start with organic production, and 59% of the nominated persons which answered this question in the social network part of the analysis, did not motivate others to start producing organic products. Around 60% of the nominated persons in the network are also farmers, producing organic product.

Both formal and informal type of advice, or information were listed as the most present and favorable types of advice. In terms of the type of information that is most often shared on "horizontal" level, information on the production technology is mostly discussed with the nominated persons in the network. This information is shared among the organic farmers on "occasional" or "frequent" basis, and most of the nominated farmers are either member of a

different cooperative or are not members of any cooperative at all. Very small number of the farmers that share information are members of a same cooperative or association.

SNA analysis

The information network of farmer relations (horizontal level) in the selected sample of organic farmers is constituted of very large number of 188 components which suggests that the network is very fragmented. This fragmentation is confirmed also by the fragmentation measure which is very close to 1 (0.974), a fact that additionally influences the low level of density of this network, and is one of the primary indicators of social cohesion of the network. The density measure is relative to the network size and in bigger networks is expected to express lower values (Everett, Broccatelli, Borgatti, & Koskinena, 2018) and especially when the sample contains fiscally dispersed individuals, such as in this case. In accordance to the extremely low-density measures, the conclusion can be made that the information transfer trough the network is also very difficult. The average degree of the nodes or the farmers in the network is also very low, mostly due to the significant number of outliers (nodes without relations), and dyads (separate pairs of nodes) (Figure 22). Many of the farmers openly stated that they did not and do not intend to communicate and share information with other farmers or institutions / institution representatives. The reciprocity value which is 0.063, shows that that only 6.3% of the ties in the network are reciprocal (ties between the nodes in both directions), but this is mostly due to the fact that the organic producers were much dispersed. The majority of these reciprocated ties are between the isolated pairs of nodes (Figure 22). The "distance" measure analyses the shortest path between the more distant nodes, and if the connecting relations are absent than those nodes would be unreachable (Wasserman & Faust, 1994). The average distance in the studied networks has a value of 1.424, indicating that the network contains relatively close relations in terms of informational flow (Kadushin, 2012), and each actor in the network might be reached in approximately 1.5 steps, which is logical since all the actors in the network, regardless of their distance, are able to reach other farmers or stakeholders in the network through the common sale trading partner, certification institution, association etc, which act as brokers between the organic farmers. Because of the expectation of larger network disconnections, we also included the measure of "breadth", or the distance

weighted fragmentation which shows the average distance among nodes in the case of removing certain nodes in the network (Everett, Broccatelli, Borgatti, & Koskinena, 2018). The majority of the nodes in the network are at distance close to 1 point to a complete graph. The diameter of the graphs shows the maximum distance on which the information in the network can travel between any pair of nodes in the network, or how distant are the remotest two actors in the network, which in this case is very low, and all actors in the networks are reachable in four steps (Figure 27).

	Values		Range and explanations
Average degree	0.829	○	Average number of ties of each node.
In degree (H-index)	54	○	Average of ties received by each node
Density	0.004	○	Values closer to 1 - better connectedness of the actors in the network
Components	188	○	Number of component comprising the network
Component ratio	0.974	○	1- every node is isolate, 0 – there is one component
Connectedness	0.006	○	1 – each node belongs to the same component, 0 – every node is in a different component
Network fragmentation	0.994	○	1- all nodes are at distance1 from each other (complete graph), 0 – all nodes are isolates
Average distance	1.454	○	The time length for information diffusion across the network
SD distance	0.716	○	Sees distances beyond actors' direct relations.
Diameter	4	○	The longest path of the information flow (between the furthest nodes in the network)
Distance - Breadth	0.995	○	Average distance among nodes when certain nodes in the networks are removed (when all nodes are distance 1 from each other - complete graph, and 0 when all nodes are isolates)
Reciprocity	0.063	○	Average reciprocated ties (ties in both directions)
Dyad reciprocity	0.032	○	Reciprocity between pairs

Figure 27: Cohesion Network Measures – Horizontal Network of Information Transfer

Representatives of some educational institutions, most of which professors from the Faculty of agricultural sciences and food in Skopje (FASF) and experts from the Ministry of agriculture, forestry and water economy (MAFWE) are also part of the information network. Other part of

this network is the cooperating firms (mostly input firms). Nonetheless, these relations were based on friendship, rather than institutional (formal) level of cooperation.

Clearer picture of the presented measures and the structure of the commercial relations and information channels among the actors in the supply-chain for organic products are presented in Figure 24. In this figure (socigram), it is noticeable that farmers which are coloured blue have very few relations on horizontal level i.e. among themselves. It can be observed that there are many outliers, meaning that many of the organic farmers are not communicating, not sharing or enquiring information from other farmers or related institutions (Figure 24). Important role in the transmission of information was assigned by the farmers to the two certification institutions (BIOSERT and PROSERT) and their representatives, which have the highest degree of information sharing (nodes 123 – 16 relations; nodes 125 and 124 – 11 relations). Very few of the farmers have higher degree. Node 114 (7 relations) is a representative of a cooperative, mostly involved in crop production, cooperating with all the trading partners (except Zegin), and four of the eleven exporters. On the other hand, node 9 (6 relations) is a livestock producer who stated that he/she does not need or acquire information regarding the organic production (no nominations of alters), however he/she motivates others to begin with organic production, which can be seen through the higher degree of relations (nominated by other farmers). This farmer is also a member of a cooperative, however does not cooperate with any of the trading or exporting companies.

In Figure 28, the graphical analysed network of horizontal information diffusion clearly shows the existence of four component with higher density of relations, within which there is a group of nodes which constitute the cohesive sub-group of the network, so called the k-core. These are the nodes where the highest level of social capital is concentrated. Most of the nodes in this component and sub-group are connected with two of the representatives of the certification bodies.

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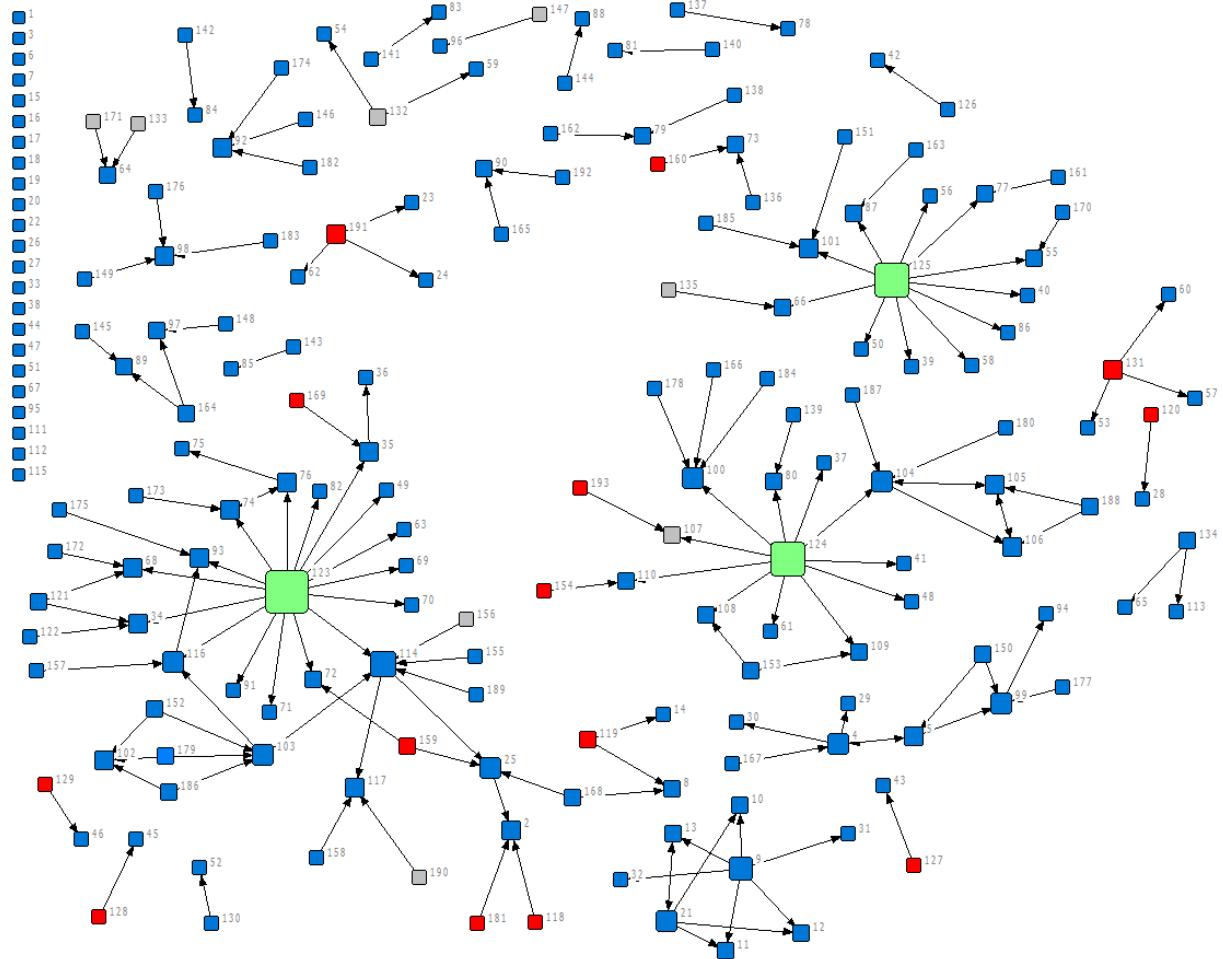
Figure 28:Horizontal Information Sharing (Different Stakeholders)
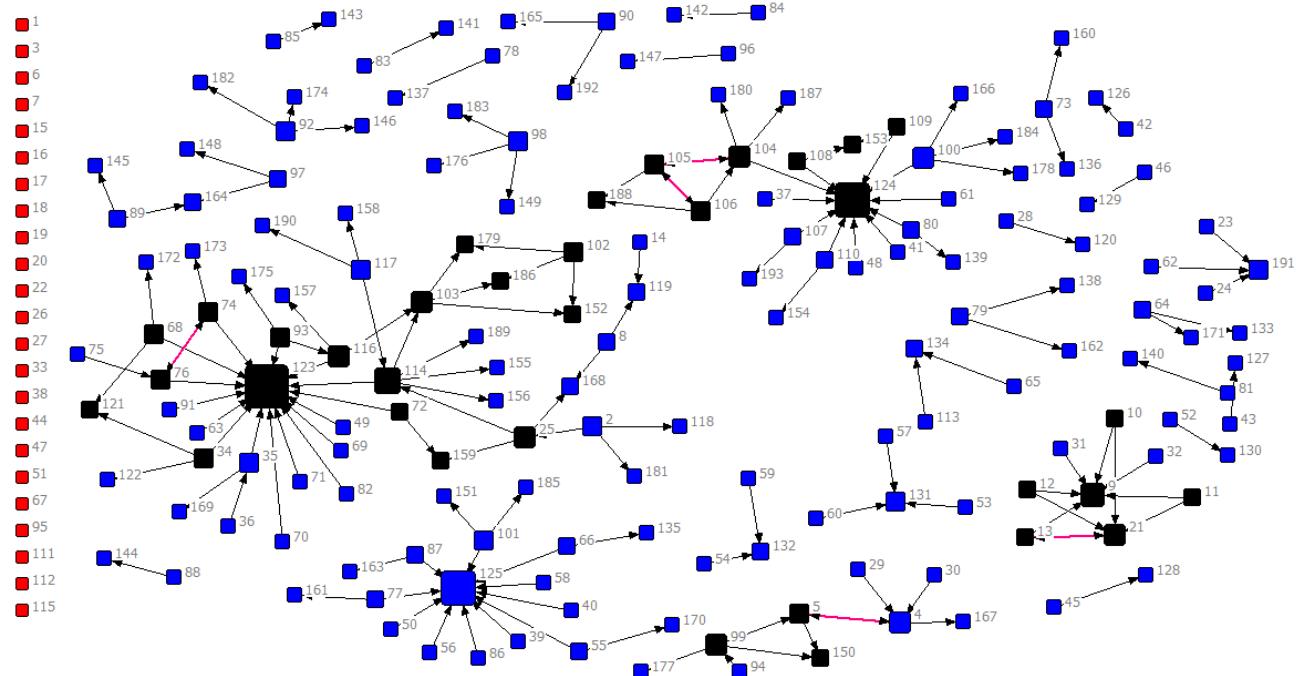
Figure 29: Sub-groups and Clustering Patterns in Information Sharing Network

Existent subgroups (clusters) were further identified, which are embedded in this network of organic farmers on a horizontal level (Figure 29.). The farmers which form cohesive groups - farmers with such close relations that can characterize them as a separate community were extracted (Everett, Broccatelli, Borgatti, & Koskinena, 2018). Nodes which belong to the same clique often incline to express similar patterns of behaviour, and certain part of the clustering of the networks can become as a result of these similar attributes. These properties are called "homophily", referring to the common norms/values that may bring nodes together (same kind of people flock together, in this process they influence each other, people can end up in the same places, geographical proximity –being in the same place influences to development of similarities) (Kadushin, 2012).

Five cliques were identified constituted of 14 farmers and one representative of the certification bodies. In clique 1, two of the farmers produce honey, and two are delivering to one of IME partners. Cliques 2 and 3 are constituted of farmers which produce fruits and vegetables and deliver to some of the official organic stores. Node 123 is a representative of

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one of the certification bodies. Cliques 4 and 5 are constituted of sheep breeders and farmers which live in the same village. The sheep breeders are connected to the another IME partner that is an exporter.

Identifying cliques (subgroups) Farmer's code			
Clique 1:	74	76	123
Clique 2:	93	116	123
Clique 3:	5	99	150
Clique 4:	104	105	106
Clique 5:	105	106	188

Figure 30: Identifying Cliques (Subgroups) Farmer's Code

Figure 31 is a more specific presentation of the commercial relations that the farmers reported to establish with different, pre-defined partners.

Understandably, the certification bodies are the most represented in this network, since all of the organic farmers need to be certified. However, again there is the problem of farmers which do not cooperate with any of the trading or exporting companies, refers to the relatively under developed distribution network and lack of distribution channels especially in the case of the livestock producers.
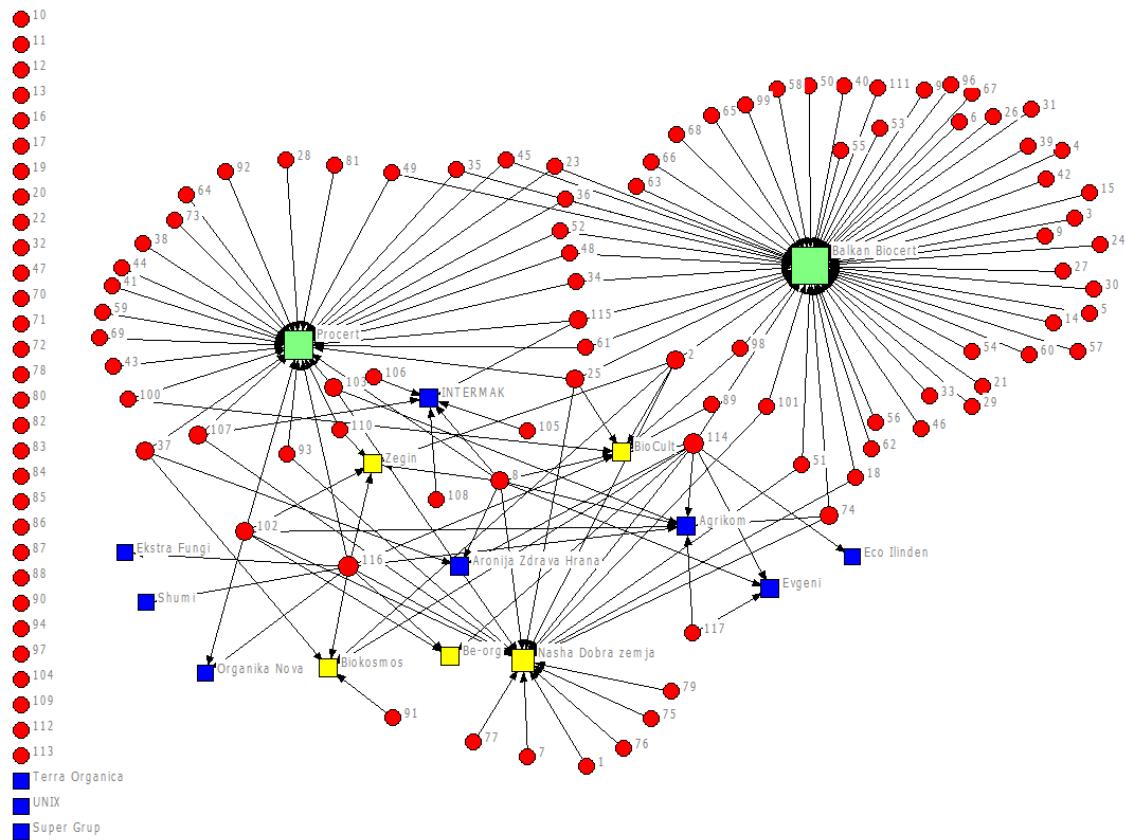
Figure 31: Commercial Relations with Different Types of Stakeholders in the Organic Value Chain

A positive correlation exists between the companies' increased sale of the organic products and the IME support for sustainable linkage between the stakeholders in the domestic market of organic production.

<u>Conclusion</u>

One of the identified constraints of the value chain of organic products is the lack of linkages between the organic producers, and the organic producers and their markets (distribution, trading partners). Therefore, the aim of this case study was to identify the information diffusion channels for producing organic products among the different actors in the supply chain, by

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mapping the structure of their personal and commercial social network, as well to describe the nature of their relations.

The results of the Social Network analysis part of the research can be presented on two levels. The first considers the more general presentation of the general attributes and nature of the relations that occur among the organic producers and their identified partners. The general observation is that the organic farmers are rather isolated and alienated, rarely communicating, either in terms of sharing or acquiring information. On horizontal level, farmers acquire information mainly based on informal, friendship basis or on formal with the representatives of the certification bodies, which are considered as one of the most reliable sources of information regarding the organic farming. The organic farmers seldom motivate others to begin with organic production, and most of the nominated farmers (alters) are also organic producers, meaning that organic farmers trust others that already had some kind of practice in this field. This is also confirmed by the fact that the question of producing technology was the most frequently discussed matter among the organic farmers in this network.

The second level of analysis represent the social network analysis on horizontal level of information sharing as well as the commercial relations of the farmers and the various types of trading, exporting and certification partners. Because of the diversity and dispersion of the organic farmers in our sample, the information network is quite fragmented. This is additionally determined by the sampling technique which is not so typical for SNA sampling. However due to technical limitation this type of an approach provides an opportunity of acquiring larger number of the population in question, since there is no limitation (only motivation) in the number of nominations. In this way the network is widened and includes and identifies most of the relevant types of actors (stakeholders) in the information sharing network of organic farmers. Evidently, there are very few relations on purely horizontal level, among the organic farmers. The information sharing through this kind of a dispersed network is therefore quite difficult. Nevertheless, the SNA measures identified relatively close relations in terms of information flow, since actors in the network can be reached in 1.5 steps (mostly through their certification or trading partners). In this respect, the distance between the remotest nodes is also low.

Few institutional actors can be identified, among them three representatives of the certification bodies, experts from the Faculty of Agricultural Sciences and Food in Skopje and the Ministry of Agriculture, Forestry and Water Economy, and other cooperating firms, mostly input selling firms. Again, most of the relations and information sharing is based on informal (friendship) basis. Both of the most influential organic farmers in the network are members of a cooperative, which can indicate that cooperatives can serve as a good medium for acquiring or dispersion of information.

The analyzed network is consisted of sub-groups of organic farmers which express similar attributes and patterns of information sharing, or in this case, the horizontal sharing of information is based on similarities in terms of the type of production (e.g. sheep breeders share information with sheep breeders) or in terms of geographical proximity (farmers living in the same village/region). Besides the farmers, one representative of a certification bodies, Nasa dobra zemja is also part of couple of the identified sub-groups.

Besides the representatives of the certification bodies, which were pointed out as the most important actors in the network, both in informal and formal terms, there are several well-established farmers which act as brokers in the information sharing network. Depending on the type of their production (crop or livestock), the organic farmers have a certain pattern of cooperation with their buyers (trading partners). Crop producers cooperate more with the specialized stores, and the livestock producers are more connected/selling their products through the exporting companies. However, the fact that many of the farmers did not report to have relations with any of the trading partners, only confirm the severity of the problem and constraints of the value chain of organic products, and the lack of linkages between the organic producers and their markets (distribution, trading partners).

4.1.6. Case Study: Business Development (Advisory) Services

<u>Introduction</u>

As there has been intensive support primarily by governments in business advisory services, the attempt to measure the impact of such services has been growing over time. Advisory services can be defined as the provision of specific advice tailored to the challenges unique to a specific firm at a given time; as such, a form of customized coaching (Hjalmarsson & Johansson, 2003). As SMEs have limited resources or are unwilling to pay for professional advisory services, there are public funded advisory services that they can access. These advisory services can be targeting different SMEs, mostly SMEs in early stage if targeting entrepreneurial boost in a country or export activities when targeting increased or/and fostered internationalization of SMEs. There is another distinction that can be made for external advice on:

- informal assistance, usually advice that is given without compensation and received by friends, family and business associates through advice network (Heyden, Doorn, Reimer, Bosch, & Volberda, 2013) and

- formal assistance, advice given for payment provided by private sector consultants, professional organizations and/or government sponsored business support agencies and programmes.

Through the resource-based lens, business advisory services assist in improvement of management capabilities and thus increase firm's resources (Mole & Keogh, 2009). When it comes to interaction with the client, there is a wide range in which level this interaction can happen due to individual differences and needs (Chrisman, McMullan, & Hall, 2005).
There is another classification of external advice depending on which segment of the business is a subject of the assistance and they can be:

- Operational services that include business advice in terms of business setup procedure, writing a business plan, and finance and

- Strategic services that include market and management intensive analyses.

In literature on researches that assess the impact of external advice there is some evidence of a positive effect from business advisory services on SMEs' growth and performance such as:

improved profitability (Bennett, 2008), (Mole & Keogh, 2009), positive effect of business advisory services on sales and employee growth (Mole, Hart, Roper, & Saal, 2009), positive link between business advisory services and SME's growth, measured by business turnover and profitability (Ramsden & Bennett, 2005).

Researches also show the effect of business advisory services on organizational learning and organizational innovativeness from a delivery approach perspective. Organizational learning is defined as abilities and new knowledge that firms acquire from participating in business advisory programs.

There are three major business advisory program delivery characteristics (Sawang, Parker, & Hine, 2016):

- Collective Learning. There is a very important element that should be taken into consideration when setting up advisory programmes that that is the potential to facilitate learning which is achieved usually through the creation of social exchange. Types of collective learning is: development of common visions, collective goals, social interaction, and a sharing of experiences and group decision-making.

- Tailoring of Content. In the past, it was more common to transmit knowledge from trainer to one or more listeners using the traditional trainer-cantered model. This type of business advice is static.

  Over time, alternative learner-centred model developed focusing on learners' needs rather than just mere transmission of the knowledge and is not exclusively dependent on the transmission of expert advice. This type of business advice is more dynamic and they engage facilitators rather than trainers as resource managers.

- Organizational Innovativeness. Changes in behaviour achieved through an advisory program in which the learner is active, rather than passive, and in which the learner is engaged in doing things in their own business.

- Practice-based Approach. Facilitators encourage participants to become researchers in the context of practice, to be free from established theory and techniques, and to be able to construct a new theory to fit the firm's situation. Participants acquire theoretical

background and learn to apply knowledge in practice and to innovate by creating new products and services, or to add value to existing ones.

Case Study 6
Hospitality Senior Expert Corpse

Background

In 2015-2016, Tourism and Hospitality sector in IME Programme, was focused on attracting more tourists in three destinations in Macedonia in: Mavrovo, Ohrid and Krushevo (starting from 2016) though developing domestic market offer in three destinations.

Intervention Overview

From November-December 2015, three Swiss Senior Expert Corps consultants (retired professionals providing problem-solving solutions for small and medium enterprises in developing countries and in Eastern Europe) performed hotel and restaurant management training for four weeks in 3 selected hotels (Ohrid, Krusevo and Mavrovo). Two local consultants were skilled in hotel and restaurant management in order to scale up the consultancy to other hotels. Additionally, the hotel Managers and employees were capacitated on standards for food storage and food measuring, proposals for changes in the menus, introduction on kids' menu, expenditures and profit on the entire restaurant, calculations on average cost per guest and food quantities. Furthermore, they were supported to develop menu engineering, how to sell the most sold products first, and calculation of cost per employee and logbooks.

Research Methods

During the period from June to August 2016, an in-depth research was carried out conducting individual interviews with managers/owners of 3 hotels in Krushevo, Ohrid and Mavrovo. The interviews were conducted in order to gain relevant quantitative and qualitative data on the impact of the support provided by the Senior Expert Corps[8] identify, i.e. get a

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[8] Swisscontact project that provides problem-solving solutions for small and medium enterprises in developing countries and in Eastern Europe by retired professionals supported by Swiss Agency for Development and Cooperation (SDC)

comprehensive and elaborate description of the capacity building provided and how this support has helped the beneficiaries organize their work more efficiently, how it has helped them increase their profit, has resulted in new employments or more skilled employees, get new gests, increase the guests' satisfaction etc.

Semi structured, in-depth, face to face interviews were conducted and the conversations between the researcher and the respondents were audio-taped. The audio recordings were transcribed and a detailed analysis on each interview was written. After the extensive interview through which important and detailed qualitative data was provided, the respondents were asked to fill up a short questionnaire in order to gain statistical quantitative information on the impact indicators – number of new jobs, net income increased, number of new clients serviced etc. The questionnaires were sent by e-mail after the respondents completed them.

The sample size included all the direct beneficiaries from the intervention – Improve management capacities of hotel and restaurant managers – Hotel in Krusevo, Hotel in Ohrid and Hotel in Mavrovo.

The contacts of the respondents – hotel managers/ owners were provided by the IME team. 3 persons were contacted first by phone, and then on their request, a meeting was organised. After the interview they filled in a short questionnaire and sent it to the research team by mail. After submitting the completed questionnaire, in a case where there was a need for additional information, the respondents were further contacted.

All the respondents agreed to be interviewed and gave detailed answers on the questions asked. Additionally, all of them answered and submitted their questionnaire to the responsible research team.

Research Tools and Data collection Instruments:

For completing the research, the following instruments were used:

- A structured questionnaire for gaining quantitative data on the impact of the support provided
- A semi structured guide for gaining qualitative information and description on how the support has helped them and what change have been made after the capacity building
-

Results and Discussion

I Hotel:

3 people are employed after the consultant's visit. 1 man and 1 woman employed in reception and bar, and one temporary employment (1 man) as booking manager.

- The respondent states profit increase of 10% after the fulfilled intervention by the consultants for improving the capacities of the facility, which according to the opinion of the owner/manager is due to the improved and shortened restaurant menu. Simultaneously, increased sale of 30% of the wines were noted after the consultant's suggestion for introducing a winery in the hotel where the guests can buy wine on their own.
- The respondent states an increase in the number of guests for 5% as a result of the interventions done by the consultant. Simultaneously, an increase in terms of the guests' satisfaction is evident after the intervention.
- 12 people attended the training in the hotel (8 men and 4 women).

During the interview, the respondent expressed his exceptional satisfaction from the consultants on several occasions, in terms of the benefit and the support in the overall working of the hotel, and above all in terms of more efficient employees' management and organization, improvement of the restaurant's working and the menu optimization, interior improvement and interventions in the financial and accounting working of the tourist facility. In terms of the restaurant working, the focus was on handling the food, introducing international standards, hygiene improvement, new recipes, decreasing the menu content and changing its appearance, more creative food combinations, new side dishes, hot food serving etc. The manager/owner of the hotel stated that 80% of the consultants' proposals and suggestions were accepted and implemented in the kitchen, while the rest of the planned changes in the kitchen will be implemented upcoming autumn. The changes in the restaurant working, especially the changes in the menu, decreased the expenses in their working. Great benefit from the improvement of the staff management of the hotel were noted. In collaboration with the consultant, working manuals are made for every sector, working tasks are clearly specified for every employee and the criteria for measuring their work efficiency are

clear. At the same time, the consultant gave suggestions in terms of the working hours of the employees and a different schedule of the working shifts, which developed more efficient and more effective HR policies, while the work is better organized.

The consultant gave his input in exceptionally efficient changes of the hotel interior. Major changes of the lobby appearance were done upon his suggestion, the lightening and the winery. At the same time, the purpose of certain rooms is changed, while others are more efficiently used. The perception of the owner/manager was that the interior changes made the hotel look more appealing, richer and more attractive for the tourists and they made the hotel "call the guests to come in"

The consultant gave advice in regards to the financial and accounting activities, tools for following the entrance and the exit of finances and the cash flow in the company, as well as an idea for software use for the reception working. The owner of the hotel became more aware about how limited his knowledge was in this field and how that could affect the business in a negative way.

Generally speaking, after the consultants' visit, the owner of the hotel introduced many changes in the hotel management, the work was organized much better, the restaurant expenses are decreased, the number of the guests and their satisfaction are increased, which brought increased profit of the hotel.

II Hotel:

After the consultant's visit, 4 people are employed, 3 women and 1 man (in the restaurant and in the kitchen). Employment of one person for managing the legal issues is planned to be employed at the same time.

- The respondent stated profit increase after the fulfilled intervention done by the consultants for capacities improvement of his facility which, according to his opinion, is due to the increased interest in visiting the hotel because of the improved services and products. He stated that it was a big success for them that the sale remained the same, taking into consideration the "external shocks and stresses".

- Although the respondent states decreased number of guests (from 3357 to 2958 for the same period), he stated that having in mind the unpleasant social and political situation in the country, he notices an increase in the number of the guests in the summer period as a result from the interventions done by the consultants. The respondent also notices increasing in terms of the guests' satisfaction after the intervention.
- 2 people attended the training in the hotel (1 man and 1 woman). Still, the consultants were working with all the hotel employees in the practical part.

The major changes in the hotel are done in the part with restaurant work; The owner/manager stated satisfaction with the received advices and that almost all of them are being implemented in reality.

The hotel management received too much information, useful advices and trainings regarding the way how to manage the kitchen, from the aspect of food standardization, stock management, defining the exactly determined temperature of the food and the dish in which it is being served, concept of hot restaurant trolley, buffets concept, division of one buffet into several smaller buffets, different and more aesthetic starters and salads design, dish recipes, but also in terms of the need for newer and up to date appliances, where and how to purchase them for better price.

After the received trainings, plans for purchasing specialized kitchen appliances are started (for example, a table with a special place for every ingredient in order to keep their freshness). Simultaneously, the hotel satellite kitchen is renovated, widened and relocated on the same level with the restaurant. Thanks to the trainings, knowledge was acquired on organization of business events, trainings and seminars in a better way.

In terms of human resources management, the owner/manager saw the biggest benefits in the staff policy of the hotel, in terms of improved capability for assessing the candidate's qualities for a certain working position, the need to make specifications for working positions and working procedures in the upcoming period.

To sum up, after the consultants' visit, many changes were done in the hotel, especially in the part of the restaurant working: improved services and products, while the guests' satisfaction is

also increased resulting in increased profit of the hotel and increased capacity to cater more tourists.

Hotel III:

There were attempts for new employments after the consultants' visit, but due to the large fluctuation of labour force, the respondent is not capable to state correct data.

- The respondent expressed disability to state the profit differences after the fulfilled intervention, having in mind that due to the absence of snow and the hot weather this year, the winter season practically did not exist. Still, he stated that apart from the external conditions they had a good season, especially because of the interventions done by the consultants in terms of the rooms, the reservations, the lower prices for early booking, non-refundable option etc.
- In terms of the noticed satisfaction of the guests after the consultants' visit, the respondent stated that everything that was changed was visible.

Simultaneously, the consultants gave suggestions in terms of the interior, on one hand to be at guests' service, while on the other hand to be at service for increasing the capacities for accepting guests. The consultant also made and left rulebook for changing the interior for a certain period, for the restaurant and for the lobby. They made small changes at the same time, such as beatifying the area with flowers, which cost the hotel insignificantly in economic terms, and also making available more parking spaces in front of the hotel with dislocating the vehicles of the hotel employees.

In terms of the restaurant work, a change in the menus offer is done, the serving of the food and the idea solutions for its serving, especially outside the restaurant, in the cottages. The respondent stated that he received invaluable advices which refer to more efficient working and they do not cost anything, on the contrary, they make savings.

From the ingredients which were previously considered as needless, specialties are created which exited the guests. The cheese which they produce started to be served in many different ways, whose production is presented as hotel pride.

Generally speaking, many changes are done after the consultants' visit, especially in terms of the employees' management, but also in terms of outside area of the hotel. Exclusively useful advices and creative solutions were adapted for their use, whether it was about fast food defrosting, making a spread from cheese crumbles, a questionnaire for satisfaction evaluation from fiscal bill, giving priority to the guests in terms of parking places, increased cleanliness in the hotel, new recipes with old ingredients, a pot of flower on the table or rotated table schedule, all of this are ideas which practically showed they brought satisfied clients after the consultants' intervention. The manager stated that the consultant contributed for "the work to be organized in order to be more efficient, more economical and to make more money"…

Conclusion

All the interviewed managers/ owners of the hotels who were direct beneficiaries from the intervention evaluate the capacity building as extremely successful and useful. They especially appreciate "the customized conceptual solutions for all problems and challenges they were facing" and the fact they were not asked to make major financial interventions, but on the contrary they received useful advices how with "smaller changes to decrease the expenses, and to achieve better effects".

All of them introduced many changes in their hotels, starting with new and reorganized HR management and operations, changes in the restaurant working, changes in the menu offers, minor but effective changes in the hotel interior and implemented the useful advices concerning the financial working of the hotels.

The support has helped them organize their work better, contributed towards reduction of costs and helped them increase their profit, get new guests as well as experience more satisfied guests. Additionally, they all have plans for future improvements and implementing other valuable inputs provided by the consultants.

4.2.   Descriptive Statistics

Monitoring and results measurement system of IME programme was embedded into all levels of the programme work in line with the DCED[9] principles.

The entire process of Monitoring and Results measurement was designed to capture the impact from implemented interventions from 2015-2018. The objective was to assess the impact on jobs and income on sectors and/or enterprise level whenever is applicable.

In total 29 Interventions impact (and/or early signs of impact) assessments and 2 Sector Impact assessments were conducted for all sectors: Tourism & Hospitality, Green economy sectors (Organic Agriculture, Sustainable Building) and Creative Industries (Software & IT Services and Product Design).

In Tourism & Hospitality sector, the impact was assessed on increased volume of sale and increased number of tourists, due to interventions primarily on destinations' promotion to new international and domestic buyers. As there was evidence in UK based on two studies[10] that reveal how multipliers using additional volume of sales due to external support as starting point from which assessment of job creation was undertaken. The studies aimed to link the growth of the tourism sector (increased volume of sales) to the number of jobs created as a result of that growth. The additional jobs created in Tourism & Hospitality sector were assessed through a combination of company records and in-depth interviews with IME partners. Furthermore, the jobs created in tourism sector were translated to indirect jobs outside of the sector and as a result of the growth of tourism sector. The parameters used in this category were taken from the annual World Travel and Tourism Report on Macedonia (2018).

Organic Agriculture sector growth was measured through Sector Impact assessment, identifying the changes on income and jobs at organic farmer's level. Impact assessment in Sustainable Building was focused on the increased volume of sale of the energy auditors (service provider's level) as a result of enabled access to market and improved models for hotels in accessing finance for using energy auditor's services in 2016 and 2017.

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[9] DCED – Donor Coordination of Enterprise Development (https://www.enterprise-development.org/)
[10] Employment generated by tourism in Britain, Caledonian Economics Ltd, 2003 and Tourism: jobs and growth, the economic contribution of the tourism economy in the UK, Deloitte, November 2013

Comprehensive assessments were conducted in the two remaining sectors. In IT sector, the impact on increased volume of sale of IT companies due to established linkages with export markets for 2 companies was surveyed. The impact on how IT companies benefited from improved services of the eco system service providers was assessed in terms to identify how improved performance lead to increase sales for IT companies. In Product design sector, the changes enabling better access to markets for designers, in terms of increased sales due to established linkages with food processing, furniture and light manufacture sector was analyzed through a case study assessment.

Impact assessments related to the cross-cutting Gender and Skills &Youth component were integrated within the sectorial impact assessments, however the impact on increased volume of sales of women owned companies due to improved access to supporting services was examined separately through individual study.

After conducting all these researches to assess the impact of the various 29 implemented interventions, the following results were drawn. Total of 615 SMEs in the different sectors benefited from IME interventions over the years from 2015-2017 (Figure 32).

Sector	Number of SMEs Benefiting
Tourism & Hospitality	261
Creative Industries	145
Green Economy (Organic Agriculture)	171
Cross-cutting (gender)	38
TOTAL	**615**
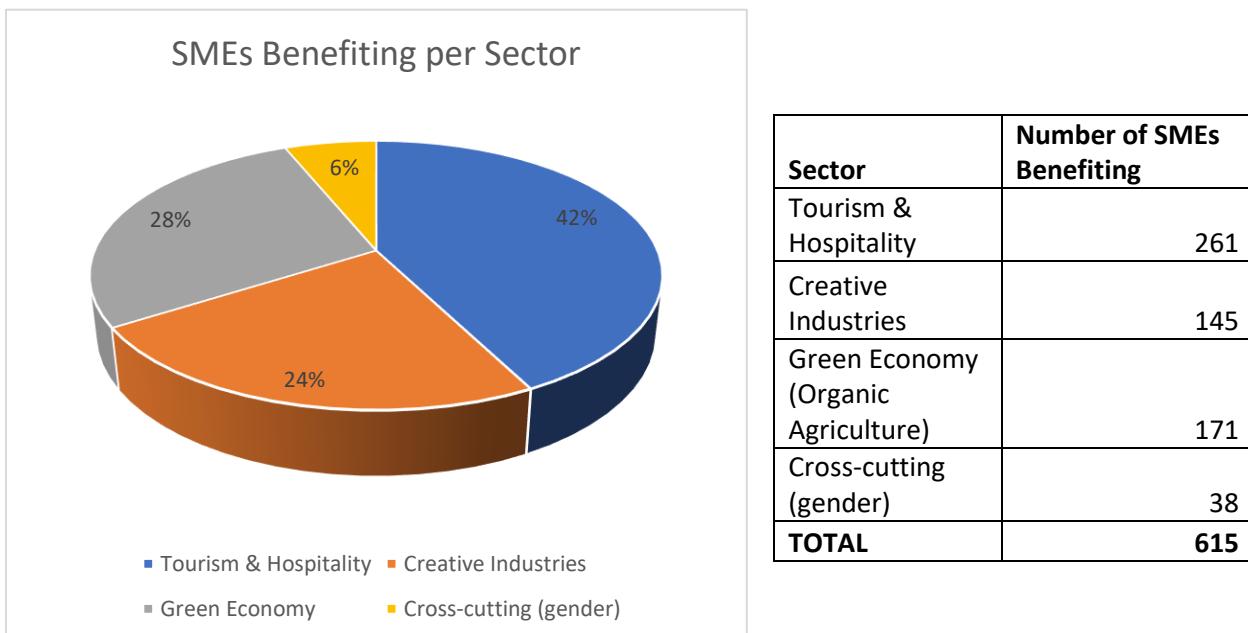
Figure 32: Benefit Outreach Per Sector

The biggest number of SMEs fall in Tourism & Hospitality sector (42%), followed by Green Economy (28%) and Creative Industries (24%). There were certain number of SMEs that benefited from the cross-cutting component of Gender & Youth and these companies do not belong of neither of the three sectors.

Further analysis was conducted to observe how the implemented interventions have caused effects on the SMEs in different sectors over the years, Figure 33. Continuous increase is observed of SMEs benefiting in Tourism & Hospitality Sector over the years and this is due to the persistent work on destination management in three destinations in Macedonia in all three years and continuous yearly assessments on benefit outreach. In the other two sectors the situation is different and dada might not be relevant to draw any conclusion on the SMEs growth within the sectors as it might be due to different assessment methods applied over the years in the different years and this reflects the data collected in the year reported.
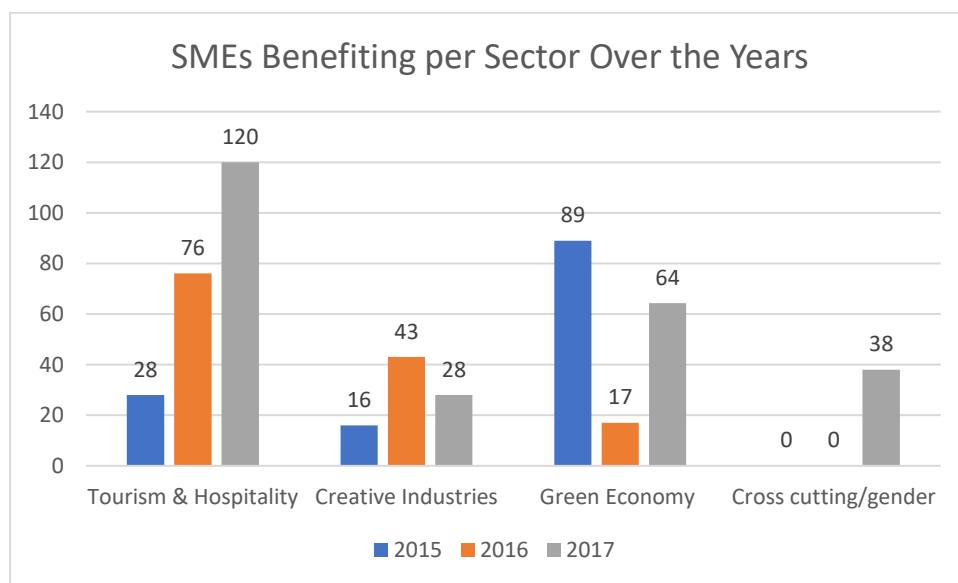
Figure 33: Benefit Outreach per Sector over the Years

The 29 interventions that were implemented in IME can be classified in different types of external support as explained in Chapter 4.1. Types of External Support to SMEs Growth and later in the elaborated individual case studies for each type of external support.

IME Interventions classified per Type of External Support to SMEs Growth

- 4%
- 10%
- 17%
- 24%
- 7%
- 38%

Legend:
- ■ Start-up Support
- ■ Extisting Business Asssistance
- ■ Innovations
- ■ Enabling Envronment
- ■ Reduction of Burdens
- ■ Buisness Advisory Services
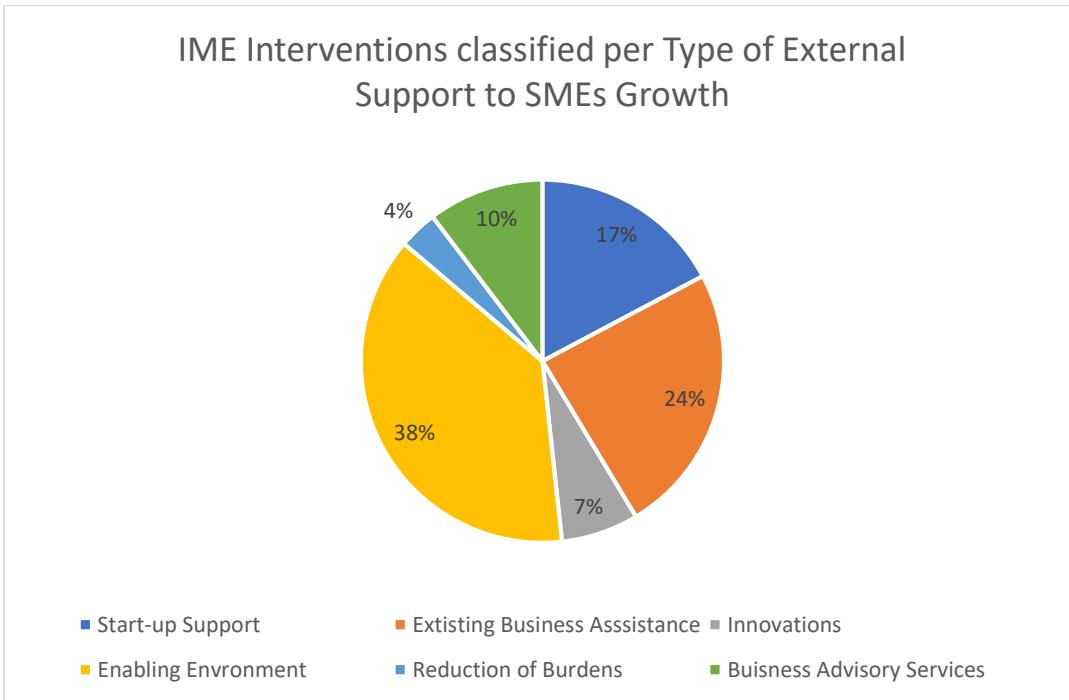
Figure 34: IME Interventions classified per Type of External Support to SMEs Growth

Most of the interventions fall in enabling environment type of external support as all cross-cutting component interventions dealing with skills development and education are rather support function to the core value chain in the sector where the SMEs belong.

In addition, analysis of the interventions in regards to the sectors have been conducted and it can be drowning a conclusion that all three sectors were equally represented with 10 interventions each whereas Product Design sector had 4 interventions and Sustainable Building 3 interventions (Figure 35).
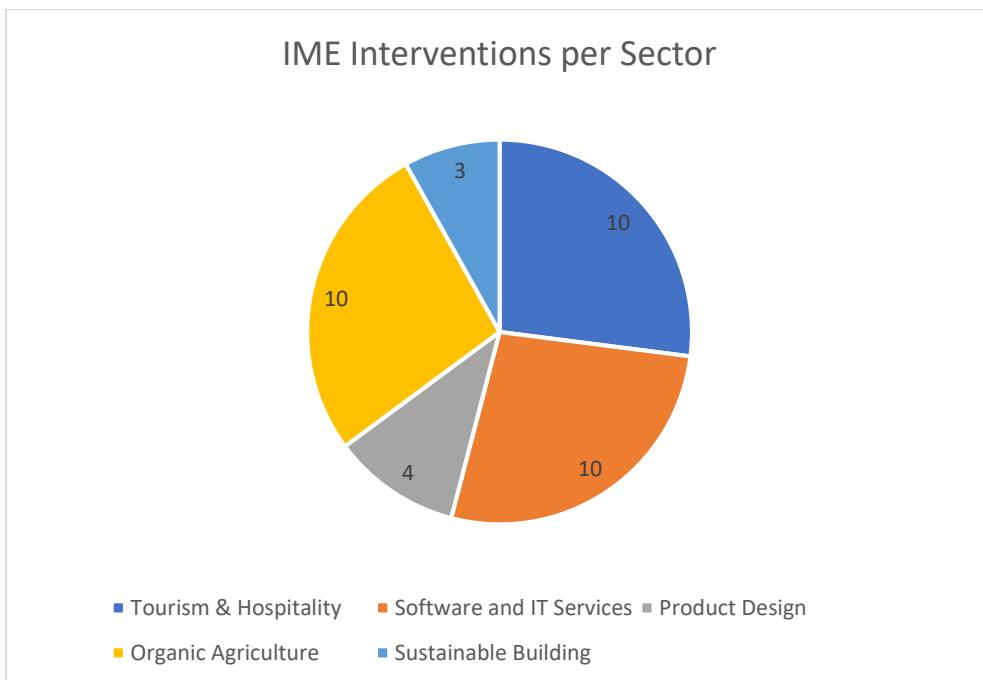
Figure 35: IME Interventions Per Sector

4.3. Data Analysis

As an example, on how to assess the impact, annual research has been conducted in the sector of Organic Agriculture. In order to evaluate the direct and indirect effects from IME interventions the general objective of this report is to assess the impact (change) made in the Organic Agriculture Sector in 2017 due to the different IME interventions More specifically, the assessment aimed at:

1) Measurement what kind of changes happened and how these changes were reflected on the market level (traders, media);

2) How this change impacted the level of end beneficiary (organic operators: organic farmers; organic production companies);

3) Understanding of the network aspects of the relations and information channels among the actors in the supply chain for organic products as to identify possible coppyng and crowding in effects in the value chain.

The key analyzed qualitative questions include questions in relation to the:

- Trend of growth of the Organic sector from 2014-2017 and to which extent IME influenced on the organic sector growth through inclusive approach of different levels of the market system?

Also, growth of organic demand in the region and globally, are there barriers to increase production (weather, lack of labor, input, etc.), new law, regulations to promote organic;

- The jobs which have been created in the sector? - What are the interconnected sectors, are there jobs in the interconnected sector (like increased input sales)

- Farmers' perspectives of organic products production if supported market system activities did not happen?

- Systemic change in the sector (before and after IME approached the sector)

- Other factors/ lead actors that drives the changes in the sector

Different sources of information, including data collected from reports (company records), data from the Ministry of agriculture, forestry and water management (MAFWE), data from the Agency for Financial Support in Agriculture and Rural Development on the level of subsidies and measures in the organic production, as well as phone and on site semi structured interviews and qualitative transcription of the findings were used. The different methodological approaches, applied in order to reach the diverse objectives of the assessment.

Desk study. The desk study aims to provided: 1) background information on the current situation of the organic sub-sector in the Republic of Macedonia during 2017, 2) overview on the governmental measures supporting the organic production for the year 2017, and 3) an information on the organic producers' interest for those measures in 2017. Source: Ministry of Agriculture, Water Economy, and Forestry (MAFWE). Data: data on the number of certified farmers, number of operators, types of products, and land size.

The overview on the governmental measures supporting the organic production is based on governmental documents that explain a certain program, i.e. subsidies, rural development program, IPARD, and the program for fisheries and aquaculture.

Field study. The field study aims to provide an assessment on the indirect impact of IME to the development of the organic sub-sector during 2017, by providing: 1) an insight on the organic production trends, including production orientation, production area, number of employees, costs of production, sales channels, etc., 2) observation on the trend differences appeared in relation to the previous year, 3) an insight of the functionality of information systems in the organic sub-sector, and 4) an assessment on the market-level change. In fact, two different field

studies were conducted. The first is a survey on organic producers, and the second is interview with traders of organic products. over 170 organic producers were contacted, but due to different reasons (unwillingness to cooperate, farmers that ceased organic farming, unreachable contact details, etc.), the final sample size is smaller than the predicted. The final sample size was 117 respondents, out of total population of 654 organic producers (or 18% from the total statistical population). The survey includes face-to-face interviews with organic farmers, conducted by trained interviewers. Structured questionnaire was used; one part adapted from previous IME's impact assessment reports of 2015 and 2016, and an additional part covering completely new perspectives. Additionally, Market level - Traders (observed that are selling fresh organic products to the end consumers) IME's partners were assessed using company records and other relevant data were obtained through structured questionnaire and interview with company representatives.

The organic farming in Macedonia is an emerging sector with potential for opening new employment opportunities and new market perspectives for the agricultural producers. Since 2014, the area under certified organic production has increased by 21% (with its peak in 2016 with 36%). The area under organic production represents 0.63% of total cultivated agricultural area, and 0.26% of the total agricultural area in 2016. The number of operators has also almost doubled in the last four years, from 344 in 2014, to 654 in 2017 (Figure 36).
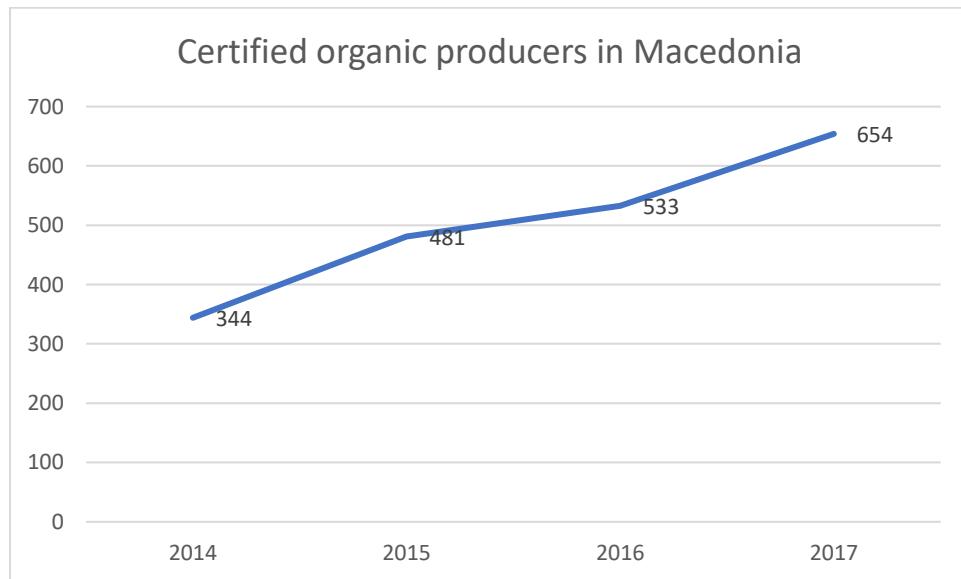
Figure 36: Certified Organic Producers in Macedonia

The research included a sample of 117 organic operators (18% from the total population). For 62% of all farms the production in 2017 decreased compared to the production in 2016, and this is mostly due to the unfavourable weather conditions; the production increased for 16% of the farms, mostly due to increased reproduction and renewal of the herds within the livestock farms.

The most common marketing/sales channels are buy-out, sales directly on farm and sales through retailers. One of IME partners, new venture – organic retailer started with support of IME was the most frequently stated as collaborator.

Very few farmers use promotion tools for marketing of their production and this is a segment that deserves to be further enhanced and developed. Also, cooperation and horizontal integration of farmers needs to be fostered, since only a third of the farmers stated their membership in farmers association, and only some are part of a farmers' cooperative.

Given the results from the survey and the descriptive statistics of the sample, the population size of the organic sector turnover is estimated with a confidence interval of 95%. The total turnover for the whole population is estimated to range in the interval from 303 million MKD to 557 million MKD (Figure 37)

	Population Mean	Standard Error	Lower Bound	Upper bound
Bees turnover[1]	44,405,848	131,106	31,282,332	57,529,365
Crops turnover[1]	82,711,326	87,141	58,267,171	107,155,481
Livestock turnover[1]	302,534,386	194,992	213,124,655	391,944,117
Total turnover	429,651,561	97,667	302,674,159	556,628,962

*95% confidence interval, note: [1] structure of turnover by production type as in sample.

Figure 37: Estimation of the turnover population interval, in MKD (n=654)

The analysis of the individual farms showed that 72% of all farms cooperate with all companies. The share of family farms cooperating with the other companies excluding the two certification bodies was lower compared to the agricultural companies (21%). As for the agricultural companies, here most of the family farms cooperated with one of IME partners (14%), and (around 5%) cooperated with additional three IME partners. In order to assess the impact of the activities carried out by the IME project, the holdings were grouped into those with at least one link with the IME-supported organization ("IME-related") or none ("non-related"). Out of the 87 respondents that provided turnover data, 31.03% were IME related farms, in terms of number

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of entities, i.e., 29.62% in terms of turnover. Additionally, 75% of the IME linked companies had break-even or positive performance (contrasting the non-related holdings which had more pronounced underperformance results).

Jobs creation is one of the positive impacts of agriculture in rural areas, as this sector is usually the dominant absorber of rural labour force. It is often suggested that organic farming employs more labour than conventional farming because it is more labour intensive, needed to compensate for the decreased use of plant protection chemicals against pests etc. Questions from the questionnaire used to measure the employment, and the used methods for analysis was presentation of the sample analysis on the employment data, disaggregated data by farms that had a relation with at least one of the IME-supported organizations, and estimation of the gross project' impact assessment based on the estimation of total population.

The part of the questionnaire targeted to answer this question consisted of four group of questions: 1) Fulltime (permanent) employed labour (number and monthly payment, disaggregated by age, gender, education, and family relation - owner, family or non-family member); 2) Seasonal(temporary) engaged workers (number and daily wage, disaggregated by gender and family relation - family or non-family members); 3) Perceived need to increase the number of employees in 2018, and 4) qualifications and skills required by employees.

In total, 114 surveyed farms employ 317 fulltime employees. Considering that most of the surveyed entities are family farms (99), and the companies are smaller in size of employment (6.00 employees per company opposed to 2.34 employees per farm), it is reasonable that the family labour dominates as a source of labour with 241 fulltime engaged (212 in farms, 28 in companies and 1 in the cooperation). Non-family labour engaged by the surveyed entities is 24% from the total employment (76 in total, 20 by farms and 56 by companies).

The surveyed entities, have engaged additionally 274 seasonal workers, out of which only 7 are family members. Most of the seasonal workers are engaged by farms (206 in total, or 2.08 per farm), whereas companies engaged 21.18% (58 in total, or 4.14 per company), and the cooperative engaged 10 seasonal workers.

The days engaging seasonal labour range from one day up to 155 days per year engaged by farm, with 10-days engagements as most frequently observed value, and 30 days as a median.

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The total days engaging seasonal labour in the whole sample is 6,958 days, out of which 4,703 days at family farms and 2,245 days at companies. These days divided by the total number of seasonal labour gives the average number of days per worker that is 25.39 days. Roughly converted into annual working units (AWU)[11], the quantity of engaged seasonal labour in the sample equals to 30.92 fulltime equivalent.

IME have assisted a number of organizations working in the organic agricultural sector. One of the objectives of the impact assessment is to evaluate the number of employees that have been directly or indirectly reached through the project activities. Therefore, the data is disaggregated of the sample (Figure 38) by the question if they have relation with at least one of the IME-supported organizations ("IME-related") or none ("non-related").

Full-time Labour

	Entities		Fulltime (FTE)		FTE, average	
	N	%	N	%	N	%
Total	114	100.0	317	100.0	2.78	100.0
IME related	29	25.4	90	28.4	3.10	111.6
non-related	85	74.6	227	71.6	2.67	96.0

Seasonal Labour

	Entities	Workers (n=114)	Worker per farm	Days, total	Days per worker	Wage, weighted, MKD
Total	**114**	**274**	**2.40**	**6,958**	**25.39**	**833**
IME related	29	117	4.03	2,778	23.74	772
non-related	85	157	1.85	4,180	26.62	1,305

Figure 38: Full-time Labour and Seasonal Labour

Given the sample means of the fulltime labour (MLT=2.46 ;St.dev=1.660; SELT=0.157) the fulltime labour in the organic agricultural sector ranges from 1,403 to 1,809 fulltime employees (Figure 39).

The estimation of the seasonal labour produces a wide range due to high standard deviations, since there are huge differences between the number and days of seasonal labour

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[11] https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Annual_work_unit_(AWU)

engagements among the respondents (MST=2.22; st.dev=6.872;, SEST=0.649), thus the estimated number of seasonal workers engaged in organic agricultural production in 2017 ranges from 613 to 2.295. Converted into fulltime equivalent, we estimate the population Mean of seasonal labour as annual working units to range from 93.8 to 261.

	Population Mean	Std. error	Lower bound[1]	Upper bound[1]	Gross IME impact assessment[2]
Fulltime labour, number	1,606	.157	1,403	1,809	298.68 - 529.92
Seasonal labour, number	1,454	.649	613	2,295	270.44 - 479.81
Seasonal labour, total days	39,917	14.517	21,107	58,727	7424.56 - 13172.61
Seasonal labour, AWU[3]	177.41		93.81	261.01	33.00 - 58.55

Note: [1] 95% confidence interval; [2] based on the IME-impact rate; [3] based on the estimated total number of days of engaged seasonal labour, converted in AWU (225 days annually).

Figure 39: Estimation of Organic Agriculture Labour Population Mean and Interval (n=654)

Conclusion:

The IME related farms account for about 25% of the sample, but employ about 28%, due to the higher average number of employees per farm. IME is estimated to have a gross impact on 300 to 530 employees and 270-480 seasonal workers, contributing to the total volume of sale in the sector with about 77,608,759 MKD - 142,725,375 MKD.

4.4. Econometric Model

The sector of Organic Agriculture has been taken as a model to show how complex impact assessments are taken into further research in order to isolate only the change in the selected indicators that was due to applied external support (IME interventions) in the sector.
In order to further investigate the research questions, a quantitative empirical research approach is selected and aims at testing a set of hypotheses. The research methodology used two-steps approach:

- I Phase: Assessment of each individual IME intervention (type of external support) applied in the years 2014-2018 in order to measure their impact in terms of the following indicators:

- Number of "net" jobs created (# Net new decent jobs (gender and age desegregated)
- Net additional income increase
- Volume of additional sales by targeted enterprises (expenditures per client)

The individual assessments of the interventions collected and analyzed empirical data collected from at least 650 SMEs, beneficiaries to IME programme over 4 years of implementing various interventions, external support measures. Distinct tools to assess the impact of each individual intervention (external support) out of total 29 interventions (Annex 1: IME List of Assessed Interventions) were conducted. Several options to capture increase of sales or/and profit were used applying proxy indicators such as: increased turnover, increased productivity, introduced new services/products, improved employee skills, increase of new clients/customers, financial products accessed. A variety of tools exist to collect data, each of them useful in different situations. The list below provides a general overview of the different tools at IME disposal. In practice, a mix of (simpler) tools and triangulation of information was applied rather than resort to large expensive surveys, unless unavoidable. One or a mix of these tools was applied in different interventions measuring the impact from the external support:

a)   Observation by project staff. Particularly useful to gather qualitative information, quickly assess certain changes, to collect preliminary information before other tools are used or validate findings from other tools. Observations were collected as part of routine formal or informal meetings and visits, or if needed planned as a separate activity. Observations were clearly recorded in the weekly up-dates reports sent to the management on a weekly base. Supporting documents: Checklists, Minutes of the meetings, list of participants etc.

b)   Secondary sources tended to provide more general information, for example for a sector in general. For external reports, the credibility and applicability of the data were carefully screened.

c)   Company records/partners 'reports. Assessment of business information and critical and confidential data directly from SMEs / partners.

d)   Focus Group Discussions used to gather qualitative information, understand change processes. Conducted in-house or by outsourced local consultants, excellent moderation skills and understanding of the context (sector) and target group. Homogenous groups of around 10 participants extracting common views, although depending on the answers sought, a more mixed group was sometimes preferred to stimulate debate. In each case, specific guidelines were prepared in advance.

e) In-depth interviews were conducted to gather qualitative information, explore change processes and dig deeper into underlying causes. Semi-structured interview formats were preferred, allowing spending enough time on each issue in order to gather the necessary details and often uncover unexpected ones.

f)   Surveys, either in house or outsourced (usually for larger samples than in-house surveys) were used to cover larger, more statistically significant samples. Samples were randomized and questionnaires elaborated to gather concise and precise information, e.g. through closed or multiple-choice questions.

-   II Phase: Application of multiple regression analysis using SME growth as dependent variable and external support and its elements as independent variable. This was used to examine what is the impact from different types of external support to SMEs growth, in terms of: 1) Number of Net new decent jobs (gender and age desegregated), 2) Volume of increased earning income of end beneficiaries, 3) Net additional income increase and 4) Volume of additional sales by targeted enterprise. Independent variable would be external support received by SMEs. In relation to that, several dependent variables can be defined: 1) type of external support, 2) sector and 3) type of the external support.

Definition of Variables

Dependent variable:

The variable that will be researched in this thesis are linked to SMEs growth and several aspects from the SMEs growth including the following parameters indicated in Figure 40:

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Firm growth	Employment increase	Number of "net" jobs created
	Additional income increase (firm level)	Net additional income increase
	Sales increase	Volume of additional sales by targeted enterprise

<div align="center">Figure 40: Firm Growth Parameters</div>

Independent Variable:

The research covers independent variables that are linked to the external support and cover the following aspects of it: sector, type of external support, and duration of the external support received as presented in Figure 41. For better structured analysis the types of external support will be grouped in 6 main types: 1) Start-up support, 2) External Business Assistance to Existing Businesses, 3) Innovations, 4) Enabling Environment and 5) Reduction of the Burdens, Regulation and Compliance Costs and 6) Business Development (Advisory) Services.

The collection of data on the performance of the SMEs included in IME interventions have been conducted through several surveys executed in different sectors in Macedonia.

Type of External Support	1)Start-up support
	2) External Business Assistance to Existing Businesses
	3) Innovations
	4) Enabling Environment
	5) Reduction of the Burdens, Regulation and Compliance Costs
	6) Business Development (Advisory) Services
Sector	Tourism & Hospitality
	IT & Software
	Product Design
	Organic Agriculture
	Sustainable Building
Duration of External Support	1 year, 2 years, 3 years and 4 years

<div align="center">Figure 41: External Support Parameters</div>

In this regard three hypothesis were tested:

H1. The type of external support is positively associated to the SME growth

H2. The sector in which SME belongs is positively associated to SME growth when supported externally

H3. The duration of the external support is positively associated to the SME growth

5. RESULTS AND DISCUSSION

In order to test the hypothesis, set previously, multiple regression analysis is conducted in order to test the significance of the coefficients.

The test results are shown in three different Figures 42, 43, 44 respectively examining the relationship between SMEs growth and different parameters of external support.

The first test is undertaken to examine the relationship between SMEs growth presented as a number of net new decent jobs in the period before the external support and calculated change due to the external support depending on the duration of external support, sector and type of external support. From the results, 53% (R Square) of the change in the net new jobs in the SMEs that received external support can be linked due to the variables: duration of external support, sector and type of external support. Consulting the p-values of the variables, it can be drawn a conclusion that duration of support is the only variable that influences the SME growth.

From testing the hypothesis where SME growth is presented as a Number of Net new decent jobs (Figure 42), it can be concluded that two of the parameters takes from external support such as the type of external support and the sector where the external support was practiced do not show statistical significance and thus are not related to the SME growth. In other word, regardless of the type of the external support and the sector where external support was practiced, the external support highly depends on the duration of the support.

Regression Statistics

Regression Statistics	
Multiple R	0.72833
R Square	0.530465
Adjusted R Square	0.112006
Standard Error	37.10664
Observations	27

ANOVA

	df	SS	MS	F	Significance F
Regression	12	24889.26	2074.105	1.807626	0.144881845
Residual	16	22030.45	1376.903		
Total	28	46919.71			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-46.6365	56.9662	-0.81867	0.425001	-167.399472	74.12645	-167.399	74.12645
Duration of support (years)	30.72262	10.21119	3.008722	0.008327	9.075870343	52.36936	9.07587	52.36936
Start-up Support	34.02363	42.52356	0.800112	0.435365	-56.12228895	124.1695	-56.1223	124.1695
External business assistancex	40.31	42.10093	0.957461	0.35258	-48.9399974	129.56	-48.94	129.56
Innovations	24.81405	51.00187	0.486532	0.633187	-83.30508525	132.9332	-83.3051	132.9332
Enabling Environment	15.9139	41.54907	0.383014	0.70675	-72.16620052	103.994	-72.1662	103.994
Reduction of Burdens	0	0	65535	#NUM!	0	0	0	0
Advisory Services	11.7008	44.40993	0.263473	#NUM!	-82.4440361	105.8456	-82.444	105.8456

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	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Tourism & Hospitality	-22.1032	42.20864	-0.52366	0.60769	-111.5814836	67.37514	-111.581	67.37514
IT	2.233331	40.39056	0.055293	0.956589	-83.39083234	87.85749	-83.3908	87.85749
Design	-24.6762	51.10028	-0.4829	0.635709	-133.0040078	83.65151	-133.004	83.65151
Organic Agriculture	15.9139	41.54907	0.383014	0.70675	72.16620052	-103.994	72.1662	-103.994
Sustainable Building	0	0	65535	#NUM!	0	0	0	0

Figure 42: Test Relationship between SMEs Growth (Number of Net new decent jobs) and External Support

The second test (Figure 43) is undertaken to examine the relationship between SMEs growth presented as Net additional income increase in the period before the external support and calculated change due to the external support depending on the duration of external support, sector and type of external support. From the results, 67% (R Square) of the change in the additional income increase in the SMEs that received external support can be linked due to the variables: duration of external support, sector and type of external support. Consulting the p-values of the variables, it can be drawn a conclusion that duration of support is the only variable that influences the SME growth.

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.668114
R Square	0.446376
Adjusted R Square	-0.02464

Standard Error		102925
Observations		27

ANOVA

	df	SS	MS	F	Significance F
Regression	12	1.37E+11	1.14E+10	1.29004 7	0.321212
Residual	16	1.69E+11	1.06E+10		
Total	28	3.06E+11			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-49380.6	158010.7	-0.31251	0.758686	-384348	285587.2	-384348	285587.2
Duration of support (years)	49688.46	28323.41	1.754325	0.098504	-10354.5	109731.4	-10354.5	109731.4
Start-up Support	69420.54	117950.3	0.588558	0.564375	-180623	319463.9	-180623	319463.9
External business assistance	34115.72	116778	0.292142	0.773932	-213443	281674	-213443	281674
Innovations	100927.1	141467.1	0.713432	0.485855	-198970	400824	-198970	400824
Enabling Environment	-307.835	115247.3	-0.002667	0.997902	-244621	244005.4	-244621	244005.4
Reduction of Burdens	0	0	65535	#NUM!	0	0	0	0

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Advisory Services	-27164	-123182.6	-0.22052	#NUM!	-288299	233971.5	-288299	233971.5
Tourism & Hospitality	28253.08	117076.7	0.241321	0.812372	-219939	276444.7	-219939	276444.7
IT	-37505.7	-112033.8	-0.33477	0.742146	-275007	199995.4	-275007	199995.4
Design	-5999.14	-141740.1	-0.04232	0.966763	-306475	294476.3	-306475	294476.3
Organic Agriculture	-307.835	115247.3	-0.00267	0.997902	-244621	244005.4	-244621	244005.4
Sustainable Building	0	0	65535	#NUM!	0	0	0	0

Figure 43: Test Relationship between SMEs Growth (Net additional income increase) and External Support

The third test (Figure 44) is undertaken to examine the relationship between SMEs growth presented as Volume of additional sales by targeted enterprise in the period before the external support and calculated change due to the external support depending on the duration of external support, sector and type of external support. From the results, 69% (R Square) of the change in the additional income increase in the SMEs that received external support can be linked due to the variables: duration of external support, sector and type of external support. Consulting the p-values of the variables, it can be drawn a conclusion that duration of support is the only variable that influences the SME growth.

From testing the hypothesis where SME growth is presented as a Volume of additional sales by targeted enterprise, it can be concluded that two of the parameters takes from external support such as the type of external support and the sector where the external support was practiced do not show statistical significance and thus are not related to the SME growth presented through Volume of additional sales by targeted enterprise.

Regression Statistics	
Multiple R	0.689872
R Square	0.475924
Adjusted R Square	0.023377
Standard Error	441227.3
Observations	27

ANOVA

	df	SS	MS	F	Significance F
Regression	12	2.83E+12	2.36E+11	1.452992	0.25002
Residual	16	3.11E+12	1.95E+11		
Total	28	5.94E+12			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-257613	677373.1	-0.38031	0.708715	-1693580	1178353	-1693580	1178353
Duration of support (years)	233177.6	121419.1	1.920437	0.072809	-24219.3	490574.5	-24219.3	490574.5
Start-up Support	201291.2	505638.7	0.398093	0.695823	-870615	1273197	-870615	1273197
External business assistance	161942.9	500613.3	0.323489	0.750515	-899310	1223196	-899310	1223196
Innovations	532889.6	606452.5	0.8787	0.392569	-752732	1818511	-752732	1818511
Enabling Environment	24435.86	494051.2	0.04946	0.961165	-1022906	1071778	-1022906	1071778
Reduction of Burdens	0	0	65535	#NUM!	0	0	0	0

Advisory Services	-112723	-528069.1	-0.21346	#NUM!	-1232179	1006734	-1232179	1006734
Tourism & Hospitality	108877.2	501894	0.216933	0.831003	-955091	1172845	-955091	1172845
IT	-175412	-480275.6	0.36523	0.719721	-1193551	842726.6	-1193551	842726.6
Design	178645.2	607622.7	0.294007	0.772533	-1109457	1466748	-1109457	1466748
Organic Agriculture	24867.23	494051.2	0.050333	0.96048	-1022475	1072209	-1022475	1072209
Sustainable Building	0	0	65535	#NUM!	0	0	0	0

Figure 44: Test Relationship between SMEs Growth (Volume of additional sales) and External Support

In all three models where for SMEs growth different parameters were taken into consideration new job increase was the most significant when taking into consideration the Significance F as lowest in the first model (Figure 42: Significance F=0.144881845).

6. CONCLUSIONS AND IMPLICATIONS

6.1. General Summary of the Study

External support can take various forms and types and it is difficult to measure its isolated impact due to many external factors that might influence the same targeted SMEs. Nevertheless, the topic of measuring the impact of external support to SMEs growth is increasingly gaining the attention from both, researchers and policy makers.

This study had the aim to first attempt to make a collection of most of the different types external support to SME growth that can be found in literature. On top of it, the desk research was conducted to observe the external support currently offered to SMEs in Macedonia. Having analyzed different types of external support to SMEs growth, this study classified them in 6 possible categories and for each of them different case study from various sectors were

presented. The case study did not have the mere goal to have descriptive explanation of what certain type of external support has as characteristics, but each of the case study tried to apply different, relevant research techniques to measure the individual impact from the particular type of external support. Once different parameters of external support were attributably measured using various techniques for data collection and analysis, all interventions were coded from the list of 6 classified types of external support, 6 different sectors the SMEs belong to and number of years the external support was applied to. It might have been a good parameter to take the amount of external support dedicated to each intervention and would give other angle of external support to SMEs growth, especially to decision makers, this exercise was very difficult to be conducted due to heavy facilitation costs.

The regression analysis showed that there is no relation between the type of external support and the sector where the SMEs gained the external support, but that there is a significant relationship between the years of gaining external support. Long-term interventions (external support) are considered to bring bigger impact. This is very relevant argument for policy makers and donors to start programming long-term external support programmes rather than one-shoot or short-sighted activities that bring less impact on SMEs growth.

6.2. Conclusion on the Research Question

<u>Attribution to external support</u>. Attribution of external support can be defined as the ascription of a causal link between observed growth and a specific external support. It represents the extent to which observed growth effects can be attributed to a specific external support or to the performance of one or more SMEs taking account of other external support measures, (anticipated or unanticipated) confounding factors, or external shocks. In order to establish attribution, a baseline (i.e. comparing the before-after situation), is not always enough. When measuring the impact of external support, it is very important to take into consideration other factors besides external support that led to the growth measured. Therefore, practitioners should be aware and try to measure the growth attributable to certain external support isolating all other factors as accurate as possible. Therefore, there is a need to make distinction among the concepts of: contribution, attribution and additionality. 1) Contribution is the total measured growth since the start of the external support. This means

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that external support contributed to the total growth of the SMEs, without taking into consideration other types of external support that might have happened in the meanwhile and/or other external factors that might affected the growth of the SMEs. 2) Additionality refers to the extent to which external support fills a market gap. According to this concept, assessing the impact of the external support is very important, but mathematical approaches are considered as inadequate as they would underestimate their role. 3) Attribution as a concept as explained before is the ascription of a causal link between observed growth and a specific external support. The concept of attribution is related to the concept of contribution and additionality and partly overlap (Figure 45).

Concepts Related to Attribution

Contribution   Attribution   Additionality
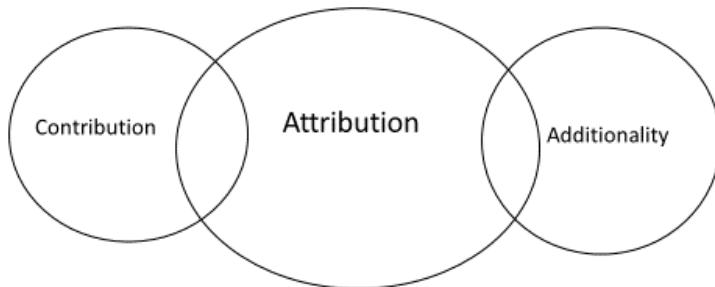
Figure 45: Concepts Related to Attribution

Scale of the external support. The processing companies were making substantial efforts at building their own identity and brand. They realized that this road leads to a higher value added, operational efficiency and ultimately higher profits. These efforts should push the above-mentioned average export price per product up. A number of companies mentioned that their pricing has gone up since the development of their brand.

Benefits of this will also be felt by the whole industry because through branded sales it is not only the company's brand that is being marketed but also the country of origin, thus promoting the whole sector. These types of outcomes from external support are sometimes more important that the pure numbers that the intervention yields. These are transformational changes that will have a lasting effect. Even though this process is long-term and requires

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substantial investments, the companies presented here have started on this road and are continuously moving forward.

Market level change. When using market system approach as IME has and the goal to is achieve systemic change in the market, overall assessment and verification of the impact of external support interventions to the whole value chain and to triangulation of the sources of gathered information would be the method of measuring the impact of the external support.

For e.g. in organic agriculture in IME, four main interventions were introduced within the market sector:

- O1.3 GE-01 Capacitate buyers' coop to increase membership
- O1.3 GE-02 Facilitate establishment of Organic Green Market in Skopje City Mall
- O1.4 GE-04 Export promotion of organic products
- O3.1 GE-06 Private sector driven awareness raising for organic products
- 02.2 S-03 Support Federation of Organic Producers (MOPF) to disseminate organic agriculture advisory services to farmers.

Nevertheless, to assess the impact of each intervention instead of using a method where separate measurement will be conducted for each intervention, overall assessment to assess and verify the impact of the interventions to the whole value chain and to triangulate the sources of gathered information was practiced.

Duration of the external support. The time that the support is available and accessed to SMEs is of crucial importance. It can be observed that the longer the external support exists and is utilized by the SMEs, the better results it gives in the SMEs growth. Therefore, there could be a division made that external support can be short-term (one year of duration) and longer-term (from at least 2 years duration and more). There might be good point for further research to investigate what makes time dimension of available external support so critical for the SMEs growth. Possible elements to be further investigated might be the increased absorption capacity of SMEs, learning curve over the years of the owner/manager on how to access the available external support or the application of same external support makes the SMEs grow repeatedly.

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Delayed Impact of external support. Taking a facilitatory approach, support programmes as IME worked with selected private and public sector partners to improve the viability of their supply chains, with a focus on building sustainable linkages with medium, large and institutional buyers and services providers with the aim of allowing the growth of the sectors. The goal of the programme was also to facilitate systemic change in the market system that will last after the external support stops producing sustainable growth beyond the lifespan of the intervention (external support). Such approach might sometimes take more time and get delayed impact that was not measured within the support monitoring timeline.

Multi-factor influences of growth. It is difficult to extract the exact impact of the external support. Sometime there are few factors influencing the SMEs growth and might get difficult to measure the impact of a single intervention (external support). Same sector, sometimes might get several differ types of external support that would be difficult to attribute to. In such cases, the method of contribution to SMEs growth should apply rather the attribution to SMEs growth.

6.3. Theoretical and Practical Implication

Researchers:

There are different types and variations of the types of external support to SME growth that it is rather difficult to get organized in assessing impact of the external support to SMEs growth. This gets even more complex in researches that tend to explain the factors that influence SMEs growth. For the sake of organizing the researches certain classification of external support should be followed.

Inter-connected SMEs. SMEs work in market systems that are not functioning as isolated islands, but rather are inter-connected to other SMEs. The relationships and networks among SMEs are very significant segment for further researches from this perspective mainly due to observing the complex and dispersive impact that external support generates in the wider context of SME development. External support can create growth in SMEs that further might have an implication of growth in another SME from the same sector or SMEs from other sectors. There has been little empirical research

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that have examined the impact of external growth to inter-connected SMEs and might be a good area to be researched in future. The findings might be relevant further for policy creators to properly design support measures in other sector even when targeting growth in inter-related sector. For e.g. support measures designed for input suppliers of organic agriculture (fertilizers, seedlings) will bring more growth in organic agriculture SMEs than measures targeting these same SMEs.

It might be very relevant to investigate in future the impact of external support when slowing down a decline in a sector. Instead of measuring the new jobs created influenced by a certain external support, to analyze whether the same principles follow when external support prevents current jobs to be sustained. The impact of external support on declining sectors or SMEs that do not note increase in the parameters of SME growth, but decrease in SMEs jobs, sales, profit etc. It should be examined if same patterns and conclusions can be drown when assessing the impact of external support to SMEs that are in declining mode. This could be of interest of future researches with relevant and interesting finding for sustaining jobs rather that creating new jobs.

Policy makers:

SMEs provide even more of the existing jobs in Macedonia than in the EU (77% vs. 66% in EU) and produce a significantly higher share of national value added than elsewhere in Europe (67% vs. 57%in EU). This even further increases the importance of the topic and attention by the policy makers. As a result of the empirical research that was conducted, several concrete proposals for improvement od the policies in regards to external support to SMEs growth can be specified:

a) Context awareness. Strategic decisions of policy makers should not only focus on the type of external support provided but also the industry specificities in order to achieve most with the resources available. Tourism has maybe lower direct impact on job creation, yet positive indirect contribution it creates is much higher than any other industry. Additionally, particular type of tourism can bring

good directions in other field such as environment protection that is tightly linked to adventure travel. Adventure tourists are highly demanding to clean environment and thus making the positive influence on policy makers I the field of waste management.

b) Importance of Monitoring Systems. It is more essential that the focus of assessing external support to SMEs growth from public sector shifts from concentrating on activities and outputs to measuring results and impact. This puts emphasis on more robust monitoring systems Traditionally, monitoring of support programmes has been focusing to a large extend on monitoring and reporting of activities with the aim of proving to outsiders (general public, voters, donors, headquarters etc.) that the programme is being implemented according to the planning. Monitoring systems should more systematically monitor, measure and report not only on activities but even more on results and impact over time. However, they should not be used only to prove the impact of the external support but also improve future external support programmes. Surveys usually capture information at one point of the time. Nevertheless, information collected from observations and direct contact to SMEs, local officials and other involved stakeholders can be wisely used as learning from experience. There should be an attempt from policy makers to introduce mechanisms that will allow structured registry of field observations. In this way, qualitative information should also be integrated into steering current support and conceptualization of future programmes of external support of SMEs growth.

c) Significance of coordinating different support programmes. First of all, there is a need for alignment of the legislation in regards to implementation of unique classification of SMEs in all institutions that are providing some kind of external support in order to secure equal treatment from the intuitions when implementing external support measures, interventions, activities etc. One line for needed coordination when developing and implementing external support

measures is between the institutions in the central government and the ones operating on local level. Coordination is needed since support measures should be dimensioned in the right manner targeting the specific needs of the SMEs. If not planned adequately, there have been cases of market failures and disruptions and as such instead of improving certain situation for SMEs, there have been case where external support harms more than bringing benefit. Therefore, the importance of securing coordination of the external support is even more important to be well executed by the authorities. This is even more evident in the cases where external international (bilateral and multilateral) donors are designing their individual cooperation programmes without taking too much attention on the already existing programmes from other donors in the same topic. In small countries as Macedonia is, this is very important aspect as overlapping activities of the same external support programmes may target same SMEs, confusing them and distracting them from the core business activities. In such cases, Donor mapping (Figure 46) can be used and attempt to present the different donor programmes in a visual matrix that will avoid the overlap and promote rather synergies. Instead of presenting different donor programmes in a list such as Figure 18 was presented.

The different type of external support provided by the donors as listed in the previous table can be better presented visually in a Donor Map as in Figure 46 with a special focus on where potential overlaps can happen.

External Donor Support to SMEs Growth in Macedonia
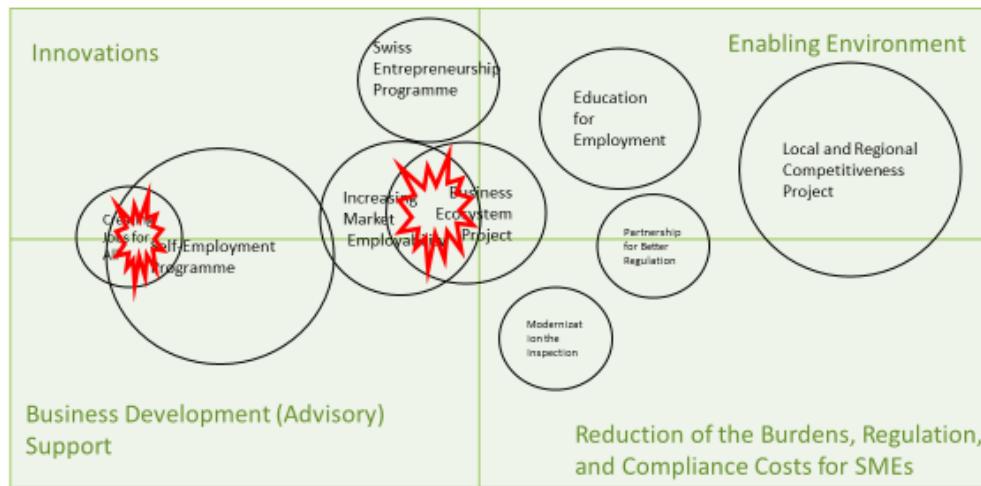
Figure 46: Donor Map on External Support to SMEs Growth in Macedonia

The Cabinet of the Vice Prime Minister for Economic Affairs is leading the implementation of the Plan for Economic Growth and in the same time is responsible for the donor coordination on private sector support programmes in the country. The map serves as an indication for better allocation of the available funds from international bilateral and multilateral donors when planning and designing new programmes. During their implementation the map presents where different donor programmes fall in regards to four different types of external support in: innovations, business development (advisory) support, enabling environment and reduction of burdens. Special attention should be paid in the possible overlaps between different programmes and provide coordination in order to achieve complementarity and synergy rather than potential conflicts.

6.4. Limitations of the Study and Further Research

Isolation of the Impact. It is a complex endeavor and highly difficult to isolate the causal impact of certain intervention as there are different factors contributing to the change. Sometimes two interventions contribute to same impact and how much of them is very hard to isolate. Additionally, not all interventions can be fully measured, especially the ones that fall in the type of external support: enabling environment are very difficult to be measured, yet crucial as a precondition for other interventions that influenced directly the SMEs performance and produces a systemic change that continued to produce benefit for other SMEs even after the lifespan of the external support (project). In such cases, the measurement is extremely complex, therefore seems least influential which is not the case.

One possibility explored was the use of control groups. Control groups would be one of the best methods used in theory. Yet, when it comes to practice it is almost impossible to find two identical control groups that could be compared. There was an attempt to compare 2 tourism destinations, both winter ones and compare the results. The attempt failed since the results would not be relevant as one destination had private sector owner of the ski center and the other one public sector owner and management that made them not relevant for comparison, not to mention the different weather conditions for the same season and different level of snow in both destinations.

Amount of External Support. The research might have brought further findings on the topic if it would be possible to isolate the exact cost that was spent per intervention in IME programme and as such would get valorization of the external support. This variable is also something valid to be researched in further researches. In this situation as IME programme followed market system development approach that has intensive cost in the facilitation of the interventions (external support) which is almost half of the direct amount spent for the external support within the intervention. As facilitation cost is actually allocated to the salaries of the experienced personnel managing the interventions and as each person managed several interventions, this exercise of calculating the exact cost per intervention including the facilitation cost was not possible. In this way, it was very complex exercise to extrapolate the costs dedicated to the time of the facilitator that was involved in the intervention as one

facilitator was leading several interventions at the time. This can be a subject for other future researches to examine is the amount dedicated to external support has significant relevance on the SMEs growth. Without the facilitation cost being included, it also would not have any sense. Therefore, this might be a possibility for future researchers to explore.

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ANNEX 1: LIST OF IME INTERVENTIONS (EXTERNAL SUPPORT)

	Interventions
	Interventions
1	Pilot Intervention Mavrovo + TH 01 -
2	Improving water transport operational procedures in Macedonia
3	Product Development in Ohrid in preparation for Adventure Travel SVF
4	DM Processes for improving/diversifying products/services in Krushevo
5	Mavrovo: Summer offer and Access to domestic and international markets
6	Guiding Services
7	Facilitate establishment of Organic Green Market in Skopje City Mall
8	Capacitate buyers' coop to increase membership
9	Improve access to inputs and knowledge for production though Rural Incubator
10	Export promotion of organic products
11	Value chain development for the domestic consumption of organic products
12	Facilitate development of best practice cooperation methodologies between formal education providers and business sector in IT
13	Labor market-oriented modules/trainings as free classes in technical VET schools
14	Training of trainers in Creative Enterprise
15	Capacitate advisors to provide advisory services in organic agriculture
16	Introduction of organic agriculture as free classes curricula in selected VET Agricultural schools
17	Identify and train Career Counselors to cooperate with private sector for curricula improvement
18	Improve Management capacities of hotel and restaurant mangers
19	Hotel training initiative – bringing Swiss Hospitality into Macedonia
20	Job placement center
21	Support young designer start-ups
22	Create awareness of local IT product on domestic market
23	Facilitate the development of Skills simulator
24	Supporting services for designers
25	Implementation of the short-term National ICT strategy Action Plan
26	IT export market
27	Accelerator services
	Excluded Interventions
1	Support National Youth Council to provide input to the National Youth Strategy 2016 - 2025
2	Access to Support services for women owned business in 5 sectors

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Embassy of Switzerland in North Macedonia
Swiss Cooperation Office

Ms. Marijana Milevska
PhD Candidate

Reference: 771.22; 55/19
Skopje, 20.06.2019

Confirmation of Authorisation for Use of SDC Data for Research Purposes

Dear Ms. Milevska,

This letter is to confirm the authorisation to use data from the SDC project "Increasing Market Employability" for the purposes of scientific research in the frame of the development of your Ph.D. thesis. The authorisation was provided based on a previous letter from your side requesting such permission.

Please kindly note that the authorisation for use of the data is only granted for the specific purpose of scientific research indicated above. Please also note that the authorisation is only issued for use of data in an aggregated manner, without disclosure of individual firm-level data (observing confidentiality of individual firms' sensitive data).

With best wishes for a successful completion of your PhD research work,
Yours sincerely,

Embassy of Switzerland in North Macedonia

Lilian Kandikjan
National Programme Officer

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ANNEX 3: CUMMULATIVE RESULTS PER INDIVIDUAL IME INTERVENTIONS (EXTERNAL SUPPORT) FOR THE PERIOD FROM 01.04.2013-31.12.2017

	1
Impact level Indicators	**Pilot Intervention Mavrovo + TH 01 -**
1. Number of Net new decent jobs (gender and age desegregated)	63
2. Volume of increased earning income of end beneficiaries	500,631 CHF
3. Net additional income increase	451,093 CHF
8. Volume of additional sales by targeted enterprises	1,775,863 CHF
Duration of support (years)	3
Support Type	1
Sector	1

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
4=Enabling Environment
5=Reduction of Burdens
6=Advisory Services

Sector
1=Tourism & Hospitality
2=IT
3=Design
4=Organic Agriculture
5=Sustainable Building

Impact level Indicators	Improving water transport operational procedures in Macedonia
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	1
Support Type	5
Sector	1

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
4=Enabling Environment
5=Reduction of Burdens
6=Advisory Services

Sector
1=Tourism & Hospitality
2=IT
3=Design
4=Organic Agriculture
5=Sustainable Building

Impact level Indicators	Product Development in Ohrid in preparation for Adventure Travel SVF
1. Number of Net new decent jobs (gender and age desegregated)	53
2. Volume of increased earning income of end beneficiaries	61,760 CHF
3. Net additional income increase	206,653 CHF
8. Volume of additional sales by targeted enterprises	1,025,150 CHF
Duration of support (years)	3
Support Type	2
Sector	1

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
4=Enabling Environment
5=Reduction of Burdens
6=Advisory Services

Sector
1=Tourism & Hospitality
2=IT
3=Design
4=Organic Agriculture
5=Sustainable Building

Impact level Indicators	DM Processes for improving/diversifying products/services in Krushevo
1. Number of Net new decent jobs (gender and age desegregated)	8
2. Volume of increased earning income of end beneficiaries	10,160 CHF
3. Net additional income increase	28,754 CHF
8. Volume of additional sales by targeted enterprises	115,016 CHF
Duration of support (years)	2
Support Type	2
Sector	1

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
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Sector
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Impact level Indicators	Mavrovo: Summer offer and Access to domestic and international markets
1. Number of Net new decent jobs (gender and age desegregated)	31
2. Volume of increased earning income of end beneficiaries	77,195 CHF
3. Net additional income increase	208,676 CHF
8. Volume of additional sales by targeted enterprises	834,704 CHF
Duration of support (years)	2
Support Type	2
Sector	1

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
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Impact level Indicators	Guiding Services
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	1
Support Type	4
Sector	1

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
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Impact level Indicators	Facilitate establishment of Organic Green Market
1. Number of Net new decent jobs (gender and age desegregated)	11
2. Volume of increased earning income of end beneficiaries	15,480 CHF
3. Net additional income increase	9,979 CHF
8. Volume of additional sales by targeted enterprises	20,530 CHF
Duration of support (years)	1
Support Type	1
Sector	4

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
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Impact level Indicators	Capacitate cooperative
1. Number of Net new decent jobs (gender and age desegregated)	37
2. Volume of increased earning income of end beneficiaries	28,629 CHF
3. Net additional income increase	42,478 CHF
8. Volume of additional sales by targeted enterprises	129,868 CHF
Duration of support (years)	1
Support Type	1
Sector	4

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
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Impact level Indicators	Improve access to inputs and knowledge for production though Rural Incubator
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	2
Support Type	2
Sector	4

Support Type
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2=External business assistance to existing firms
3=Innovations
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Impact level Indicators	Export promotion of organic products
1. Number of Net new decent jobs (gender and age desegregated)	196
2. Volume of increased earning income of end beneficiaries	169,971 CHF
3. Net additional income increase	216,964 CHF
8. Volume of additional sales by targeted enterprises	968,382 CHF
Duration of support (years)	3
Support Type	2
Sector	4

Support Type
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Impact level Indicators	Value chain development for the domestic consumption of organic products
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	431 CHF
Duration of support (years)	1
Support Type	5
Sector	4

Support Type
1=Start-up support
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Impact level Indicators	Facilitate development of best practice cooperation methodologies between formal education providers and business sector in IT
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	1
Support Type	4
Sector	4

Support Type
1=Start-up support
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Impact level Indicators	Labor market oriented modules/trainings as free classes in technical VET schools
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	1
Support Type	4
Sector	5

Support Type
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Impact level Indicators	Training of trainers in Creative Enterprise
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	1
Support Type	4
Sector	2

Support Type
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Impact level Indicators	Capacitate advisors to provide advisory services in organic agriculture
1. Number of Net new decent jobs (gender and age desegregated)	10
2. Volume of increased earning income of end beneficiaries	90,956 CHF
3. Net additional income increase	9,248 CHF
8. Volume of additional sales by targeted enterprises	13,212 CHF
Duration of support (years)	1
Support Type	6
Sector	4

Support Type
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Impact level Indicators	Introduction of organic agriculture as free classes curricula in selected VET Agricultural schools
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	1
Support Type	4
Sector	4

Support Type
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Impact level Indicators	Identify and train Career Counselors to cooperate with private sector for curricula improvement
1. Number of Net new decent jobs (gender and age desegregated)	18
2. Volume of increased earning income of end beneficiaries	98,385 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	1
Support Type	6
Sector	

Support Type
1=Start-up support
2=External business assistance to existing firms
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Impact level Indicators	Improve Management capacities of hotel and restaurant mangers
1. Number of Net new decent jobs (gender and age desegregated)	17
2. Volume of increased earning income of end beneficiaries	141,304 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	3
Support Type	6
Sector	1

Support Type
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Impact level Indicators	Support National Youth Council to provide input to the National Youth Strategy 2016 - 2025
1. Number of Net new decent jobs (gender and age desegregated)	466
2. Volume of increased earning income of end beneficiaries	177,577 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	3
Support Type	4
Sector	

Support Type
1=Start-up support
2=External business assistance to existing firms
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Impact level Indicators	Hotel training initiative – bringing Swiss Hospitality into Macedonia
1. Number of Net new decent jobs (gender and age desegregated)	70
2. Volume of increased earning income of end beneficiaries	155,813 CHF
3. Net additional income increase	8,300 CHF
8. Volume of additional sales by targeted enterprises	41,786 CHF
Duration of support (years)	3
Support Type	2
Sector	1

Support Type
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Impact level Indicators	Job placement center
1. Number of Net new decent jobs (gender and age desegregated)	58
2. Volume of increased earning income of end beneficiaries	140,330 CHF
3. Net additional income increase	5,244 CHF
8. Volume of additional sales by targeted enterprises	32,195 CHF
Duration of support (years)	1
Support Type	4
Sector	2

Support Type
1=Start-up support
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Impact level Indicators	Support young designer start-ups
1. Number of Net new decent jobs (gender and age desegregated)	3
2. Volume of increased earning income of end beneficiaries	27,355 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	22,459 CHF
Duration of support (years)	1
Support Type	1
Sector	3

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
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Impact level Indicators	Access to Support services for women owned business in 5 sectors
1. Number of Net new decent jobs (gender and age desegregated)	26
2. Volume of increased earning income of end beneficiaries	196,132 CHF
3. Net additional income increase	227,477 CHF
8. Volume of additional sales by targeted enterprises	460,906 CHF
Duration of support (years)	3
Support Type	6
Sector	

Support Type
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Impact level Indicators	Create awareness of local IT product on domestic market
1. Number of Net new decent jobs (gender and age desegregated)	4
2. Volume of increased earning income of end beneficiaries	44,040 CHF
3. Net additional income increase	44,016 CHF
8. Volume of additional sales by targeted enterprises	152,763 CHF
Duration of support (years)	1
Support Type	2
Sector	2

Support Type
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Impact level Indicators	Facilitate the development of Skills simulation
1. Number of Net new decent jobs (gender and age desegregated)	21
2. Volume of increased earning income of end beneficiaries	148,896 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	1
Support Type	3
Sector	2

Support Type
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Impact level Indicators	Supporting services for designers
1. Number of Net new decent jobs (gender and age desegregated)	5
2. Volume of increased earning income of end beneficiaries	31,692 CHF
3. Net additional income increase	208,654 CHF
8. Volume of additional sales by targeted enterprises	1,253,318 CHF
Duration of support (years)	2
Support Type	3
Sector	3

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
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Impact level Indicators	Implementation of the short term National ICT strategy Action Plan
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	1
Support Type	4
Sector	2

Support Type
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Impact level Indicators	IT export market
1. Number of Net new decent jobs (gender and age desegregated)	0
2. Volume of increased earning income of end beneficiaries	0 CHF
3. Net additional income increase	0 CHF
8. Volume of additional sales by targeted enterprises	0 CHF
Duration of support (years)	3
Support Type	4
Sector	2

Support Type
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Impact level Indicators	Accelerator services
1. Number of Net new decent jobs (gender and age desegregated)	87
2. Volume of increased earning income of end beneficiaries	314,295 CHF
3. Net additional income increase	27,978 CHF
8. Volume of additional sales by targeted enterprises	30,111 CHF
Duration of support (years)	3
Support Type	1
Sector	2

Support Type
1=Start-up support
2=External business assistance to existing firms
3=Innovations
4=Enabling Environment
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