ISSN 1822 - 8402 EUROPEAN INTEGRATION STUDIES. 2009. No 3

STIMULATING PENSION FUNDS INVESTMENTS TO VENTURE CAPITAL: OPPORTUNITIES IN EUROPEAN UNION COUNTRIES

Dalia Kaupelytė
Vilija Jankauskienė
Vytautas Magnus University

Abstract

Various researches show that venture capital supports higher-risk investments in young, potential start-ups by reducing existing financing gap for companies without performance history, reinforces dynamic entrepreneurial spirit by producing innovative and cutting-edge technology and products for knowledge-based economy, boosts economic strength by creation of jobs and revenues in venture-backed companies. Considering the total impact venture capital could make on the long-term economic growth, most of the EU countries have pointed the development of venture capital as one of the major priorities as venture capital. Insufficient market of investors for venture capital funds do not allow to reach significant level of venture capital investments in EU countries.

The higher level of venture capital investments can be achieved by stimulating investments of institutional investors into venture capital funds. Investments of well capitalized pension funds to venture capital could be very important source of long-term financing, which might ensure sustainable and continuous venture capital growth. From other side, pension funds stimulation is important not only to venture capital funds creation and development, but also to overall social insurance and pension systems in European countries, because of negative demographic Europe tendencies like aging society with increasing life expectancy, declining birth rates. Private pension systems creation and development, which would allow to get higher individual pensions, as financial stability for retired people, become one of the major priorities of governments.

In many EU countries, there are quite many various legal restrictions for pension funds investments and assets allocation, which reduce the potential higher financial return from invested assets. This raised question, are there any research for pension funds investments into venture capital funds, how pension funds investments are related to venture capital, why pension funds do not invest into venture capital, what kind of instruments can be created and implemented in EU countries for stimulating investments of pension funds to venture capital.

The aim of this paper is to provide main obstacles and stimulating instruments of venture capital investments development through pension funds, by explaining the relation between venture capital funds and pension funds investments and the features of pension funds activities in EU countries and main problems.

Theoretical analysis of the scientific works, research papers, practical fields in this research field, statistical data analysis allowed highlighting the problematic positions concerning pension's funds investments into venture capital funds. Though main investors in venture capital funds in EU countries in 2003-2007 periods are pension funds, there are still problems in legal environment, pension funds assets allocation, geographical investments limitation. Main obstacles and stimulating instruments of venture capital investments development through pension funds and overall situation improvement are presented in this paper.

Keywords:

Venture capital, venture capital funds, investments, pension funds, pension systems.

Introduction

Venture capital is important ensuring sustainable growth and the increase of employment, creating innovation and having impact to knowledge-based economy. Considering the total impact venture capital could make on the long-term economic growth, most of the European countries have pointed the development of venture capital as one of the major priorities. Pensions Funds with other institutional investors (insurance companies, banks, public bodies, etc.) are the main sources for fundraising venture capital. Pension funds investments to venture capital funds make not more than 25 % of pension funds assets in Europe and are increasing constantly. Pension funds invest the largest part of their assets to the venture capital in Great Britain, Sweden and Netherlands, though pension funds investments to venture capital is underdeveloped in Europe in comparison to USA, where pension funds investments make more than 50 % investments to venture capital (Barros et al., 2005).

According to European Venture capital association point of view, investments of well capitalized pension funds to venture capital are very important source of long-term financing, which might ensure sustainable and continuous venture capital growth. Despite of that, private pension funds have to be developed themselves in most of the European Countries. Analysis of pension funds investments to venture capital funds raises many questions: what the infrastructure of financial market must be for venture capital raising developing, what regulations are required for pension funds in order to invest into venture capital with more potential gain, what special instruments can be created and implemented in European countries for stimulating investments of pension funds to venture capital

The aim of the research: to analyze the main limitations of pension funds investments to venture capital in EU countries and define main measures for promoting pensions funds investments into venture capital.

The tasks of the research: to present the importance of venture capital investments; to explain the relation between venture capital funds and pension funds; to analyze the features of pension funds activities in EU countries and main problems; to provide main obstacles and stimulating instruments of venture capital investments development through pension funds.

The object of research: Investments of pension funds to venture capital.

Main results of research are: As venture capital investments and activities of venture capital funds gain more international cross-border character, the geographical limitation for pension funds investments to venture capital should be revised. Also, EU countries should develop not only venture capital investments through pension funds, but pension funds market itself. Only by making coordinative actions, European Union countries might reach long-term impact, which will positively influence their economic growth.

As the **research methods** it was taken theoretical analysis of the scientific works, research papers, practical fields in this research field. Also of statistical data was applied as well.

The importance of venture capital investments

The creation and development of the alternative venture capital markets, which finance companies in early stages and especially high-tech sectors, progressively takes up a important position in economic policy formation. Main reason for venture capital market creation and stimulation is that venture capital has positive influence on stable growth of economy and increase of employment (Botazzi and Da Rin, 2002, European Commission, 2003, OECD, 2001). When economies become dependent from innovation and entrepreneurship in order to reach continuous long-term growth (Botazzi et all, 2003, Nelson and Romer 1996, OECD, 2001), governments try to adapt venture capital stimulation methods, which have been successfully implemented in USA (Megginson, 2004). These efforts require huge investments, but still now the best and proper political instruments, enabling to create active venture capital markets, not known enough.

Mostly venture capital market is developed in USA. There are several reasons, why venture capital creation and development in USA has impressive venture capital investment results. One of the first building steps toward a professionally-managed venture capital industry was the passage of the Small Business Investment Act of 1958 in US. The 1958 Act officially allowed to license private, small business investment companies, which help the financing and management of the small entrepreneurial businesses in the USA. The other legislation, which had a significant impact on venture capital, was a series of changes in employee pension funds lows during 1970s. The pension funds were allowed to invest in independent investment funds, including venture capital funds (Kenney, 2000). According various authors (Bygrave and Timmons, 2002, Lerner, 1998, Bartlett, 2000), with these few exceptions and decisions in legislation changes, US government has only a limited role in creating and developing venture capital industry. Venture capital has been the main driving force behind some of the most vibrant sectors (information technologies) of the USA economy, financing the growth of technology based firms as Microsoft, Compaq, Oracle, etc. (Jeng, Wells, 1998). During the 1960s-1970s, venture capital firms focused their investment activity primarily on starting and expanding companies, which were exploiting breakthroughs in electronic, medical or data-processing technology. As a result, venture capital came to be almost synonymous with technology finance.

In Europe, venture capital started in earnest about 1980s-1990s (EVCA, 2002), when venture capital industry in USA was highly developed. The growth of international competition, the lack of innovative ideas and projects, continuous high-technologies renewal and new knowledge creation led to the individual governments' decisions to initiate, develop and support the creation of active venture capital sector. Unfortunately, in some European countries these efforts to create similar institutions, stimulating entrepreneurial ideas and local abilities, were inefficient. Gompers and Lerner (1998) identified the reasons of venture capital stagnation in EU countries such as the lack of entrepreneurship spirit for new ideas implementation, the lack of experienced venture capitalists, which needed for venture-backed companies management, the lack of sustainable infrastructure for ideas, projects generation and performance. Most of European venture capital funds and venture capital management companies survived only by selling and buying companies', mergers and acquisitions and only few coincidence investments to start-ups (Jakubavicius et al, 2008).

Mostly venture capital industry is developed in United Kingdom. Tannon and Johanson (2005) states, that venture capital gap, comparing USA with United Kingdom venture capital fundraisings and investments, has grown last years, but venture capital industry in United Kingdom is more mature than other well developed countries in Europe. The venture capital industry in United Kingdom started rapidly grow after liberalization of banks, pension funds legislation, when various institutional investors were allowed to invest into venture capital funds. More, the reformation of legal and tax system in United Kingdom, has accelerated the development of reliable and attractive venture capital industry.

As various literature shows, venture capital development in EU faces various legal acts problems, related to institutional investors possibilities to invest into alternative assets – venture capital, but this determinant was one of the most important for venture market creation and development.

The relation between venture capital investment and country' financial system

Venture capital investments usually are made through venture capital funds. Venture capital funds creation in financial market structure was influenced by the financial gaps between capital and credit markets. This gap was fueled by investors, which showed readiness for higher risk, but potential higher than average returns from invested equity capital. So, venture capital funds acts as financial intermediary between investors and venture-backed companies (Fig.1). Company, which seeks venture capital investment, can finance its performance by individual investors or indirect through venture capital fund.

It is important, that the more individual and/or institutional investors indirectly invest through venture capital funds, the higher risk of venture capital funds is (Anderson, Napier, 2005). Such suggestion shows, that the transfer of financial risk to venture capital funds responsibility reflects the conservative aims of the banks and general view into risk diversification.

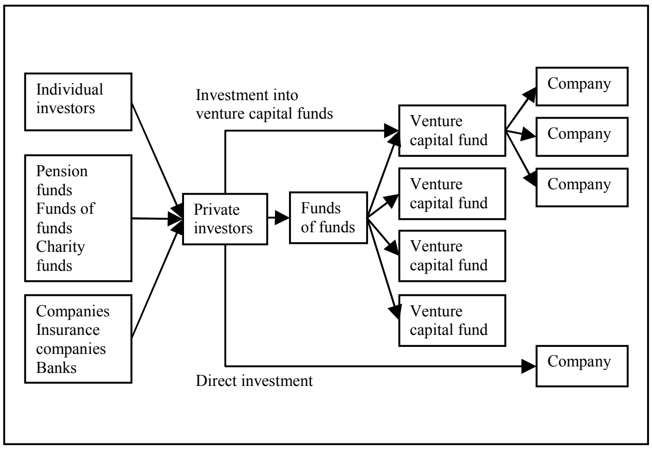

Fig. 1. Venture capital fund as financial intermediary (adopted according Anderson, Napier, 2005; Blotevogel, 2005)

The authors of venture capital research papers (Black, Gilson, 1998; Hyytinne, Pajarinen, 2001; Alen, Gale, 2000; Johnson, 2000; Jeng, Wells, 1999; Schafer, 2002; Mayer, Schoors, Yafeh, 2003; Anderson, Napier, 2005) form an opinion, that there is a very strong relation between financial system structure and venture capital investments. Their researches (Mayer, Schoors, Yafeh, 2003) show that there are significant relationships between sources of finance of venture capital firms and their investment activities within countries. In particular, banks, insurance, and pension fund-backed venture capital firms invest in later stage activities, and venture capital firms relying on private individual investors and corporations favor earlier stage activities. Individual and corporate-backed funds invest more in IT, software, and electronics in preference to manufacturing sectors, while the reverse holds for insurance and pension fund-backed funds. Bank and pension-backed funds invest domestically, while individual and corporate-backed funds invest globally. Financial intermediary-backed funds, therefore, are focused on late-stage investments in relatively low-tech domestic industries, while individual and corporate-backed funds invest globally in early-stage activities in high-tech industries. It is obviously, that venture capital funds forms their investment strategies according to the investors types and financial system, dominated in particular countries. Also, it is important to understand, that various investors has not equal possibilities to invest into risky venture capital (Alen, Gale, 2000). As commercial banks, pension funds, insurance companies are open to various decisions of risk diversification, but their obligations are long-term, which orientate investment into less risky sectors. The sources of venture capital funds depend also on proceeding reforms in particular countries, new financial intermediaries and ongoing creation or development of new financial institutions.

The features of pension funds activities in EU countries

Due to demographic Europe tendencies, aging society, pensions as financial stability for retired people become one of the major priorities of governments. Mostly pension systems in European countries are public, where pension payments depend on proportion between working people and paying contribution on social insurance people. As European countries faces demographical tendencies as increasing life expectancy and declining birth rates, countries with public pension reallocation systems, may encounter incapability to ensure pensions for retired people in near future. According to EuroStat data (2008), the old age dependency ratio is expected to increase substantially from its current levels of 25.4% to 53.5% in 2060. Whereas in 2008 in the EU27 there are 4 persons of working age (15-64 years old) for every person aged 65 years or over; in 2060 the ratio is expected to be 2 to 1.

This situation requires the creation of private pension systems and long-term growth of economy in short time period. Also, the governments must determine how the pension funds must be managed, publicly or privately, even taking into account, that private pension systems have advantages comparing with public systems (Cebi, Thorning, 2004). Private pension systems further the development of capital markets, reduce capital costs, reduce stock prices fluctuations, and increase trade turnovers. Private pension systems increase investments, also encourage economical growth and productivity. Raising finance through pension funds may be vital for less developed EU countries. Private pension systems generate higher investment returns (Iglesias, Palacios, 2000), but their risk is smaller comparing with public systems.

Despite of the countries governments' efforts to create private pension systems, pension funds in EU countries make not more than 30 % of GDP, comparing with 75.5 % average in OECD countries. Pension funds play more significant role only in the economies of Netherlands, Great Britain, and, in smaller extent, in Sweden and Ireland (fig.2).

As nobody can ensure the concrete pension funds investment return in future and fluctuations of investment returns are quite significant, private pension funds must target investments into assets class in investment portfolio (Antolin, 2008) with higher returns.

Investment into venture capital can provide a higher financial return comparing with average in financial marker. In countries, where supervisory institutions and legal acts allow pension funds, as institutional investors, to diversify the investment portfolio by choosing venture capital, has already showed dramatic input into results of pension funds returns.

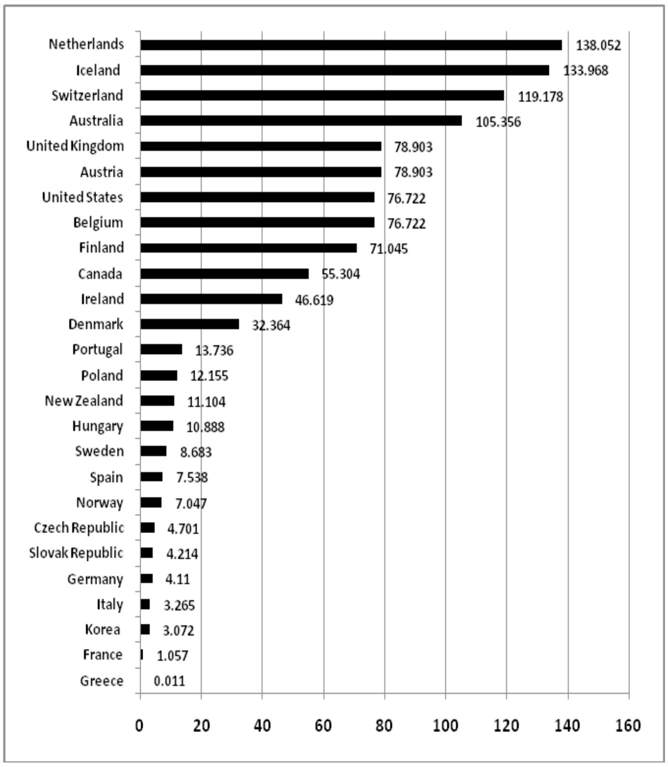

Fig. 2 .The assets of pension funds in various countries (% OF GDP, 2007) (according to OECD, 2008)

The relation between venture capital investments and pension funds

Pension funds are one of the financial sources for venture capital funds rising. (Fig.3). Pension funds investments, which are raised by saving accounts, pension plans in pension systems, can be reinvested into venture capital funds for getting particular repayment and capital gains.

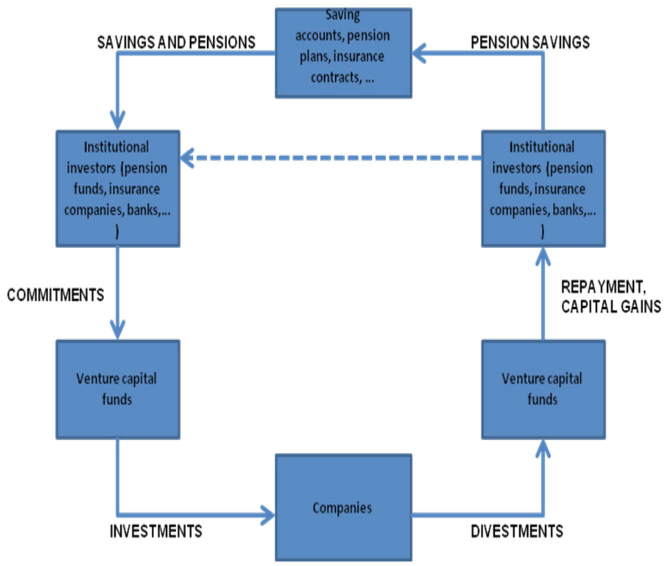

Fig. 3. The link between pension funds and venture capital (EVCA 2001)

Theoretically, pension funds investments in EU cannot be limited by investment into private capital. But in particular markets, free reallocation of pension funds assets is restricted due to unfavorable fiscal policy and regulation, which hampers pension funds investments in venture capital. These restrictions reduce the potential ability to gain higher return on venture-backed investments. Yet in 1999 US pension funds amounted to 38 % of all venture capital financial sources (Jeng, Wells, 2000).

Empirical researches show, that after 1979 US labor department relaxation of the Employee Retirement Income Security Act (ERISA), allowing pension funds to invest into venture capital, the venture capital market increased by from 39 million USD to 570 million USD just one year later (Gompers, Lerner 1998)

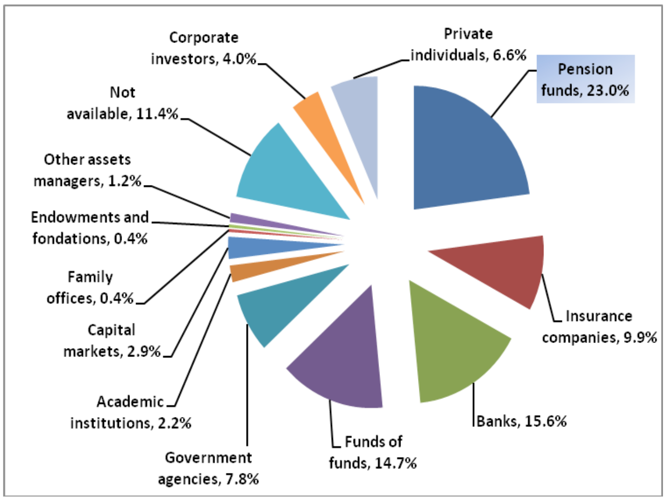

Fig. 4. Main sources of venture capital finance 2003-2007 in EU (according to EVCA, 2007)

Though commercial banks dominated in European venture capital market, after 2000 pension funds started to gain a greater influence in venture capital investments (Schertler, 2001). Main investors in venture capital funds in EU countries in 2003-2007 period are pension funds (23%), banks (15.6) (fig.4)

Main obstacles and stimulating instruments of venture capital investments development through pension funds

For venture capital market development, there is a huge demand for long-term sources of finance, like pension funds or insurance companies (Winton, 2005) Also pension funds development is very important for all European society. This leads to the conclusion, that pension funds must be able to improve an opportunity to use value- added, created by growing companies.
According to European Commission, EcoFin, Europe must perform huge preparatory work for the maximization of the of venture capital sector potential in order to eliminate the difference between EU and US institutional investors capabilities to invest into venture capital. Main barriers, which are faced by institutional investors, must be reviewed and reduced. Huge at al. showed (2006), that tax system, financial market development is not main determinants for venture capital development. This forms a point of view, that pension funds regulation could be very important for venture capital development. Pension funds investments in USA and Great Britain have started to develop after implementation of „prudent man" principle. The implementation of „prudent man" principle in EU countries would encourage prudent level of diversification, by not limiting the asset allocation quantitatively. Structural changes, which prohibit pension funds investments into venture capital, elimination, would allow increasing a list of instruments, by which pension funds would reach the better results of returns. Thus, legislators and supervisory institutions must be concerned to remove the restrictions, which limit the allocation of pension funds assets.

For stimulation of pension funds investments into venture capital, it is important to reduce the restrictions on investments between individual countries. Although theoretically the capital movement is free in EU, in some EU countries international pension funds investments are prohibited. As venture capital market is developing and become more international, the geographical limitation for pension funds investments to venture capital stops the pension funds investments into venture capital. In countries with smaller financial market and not developed venture capital market, where pension funds are not allowed to invest into private capital, local innovative, with huge potential companies may attract international sources of finance. Such scenario shows, that even economy of country gains due to economical growth, rising income, employment, competitiveness, the gain of venture capital is useful only for foreign investors, not local pension funds, as financial sources provider. Pension funds investments limitations to higher-yield areas also reduce the ability to get higher pension after retirement. So, national governments and supervisory institutions must be interested to revise geographical restrictions for pension funds investments.

Conclusions

Venture capital is very important source of finance for creating and ensuring long-term economic growth and job creation. This accentuates the need of venture capital development as one of main underlying tasks in

European Union countries, trying to reach the USA level of venture capital investments. Despite of that, one of the main problems for creating and developing venture capital in EU countries is insufficient market of investors, also undeveloped market of pension funds.

Generally, venture capital investments are made through venture capital funds, which perform as financial intermediary between investors of venture capital and companies, seeking for venture capital. Pension funds as institutional investors also invest in venture capital funds, typically in market-oriented financial systems. Investments of well capitalized pension funds are one of the main investors group to venture capital funds in EU countries. This lead pension funds as very important source for long-term venture financing, which might ensure sustainable, continuous venture capital growth.

Due to the demographic tendencies, the creation and development of private pension funds in EU countries is one of the major priorities trying to ensure financial stability of retired old people. Despite of the countries governments' efforts to create private pension systems, pension funds in EU countries make not more than 30 % of GDP, comparing with 75.5 % average in OECD countries. Pension funds play more significant role only in the economies of Netherlands, Great Britain, and, in smaller extent, in Sweden and Ireland.

Pension funds investments in USA and Great Britain have started to develop after implementation of „prudent man" principle. The implementation of „prudent man" principle in EU countries would encourage prudent level of diversification, by not limiting the asset allocation quantitatively.

Policy-makers and supervising institutions should be interested to cancel the limitation of pension fund assets allocation. Instead of that, special mechanisms should be defined, which would evaluate the peculiarities of private equity, venture capital and other forms of alternative investments.

As venture capital investments and activities of venture capital funds gain more international cross-border character, the geographical limitation for pension funds investments to venture capital should be revised.

As the results of the research show, EU countries should develop not only venture capital investments through pension funds, but pension funds market itself. Only by making coordinative actions, E|U countries might reach long-term impact, which will positively influence their economic growth.

References

Allen, F., Gale, D. (2000) Comparing Financial systems, MIT press.

Anderson, T., Napier, G. (2005) The venture capital market Global trends and issues for Nordic countries, IKED,Online paper: http://www.iked.org/pdf/THE%20ROLE%20OF%20VENTURE%20CAPITAL,GLOBAL%20TRENDS%20AND%20ISSUES.pdf.

Antolin, P. (2008), Pension Fund Performance // *OECD Working Papers on Insurance and Private Pensions*, No. 20, OECD publishing, OECD.

Barros, P.P.P., Berglof, E., Fulghieri, P., Gual, J., Mayer C., Vives, X (2005) Integration of European Banking: The Way Forward. London: CEPR.

Black, B. S., Gilson, R.J. (1998) Venture capital and the Structure of Capital Markets: Banks versus Stock Markets, Journal of Financial Economics, Vol. 47, pp. 243-277, online paper: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=46909.

Blotevogel, R. (2005) A Principle Agent Approach to Understanding the Net Asset Value in VC, EIF Staff Paper, online papers http://www.altassets.com/pdfs/aprincipal-agentapproach.pdf.

Bygrave, W. B. and J. A. Timmons (1992) Venture Capital at the Crossroads, Boston: Harvard Business School Press

Bottazzi, L., Marco Da Rin (2002) Venture Capital in Europe: Europe and the Financing of European Innovative Firms, Economic Policy, 17 (1), 229—69.

Bottazzi, L., Da Rin. M , Giavazzi, F. (2003) Research, Patents, and the Financing of Ideas: Why is the EU Growth Potential so Low? in André Sapir and Mario Nava (eds) Economic Policy-Making in the European Union, Brussels, European Commission.

Çebi P. Thorning M. (2004) International Council for Capital Formation. Private Pension Expansion In The Eu: Obstacles And Opportunities. Presented at a forum co-sponsored by the ICCF and the Istituto Bruno Leoni, "Pensions, Reform or Die," Milan, Italy June 17, 2004.

European Commission (2003) Communication on the Implementation of the Risk Capital Action Plan, COMM (2003) 654, Brussels.

EuroStat (2008) Population and social conditions. EuroStat statistics in focus, 72/2008, online paper: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-08-072/EN/KS-SF-08-072-EN.PDF.

EVCA Yearbook (2006) EVCA, Thomson Financial, PricewaterhouseCoopers.

EVCA Yearbook (2007) EVCA, Thomson Financial, PricewaterhouseCoopers.

EVCA White Paper (2001), "Policy priorities for private equity: Fostering long-term economic growth", EVCA White Paper.

Gompers, P., Lerner, J. (1998) What drives venture capital fundraising? Brookings Papers on Economic Activity (Microeconomics), 149– 192.

Hege, U., Palomino, F., Schwienbacher, A. (2006) Venture Capital Performance: The Disparity Between Europe and United States.

Hyytinen, A., Pajarinen, M. (2001) Financial systems and venture capital in Nordic countries: a comparative study. Helsinki: ETLA, Elinkeinoelämän tutkimuslaitos, The Research Institute of the Finnish Economy,2001, 56 p. Keskusteluaiheita, Discussion Papers, ISSN 0781-6847; No. 774, online paper: http://www.etla.fi/files/596_dp774.pdf.

Iglesias A., Palacios R.J. (2000). Managing Public Pension Reserves: Part I Evidence from the International Experience. World Bank, January 2000.

Jakubavičius, A., Jucevičius ,R., Jucevičius, G., Kriaučionienė, M., Keršys, M. (2008) Inovacijos versle procesai, parama, tinklaveika, Vilnius: Lietuvos inovacijų centras

Jeng, L.L. ir Wells, P.C. (1998) The determinants of Venture capital funding: evidence across countries, National Bureau of Economic Research (NBER), online paper: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=103948.

Jeng, L.L. and Wells, P.C. (1999) The Determinants of Venture Capital Funding: Evidence across Countries. Journal of Corporate Finance 6, pp. 241-289.

Kenney, M. (2000) Note on „Venture Capital“, BRIE working paper 142, online paper: http://brie.berkeley.edu/econ/publications/wp/wp142.pdf.

Lerner, J. (1998) Boom and boost Boom and Bust in the Venture Capital Industry and the Impact on Innovation, Negotiation, Organizations and Markets Research Papers, Harvard NOM Research Paper No. 03-13, online paper: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=366041.

Lerner, J. (1998) Venture Capital and Private Equity: A Course Overview , Harvard Business School - Finance Unit; Harvard University - Entrepreneurial Management Unit; National Bureau of Economic Research (NBER), online paper: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=79148.

Mayer, C., Schoors, K., Yafeh, Y. (2003) Sources of funds and investment activities of venture capital funds: evidence from Germany, Israel, Japan and the UK, working paper 9645, National bureau of economic research, online paper: http://www.nber.org/papers/w9645.pdf?new_window=1.

Mayer, C., Schoors, K., Yafeh, Y. (2005) Sources of funds and investment activities of venture capital funds: evidence from Germany, Israel, Japan and the United Kingdom // Journal of Corporate Finance 11 (2005) 586–608.

Megginson, W. (2004) Towards a Global Model of Venture Capital? Journal of Applied Corporate Finance, 17 (1), 8—26.

Nelson, R., Romer, P. (1996) Science, Economic Growth, and Public Policy, in Bruce Smith and Claude Barfield (eds.) Technology, R&D, and the Economy, Washington, DC, Brookings Institution.

OECD (2001) Drivers of Growth, Paris.

OECD (2008) Pension Markets in Focus, December, 2008, Issue 5, OECD.

Schafer, D. (2002) How important is the venture capital industry? An assessment based on comparison of the U.S. and the German financial systems, AICGS/DAAD working paper series.

Schertler, A. (2001) Venture Capital in Europe's Common Market: A Quantitative Description. Kiel Institute of World Economics, Working Paper, 29 November, Online paper: http://www.intech.unu.edu/publications/eifc-tf-papers/eifc01-4.pdf.

Tannon, J., Johnson R. (2005) Transatlantic private equity: Beyond a trillion dollar force, Journal of Private Equity, vol. 8(3),

Winton, A. (2003) Institutional liquidity needs and the structure of monitored finance. Review of Financial Studies 16, 1273– 1313.

The article has been reviewed.

Received in March, 2009; accepted in April, 2009.