VENTURE CAPITAL AND THE INCUBATION OF SMALL ENTERPRISES

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Key words: business incubation, corporate business incubation, knowledge and capital gap, V2C (venture to capital).

CONCLUSIONS

The present paper has reviewed the potential interpretations of the incubation process and examined in detail the basic types of corporate incubators having an increasing role in everyday practice together with the main objectives of the different types. We have also mapped how the different types of enterprises can join the incubation process and highlighted that for-profit organisations can also play a significant role within financing solutions. We made an attempt to prove that – under adequate conditions – the cooperation of private capital and incubators is suitable for creating a bridge over the equity and knowledge gap, which means that such co-operations can also have significant economic development effects. Incubators operating on such bases can support small and medium-sized enterprises not only by offering financial and professional help. Experience has shown that the incubation process can be "naturally accompanied" by the initiation of a networking process, the advantages of which can also be used by the companies participating in incubation. After examining the special features related to the operation of corporate incubators –which served to set the logical frames of the analysis - we studied in detail what role the state can assume in such type of incubation. Following some theoretical considerations and an analysis of successful and failed practical examples we reached the conclusion that governmental interventions "can have their place" in this process. Since there are various different ways for the development of incubators, the types of roles taken by the state can also differ. A model was developed in which we summarized potential governmental strategies, also discussing the possible effects on the players of the incubation industry. We are convinced that the analysis of this highly new and dynamically developing area may also lead to conclusions that can be applied in practice and the recognition of defined rules and laws may contribute to the improvement of the national practice.

ABSTRACT

The concept of business incubation has recently strongly intertwined with the development of innovative start-up enterprises. These small and mediumsized firms are the potential focus group of future venture capital investments, however in the early phase of their lifespan they have to face several difficulties which may hinder their growth or may even cause their failure. The main role of incubation is to bridge the "promising" and "eligible for investment" phases. Some recent types of incubators are able to fulfil this task within a corporate framework. Hence incubation has become a corporate strategy linked with venture capital and corporate venturing activity which is prior to the investment. Recent study first briefly reviews the concept of business incubation then surveys the potential types of corporate incubators, their basic motivations and strategies. After this we present the role of incubators in bridging the ,,knowledge and capital gap". After the examination of the demand and supply side of corporate incubation we evaluate the potential role of public sector in connection with corporate business incubation.

INTRODUCTION

In the European Union the term business incubation is closely linked to local economic development and thus to economic policy intervention, therefore, the question of why it should be discussed in a paper related to venture capital may arise. The meaning of incubation in economics gives an explanation to its essential and mutually interrelated connection with venture capital. In economics the basic content of the concept is that startup enterprises are backed up in the most vulnerable (early) period of their life span by ensuring them special environment and services. So basically it is a transitional state, by the end of which the incubatee becomes capable of proper operation (and typically fast growth) under market conditions (Aernoudt, 2004). Just as healthy newborn babies can live without incubators, the majority of companies do not need such support and providing them such assistance is not worth either. Owing to the special features of the innovation process and the frequent market failures occurring in this field, innovative, technology-based start-up enterprises constitute the most characteristic target group of incubation. In a latter phase of their growth these enterprises will be the most important target

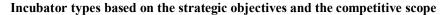
group of venture capital activities. Therefore, the success of incubation is closely related to the development of companies that are potentially suitable for venture capital investment and business angel activities.

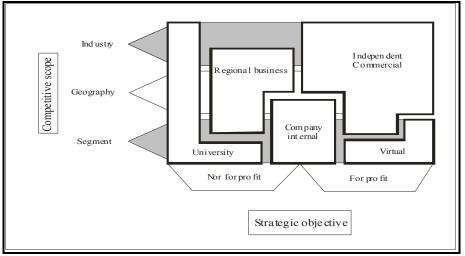
MATERIAL AND METHODS

After interpreting incubation, the present paper is divided into three parts. First, we examine which players of the private sector are interested in the incubation industry, which are the main motivations and what concepts have been formed. Second, on the "demand" side of the process we explore the interests of small entrepreneurs and the interdependence of players. Third, we look at whether governmental interventions are justifiable in connection with corporate business incubation and if yes in which areas and how. Today the number of incubator-type institutions providing services and premises especially for start-up enterprises is estimated to be 3000 worldwide (CEC, 2002). As for their distribution, most of these are present in North America and Western Europe, although their number is also dynamically increasing in countries of the Far East. In 2001 the quantitative growth of incubators temporarily stopped due to the dotcom crisis, (what is more, their number even fell to a certain extent) however, today the role of seed capital investors has given their development a new stimulus (Johnsrud, 2004). Numberless types co-exist and the same denomination may often cover different principals of operation, while sometimes institutes naming themselves differently turn out to function identically. Consequently, we do not aim to provide a detailed typology; instead, we merely seek the common features of major forms. Based on the service provision Carayannis and Zedtwitz (2005) give a good approach to the practical interpretation of incubators. They define five fundamental incubator services: incubation space, management services, financial services, supporting start-up enterprises and networking. In their opinion incubation is an industry where various agents (economic development agencies, venture capitalists, business angels, real estate developers, universities) try to offer financial and management services for start-up enterprises, consequently in a sense service providers compete with one another. They can distinguish themselves from

similar institutions based other on whether they operate on non-profit or for-profit grounds (strategic goal). Furthermore, distinction can be made on the basis of competitive scope, that is: whether the incubator focuses on a given industry, a determined segment of entrepreneurs or a defined geographical area (Figure 1). While university incubators and the ones aiming at economic development obviously operate on non-profit grounds, incubators following corporate interests often operate on the borderline of profit interests and other complementary goals.

Figure 1





Source: Carayannis - Zedtwitz (2005: 104)

Based on the main objective, three large groups of incubators can be defined, as the set of goals determine the most important stakeholders and thus also the applied concept. *The first basic* group of possible goals is related to the development of the local economy including increased employment and local GDP, certain innovation-policy objectives and improving the local institutional environment of enterprises. *The* second group of goals strives to reduce inequalities of the population's income by supporting certain beneficiary groups (female entrepreneurs, minorities, etc.); consequently, it mainly represents social policy objectives. *The third group of goals* indicates corporate interests that may include capital gain, profit or advantages hard to express in money such as complementary markets, monitoring technologies or motivating employees. In the case of corporate goals venture capital, corporate venturing or real estate development types of incubators are established, which are jointly called corporate incubators in the present paper. Business incubation is a dual-level process. On the one hand, investment is made in the hope of some longer-term return. In case of corporate incubation these are well-defined corporate strategic goals (capital gains, profit, accessory benefits). On the other hand, entrepreneurs access the incubator (sometimes only with an idea) and after the commercialization of the idea and a few years of operational experience leave it with an increased value. Value adding that can derive from services is a process with two players: it demands the active participation of both the incubator's management and the supported company (Rice, 2002). While looking for the common elements of interpretation, in our opinion the special environment and milieu provided for start-up enterprises that increases their chances of survival and improves their capacity to develop can be highlighted. Incubation is always a process that covers the complex support of small enterprises. This incubation process can not only occur in incubators in the classical sense but also in a new type of organisation like a virtual incubator or "incubator without walls" (CEC, 2002; UN/ECE, 2001). At the same time, incubation is not limited to the relationship of service provider and recipient, but the fact that various entrepreneurs and researchers are concentrated in space also plays an important role. Therefore, spatial proximity is an essential element that does not necessarily require the concentration of players in one building, however, it requires daily relations since the flow of tacit knowledge can be ensured and synergies emerging from spatial proximity can reach real effects only this way.

More studies and reports emphasise that incubators following corporate interests are becoming more and more significant in the incubation industry (CEC, 2002; Johsrud et al., 2003; Linder, 2003). In developed regions corporate concepts are expected to give new force to the development of incubators, while in transitional and developing countries at present the domination of economic development goals is obvious (Johnsrud 2004). In Europe today approximately 20% of all the incubators follow private interests; this proportion is the same as in the USA. It can be noticed, however, that among specifically technologyoriented incubators this rate is higher and is close to 30% (Tornatzky et al., 2003). Private capital has two basic ways to join the incubation process. One alternative of assuming a role is when the involved capital investors quasi enrich the variety of services offered by the incubator. Participation may be considered more organic if the capital investors stand behind business incubators as their foun-

The fact that in many countries of the world emerging or early-stage - and especially innovative - enterprises have difficulties in gaining access to financing sources necessary for their growth is an insufficiency involving the *demand side* of the incubation process. The reason is simple: the high fixed costs of screening enterprises and managing investments and the need for reducing risks on the investors' side forced a more economical way of gaining share in safer large enterprises with significant history. What is more, in the second half of the 90s the sums flowing in venture capital funds peaked, so in constantly growing organisations minimal investment size increased automatically. From the end of the 90s the trend turned around temporarily: the attention of venture capital as-

ders / financiers.

sociations focused on investing in earlyphase predominantly technological companies (the spread of venture capital incubators reflects this), however, the bust of the "Internet bubble" ended this short period (Makra - Kosztopulosz, 2004). Although venture capital is considered the adequate form of financing these enterprises, general experience shows that the investments of venture capital organisations tend to prefer investing relatively greater amounts and financing later phases with fewer risks. In case of start-up enterprises, on the other hand, besides access to financing sources, nonfinancial assistance, i.e. management and professional consulting services play an important role in the successful development of the enterprise. However, the already mentioned processes also had the consequences that the managers of professional venture capital organisations tend to be less capable to fulfil this enterprise development role (Mason - Harrison, 2002). In the international literature the term *equity* and knowledge gap refers to the described market insufficiency. Appearing in the literature more and more often, the new model of the V2C (Venture-To-Capital) approach serves as an instrument to encourage investments in the very early life-cycle phase. According to this at the end of the seed phase and the start-up phase part of the enterprises can be made capable of becoming the investment target of venture capital organisations within relatively short time (this most often means 2-3 years). In order for this to happen, the targeted, professional and active mediation of an enterprise development specialist is necessary, which can create a bridge over the knowledge gap (Rasila et al., 2002). Venture capital organisations are interested in the success of the process since this way the number of promising investment opportunities

grows. It is difficult to recognise that incubators represent the – maybe most suitable – group of players participating in enterprise development that may be able to carry out the task of creating a market-based bridge over the knowledge gap. According to the model, this has two criteria. One lies in settling suitable enterprises with great growth potential into the incubator (suitable selection performance), while the other one is active and professional participation (value adding capability), by which enterprises become ripe for receiving venture capital investment.

The changes and modifications occurring in the course of expanding the concept of incubation and practical operation have pointed out that incubation processes are also often accompanied by some forms of cooperation. The international literature more and more often discusses the advantages lying in networking within the frameworks of incubation (Clarisse – Brunnel, 2005; UKBI 2004). Furthermore, the development of an active cooperation between the incubatee and associate enterprises around the incubator is a common phenomenon. Beyond a certain stage the level of cooperation calls for using the term of entrepreneureal networks, which means that the incubator may be considered also as some institutionalised form of the entrepreneureal network. In the related literature the list of arguments for the advantages of networking is really long. Network cooperations are supported by such "hard" arguments like access to resources, gaining cost advantages, better access to various markets (DG ENTR, 2004; Sprenger, 2001). On the other hand, "soft" advantages - difficult or impossible to display in numbers - like "the feeling of belonging somewhere" (Elfring - Hulsink, 2003) and "the spread of knowledge this way" are getting in the foreground. In the case of companies to be incubated some factors receive especially great emphasis. The fact that cooperations can often have an important role in substituting missing skills and capabilities (Johannisson, 1996) is an important observation. In such formations, for example, cooperations represented by the more and more popular abbreviation KIT (knowledge, innovation, technology) are of essential importance. In KIT-networks the fundamental reason of partnership is always to gain or create some new knowledge, skill or capability (Lechner -Dowling, 2003). These types of cooperations are especially important in the early phase of the enterprises' life cycle when they usually have little experience. The learning process has special emphasis in networks emerging within incubators. Collinson and Gregson pointed out that for "young companies" gaining external knowledge in the frameworks of the network assumes great importance (*Clarisse – Brunnel, 2005*). The question of which players can participate in networks may rise. It is an accepted view that one of the most important tasks of networks is to facilitate access to various resources and expertise, therefore, it is recommended to establish the widest possible network co-operations starting from (potential) financing institutes through various enterprise development organisations to the different scientific institutions (UKBI, 2004). In harmony with the importance of wide networks four different network forms can be distinguished that may bring different advantages for innovative small and medium-sized enterprises (Clarisse - Brunnel, 2005):

• *Financing networks* are especially important. These companies usually do not have history in operation and often need to involve external sources for their

development. Network frameworks make finding partners easier and help to overcome difficulties emerging from mistrust.

• Informal networks among individuals are also important in terms of gaining the necessary human resources. Since these enterprises are not known, it is often difficult even to find and hire the necessary employees.

• The third category is *networking that targets gaining technology and knowledge*. In the frameworks of the cooperation it is significantly easier to gain access to the intellectual resources possessed by other organisations.

• The forth sub-type is organisational networking, within which it is easier for companies to find and rank experts involved in formal procedures (legal counselling, patents, etc.).

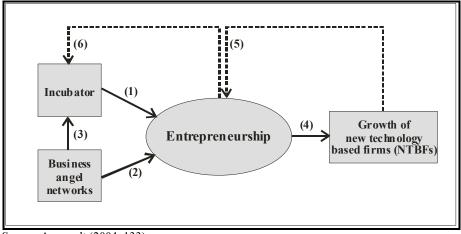
RESULTS AND DISCUSSION

Going through the "supply" and "demand" side of corporate incubation we can draw two highly important conclusions. On one hand, based on the capital need of technology-based innovative enterprises incubation assumes an important role in the seed and pre-seed phase, on the other hand, the venture capital type of incubation is predominant in more developed central regions. Venture capital and corporate venturing types of incubation have given successful market answers to the problems associated with the early development of innovative enterprises in various cases, but it is also visible that this strategy has not become common: the number of such incubators reaches only a few hundred worldwide. Therefore, it is necessary to examine

• whether (corporate) incubation organised on market grounds can *become a common strategy* or the role of state intervention is still needed and • how all this depends on the *devel*opment level of the region hosting the incubation.

Related to incubation mainly business angel financing has a determining role, because beyond mere financial investment, these investors usually make their experience available for entrepreneurs (smart money). On the venture capital market it is exactly seed and pre-seed financing, related to which market insufficiencies occur relatively often even in more developed regions, and these shortfalls are rooted in the special features of transactions in terms of the economies of scale (Kállay, 2005; Kosztopulosz, 2005). Examining the growth of technologybased start up enterprises Aernoudt (2004) identified three determining factors: entrepreneurship, incubation and the activities of business angel networks (Figure 2). The most fundamental assumption connected to incubation is that it has an effect on entrepreneurial activities and entrepreneurship (1), which can be further strengthened by the activities of business angel networks in an indirect manner (2) by networks concentrating on the projects going on in the incubator (3). The growth of entrepreneurship (especially in the academic sphere and among already existing technology-based enterprises) can result in the growth of new technology-based enterprises (4). All this starts a dynamic and cumulative development process. Successful examples of technology-based enterprises lead to increased entrepreneurship (5) and new projects for the incubator (6).

Figure 2



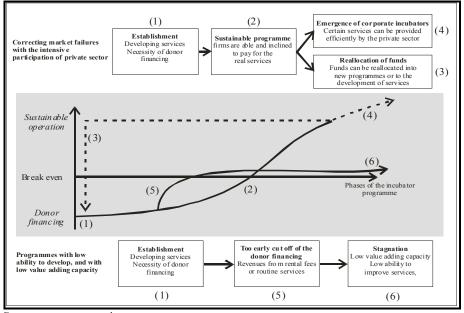
The dynamic relation of entrepreneurship, incubation and business angel networks

Source: Aernoudt (2004: 133)

Consequently, successful incubation is in correlation with well-functioning business angel activities and the adequate entrepreneurial activity. The criteria of this can highly differ in *regions with different development levels*. Moreover, the analysis of further factors also shows that the success of incubation greatly depends on the development level of the local (regional) area hosting it (*Bajmócy*, 2004). Therefore, the question of whether market insufficiencies creating the basis of intervention disappear due to the development of the region and the market of services and whether the private sector is capable of managing the incubation arises. According to our present knowledge it seems that there is no clear answer to this question. Various ways of development are possible for incubators depending on local circumstances, industrial characteristics and fortune, among which there is no theoretically optimal one although we can already mention more or less successful examples. In certain cases the formerly missing market of services is definitely expected to emerge making Community intervention unnecessary and all this is mostly related to the development of local strategic sectors (Lengyel, 2003). However, in the case of

services tied to the university and often determining for new technology-based enterprises the role of the Community is also necessary in the long run. Universities can offer such inspiring climate, equipment, laboratories, training programs and special services for entrepreneurs that would be unavailable for them within their own organisational frameworks (Mian, 1996). This is especially true in less developed regions. Just as there are various ways for the development of incubators, the state can also assume highly different roles. Based on substantive features the following strategies of the state's role in incubation can be defined (with different outcomes from the aspect of private players in the incubation sector) (Figure 3).

Figure 3



Different strategies of private financing in business incubation

Source: own construction

1. In the beginning the program correcting market failure needs donor financing (1). The properly elaborated services mean real value adding for the enterprises, so with time they are able and willing to pay a market price for them. This way the program becomes *sustainable* (2). Sources can be used to launch new (not necessarily incubator-) programs or develop new services (3). Funds can be reallocated into new programmes or to the development of services.

2. The potential outcome of the previous strategy can be that it will be worth operating certain incubation services on a for-profit basis, therefore, venture capital and corporate venturing types of incubators appear (4). For this entrepreneurial activity, the presence of business angel financing and its critical mass are essential. *This is characteristic of developed regions showing great innovation activity.*

3. In the event that the development of necessary services fails or if donor financing is withdrawn in a stage of development that is too early (5), then in order to maintain the organisation the incubator approximates its rental fees to the market price or it introduces such services that the market could also solve but significant income derives from them. This practically leads to a "nonprofit real estate business" created from public money without any value adding capacity that is highly similar to the incubation role of real estate developers (6) and causes strong deformities on the market of certain services. This latter model is common in Hungary.

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