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INSTITUTE OF ECONOMICS
HUNGARIAN ACADEMY OF SCIENCES

MŰHELYTANULMÁNYOK **DISCUSSION PAPERS**

MT–**DP.** 2004/9

CAN THE STATE REPLACE PRIVATE CAPITAL INVESTORS?

PUBLIC FINANCING OF VENTURE CAPITAL IN HUNGARY

JUDIT KARSAI

Institute of Economics
Hungarian Academy of Sciences

Budapest

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June 2004

KTK/IE Discussion Papers 2004/9
Institute of Economics Hungarian Academy of Sciences

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Can the state replace private capital investors? Public financing of venture capital in Hungary

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Financing for this research was provided by the Hungarian Scientific Research Found (OTKA) grant No. T031987, "The role of private equity investments in enhancement of economic growth in Hungary".

HU ISSN 1785-377X
ISBN 963 9588 09 1

Published by the Institute of Economics Hungarian Academy of Sciences, Budapest, 2004.
With financial support from the Hungarian Economic Foundation

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CAN THE STATE REPLACE PRIVATE CAPIAL INVESTORS? PUBLIC FINANCING OF VENTURE CAPITAL IN HUNGARY

BY JUDIT KARSAI

Abstract

It is generally accepted that venture capital exerts a positive influence on economic development, and Hungarian economic policy, too, regards it as a means to accelerate economic growth, enhance the export capacity of companies, improve employment, increase tax revenues, investments and research and development expenditures, that is, to boost the overall competitiveness of the country. Although Hungary boasts an advanced venture capital industry in regional comparison, the capital supply of small/start-up companies especially is still unresolved. The successive Hungarian governments having come to power since the change of the economic and political regime declared almost without exception the importance of venture capital, and made efforts to contribute to raising its supply. These efforts, however, have been rather ineffective due to their almost exclusive reliance on direct state intervention and disregard for the much more successful western solutions stimulating private sector venture capital investors.

The present paper first describes the reasons, areas, direct and indirect forms of state intervention in the venture capital industry. Subsequently, it surveys its specific reasons and practice so far on the Hungarian venture capital market. It highlights the essential difference in approach reflected by the Hungarian and the western experiences, respectively, and makes a proposal as to how the state could promote the development of the venture capital market more effectively and in a more market-oriented way, with special regard to Hungary's prospective accession to the European Union in 2004. Accordingly, the state should avoid direct capital investment in companies, bypassing the private sector; it should supplement the funds of private investors as co-financier, and control co-operation with them by reducing the risks and increasing the profits associated with investments enjoying state preference for private investors. This would allow the state to realise its economy and venture capital industry development objectives simultaneously.

Keywords: venture capital, public policy

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KARSAI JUDIT

HELYETTESÍTHETI-E AZ ÁLLAM A MAGÁNTŐKE-BEFEKTETŐKET?
AZ ÁLLAM SZEREPE A KOCKÁZATITŐKE-PIACON

Összefoglalás

A gazdaságpolitika Magyarországon úgy tekint a kockázati tőkére, mint amely képes gyorsítani a gazdasági növekedést; fokozni a cégek exportképességét; javítani a foglalkoztatottságot; növelni az adóbevételeket, a beruházásokat és a kutatás-fejlesztési ráfordításokat, azaz összességében javítani az ország versenyképességét. Magyarországon regionális összehasonlításban fejlett kockázatitőke-ágazat jött létre, azonban különösen a kisméretű, induló vállalkozások tőkeellátása továbbra is megoldatlan. Ennek megfelelően a rendszerváltás óta hatalomra került magyar kormányok szinte kivétel nélkül deklarálták a kockázati tőke fontosságát, s igyekeztek szerepet vállalni a kockázati tőke kínálatának növelésében. A kormányzati törekvések meglehetős eredménytelenségéhez vezetett azonban, hogy jóformán kizárólag közvetlen állami beavatkozással igyekeztek a kockázati tőke kínálatát javítani, figyelmen kívül hagyva a magánszektorbeli kockázatitőke-befektetők ösztönzésére épülő, sokkal sikeresebb nyugati megoldásokat.

Az anyag először bemutatja az állam kockázatitőke-piaci szerepvállalásának indokait, területeit, közvetlen és közvetett formáit. Ezt követően áttekinti, hogy a magyar kockázatitőke-piacon miért van szükség az állam beavatkozására, s hogy ez eddig hogyan történt. A magyarországi és a nyugati tapasztalatok alapvető szemléleti eltérését érzékeltetve a tanulmány javaslatot tesz arra, hogy az állam hogyan tudná a jelenleginél hatékonyabban és piackonform módon elősegíteni a kockázatitőke-piac fejlődését, különös tekintettel a 2004-es csatlakozásra az Európai Unióhoz. Ennek megfelelően az államnak el kell kerülnie a vállalkozásokba történő közvetlen, a magánszféra közreműködése nélküli tőkebefektetést. Ehelyett társfinanszírozóként kellene kiegészítenie a magánbefektetők forrásait, s oly módon szabályozni a velük való együttműködést, hogy az általa preferált befektetések kockázata a magánbefektetők számára csökkenjen, hozama pedig nőjön. Így egyszerre teljesülhetnek az állam gazdaság- és kockázatitőke-ágazat fejlesztő céljai.

1. THE REASONS OF STATE INTERVENTION

The presence of the state on the venture capital market is based on two basic *assumptions*. Firstly, that the private sector does not provide sufficient capital to a certain circle of companies, such as new, innovation-oriented companies capable of fast growth or companies operating at a distance. Secondly, that the government can correct this arrangement by identifying investment options promising a major social yield, and diverting the attention of financial mediators (private sector investors) to the companies concerned by providing appropriate incentives. The correctness of these assumptions, however, *has not been examined thoroughly so far*, in spite state funds of a significant order of magnitude being invested in certain segments of the venture capital industry, such as venture capital investment to new companies *(Lerner, 2002)*.

In order to put venture capital to the service of economic growth/competitiveness, governments must be absolutely certain that capital allocation is actually the form most needed to promote enterprise growth. For, there are many small enterprises on the market without a good potential for growth or outside the circle of high-tech companies, and hence unsuited for venture capital financing, which, however, collectively play an important role in the economic /employment situation of their region *(Harding, 2000)*. On the other hand, neither does the ample supply/substantial expansion of venture capital originating from private sources does not necessarily imply the automatic improvement of the capital access conditions of the targeted enterprise circle if the range of capital per transaction targeted by investors exceeds by far the corresponding demand.

The economy-boosting effect of venture capital is closely related to the problem of the so-called *capital gap* observed in venture capital supply. This capital gap is experienced by certain types of companies, due to their *investment* demand range (it is more difficult to attract minor investments than major ones), *life-cycle stage* (start-up companies face more problems than established ones), the *technology* concerned (technology-based companies are at a disadvantage compared to those applying less advanced technology), or *geographical location* (companies in the periphery will find it more difficult to access capital than those in the centre) *(Harrison and Mason, 2000)*.

The experience is that the venture capital demand/supply gap is most pronounced in *two ranges*. The first is observed primarily in the financing of seed and start-up companies, in the range of *USD100 thousand to USD2 million*. This range is the primary target of the so-called *business angels*, and institutional venture capital investors tend to withdraw from it to an increasing extent. Its bottom limit is represented by funds to be raised via the family and friends of the entrepreneur, while the ceiling is the lowest limit where professional venture

capital investors already find it worth investing. In the United States, business angels typically undertake transactions in the range of USD100 thousand to USD2 million *(Sohl, 2003)*. In Europe, the corresponding limits are USD100 and 500 thousand, but USD25 thousand or USD1 million is not unknown either. Researchers noticed the emergence of another, new, financing gap as well in the USA lately *(Sohl, 1999).* Since the interest of the venture capital industry has shifts in favour of financing companies in a later life-cycle stage, while that of informal investors remained under the USD2 million limit, a new capital gap occurred at *USD2 to 5 million* – a major problem especially to high-tech companies in the early stage –, despite the fact that, to date, business angels already co-operate to cover the more marked capital demand of early transactions and often even associate with institutional venture capital investors *(Sohl, 2003)*.

2. System of instruments of state intervention

The state makes efforts to compensate for the negative effects exerted by the capital gap on companies in the start-up or early stage, for technology-based ones or those operating in more far-away regions *(OECD, 1997, O'Shea 1995, Standeven 1993, Mason and Harrison, 1999/a,b, 2000)*. Governments have a series of *taxation and regulation* measures at their disposal to assist companies in certain specific categories. *Taxation* especially offers an extensive range of intervention options. The relative and absolute extent of personal and capital income taxation affects the ratio of savings available to venture capital investors. From the point of view of venture financing, the elimination of double taxation, that is, the taxation of capital income collected with the mediation of investment institutions, as well as regulations applying to share options are especially sensitive areas.

The state as *public authority* specifies the assets management provisions applicable to institutional investors, hence pension funds, insurance companies and banks, of special importance for the capital supply of the venture capital market. This, in turn, sets the ratio of savings to be directed to the capital market instead of the financing government securities, that is, the public expenditures.

The state can also influence the venture capital industry as investor, either by establishing investment agencies or funds, and making *direct* investments through these to priority companies, or by tackling the capital gap by providing appropriate incentives to private sector investors, that is, *indirectly,* e.g., by investment to private sector venture capital funds.

The selection and combination of individual schemes depends primarily on the level of development of the capital market of the given country, its traditions and the size of available public sources. Countries with important securities markets and strong investor protection and countries where financing is dominated by bank credits, respectively, will use different combinations of instru-

ments with success. Different solutions are required if the state wishes to lure investors active on a venture capital market of adequate liquidity to a certain market segment, or if it wants to raise the capital supply of an underdeveloped venture capital market.

There are many arguments both *in favour and against* state intervention *(Maula and Murray, 2003).* Its advocates *(OECD, 1997; Aernoudt, 1999)* argue in favour of development with state participation on the basis of the effect of the venture capital industry on economic growth and job creation. In their opinion, this is the way to reduce the capital acquisition problems of small enterprises. (Many quote the research findings of *Lerner (1999)*, viz. that in the United States, companies subsidised under the Small Investment Business Research programme in the period from 1983 to 1997 grew much faster and attracted more venture capital than their unsubsidised peers.) According to those voting for government intervention, appropriate programme design will ensure that the state play a useful role on the venture capital market *(OECD, 1997)*, and such intervention will *enhance* the venture capital supply of the private sector. It can attract inventors to enterprises implying higher risk and hence create jobs that could not be created otherwise and give access to venture capital to regions that would have to do without it otherwise.

Relatively few researchers have analysed government programmes providing *direct* corporate financing *(Doran and Bannock, 2000),* hence *it is not clear* whether prioritised companies financed by direct state participation were a success, that is, whether they could access funds later on on the private capital market as well. Neither is it established whether state employees could select the most promising applications from an innovation point of view. And it is similarly dubious whether, by putting the emphasis on local investments, the state has actually managed to fulfil a substantial economic development function in individual regions.

Despite the positive features of direct state intervention, research has identified a multitude of reasons why governments *should not* take part in corporate-level decision making *(Gilson, 2002, Manigart and Beuselinck, 2001, Bannock Consulting Ltd, 2001)*. The first argument warns that direct state intervention in the venture capital industry may decelerate the development of/relegate into the background the private sector venture capital industry *(O'Shea, 1996; Leleux et al, 1998, Gilson, 2002)*. This is the so-called *crowding-out effect*: investment organisations created on public funds act as rivals of private investors on the market, crushing them down and slowing their development. By offering softer investment conditions than those in effect on the market, the state may snatch away from private financiers projects that would have been financed anyway by the private sector, leaving the less favourable projects only to the latter *(Lerner, 1999*, *Manigart et al, 2002)*.

The second argument against direct state intervention focuses on the possibility of *abuse* inherent in state investments or subsidies of any kind *(Florida and Smith, 1993, Leleux et al., 1998)*. As a result of interdependent personal and political interests and deliberate abuse, the preferences often miss the enterprise circle designated as their target, and hence the central funds are not spent in a socially useful way. This is especially true of assistance schemes lacking clear-cut criteria, where the activity of public investors is seldom or not at all subject to control.

The third argument against direct state intervention pertains to the ability of *public officials*, whose remuneration system is mostly independent of the outcome, to choose the appropriate investment projects *(Lelelux et al., 1998)*. The state acting as venture capitalist will inevitably finance larger companies with a more significant history, employing more staff and more sensitive politically rather than minor ones promising significant achievements but having more uncertain prospects. Government officials will select on the basis of the probability of success, without examining whether the company actually needs public funds for its development. Moreover, government logic is *incompatible* with the *portfolio-based thinking* of venture financiers requiring the uneven distribution of available funds *(Florida, Smith, 1993)*. Politics and venture capital differ in their attitude to the management of failure and bankruptcy, too. Politically, it is difficult to accept that part of the public funds will be allocated to unsuccessful companies, which is a necessary concomitant of venture financing. Moreover, the need to demonstrate success in the short run, matching the election cycles, is also difficult to reconcile with the typical patience of venture capital allowing projects to mature in as many as 5–7 years *(Eisinger, 1993)*.

Yet another counter-argument relates to the *sensitivity* of direct state investment to *pressure* exerted by political or other interest groups *(Lerner, 2002, Eisinger, 1988)*. Finally, direct investment is a rather costly solution, that is, it *costs the state a lot (Bannock Consulting Ltd, 2001*).

The overwhelming majority of experts agree that the generation, identification and implementation of investment, especially into seed/early-stage/technology-intensive companies, requires such *expertise* as the state *can hardly imitate*. Therefore, the best way to support them is for the state to attract professional private sector investors to their market and hence "make them" finance the company circle enjoying state preference *(Maula and Murray, 2003)*. Public support to private sector investment funds active in the venture capital industry and hybrid funds based on private and public capital both serve this objective.

If *indirect* state participation takes one of the above forms, the only open question is whether the state should *protect or rather remunerate* private sector investors to make them extend their participation to the extent of the possible in the investment projects expected by the state. Incentives may reduce the costs of

failure ("downside protection"), or improve the yield on successful investments ("upside leverage") *(Maula and Murray, 2003)*. These solutions are not necessarily alternatives, but may co-occur as well. Furthermore, the state can also alter the profitability of funds by reducing their operating expenses by direct assistance, instead of adjusting the profitability of the investment outcome. Upside leverage with indirect state support *is becoming increasingly widespread* in the advanced market economies. It allows the state to add one or more dollars to every dollar invested by venture capitalists.

Upside leverage aims at improving the rate of return for venture capital investors. This is achieved by the state, having contributed capital to the private sector fund, claiming a smaller segment of the profits than would be due to it on the basis of its share. In practice, this is realised by putting a limit/maximum on the rate of return to be obtained by the state. Private sector investors can be put in a similarly advantageous position if capital promised to a fund is first drawn from the state, while upon the repayment of invested capital or the disbursement of profits the state receives its share last. Upside leverage does not protect co-financiers from the drawbacks of selecting the wrong project, but concentrates a larger segment of the benefits of success to the private sector partners. This may be particularly important to funds of a smaller size, for, usually, a minor part of the investments generates a significant segment of the capital income.

As for *downward protection,* many governments have launched guarantee or liability programmes with state support to encourage private sector investors. Under these, investors do not have to shoulder the entire loss on a failed investment, which is partly compensated for by the state, the assumption being that this safety net will alter the risk preferences of private sector venture capital investors *(Maula and Murray, 2003)*. As downward protection acts against the investor's targeting the maximum yield, it tends to promote the survival of venture capital investors instead of enhancing the success of their investments. Hence the clearly observable tendency that the more advanced the venture capital industry of a given country, the more *unlikely* that downward protection play a major part in encouraging venture capital. In the USA and in the United Kingdom, venture capital programmes supported by the state tend to focus on raising the returns to private sector investors. On the other hand, in Continental Europe, every one of the more significant countries (France, Germany, Sweden, the Netherlands, Denmark) has public programmes including the direct guarantee component *(Maula and Murray, 2003)*.

The third form of indirect state support is *contribution to the operating expenses* of funds. Funds specialised in start-up companies are typically small in size and hence they are hardly able to achieve scale yields and neither is their management profitable as industrial norms are specified for major funds. (Normally, the administration fee for a traditional capital fund dealing with mature

companies is 2–2.5% of the total amount of the collected capital,, hence the corresponding ratio would be 4–5% for technology funds specialised in the early phase, but this ratio is unacceptable to institutional investors.)

The American practice where public support to private sector venture capital funds is the most widespread has provided ample experience on the *drawbacks* of indirect support *(Doran and Bannock, 2000)*. One of the essential conclusions is that the funds concerned should first aim at business yields comparable with those of exclusively private sector funds of a similar size and financing companies in a similar life-cycle stage. Nothing can replace return on capital investment – all other economic indicators shall be taken into consideration after that. To prevent erroneous signals, the internal rate of returns shall be the focal point instead of tax credits or other incentives.

State participation on the venture capital market inevitable generates a *contradiction* between *development objectives* on the one hand, and the venture financier's need to ensure appropriate returns on the other. Success in business, the selection of viable projects, is a must, otherwise the state would have to allocate new sources to the same purpose. Moreover, it could not raise capital for the common public/private investment funds otherwise *(Hood, 2000)*. If economic development is over-emphasised, business success will suffer, while in the opposite case the usefulness of economic development achieved on public funds will be questioned. Therefore, the *goals* of public venture capital organisations shall be defined clearly and consistently, to ensure the ideal balance between business and economic development objectives. Other market investors, whose support is essential, shall only consider the public investment organisation an authentic agent if *it gives priority to business objectives*.

In most European countries, the state influences the operation of the venture capital market in some direct or indirect way, partly in function of the traditions ever. The contents, methods and intensity of its interference changes continuously depending on the economic policy orientation of the ruling parties and the prevailing economic trends. Typically, however, in Europe, public support to the venture capital funds is mostly provided indirectly, by way of contribution *(McGlue, 2002)*.

Generally speaking, foreign experiences suggest that, under an appropriate scheme, state venture capital may be an *effective means* of the development of the venture capital industry and hence the promotion of economic growth. Effective state participation, however, is not as simple as capital extension. Most authors emphasise in this respect the *longer-term function* of public venture capital, stressing the outstanding importance of the expertise and professional skills of fund managers, and the importance of state incentives to boost private sector supply. In order to make the latter effective, public venture capital must be allocated, from the start, on conditions that are *consistent with the expecta-*

tions of the private sector, in terms of both investment criteria and preferences and performance expectations. This is a major challenge, and one of the biggest obstacles in this respect is the lack of expertise in public venture capital investment. So long as this issue is unresolved, the capital supply bottleneck will prevail. For the mere increase of the capital supply will do little to boost economic development without the *business development/construction expertise* of efficiently managed venture capital funds *(Harrison and Mason, 2000)*.

Yet another important lesson is that the state or its agents shall not *take part directly in the selection of investment candidate companies*. This function shall be assigned exclusively to professional venture capital managers commissioned by the state to manage the funds concerned. The state shall play an indirect role only, implying co-investor status in private sector funds – it will simply establish the criteria under which it is willing to invest. Any fund meeting the said criteria shall win public funds by open tender.

3. State participation on the Hungarian venture capital market

The state essentially influenced the development of the Hungarian venture capital industry in two ways: through the establishment of the legislative/regulative background and through the direct investment of public funds into enterprises.

In order to promote Hungarian venture capital investments, an Act was passed in 1998, creating the *legal form of the venture capital fund*. To prevent abuse, the Act specified the capital requirements associated with foundation, and ruled that the entire amount proposed for investment be paid-up upon the establishment of the entity. It also specified the capital segment to be invested time-proportionally relative to the date of foundation. Compliance with the said provisions implies tax-exemption for a temporary period of six years. However, its bureaucratic provisions and disregard for business considerations rendered the Act *ineffective*: there was only a single, state-owned, investment fund subjected to its consequences. The other agents of the market were not tempted by the opportunity offered by the Act, and continued to operate either as off-shore company registered abroad or as domestic company not claiming tax exemption.

Legislative provisions applicable on the Hungarian market not only aggravate the situation of investor organisations, but also imply problems regarding the assignment of the *savings of domestic institutional investors* to venture capital as an asset category. They practically exclude the possibility that institutional investors such as private pension funds or insurance companies should invest a minor part (if only 1%) of their assets into the venture capital industry. This, in turn, makes it impossible to ensure the capital supply of the venture capital industry through domestic channels, a circumstance that is currently obstructing the development of the industry.

Neither has a system of *tax credits* to private investors evolved in Hungary, to allow to reduce/postpone the payment of part of the personal income tax of investors in case of direct investment to private companies (not listed on the stock exchange).

Paradoxically, the new legal regulations codified in Hungary make direct investment on the venture capital market more difficult for the state itself as well. The so-called *glass-pocket act*, codified in 2003, actually rules that a company based on public funds shall not acquire another company or participation in another company, in order to prevent the abuse of public funds.

In the years following the change of regime, the most important area of state intervention in the Hungarian venture capital industry was that of direct corporate investments by the state-owned development bank, the *Hungarian Development Bank (MFB)*. MFB provided significant funds to finance Hungarian industrial companies in need of reorganisation, selected, however, on the basis of economic policy and occasionally subjective, rather than business, considerations. MFB established 11 *regional investment companies* as well to finance companies of a smaller size, whose registered equity exceeded USD27 million in 1998 *(Karsai, 1998)*. The efficiency and profitability of venture capital financing was reduced by the extremely small, USD3–4 million, own capital of these investment companies as well as by the scheme used by them, reminiscent of credit extension rather than capital investment.

MFB's participation in venture capital financing came to an end in 2000. Under the new government strategy, the function of state venture capital investment was taken over by *Regional Development Holding PLC (RFH Rt.)* created expressly for this purpose on public funds. Hence RFH Rt. took over the regional investment companies as well as a significant part of the Bank's company shares, while being commissioned to set up several state venture capital funds. Accordingly, in 2002, it created an investment company and a venture capital fund. Independent of these efforts, however, the government itself also set up a venture capital company directly, to promote small and medium-size enterprise financing.

Originally, the state wanted to *attract the capital of private financiers, too,* to the said funds, but the relevant efforts failed (*NAPI, 2001, VG, 2001)*. On the other hand, its conceptions did not include the *extension, by public sources, of the capital of private venture capital funds* undertaking to finance small enterprises in the early life-cycle stage. Indeed, neither did the state relegate the *management* of its investment societies or its fund to private-sector managers.

In 2003, the state re-introduced its development bank, MFB, to the venture capital market by commissioning it, under the *Development Capital Programme* adopted in the summer of 2003, to invest a total of HUF40 billion in a period of

5 years into Hungarian companies. The investment project, at some HUF100–500 million per company, to be provided by the Bank on condition of minority ownership, will be accessible to medium-size enterprises in the first place *(Bakonyi, 2003)*.

Parallel with the activation of MFB, RFH Rt. is also working on large-scale plans. Accordingly, the first *regional venture capital fund* to be established by it in 2003 will be followed soon by two more, and the plans include the setting up of 5–7 more *sector-specific venture capital funds*. RFH Rt. intends to take an active part in setting up the funds and, in case of regional funds, the fund managers. It will provide, for the first funds, one half or one third of the capital, planning to reduce its share in the long run, by the attraction of private capital and Union sources, gradually to under 35%. As for the professional sector funds, it will provide a minor segment only of the funds, and assign their management to professional fund managers *(Magos, 2003)*.

In 2002–2003, the state created a *series of venture capital investors* on public funds in order to ease the venture capital shortage of domestic companies, small and medium-size ones in the first place. Their equity, in the range of HUF2.5–3 billion, was raised and their supervision, management and investment strategy worked out rather slowly, with numerous detours, and not without political influencing. By the investments concerned, of a minimum amount of HUF10–50 million (USD40–200 thousand), based on public sources and targeting mostly to the same circle of companies, the state wished to *stop the gap* left by business angels and private sector venture capital investors. The state is *different* from business sector investors also in that it expects much lower yields than the market ones; offers investments of a smaller size, too; it intends to acquire minority ownership in the financed companies, and ensures an exit option at a predetermined date by option agreement. Its declared intention is not to take part in the management of the financed company, only to ensure its close monitoring.

In Hungary, no investment society or investment fund has been created yet where public funds would be *supplemented by the capital of private sector investors,* although, originally, the relevant plans indicated that the state expected to attract private capital, too, to its future regional and sector-specific funds. Public support to private sector venture capital funds, on the other hand, was not part of the state plans, even though in 2002 private sector investors initiated a joint investment project under the so-called “fund of funds” scheme *(NAPI, 2002)*.

The yield expectation of state investment companies, at 2–5–10% only in excess of the inflation rate, indicates that the state undertakes financing on *much more favourable conditions* than the 30–40% market yield, and hence its investments will probably meet with an outstanding demand in the corporate circle. However, the announced conditions do not guarantee the assertion of business crite-

ria in the project selection process. The financing terms of investment organisations established by the state are strongly reminiscent of *hidden credit extension*, instead of equity investment at a real risk.

It is also questionable whether the initial USD10–15 million available for investment is sufficient to ensure the self-sustainability of the investors. On the private venture capital market, capital worth nearly USD20 million is the *minimum fund size* required for profit-oriented operation *(cf. Ludányi, 2001)*. Moreover, relatively smaller transactions imply higher unit expenditure than the larger projects of private investors. Another factor reducing the probability of successful operation is that state financiers do not intend to interfere with the *management* of minor companies in the early stage, and neither is their apparatus ready to do so. The experience, however, is partly that these companies are in great need of professional advice and partly that it is desirable to control them closely. Their successful financing requires speed and flexibility and efficient communication among the owners.

In summary, the types and efficiency of arrangements realising the direct participation of the state on venture capital market have hardly changed in Hungary in the ten years or so since the change of regime. Throughout that period, the state focused on *boosting the capital supply* to give enterprises access to funds. The extent of public funds earmarked for this purpose was decided upon by political bargaining. Investments were made exclusively *directly* by the state (or its bank), via companies established for this purpose and placing exclusively state capital. The state failed to ensure the capital supply of the venture capital market either by provisions promoting the savings of institutional investors on the venture capital market or by making the market more attractive to private sector investors. Neither did the state associate with the venture capital funds of the private sector, or improve the efficiency of the functioning mechanism, reduce their costs or assume part of their losses.

4. CONCLUSIONS AND PROPOSALS

Theoretically, state intervention gives an opportunity to remedy the deficiencies of the venture capital market. In order to do so, first and foremost precise information is needed on unsatisfied demand, that is, the extent and place of occurrence of the so-called *capital gap,* viz. the size, branch affiliation and geographical location of companies that the private sector cannot or will not supply, but whose development is socially desirable. The presence and contribution of the state on the venture capital market, however, cannot be limited to cushioning the effects of capital shortage. In order to stop the capital gap, the state should make the financing of the circle of enterprises deemed important socially *attractive* to private-sector participants, too, that is, adjust the uneven distribution of the supply of the private venture capital industry.

Obviously, this function can only be performed by the state *temporarily*, as the extension of venture capital is essentially a market activity. Unless the market intervention of the state is concomitant with the stimulation of the private sector in the desired direction, the state shall get *stuck* in a role whose fulfilment continuously requires the allocation of new public sources *(Maula and Murray, 2003)*. If the state fails to act as catalyst, its intervention is unnecessary. For, the financier function, to be handed over to the private sector in the longer term, requires that the role of the state *be compatible in every detail with the expectations of the private sector*, and help the acceptance of the state as a reliable investment partner. In this sense, in individual investment organisations, the yield expectations of the state as investor on the one hand, and the way in which the managers of the investment organisations concerned select prospective beneficiaries and define the returns expected in their case on the other must be *distinctly separate.*

Investment organisations set up without the participation of private sector agents can only promote the *temporary* reduction of capital shortage; they cannot ensure the *longer term development* of the venture capital market, and may even act against it by exerting a crowding-out effect on the private sector. If, however, state incentives make private sector investors more willing to finance the circle of enterprises prioritised by the state, then the economic development function and the development of the venture capital industry can be met simultaneously, with private investors taking over the role of the state in due time. Hence the question whether *the business yield expectation and economic development objectives can be reconciled* can be answered in the positive.

The state has a multitude of options to achieve its goals. It may establish a central fund whose investments raise the sources of the private capital funds, or invite private sector investors to its funds, or reduce the costs/risks incurred by the latter. Co-operation between the state and private sector investors can be lubricated, so to say, by arrangements based on *asymmetric risk assumption,* or the uneven distribution of preferences, to make joint investment more attractive to private sector investors. The engagement of the private sector in the selection, mentoring and monitoring of projects to be financed is important to ensure the long-term development of the venture capital market and also as the exclusive means ensuring the appropriate, politically neutral, selection of viable projects with good prospects, the identification of financing terms irrespective of the election cycles, and the appropriate professional expertise and stimulation of managers commissioned to administer the investments concerned.

The overview of the Hungarian venture capital market reveals many *special* features compared to those typical of the advanced market economies that affect both the system of goals and the methodology of state intervention. One conspicuous feature is the almost total *absence of business angels* preparing proj-

ects with good prospects for professional financiers *(Makra, 2002)*. The absence of well-to-do private individuals active in investment and well-prepared professionally – taking part personally in paving the way for starting companies –, is hence a drawback for companies capable of fast growth and in need of minor investments of a few ten millions of forints, and also for the supply of prospective "stars", whose development would be taken over, after the promising beginnings, by professional investors. The experience being that, in the advanced market economies, 60–80% of companies selected by institutional venture capital investors used to be financed by business angels previously *(Sohl, 2003, Leleux, 2002)*, transactions lost owing to their absence probably imply significant losses. The absence of business angels hinders the upgrading of enterprise culture, too, for companies in the seed and start-up phase are in need of assistance in many respects. The state cannot *fulfil the role of business angels* simply by assuming their minor investments, because it cannot provide the required assistance and act as a genuine professional substitute for the agents of the informal venture capital market. For, business angels provide indispensable help to enterprises in many areas, including manager selection, financial discipline, the deployment of a system of continuous monitoring, the establishment of professional and market contact systems and the development of the financing structure.

Another distinctive feature of the Hungarian venture capital market is its almost exclusive reliance on *external capital*. There is no domestically owned financier interested in venture capital investment on a substantial scale, and institutional financiers collecting Hungarian savings – pension funds, insurance companies – contribute no resources to professional venture capital financiers. The majority of the small number of domestic-owned private sector corporate investors is engaged in company take-overs and hence does not take part in venture capital financing in the classical sense. Within the economic development segment of the central budget, the funds allocated to boosting the venture capital market are rather *limited* compared to the corresponding ones of the advanced market economies, and the political will to develop the market has manifested itself at the level of rhetoric only for a decade anyway. This was due, among others, to the lack of knowledge concerning the economic development function and functioning mechanism of venture capital. In the past two or three years, changes in this respect have increased public funds allocated to this branch, but the real function of venture capital is apparently as scarcely known as before. The state still uses its resources to provide direct assistance to companies, instead of enhancing their *access sources*. Investment societies established lately by the state on public funds have so far *had little effect* on Hungarian venture capital financing due to the limited nature of their resources and their short history so far.

Yet another distinctive feature of the Hungarian venture capital market is the *limited number of companies with good growth* and other prospects. This is due, in addition to the unresolved nature of the venture capital financing of start-up companies, to the size of the country, imposing yet another barrier on the development of the market. The same explains the *low liquidity of the stock exchange,* normally the best exit option for venture capital investors, which also limits the investment options. At the same time, regional venture capital funds, offering the bulk of resources, tend to look primarily for companies of a larger size, thinking on a regional scale, or occasionally create such through the acquisition of companies in several countries. The supply of Hungarian companies capable and willing to act regionally, that can be made competitive with the contribution of venture capital, however, is highly limited. In order to arrive at a relatively small number of relatively high-value deals, Hungarian transactions are currently dominated, in line with the European trends, by *buy-outs*. Under these transactions, regional funds mostly purchase the Hungarian units awaiting wind-up of international companies restructuring their activities.

The current *legislative background* is not advantageous to the agents of the Hungarian venture capital market. The provisions of the Venture Capital Act, designed to boost the industry, are useless for investment organisations operating on a market basis, and hence investment activities are pursued, the same as before, either by funds registered abroad or by enterprises operating as domestic business companies. The latter cannot avoid double taxation. Several provisions of the Companies Act also hinder safe financing, that is, the assertion of minority rights of investors.

On the basis of the above and in view of the relevant foreign experiences, it is proposed that the state act on the Hungarian venture capital market as follows.

From the very start, the state should participate on the venture capital market in a way that is consistent with the expectations of private sector investors. Therefore, it should act as co -financier, supplementing the sources of private-sector investors, and regulate co-operation with the latter so as to reduce the risk level and increase the yields of investments enjoying state preference for them. The state should *communicate* such measures extensively, in order to make politics and the public opinion, still ignorant of the functions of venture capital, accept its market-conform intervention on the venture capital market. On the other hand, in its function as official authority, the state should alter the effective legal regulations so as to provide stronger support to the resources supply of the private sector and to the interest protection of investors as minority owners.

It is similarly useful for the state to assist in *making* companies in the start-up and early stage *"investment readyness"*, a goal requiring the extension of assistance provided in incubation periods. The state has an important role to play in making venture capital funds accessible, too. It should hence assist the estab-

lishment and consolidation of institutions providing mediation among the partners.

If the state interprets its function on the venture capital market in the above sense, its support to venture capital shall not get mixed with support "in the guise of venture capital". The real interest of the state lies in the enhancement of the competitiveness of the economy, the promotion of innovation by market means – not in assistance to individual companies outside the context of competition.

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