

WHAT HAS THE STATE GOT TO DO WITH THE VENTURE CAPITAL MARKET?

Public Financing of Venture Capital in Hungary

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Since the development of young companies with a good growth potential can also be expected to boost economic growth, reduce unemployment and enhance competitiveness, economic policy makers consider it a matter of prime importance that the venture capital industry provide appropriate capital supply for their development. Many countries implement central programmes to promote the venture capital financing of the development of enterprises that would have no access to venture capital on a purely market basis. The experience in Hungary is that state intervention in the venture capital industry mainly has political reasons, it uses budgetary sources sparingly and it is isolated from the private sector. But for its almost complete inefficiency, state activity would have softened the conditions of competition, crowded out the private sector and given preferential treatment to the political clientele. Realizing the abortive nature of its intervention, the state made no effort to identify the causes of failure and the role of supply and demand factors, respectively, hindering the venture capital supply of the small and medium-size enterprise (SME) sector. The intervention practice chosen by the state most recently is contrary to the practice of the European Union in several respects – a circumstance dooming government measures to boost the venture capital industry to failure again.

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1. INTRODUCTION

On the theoretical level, the state justifies intervention by the conviction that it is not a natural economic phenomenon that certain enterprises be left without venture capital. It attributes the non-optimal capital allocation mechanism to the *imperfect nature of the market*, to be corrected by central intervention. The shortage of private funds, that is, the inadequacy of the market, puts at a disadvantage primarily relatively smaller start-up companies with relatively high transaction

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costs compared to transaction size, whose return on investment cannot compensate for the extra expenditure. For European transactions, the *size limit* implying such disadvantage is typically USD 500–750 thousand, but in the underdeveloped regions the upper limit may be USD 1 million (Sloccock, 2001). One reason why entrepreneurs experience capital shortage in these investment brackets is that the said amounts already exceed the capacity of the informal agents of the venture capital market, the so-called business angels, but they are not large enough for institutional investors. Investment funds in charge of enormous amounts of capital find it more economical to finance fewer projects of a larger size.

The private sector does not provide sufficient capital on the business market to a certain circle of enterprises, and the pricing mechanism offers no remedy to this situation. It is the task of the state detecting the error to correct the operation of the venture capital market and to promote the venture capital supply of enterprises either by *making fresh capital available* to the market, or by *channelling* private capital present there already to the enterprises concerned. Once it has attracted enough funds to this area, the state should exit financing.

Section 2 surveys direct and indirect instruments used by individual countries to boost the venture capital supply and channel it to what they consider desirable target areas. Section 3 lists arguments for and against state intervention, and concludes that experts have failed to reach a common standpoint regarding the necessity of state intervention on the venture capital market. Section 4 presents the decade-old Hungarian venture capital market, one of the most developed ones in the Central and Eastern European region, on the basis of the distinctive features of its agents and the relevant investment transactions. The fifth and most significant section surveys diverse methods used by the successive Hungarian governments in office since the change of the economic and political regime to foster the development of the venture capital industry. As shown in the section their intervention attempts, motivated mainly by political considerations, have been totally ineffective. The closing section presents the conclusions of the article, warning that, in order to promote the development of the venture capital industry, the arrangements of the developed market economies, applied with dubious success there, should be used with utmost caution in the transition economies, given the strong tradition of the crowding-out effect of state intervention there. The Hungarian experience is that state efforts to make what are considered priority investments attractive to private financiers by indirect means fail completely, and the allocation of public funds to improve the venture capital supply is characterized by low efficiency and lots of abuse. According to the article, state participation in Hungary, on one of the most developed private venture capital markets of the region, shall only bear results if state funds are invested in

co-operation with private investors and the state pays special attention to the development of the organization of business angels focusing on investments on a smaller scale.

2. THE MEANS AND THE ORDER OF MAGNITUDE OF STATE INTERVENTION

The governments use *a multitude of arrangements* to increase the venture capital supply and to promote the development of enterprises in need of it, and their arsenal changes in time as well. The state may intervene in the operation of the venture capital market *directly* or *indirectly*. Indirect methods mainly relate to regulation and taxation. Preferential credit or guarantee and aid to reduce expenses lead over to the domain of direct intervention including the operation of investment funds established by the state.

In most countries, the state as *public authority* specifies the circle of investors entitled to engage in venture capital investment. From the point of view of the capital supply of the venture capital market, asset management provisions applying to institutional investors, hence pension funds and insurers, are the most decisive: they specify the ratio of savings that can be placed on the capital market instead of being invested in public securities to finance budgetary expenditures. The category of regulatory issues includes provisions governing the operation of investment funds and their managers and ensuring the safety of the savers, as well as the rules pertaining to the functioning of securities markets and influencing the exit opportunities of investors.

State intervention in the venture capital market via *taxation* is a highly complex area resulting in a multitude of different practical solutions. The relative and absolute extent of personal and capital gain taxation affects the ratio of savings available to venture capital investors. The state can identify preferences in many ways, in function of the investment term, the nature of the recipient institutions or the characteristics of the enterprises to be financed among others. From the point of view of venture financing, the elimination of double taxation, that is, the taxation of capital gain collected with the mediation of investment institutions, as well as regulations applying to share options are especially sensitive areas.

States have developed highly varied arsenals for the purpose of *lending* to increase the capital strength of organizations involved in venture capital investment, *guarantee commitments* to reduce investment risk and *cost redemption* to cut operating costs and options to enhance investor safety. The most direct manner of government intervention in the venture capital industry is the establish-

ment of investment funds operating exclusively with *public sources*. *Hybrid investment funds* co-financed by private investors represent direct state participation. Funds financed by public sources vary to a large extent in terms of size, operation principle, degree of specialization and management. One solution for public financing – applied by the European Union as well – is the scheme operating as the *fund of funds*. In this case, the state places resources intended for boosting the venture capital market in a fund contributing to the sources of private venture capital funds active on the market.

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 instruments 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.

According to the most recent international data covering 28 European countries (EVCA, 2002) in 2001, venture capital investors provided EUR 24.3 billion to finance more than 8,100 companies. The available data do not allow to identify the contribution to investment financing of European governments and private investors, respectively. All we know is that in the second half of the nineties, in Europe, 5% on average of capital raised for the purpose of venture capital investment annually originated from the state. In 2001, the share of government agencies *within capital raised for the purpose of venture financing* was somewhat higher at 6%.

Since the state usually supports classic venture capital investments, i.e., those without buy-out, and the share of the latter is very high in Europe – in 2001 it was 45% –, 6% state participation in the venture capital industry overall may mean as many as 10% of the funds of the venture capital sector not including buy-outs, and it may even exceed that in certain areas of the market, namely in the financing of companies in the seed and early stages (McGlue, 2002).

In the United States of America, having a much more developed venture capital industry than that in Europe, the share of venture capital originating from public sources in venture capital not including buy-outs is lower. According to the estimates, in the early nineties, when there were still many state venture capital programmes, the volume of capital managed under such schemes amounted to USD 180 million, while the annual amount of venture capital investments overall totalled USD 40 billion. That is, the *state contributed 0.5% only of invest-*

ments overall even at that time (Eisinger, 1993). However, since state participation is not distributed evenly across the venture capital investment sector in the US either, but focuses on seed and start-up companies, public investments carried a much larger weight within this segment.

International *comparisons* can be made exclusively with respect to public funds allocated *directly* for the purpose of venture capital investment annually. Data refer to the distribution by sources of new capital raised for the venture capital industry annually, that is, not *the distribution of actual investments in the given year by source*. Neither do the statistical data reveal the share of venture capital originating from the state and allocated to enterprises in different development stages – although economic policy decision makers would need to know this last figure exactly.

As for the extent of *indirect* state contribution, not even approximate data are available. This is no accident, as it would be most *difficult to add up* state revenues lost owing to tax preferences granted by the state to stimulate venture capital investment. Furthermore, one should add budgetary expenditures due to preferential credits and guarantees provided by the state to enhance the capital strength of venture capital financiers and to reduce the risk incurred by investors. In principle, the amount granted by the state as subsequent refund to reduce the expenses incurred by investors could also be quantified. However, no such statistics are available for international comparison; the available data refer to the activity of one or another state agency per country.

3. QUALITATIVE ANALYSES OF STATE INTERVENTION

The special literature of the subject is highly *divided* concerning the evaluation of the venture capital market participation of the state. Some welcome it, while others question its very necessity or reject some of its methods only due to their negative by-products. Part of the experts consider the available information insufficient to judge the efficiency of state intervention.

The advocates of *state intervention* (OECD, 1997; Aernoudt, 1999) argue in favor 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 demand problems of small enterprises.¹ Ac-

¹ Many quote the research findings of Lerner (1999) who found that in America, between 1983 and 1997, enterprises benefiting from awards under the so-called Small Investment Business Research programme grew faster and attracted more venture capital than those receiving no award.

According to those voting for government intervention (OECD, 1997), appropriate programme design will ensure that the state play a useful role on the venture capital market, 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. Pro-intervention experts emphasize the need for stimulating venture capital in Europe by state means to help the continent overcome its significant competitive backlog relative to the American market (Aernoudt, 1999). Others call the attention to the fact that state assistance to the venture capital industry allows to support it legally (Lawton, 2002).

Those against government participation, on the other hand, say there is no evidence to prove the existence of the supposed *market failure* that would justify state participation (Report of the Bank of England, 2001).² State intervention itself could distort the market by financing projects rejected by private capital due to their inviability. In the final analysis, state intervention wastes public funds by investment into such projects.

Others think the venture capital industry needs no assistance at all (Florida and Smith, 1993), arguing that it is perfectly capable of reacting to the changing market conditions. Hence any effort on the part of the state to eliminate a capital gap in a market segment actually *impairs the reaction capacity* of the industry. Intervention presupposes that it is possible to identify the efficient level of venture capital, and extra supply can be adjusted to that. However, the state can enhance growth *by other methods much more efficiently*. Florida and Smith (1993) propose other, more effective and efficient means of state intervention to influence the capital flow among others because the public venture capital programmes examined by them *lagged behind* the results of privately funded capital with respect to every major *performance indicator*. According to the researchers, the programmes concerned either lost their capital or produced much worse returns, hence poorer results in terms of the launching of new enterprises and the creation of new jobs. Others (Leleux et al., 1998) argue that stronger protection of investor rights strengthening the position of private financiers would yield much better results than state intervention. That is, the need for state participation stems from the *inability of the state to provide adequate legal protection to investors*. According to the relevant research findings, the venture capital industry of coun-

² According to the Report of the Bank of England (2001), in the United Kingdom the inadequate operation of the market has not been proved beyond doubt for high-tech companies, for example.

tries with marked state intervention tends to be smaller. Finally, the increasing *internationalization* of venture capital investments is also inconsistent with the improvement of the capital supply by public means. State efforts to increase the national venture capital supply will be in vain if financiers find much better investment opportunities in other countries (Baygan and Freudenberg, 2000). Government measures targeting the demand side, on the other hand, such as the stimulation of the enterprising spirit or infrastructure development, may also attract external venture capital investments to the country.

Direct state participation on the venture capital market, that is, investment organizations created from public sources competing with private investors on the market, is subject to much criticism. Researchers (O'Shea, 1996; Leleux et al., 1998) criticize these methods primarily for their *crowding-out* effects: in such cases, the activity of the state may suppress and condemn to slower development the agents of the venture capital industry working with private sources. By offering softer investment conditions than the market, the state may snatch away from private financiers projects that would have been financed anyway by the private sector (Lerner, 1999). The assertion of the crowding-out effect depends primarily on whether state intervention follows the logic of *assisted or sustainable* programmes (Kállay, 2002). If assistance is provided on more favorable criteria than those of the market, by administrative distribution, the crowding-out effect will manifest itself. If public funds are invested on market conditions, in accordance with the relevant market automatism, that is, if the state sector acts the same way as private-sector investors do, there is no risk that the market will be distorted. Manigart and Beuselinck (2001) having analyzed direct state financing on the European markets experienced no manifestation of the crowding-out effect.

All critiques consider it a negative feature of state intervention that the relevant financing schemes are a hotbed of *abuse* (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 without clear-cut criteria, where the activity of public investors is seldom or not at all subject to control.

Researchers of this topic emphasize that the state and fund managers in its employ *cannot think as venture capitalists* (Leleux et al., 1998). Moreover, the system of incentives of public venture capital managers is often different from that applying to managers of private funds. 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 sig-

nificant achievements but having more uncertain prospects. Neither does its logic match that of venture capitalists thinking in terms of portfolio investment requiring the uneven distribution of funds (Florida and Smith, 1993). That is, to abandon some of the companies in the portfolio for the sake of others turning successful. Politics and venture capital differ in their attitude to the management of failure and bankruptcy. The allocation of part of the public funds to unsuccessful companies, a necessary concomitant of venture financing, is something that is difficult to have accepted politically. Moreover, the need to demonstrate success in the short run, matching the election cycles, is also difficult to reconcile with the patient nature of venture capital allowing projects to mature in as many as 5–7 years (Eisinger, 1993).

Finally, the *assessment* of the efficiency of government projects is a problem in itself. In part, the goals are not identified unambiguously, and the programmes do not include such criteria as could help measure the results. Usually, the data required for performance evaluation are also missing (Eisinger, 1993). The majority of studies so far³ evaluated the effects of public schemes by comparing intervention costs to the number of newly created jobs, their influence on the survival rate of enterprises, the yield of the investments and whether state participation triggered the market appearance of new private capital funds. However, it is most difficult to compare the efficiency of national programmes. The diversity of the goals, the absence of the relevant success indicators, the unreliability of data required for measurement gives ample ground for findings corresponding to the interests of the surveying party. Moreover, the measurement of the efficiency of state intervention by country would require the simultaneous assessment of the efficiency of direct and indirect financing schemes, and no such complex surveys have been made.

Consequently, in view of the above, the basic theoretical issue whether it is necessary at all for the state to take part on the venture capital market *has not been decided yet*. In most European countries, the state does influence the operation of the venture capital market in some – direct or indirect – form, depending on the national traditions, and the contents, manner and extent of such intervention changes continuously in accordance with the economic policy orientation of

³ See for example: Florida and Smith (1993) on the role of Small Business Investment Companies (SBIC); Eisinger (1993) on the state venture capital programmes of the American member states; Leleux et al. (1998) on direct state venture capital financing by European governments; Murray and Marriott (1998) on the EU European Seed Capital Pilot Action Initiative and the Innovation and Technology Equity Capital (I-TEC) system; Lerner (1999) on the Small Business Innovative Research (SBIR) programme in the USA; and McGlue (2002) on the assessment of the European Investment Fund (EIF).

the governing parties and the economic trend situation ever. Typically, however, in Europe bulk of support takes the form of equity capital contribution to venture capital funds (McGlue, 2002).

Indirect solutions vary to a great extent, but a consensus has been reached concerning the principles underlying *direct* state participation. The standpoint of the European Union regarding the stimulation of the venture capital market by state support is essentially the manifestation of this “collective wisdom” (EVCA, 2001; Sloccock, 2001).⁴ According to the EU, state financing should serve simultaneously enterprises forced into the background by the imperfect functioning of the market on the one hand, and the development of the private venture capital sector on the other. This is feasible by state support based on capital supply by private financiers, partnered by their professional private equity. Institutions created by *co-financing* should take investment decisions on a market basis to prevent the investment of public funds into inviable projects. As for the management of state funds associated with private capital, it is expedient to relegate that, too, to the highly experienced and skilled managers of the private sector, in whose case investment performance is closely linked to remuneration. The guarantee reducing the risk of distortion of inter-investor competition is the public announcement of access to preferential terms. The requirement of continuous control serves a similar aim, the same as such investment schemes as exclude any major disproportionateness between state and private investors regarding the generation of losses and gains.

4. THE HUNGARIAN VENTURE CAPITAL INDUSTRY

The Hungarian venture capital industry having emerged in the decade following the change of the economic and political regime of the country is quite *advanced* in regional comparison,⁵ so much so that by the turn of the millennium Hungary had become the *Central and Eastern European centre* of venture capital, as indicated among other things by the fact that half of the investments made by fund managers with a registered seat in Hungary in 2001 went to foreign enterprises.

⁴ The community-level programmes of the European Union to promote the development of the venture capital industries of the member states were developed on the basis of these principles. They include, among others, the European Investment Fund (EIF), European Technology Facility (ETF), the Innovation and Technology Equity Capital (I-TEC) and the Seed Capital Action (SCA) initiatives.

⁵ This is symbolically indicated by the fact that Hungarian Venture Capital and Private Equity Association (HVCA) responsible for the interest representation of the industry currently includes 27 investors, 30 consulting companies, and 13 individual members.

All global and regional venture capital funds interested in the region are present on the Hungarian market. In the second half of the nineties, the venture capital supply had already been dominated by the capital of these investors, and through their presence, Hungary joined the international venture capital flow. The so-called country funds created for a definite term and specialized in Hungary exclusively as well as investment companies mobilizing domestic capital had appeared at the time of the change of regime, well before the regional funds. At the turn of the millennium, in line with the international trend, investors specialized in technological companies also entered the Hungarian market. By the same time, the activity of the so-called business angels – private persons involved in venture capital financing – had also become perceptible in Hungary, although their role has remained infinitesimal to the present day.

Although the presence of investors of many kinds on the venture capital market has improved the chances of Hungarian companies considerably, their access to venture capital is not a resolved issue. While major companies with appropriate projects have a choice of several possible financiers, *minor start-up companies face difficulties in this respect* – especially those that do not want to export and whose offer is more modest than the yield expectation of institutional venture capital investors. The worst off are companies looking for investors offering a relatively smaller amount, that is, business angels in the first place.

Data available to date on the operation of the venture capital industry *are not suitable* for presenting the structural features and efficiency of the operation of the industry. Annual aggregates of investments and exits have been prepared since the end of the last decade, but the development of the most important indicators, with special regard to the profits of investors, are still in obscurity. There are only estimates concerning the size of the venture capital stock and the number of enterprises financed by it over the past decade. No survey has been made so far on the effects of venture capital investments on the development of the Hungarian economy either. And there have been no studies of any kind to identify those market segments where companies suffer from a shortage of venture capital. Consequently, neither is the off-chance necessity of state participation supported by data.

According to the estimate of the Hungarian Venture Capital and Private Equity Association (HVCA), by 1995, of funds worth USD 400 million, the Hungarian venture capital industry had already invested USD 250 million and had USD 150 million available for investment. By 1998, venture capital funds had increased to USD 1.2 billion, of which nearly USD 780 million had been invested and USD 440 million was available for investment. Taking into account investments worth USD 41 million realized in 1999, USD 103 million in 2000

and USD 64 million in 2001, the *venture capital stock invested in Hungary totalled more than USD 1 billion* by the end of 2001 according to the estimates. This amount corresponds to 5% of FDI having entered the country in the course of the decade.

In line with the international tendencies, the year 2000 broke the venture capital investment records in every respect – number of transactions, amount of investments and number of active funds on the market — in Hungary, too, to be followed by a significant decline in volume in 2001. Nevertheless, certain market segments had kept developing in spite of the general decline. Hence the financing of companies in the early stage of development and introducing new technology underwent a significant boom, the same as buy-out transactions to promote ownership change in mature companies. Recession affected most keenly traditional development capital investments: 3 transactions were realized in 2001, as opposed to 17 in 2000.

Thanks to the marked shift in previous years in favor of the financing of *young, technology-based companies*, this investment area has remained quite significant despite the drop in transaction numbers. In terms of the number of transactions, the share of the technology sector fell from 75% in 2000 to 50% in 2001, with the other 50% distributed among trade, the food industry and other production activities. In terms of transaction value, the technology sector currently carries a weight of around 30% (HVCA, 2002).

After the technology boom, venture capital played a role in connection with the re-organization of the corporate sector. By that time it had restricted its activity to the first- and subsequent-round financing of technology-intensive companies deemed viable by traditional company assessment procedures, a function retained to the present day. It is no accident therefore that, in agreement with the international trend, *buy-out transactions*, completely absent previously, have also become increasingly typical in the Hungarian venture capital industry. Of the five buy-out transactions registered in 2001, two were public-to-private deals. In the remaining cases, the strategic investor sold the company in response to difficulties incurred by the parent company (HVCA, 2002).

As for the justified nature of state intervention, HVCA's survey findings reporting on the size distribution of venture capital investments are the most likely to give some footing in that respect. The marked increase of the share of transactions under the USD 1 million value since 1998 is indicative of the *obvious spread of minor transactions*. From 0% in 1998, the proportion of such deals went up to 55% of all financing transactions in 2000 and 61% in 2001. By 2001, the number of investments of less than USD 2.5 million had represented 80% of all financing transactions in Hungary. That is, the relevant data do not support the eclips-

ing of transactions implying minor investment. Moreover, the evaluation of the survey findings concerned must take into consideration the fact that the statistical data are based exclusively on data provided by the agents of the institutional venture capital industry. Hence they do not include investments made by business angels over the past years, obviously targeted at the financing of enterprises of a smaller size.

5. STATE INTERVENTION IN THE HUNGARIAN VENTURE CAPITAL INDUSTRY

In Hungary, the state had come into touch with venture capital already at the end of the eighties, that is, prior to the change of the economic and political regime, when this industry was practically non-existent in the country. In the area of innovation financing, the state pioneered by establishing two *investment companies*, wishing to promote thereby the venture capital financing of Hungarian technical innovations (Karsai, 1997). These investment companies, however, were not viable. Their fate was sealed by low capital strength – in the range of USD 1–1.5 million – as well as a strategy focusing on investment implying the highest risk and the slowest return. Their funds were rapidly depleted, and in the absence of capital injection by the state to be able to survive, they had to give up financing small innovative seed and start-up companies, and invest in enterprises in a different life-cycle stage. Simultaneously, they complemented their investment activity by providing business services.

In the years following the change of regime, venture capital investment by the fully state-owned *Hungarian Development Bank* (Magyar Fejlesztési Bank, MFB) represented the most important area of direct state intervention in the venture capital industry.⁶ The MFB provided the largest sums to *Hungarian industrial companies in need of re-organization* from among the organizations investing venture capital originating from domestic sources. (The Bank did not release actual transaction data.) Tension generated by indebtedness was reduced temporarily when the MFB acquired ownership in companies selected mostly on the basis of economic policy rather than business criteria, and occasionally of other subjective points of view as well. However, as the Bank provided neither strategy nor capital to ensure their long-term development, in most cases state participation did not solve the financing problems of the companies concerned.

Beside the direct acquisition of company shares, the MFB as representative of the regional development plans of the state created a network of *regional devel-*

⁶ On the Bank's role in this field see Karsai (1995); Karsai et al. (1999).

opment companies involved in the same activity to finance companies of a smaller size. (In 1998, the total registered capital of the 11 regional development companies created with the participation of the Bank exceeded USD 27 million, of which the MFB had a share of 76%.) However, the investors in question promoted the venture capital financing of minor companies in the initial and early stages to a relatively small extent only. On the one hand, the acquisition of company shares represented but part of their activity. Beside venture capital financing, the investors concerned pursued such other, lower-risk activities providing a steady income as financial consulting, assets management, liquidation, purchase of license and know-how or patenting (Karsai, 1999). The efficiency and profitability of venture capital financing was furthermore reduced by the very small capital strength – of USD 3–4 million – of these investors, as well as the scheme used by them,⁷ more akin to lending than to capital investment.

The next meeting between state and venture capital occurred in the mid-nineties, with the government decree on the development of the SME sector. This time, instead of the direct boosting of the venture capital supply, the state chose the indirect alternative, targeting with a new act the *improvement of the operating conditions* of organizations capable of providing venture capital out of domestic sources. Government propaganda presented venture capital as the alternative to bank credits to Hungarian small and medium-size entrepreneurs representing a significant voters' basis and struggling with financing problems. Besides, the bill really wanted to improve the regulatory environment of the venture capital industry and hoped to boost investments thereby.

The measures to be codified by the act were subject to strong criticism from the start. The bill intended to establish simultaneously the previously non-existent regulation system of the venture capital industry and preferences regarding the venture capital financing of SMEs. In the haste due to the approach of the elections, the *act* passed by Parliament on venture capital investments and inves-

⁷ According to a recent study on the conduct of Hungarian venture capital investment organizations (Ludányi, 2001), these regional development companies have many special features distinguishing them from other venture capital investors. Their closed investment scheme is characterized in the first place by capital financing approximating credit financing. The expected exit date and price are fixed at the time of the conclusion of the contract, and share acquisition is combined with proprietary credit. The collaterals associated with the transaction are practically identical with the bank collaterals. Therefore, regional development companies are characterized, in comparison with other investors, by a faster and more flexible decision-making structure, minority ownership and non-intervention in the business management of the financed companies. Consequently, such societies will not find it attractive to finance a company spending for a longer period of time on development alone, to become marketable with outstanding capital gain subsequently. Regional development companies created for an indefinite term do not use capital-gains-based incentives to stimulate their managers.

tors included such compromises which projected its *inefficiency*.⁸ Although the Venture Capital Act became effective in 1998, until 2002 not a single financier applied for the preferences under it on condition of the relevant obligations. Paradoxically, the state itself created two of its three venture capital funds in 2002 outside the scope of the Act, making reference to the inflexibility of its provisions.

For some time after the change in government in 1998, the state did not intervene in the operation of the venture capital industry, announcing instead assistance to companies through another, extensive package of incentives. Despite its non-intervention, however, *indirectly*, the government *undermined* the operating conditions of venture capital quite seriously by relegating the role of the stock exchange into the background.⁹ Moreover, this effect was concurrent in Hungary with the effect of the global economic recession and the loss of breath of the technological boom.¹⁰

In the meantime, in the area of venture capital financing, the participation of MFB, previously an important actor of state intervention, came to an end: within its activity profile, infrastructure development gained the upper hand over reorganization. The state created another institution, also fully state-owned, to serve as the basis for state venture capital financing, the *Regional Development Holding* (Regionális Fejlesztési Holding, RFH). This took over the regional develop-

⁸ The Venture Capital Act established the legal form of the venture capital association and the venture capital fund as organization. It ensures the legislative supervision of these institutions and, provided that the investors undertake to comply with the many administrative constraints prescribed for their operation, it allows them to apply, for a definite period of time, a 0% corporate tax rate instead of the normal 18%, as well as allowing preferential loss settlement and provisions generation procedures. The Act provides for venture capital investors to reduce the risks of their investments by having recourse to state guarantee if the financed company does not exceed a certain size. According to the intent of the legislators, this last element was meant to channel venture capital investments towards the SME sector enjoying state preference. At the same time, the proposals that would have granted further preferences to smaller enterprises gaining access to venture capital originally were cancelled from the Act. On the other hand, the restrictions included in the legal regulation in order to prevent the abuse of the preferences – e.g. those specifying the minimum/maximum proportion and term of investment of the investor in function of its capital strength, as well as the extent of the credit they can grant relative to their capital participation to enterprises coming into their ownership – have made the Act completely ineffective.

⁹ The role of a lively stock market would have been essential for venture capital firms, as the most favored exit route from an investment in most of the cases in Hungary is the stock market.

¹⁰ Indirectly, occasional administrative interventions in the pricing of listed companies (e.g. gas, pharmaceuticals) or the increase of the previous 0% capital gain tax on securities registered on a capital account to 20% and the freezing of private pension fund payments at 6% of the wages carried a negative message to the venture capital industry.

ment companies owned by MFB, and also a significant part of its company shares. Even more importantly from the point of view of our topic, it was commissioned to set up the venture capital funds to be financed by the state.

With the approach of the elections of 2002, in order to win the support of entrepreneurs, the government set out to rub up venture capital offering a suitable means of publicity. Instead of ameliorating the system of conditions of venture capital financing or altering the provisions of the dysfunctional Act, however, they announced to set up three *venture capital companies* based partly on public sources to boost by central means the Hungarian venture capital supply of smaller companies in the early stage of their life cycle which they deemed unsatisfactory. Since they were of the opinion that the capital supply of prospective suppliers of multinational companies and of IT companies had to be improved as well, the envisaged three venture capital funds were to improve the venture capital financing chances of such enterprises specifically.

The state created the first venture capital fund, more precisely a company limited by shares engaged in venture capital investment under the name of *Small Enterprise Development Financial Plc.* (Kisvállalkozás-fejlesztő Pénzügyi Rt.), with own capital of HUF 3.5 billion in December 2001, with the participation of seven commercial banks. Nevertheless, the ratio of state property within the investment company exceeded 95%, as three only of the founding banks belonged to the private sector. The investment company plans to finance enterprises with less than 50 staff by capital increase. Within that framework, they provide investment of max. HUF 50 million for 3–5 years so that its equity should not exceed 25% of the capital of the financed company. The parties specify already at the time of the investment that the financier is entitled upon exit to a price exceeding by 5% in excess to the purchase price plus inflation. Compulsory buying applying to the other proprietors in case of unsuccessful management is also part of the investment agreement. The circle of the enterprises to be financed is restricted by the fact that they can only be the customers of the banks taking part in the fund proposed by the said banks. The amount of the capital they can receive shall not exceed the bank's credit.

The second company limited by shares engaged in venture capital investment, *Suppliers' Investment Plc.* (Beszállítói Befektető Rt.), was created at the end of March 2002, with a registered capital of HUF 2.5 billion – exclusively from public sources – by the state. The state intended to improve the market position of Hungarian supplier companies by capital supply. Therefore, the investment company will acquire 25–49% minority ownership in SMEs acting as suppliers or demonstrating that they will act as suppliers, on the basis of a business decision, with investments of HUF 50–250 million, for a pre-determined period of 3–7

years. The parties specify the exit conditions by agreement already at the time of the acquisition of the participation. The expected annual yield is 5% in excess of the rate of inflation, and this is expected to cover, according to the calculations, the operating costs of the investor and maintain the value of invested capital. According to the plans, in the longer term, losses shall be compensated for by yields. The investor currently examines potential target projects, but it has become clear to it already that the HUF 50 million bottom limit of the investment amount – in addition to the provision applying to minority ownership – excludes many otherwise suitable companies from the circle of potential investees.

The third state venture capital fund was created by the state with an initial capital of HUF 3 billion under the name of *IT Venture Capital Fund* (Informatikai Kockázati Tőkealap) in summer 2002. This is the first fund that is to operate in accordance with the provisions of the Venture Capital Act. The fund, providing classical venture capital to Hungarian SMEs will function as an industry-specific fund, investing exclusively in the IT and telecommunications sector. The invested amount will be HUF 50–450 million per company. The association intends to acquire minority ownership in start-up or operating companies, for a period of 3–6 years, on condition that, upon exit, it will have the right to sell its share to other investors, too, beside the co-owners or managers and maybe sell it by public offering.

By creating investment companies and venture capital funds based on public sources, the state chose the most direct way to increase the venture capital supply. The original intention was *to attract private financiers, too*, but attempts to do so failed (NAPI, 2001; VG, 2001), and the approaching date of the elections left no time for further negotiations. At the same time, the conceptions of the state did not include the *expansion of private capital funds* available for the financing of small enterprises in the early stage *by public sources*. Neither did the state relegate the management of its investment companies and fund to private sector managers with significant professional expertise.

At 5% only in excess of the inflation rate, the yield expectation of state investment companies shows that the state undertakes financing at much more favorable conditions than the 30–40% yield in effect on the market. Its investment is expected to generate lively demand among the entrepreneurs. However, the announced terms and conditions provide no guarantee for the assertion of business criteria in the selection procedure. Furthermore, the financing conditions of the investment organizations created by the state are highly reminiscent of those applied by the regional development companies, and the closed schemes involved actually represent *hidden lending* and not equity investment implying a real risk.

It is also questionable whether the initial USD 10–14 million available for

investment would be sufficient to ensure the self-sustainability of the investors. For, on the Hungarian private venture capital market, capital worth nearly USD 20 million is the *minimum fund size* required for profit-oriented operation (Ludányi, 2001). Moreover, relatively smaller transactions imply higher unit expenditure than the larger projects of private investors covered by the survey in question. 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 especially in 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.

The programme of the new government having taken up office in May 2002 includes the plan to *develop the stock exchange*, representing a definite departure from the attitude of the previous cabinet. The decision to cancel the tax on capital gains as of January 2003, as well as the plans to facilitate the listing of companies and measures resulting in the more favorable taxation of long-term investments are indicative of the same. The new government approved the establishment of the *venture capital companies* created already by the previous government or on the verge of being launched. Public assistance to venture capital was an item of the election programmes of the governing parties. It is not known yet to what extent the relevant methodology will differ from that applied previously.

6. CONCLUSIONS

Ambiguous western experiences regarding the intervention of the state in the venture capital industry are a sign of warning to work out the framework setting of state participation in the Central and Eastern European countries most carefully. Moreover, the latter have a much smaller volume of public funds at their disposal, their companies are more starved for capital, the institution system of the market economy as well as information provision laying the foundations of economic policy measures is poorer, while state intervention resulting in the exclusion of market forces has considerable traditions.

It follows from the essence of venture capital that it *will never become a solution of general validity* as the alternative to bank credits for the long-term financing of small- and medium-size enterprises. In this sense it seems likely that neither will state intervention to promote the development of the venture capital

industry improve the SME sector's access to such long-term investments as would eliminate capital shortage and dependence on bank credits. The decisive criterion for the venture capital industry is the overall development of macroeconomic conditions influencing the development options of private enterprises — the appropriate regulation of venture capital investors will only play a role later on. Since venture capital is essentially a market category and it is highly mobile, it seems likely that financiers will present themselves once they detect appropriate projects. Even in case of market-oriented arrangements, legislation and central funding will influence the operation of the industry in the desired direction to a limited extent only. The *self-development* of the venture capital sector can be supplemented but not substituted.

The Hungarian experience so far shows that *central measures* to improve the SME sector's access to venture capital *put the emphasis on the relatively simple, fast improvement of the supply side, requiring little central funding and providing a good opportunity for publicity*. This has brought little change of merit, and there have been practically no attempts to explore and treat the problems of the demand side. For years, government efforts to develop the venture capital market served *political* rather than economic goals. State intervention was not preceded by an analysis of the operation, efficiency or defects of the private venture capital market. In its capacity of public authority, the state codified an act that cannot be observed and hence is of *no relevance* to market agents. Efforts so far to enhance the supply of the venture capital industry by providing state funding have also proved *inefficient*. The efficient financing of the circle of enterprises identified by the state was hindered both by the scarcity of budgetary funds and the nature of the capital investment schemes worked out for that purpose.

The state failed to make investment *attractive* to the private sector in the areas deemed important by it. State participation in Hungary tends to result in the *substitution* rather than the development of the venture capital market, as witnessed among others by fund sizes putting economical operation into doubt, the obscure system of incentives of the staff selecting and managing the projects, the inconsistency of the project selection criteria, the application of investment schemes more akin to lending than to the purchase of equity and the missing conditions of taking business-based decisions. The onslaught of entrepreneurs is likely to lead to the fast depletion of the investors' funds and hence the assertion of the state plan would require new budgetary resources.

At the same time, there are hardly any signs on the part of the state to support the business angels and the business incubation networks — the very organizations that could satisfy the capital demand of SMEs in the focus of the attention of the state on a business basis, as co-financiers.

Although the Hungarian venture capital market has acquired a lead role in the region and its activity matched perfectly the corresponding international processes, the most recent state initiatives to expand the industry give little hope for success. Neither do the new investment vehicles conform to the principles worked out by the European Union. The omission of private venture capital investors as co-financiers, the exclusion of private capital fund managers from the management of the state investments, the establishment of softer investment conditions than those offered by the market and the imperfect publication of the selection criteria are all contrary to the expectations of the Union. The softening of profit orientation endangers the very essence of venture capital financing, and the schemes supported by the state may have a *distorting* effect on the market.

In contrast with the practice followed so far in Hungary, the improvement of the capital supply of the SME sector should be promoted primarily by the venture capital financing through the *partnership of the state and the private investors*. The funds concerned should be invested by professional managers with appropriate motivation, the access criteria of preferences should be given large publicity, with little possibility left for political and administrative intervention. The financing of start-up companies and innovation projects in the initial phase should be promoted indirectly primarily by much stronger support than so far to the *networks of business angels and of incubation centres* that would facilitate, beside the preparation of entrepreneurs and the pre-screening of projects, the matching of investors and investment proposals.

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REFERENCES

- Aernoudt, R. (1999): European Policy towards Venture Capital: Myth or Reality? *Venture Capital*, Vol. 1, No. 1: 47–57.
- Baygan, G. and Freudenberg, M. (2000): *The Internationalisation of Venture Capital Activity in OECD Countries: Implications for Measurement and Policy*. OECD, DSTI Working Papers, No. 7, 19 December.
- Bottazzi, L. and Da Rin, M. (2002): Venture Capital in Europe and Financing of Innovative Companies. *Economic Policy*, April, No. 34: 229–269.
- EC (2001): State Aid and Risk Capital. *Official Journal of the European Communities*, C 235, 21 August.

- Eisinger, P. (1993): State Venture Capitalism, State Politics, and World of High-risk Investment. *Economic Development Quarterly*, Vol. 7, No. 2: 131–140.
- EVCA (2001): *Policy Priorities for Private Equity*. EVCA White Paper. European Private Equity & Venture Capital Association, September.
- EVCA (2002): *2nd Highest Year for the European Private Equity Industry*. Press Release, 28 May, European Private Equity & Venture Capital Association.
- Filatotchev, I., Grosfeld, I., Karsai, J., Wright, M. and Buck, T. (1996): Buy-Outs in Hungary, Poland and Russia: Governance and Finance Issues. *Economics of Transition*, Vol. 4, No. 1: 67–88.
- Florida, R. and Smith, D. F. (1993): Keep the Government Out of Venture Capital. *Issues in Science and Technology*, Summer: 61–68.
- HVCA (2002): *Yearbook 2002*. Budapest: Hungarian Venture Capital and Private Equity Association 67.
- Kállay, L. (2002): Change of Paradigm in the Development of Small Business. *Közgazdasági Szemle*, No. 7–8: 557–573.
- Karsai, J. (1995): Open and Hidden Channels of Venture Capital Financing in Hungary. *Acta Oeconomica*, Vol. 47, No. 3–4: 369–422.
- Karsai, J. (1997): Investing Attitude of Venture Capital Funds and Companies in Hungary. *Acta Oeconomica*, 1997–98, Vol. 49, No. 3–4: 271–284.
- Karsai, J. (1999): The Role of Venture Capital in Financing of Hungarian Small and Medium-sized Enterprises. In: Csaba, L. (ed.): *The Hungarian SME Sector Development in Comparative Perspective*. Budapest: CIPE – KOPINT DATORG, pp. 231–252.
- Karsai, J., Wright, M. and Filatotchev, I. (1998): Venture Capital in Transition Economies: The Case of Hungary. *Entrepreneurship: Theory and Practice*, Vol. 21, No. 4: 93–110.
- Karsai, J., Wright, M., Dudzinski, Z. and Morovic, J. (1999): Venture Capital in Transition Economies: the Cases of Hungary, Poland and Slovakia. In: Wright, M. and Robbie, K. (eds): *Management Buy-outs and Venture Capital*. Cheltenham: Edward Elgar, pp. 81–114.
- Lawton, T. C. (2002): Missing the Target: Assisting the Role of Government in Bridging the European Equity Gap and Enhancing Economic Growth. *Venture Capital*, Vol. 4, No. 1: 7–23.
- Leleux, B., Surlemont, B. and Wacquier, H. (1998): *State versus Private Venture Capital: Cross-Spawning or Crowding-out? A Pan-European Analysis*. Working Paper, Babason College.
- Lerner, J. (1999): The Government as Venture Capitalist: the Long-run Impact of the SBIR Program. *Journal of Business*, Vol. 72, No. 3: 285–318.
- Ludányi, A. (2001): The Effect of Capital Strength and Founder Background on the Investment Behaviour of Risk-capital Organisations. Parts I–II. *Közgazdasági Szemle*, No. 7–8: 659–672 and 9: 779–798.
- Manigart, S. and Beuselinck, C. (2001): *Supply of Venture Capital by European Governments*. Working Paper 2001/111, August. Universiteit Gent, Faculteit Economie en Bedrijfskunde 20.
- McGlue, D. (2002): The Funding of Venture Capital in Europe: Issues for Public Policy. *Venture Capital*, Vol. 4, No. 1: 45–58.
- Murray, G. (1998): A Policy Response to Regional Disparities in the Supply of Risk Capital to New Technology-Based Firms in the European Union: the European Seed Capital Fund Scheme. *Regional Studies*, Vol. 32: 405–419.
- Murray, G. (1999): Early-stage Venture Capital Funds, Scale Economies and Public Support. *Venture Capital*, Vol. 1, No. 4: 351–384.
- Murray, G. and Marriott, R. (1998): Why has the Investment Performance of Technology-Specialist, European Venture Capital Funds been so Poor? *Research Policy*, Vol. 27: 947–976.
- NAPI (2001): A PM tőkejuttató társaságot tervez a kis- és középvállalkozásoknak (The Ministry of Finance Organises a Capital Investment Company for SMEs). *Napi Gazdaság*, May 14.

- OECD (1997): *Government Venture Capital for Technology-Based Firms*. Paris: OECD, GD(97)20.
- O'Shea, M. (1996): Venture Capital in OECD Countries. *Financial Market Trends*, No. 63: 15–37.
- Report of the Bank of England (2001): *Financing of Technology-Based Small Firms*. London: Bank of England, Domestic Finance Division, February.
- Sloccock, B. (2001): Commission Adopts Communication on State Aid and Risk Capital. *Competition Policy Newsletter*, No. 2, June.
- Szerb, L. and Ulbert, J. (2003): Entrepreneurial Growth and the Role of Venture Capital in Hungary. In: Varga, A. and Szerb, L. (eds): *Innovation, Entrepreneurship, Regions and Economic Development: International Experiences and Hungarian Challenges*. Pécs: University of Pécs, pp. 122–146.
- VG (2001): A magántőke habozik (Hesitant Private Venture Capital). *Világgazdaság*, July 13.
- Wright, M., Karsai, J., Dudzinski, Z. and Morovic, J. (1999): Transition and Active Investors: Venture Capital in Hungary, Poland and Slovakia. *Post-Communist Economies*, Vol. 11, No. 1: 27–46.

