

SYNDICATION IN THE VENTURE CAPITAL INDUSTRY DURING DIFFERENT STAGES OF THE BUSINESS CYCLE

Björn Berggren¹, Royal Institute of Technology, Sweden

Christer Olofsson, Swedish University of Agricultural Sciences, Sweden

Lars Silver, Royal Institute of Technology, Sweden

ABSTRACT

In this paper we describe and analyse the development of the Swedish venture capital industry and its syndication pattern during the years 1996–2004. These nine years can be divided into three different stages in the business cycle. The period from 1996–1998 is considered to be a period of moderate growth, where the Swedish economy and capital market was still recovering from the crisis in the early 1990s. The level of investment and syndication was relatively low in comparison with the following years and the primary reason for syndication was that of sharing risks. In the overheated Swedish economy between 1999 and 2001 supply of capital to early stage investments were plentiful and new venture capital firms entered the market every month. Since capital was plentiful the investors was in constant search for new ventures to invest in which made it easy for venture capitalists to find syndication partners for their second round financing at a good valuation. After the drastic downturn in the venture capital industry in 2001 the level of investments was relatively low during 2002–2004. In all, the total number of investment during the period 2002–2004 was lower than during 2001. Furthermore, the investments during this period were to a large extent in the form of syndication. During the shake out period, the survivors of the industry were more prone to do

¹ Centre for Banking and Finance, Royal Institute of Technology, SE – 100 44 Stockholm, Sweden. Email bjorn.Berggren@infra.kth.se

first round syndications again. The sharing of monitoring costs and risk sharing were the most common reasons for syndication in this period.

INTRODUCTION

In comparison with other European countries, the Swedish venture capital market is relatively large (Reynolds, et al. 2002). As with other business sectors it has had its ups and downs. During the prolonged recession of the early 1990s the level of investment within the venture capital industry was very modest. Starting in the mid 1990s the venture capital sector started a remarkable recovery and expansion that culminated in the first year of the new millennium. The downturn began in March of 2001, with the crisis in the telecommunications and information technology sectors. Over night hundreds of Swedish venture capital funds found themselves in a situation where they had thousands of investments with no functioning second hand market. Since then, the Swedish venture capital sector has been subject to far-reaching consolidation and restructuring. The surviving venture capital firms seem to be more prone to syndicate than they were before the crisis.

European venture capital has over the last couple of decades been more targeted towards the later stages of the development of firms as compared to the U.S. venture capital (Brouwer & Hendrix, 1998). There is a widespread belief within the Swedish debate that the pro-longed crisis within the telecommunications and information technology sectors has contributed to this development. The investors are less willing today to accept the relatively high risk associated with investments in early stages. Hence there is less traditional venture capital (Bygrave & Timmons, 1992) and more capital is allocated to the later stages of the firms' development, i.e buy-outs and buy-ins. The trend towards more buy-outs and buy-ins is widespread across Europe (Brouwer & Hendrix, 1998). In short, the growth of venture capital

in Sweden seems to have been generated to an extent by large investors diversifying their holdings in public companies by also investing in later stages of the business cycle. For a number of years venture capital became a high-risk investment opportunity for capital that would otherwise have been allocated to the already inflated stock market.

REASONS FOR SYNDICATION IN THE VENTURE CAPITAL INDUSTRY

In Bygrave (1987; 1988) the syndication patterns between venture capital funds is described and analyzed. The results indicate that syndication is more common in situations characterised by high levels of uncertainty, such as investments in high technology firms in early stages. Syndication is seen from this perspective as a means to reduce the uncertainty by acquiring competence and information from other venture capital firms (Lerner, 1994; Lockett & Wright, 2001). A second reason for syndication among venture capital firms is to reduce the financial risk (Bygrave, 1987). This can be seen from two perspectives. First, according to classical financial theory (see e.g. Markowitz, 1991) the overall risk in a portfolio of investments can be reduced by investing in firms belonging to different industries or different stages of development. Second, the overall investment in a portfolio firm can be too large for one venture capitalist. Syndication might be one way to overcome this problem. According to De Clercq & Dimov (2004) syndication can also be seen as a means to increase the deal flow. If one venture capital firm invites another one to take part in an investment, this increases the likelihood for more investments from the latter part in the future (De Clercq & Dimov, 2004). In times where the competition between venture capitalist firms increases, as is the case in a booming market, we would expect that syndication is a way to reduce the bargaining power of the entrepreneurs seeking financing.

The purpose of this paper is to analyze the development of the Swedish venture capital industry and its syndication patterns in during the period 1996–2004. We postulate that during the overheated venture capital market in the late 1990s, a number of actors poured into the market with little or no competence as regards business development. Instead they were attracted by the profits made by the already established venture capital firms.

The hypothesis put forward in this paper is that the reasons for syndication will be different depending on which stage of the business cycle that the investment is being made. Firstly, on a relatively stable market with few new entrants and little competition between the actors, the foremost reason for syndication will be that of sharing risks both by acquiring competence and capital from other actors. Second, in a booming market, with an increased inflow of capital and many new entrants, the foremost reason for syndication is postulated to be that of increasing the possibilities of picking a winner among the portfolio firms. Finally, in the bottom of the business cycle in a market characterized by low levels of investments and investors with few exit options, we postulate that the foremost reason for syndication is to reduce monitoring costs and the financial risk.

METHODOLOGY AND SAMPLE

The empirical data for this paper has been acquired from Förvärv & Fusioner AB (“Mergers & Acquisitions Ltd”); a Swedish firm specialized in collecting data on investments and divestitures in the Swedish venture capital industry. The data covers the period from 1996 to 2004 and consists of all the 1740 new investments made by Swedish and international venture capital firms during the investigated period. In all 199 different venture capital firms made at least one investment during the period 1996-2004.

EMPIRICAL FINDINGS

In this section we will describe the development of the Swedish venture capital industry and its syndication patterns. We have divided the period 1996–2004 into three different phases that will be described below. But first we will give the reader a brief review of the entire period.

As can be seen in figure 1, the investment activity has shifted dramatically during the investigated period. From a relatively low level of investment activity in 1996, the industry picked up speed in the following two years. The period 1999–2001 saw a massive entrance of new venture capital firms into the booming venture capital sector, many of which had very little or no experience of business development. The downturn in investment activity in the venture capital sector started with the stock market crash in the spring of 2001. A very low level of investments characterizes the period from 2002 to 2004. Many of the new entrants from the earlier period have left the scene or have made very few investments in the latter period.

Figure 1 about here

As can be seen in figure 2, the numbers of venture capital firms that have made investments over the years have also changed rather dramatically. From only 30 venture capital firms doing a new investment in 1996 to 141 firms in 2000, back to almost 30 in 2004. It is notable that many of the old venture capital firms that were active in 1996 are still the ones that are making new investments in 2004. Many of the very high profile venture capital firms from

1998-2000, who were focused on investments within the IT and telecommunications sector, have in a number of cases filed for bankruptcy, and are not around anymore.

Figure 2 about here

The years of recovery and moderate expansion – 1996–1998

With 57 total investments 1996 is actually a better year for VC investments than both 2003 and 2004. It signals a recovery from the recession in the early 1990s. The venture capital fund 3i, originally from Great Britain, heads the group of investors, by investing in a mix of manufacturing, IT and biotech. The largest investors in terms of number of investments are private investors. The government-owned The Swedish Industry Fund only manages 3.5 percent of total investments, but is later to grow into one of the most important investors on the market. The fund's purpose is to support Swedish industry by making substantial investments in areas of strategic importance for Swedish industry. SEB Företagsinvest and Investor Growth Capital are both members of the Wallenberg sphere in the Swedish economy. Wallenberg as an old industrial family with roots in the 1850s, and benefactors of the great Swedish industrial expansion, holds an important part in Swedish industrial life.

As regards the nature of the investment, it is notable that a relatively large share of the investments being made during the year can be considered to be low-tech, such as investments in breweries, wholesalers and paper mills. The level of syndication is relatively low, in that only 15.8 percent of the total investments are syndicated. The most common type of

syndication is first round syndication that accounts for 80 percent. Furthermore, there was no third round syndication during 1996.

During 1997 the interest in venture capitalism is on the rise in the Swedish economy as more investors chose to enter the industry. 3i is still the largest fund, with a wide range of investments but Health Cap, soon to become the giant in Swedish biotech financing, now joins 3i. Health Cap starts off with an array of investments in medicine and biotechnology, Innovationskapital emerges in Sweden's second largest city close to Chalmers Technical University. This fund starts off with investments in telecom, medicine, engineering and IT. SEB Företagsinvest and Investor Growth Capital manage 6.6 percent of investments in total and trails the major three.

The foremost area of investment during the year is that of biotechnology and information technology. But some investors, foremost MBO/MBI funds, continue to do investments in low-tech sectors. As regards syndication, the second round syndication emerges as the most common type of syndication during the year, although by a slim marginal to the first round syndication. There is still no third round syndication within the industry.

During 1998 two governmental funds takes over as the most active investors on the venture capital scene. At the same time the venture capital industry is more diversified as the largest investors shrink well below 20 percent of the total number of investments. The Swedish Industry Fund mainly invests in manufacturing, as is their traditional policy. The 6th Pension Fund invests funds for pensioners and chooses mainly manufacturing as well for its investments. Novestra starts out by investing in high-risk IT projects. They will continue to do

so, but their recognition as one of the most active investors will be short-lived. They are, however, an advertisement of the types of investments to come in the venture capital industry.

The investments being made during 1998 are again focused on biotechnology and information technology. Yet another rapidly expanding sector has raised the interest among venture capital firms – the Internet consultants. Still, some of the largest deals in the year were made in more mature industries. The syndication pattern is the same as in 1997, with second round syndication being slightly more common than first round syndication. During the year the first third round syndication has been made in firms within the biotechnology sector.

Table 1 about here

The high tide of the Internet era – 1999–2001

The total number of new investments in 1999 was an impressive 344. In the same year, the expansion of the number of new entrants continues as the big three's share of the total investments falls to 16.0 percent. The 6th Pension Fund takes the lead as The Swedish Industry Fund is hit with a one-year stop for investments in the wake of some troubles in earlier investments. Investor Growth Capital and SEB Företagsinvest together manage to accumulate 9.0 percent of total investments and since the total number of investments increase dramatically it is clear that the Wallenberg family intends to make venture capital their kind of game. The range of investments is remarkable, with everything from the odd ABBA musical (actually turns out to be a good investment) to IT, biotech and telecom. The industrial background does not appear to prevent a genuine diversification. 3i makes a

comeback at third, but the major news is the startling amount of new venture capitalists appearing on the scene. The primary investment focus of these new entrants is IT related businesses.

The syndication pattern among the venture capital firms is the same as in 1997 and 1998 in that second round syndication is slightly more common than first round syndication. During the year approximately 10 percent of all syndication were in the form of third round syndication. These syndications were almost all within the biotechnology sector, with some exceptions in that a couple of investments being made in Internet related firms.

In the year 2000 it is the relatively small but very fast moving venture capital investors who occupy the leading positions. These new venture capital firms have an approach to venture capital and management inspired by the American venture capital industry. Many of the new entrants are furthermore very specialised in that they only invest in IT related businesses. The Swedish venture capital scene has never been more diversified, in all 141 different venture capital firms made new investments during the year. 3i moves into the IT industry while the government owned 6th Pension Fund and The Swedish Industry Fund staunchly refuses to leave manufacturing. It is also noteworthy that a number of very large international funds make investments in Sweden, not via Swedish venture capital firms, but by themselves.

As regards the investment focus, the biotechnology, information technology and software industry stands out. The largest deals of the year however are once again in low-tech areas. A major shift in the syndication pattern can be seen in 2000. The second round syndication stands out as the most important form of syndication with almost 60 percent of the total syndications. Furthermore, the third round syndication is now more common than the first

round syndication. These third round syndications were primarily directed towards growing IT firms, rather than biotechnology firms. A number of the relatively large syndications during 2000 have been some of the more spectacular failures within the Swedish economy in the beginning of the new millennium.

As the momentum disappears from the Swedish venture capital scene in 2001, some old actors reappear as the most common investors. The Swedish Industry Fund now invests more into IT-related areas whereas world-leading venture capitalists 3i continues to invest in a vast range of industrial fields. These two actors dominate as the number of actors making new investments decreases. Brainheart Capital picks up third place with investments in the wireless industry, thus telecom related investments. Most of the smaller investors disappear from the scene. The fall is indeed dramatic. So does The 6th Pension Fund with two final investments, as the government decides that retired people's capital belong in the stock market. Thus a major player is gone, even though they are to be found in indirect investments through a number of other venture capital firms.

As regards the syndication pattern it is clear that the second round syndications is losing ground to first round syndication, even though the former is still the most common. More than 20 percent of the syndication in 2001 is third round syndication. In comparison with 2000 it is clear that the biotechnology sector has gained some ground on the IT sector when it comes to third round syndication.

Table 2 about here

The last charge by The Swedish Industry Fund and a dormant market – 2002–2004

For the second year in a row, the total number of investments was once again cut in half. In all 131 new investments were made in 2002. The big three this year actually consists of the big one. The Swedish Industry Fund stampedes its colleagues by a whopping 26.0 percent of total investments. FöretagsByggarna consists of a couple of veterans in the venture capital industry, with investments in IT, medicine and telecom. CapMan is another venture capital firm with relatively experienced investment managers, controlled by the Finnish venture capital firm CapMan. The year is in the whole rather disappointing as it is very clear that the good times for venture capital investments are long gone by. Even 3i has by now all but left the scene with only three investments during the year, to be followed up in 2003 by one more investment. Once again biotechnology firms and software producers are the ones that venture capital firms seem to be most willing to invest in.

The syndication patterns in 2002 reveals the relatively largest numbers of third round financing during the period 1996–2004. Approximately one third of all syndications are in the form of third round syndications, foremost within the biotechnology industry. Second round syndication is still the most common type with almost 50 percent of all syndications.

In 2003 the investment activity reaches a new bottom level, with only 55 investments. Again, the big three dominate the dormant market by a sheer lack of competition. The Swedish Industry Fund receives new life and in true Keynesian economics fashion bolsters what is left of the venture capital investment market. New funds are far between for entrepreneurs as biotechnology dominates. The Swedish Industry Fund's less than impressive total of eight

investments are made in manufacturing and medicine. CapMan and Innovationskapital pitches in with four investments each in biotech and IT.

A shift can be traced in the pattern of syndication amongst the surviving venture capital firms. For the first time since 1996 the most common type of syndication is once more the first round syndication. It is obvious that the still active venture capital firms are less interested in making the deals on their own.

The total number of investments is not cut in half yet again in 2004 but the fall continues. The big three holds 21.6 percent of total investments, but three investments each is the only requirement to hold first place, a far cry from the ten or so investments most venture capitalists in the top flight managed merely a couple of years ago. The three most active investors are; Nordic Capital that mainly is a MBO/MBI fund and Scope Capital Advisory that is a foreign-based investor that focuses on early stage investment, but is a relatively small fund, and Amplico Kapital that invests for The 6th Pension Fund and goes with the times in basing its business on reconstruction of ailing companies. The sweepers of the industry have arrived.

As in earlier years, biotechnology and information technology are the preferred areas of investment for venture capital firms. The largest deals of year are as before in rather low-tech areas. As syndication is concerned first round syndication once more is the dominating form of syndication. In comparison with 2000 and 2001 the investments as such were rather modest, foremost in relatively small IT firms.

ANALYSIS AND DISCUSSION

In this paper we have analysed the development of the Swedish venture capital industry in the last nine years. Starting from a relatively low level in the first year of our study, the industry reached unprecedented heights in 1999 and 2000. New venture capital firms were established on a weekly basis and the competition within the industry accelerated. The downturn came in the first quarter of 2001, when the IT related stocks plummeted on the Stockholm Exchange. The venture capital firms faced a completely different world than they were used to. The IPO market was more or less closed for firms in biotechnology and information technology in the years coming. Furthermore investors were less prone to back new venture capital funds owing to the bad track record of many of the new entrants in the industry. Hence, the venture capital firms were squeezed between two forces that were hard to come to terms with. The result was a far-reaching consolidation of the surviving firms and very few new investments in the following years. Many of the high profile newcomers to the business filed for bankruptcy in the aftermath of the crisis in 2001. When we compare the active investors from 1996 and 2004 it is clear that many of the active firms in 1996 are still active today.

The syndication patterns have differed a lot over the investigated period. As can be seen in figure 3, the syndications were at a relatively low level in the years 1996–1998. In those years less than one out of five investments made by venture capital firms were made together with another partner.

Figure 3 about here

The interest in syndication increased as new entrants entered the venture capital industry in 1999 and 2000. The supply of capital was reaching new heights and the need for syndication

from a risk sharing perspective was less important than during the earlier period. Instead, it seemed as though many venture capital firms were set on making as many deals as possible to be able to find the new Apple or IBM. In the aftermath of the crisis of 2001, the interest in syndication has surged. In the year of 2003, almost half the investments made by the venture capital firms were made together with at least one other venture capital firm. In a time where the IPO market was ice cold and many investments turning out bad, the survivors of the industry tried to reduce the monitoring costs by sharing their investments. In short supply of new capital from the backers of their funds, the emphasis of reducing the risks by sharing information and competence between syndication partners was also an important factor behind these syndications.

As regards the syndication pattern it is also apparent that it is a pattern of which venture capital firms that syndicates with one other. Venture capital firms with a track record of good investments in the first half of the 1990s with experienced investment managers had even before 1996 made some investments together and continued to do so through out the investigated period. The new entrants on the other hand were less prone to syndicate than the more experienced venture capital firms, and if they did syndicate they tended to do so with other new comers in the industry. It is reasonable to assume that they in many instances lacked the legitimacy in the eyes of the more experienced actors in the market.

We have also noticed that small funds in many cases need to team up with a larger partner to be able to see the investment through to exit. Even though the small fund will see its share of the portfolio firm be reduced through second or even a third round of financing, the alternative might be not to be able to make the investment at all.

The preferred type of syndication in the period as a whole is second round syndication. In all but three years this was the most common type of syndication. During the first three years of our study the first and second round syndications were totally dominating the deals, as can be seen in figure 4. But as we move into the high tide of the investments in IT firms, the level of first round syndication drops, especially in 2000 and 2001. Instead, many of the relatively large portfolio firms, mainly within the biotechnology and IT sectors, swallow huge amounts of capital, therefore third round syndications become more frequent. Finally, in the aftermath of the stock market crash in 2001 the tables have turned again, and once more the first round syndication is the preferred form of syndication.

Figure 4 about here

REFERENCES

- Brouwer, M. & B. Hendrix (1998) Two Worlds of Venture Capital: What Happened to U.S. and Dutch Early Stage Investment?, *Small Business Economics* 10:333-348.
- Bygrave, W. B (1987) Syndicated Investments by Venture Capital Firms: A Networking Perspective, *Journal of Business Venturing* 2: 139-154.
- Bygrave, W. B (1988) The Structure of the Investment Networks of Venture Capital Firms, *Journal of Business Venturing* 3:137-157
- Bygrave, W. B. & J. A. Timmons (1992) *Venture Capital at the Crossroads*, Boston: Harvard Business School Press.
- De Clercq, D. & D. P. Dimov (2004) Explaining Venture Capital Firms' Syndication Behaviour: A Longitudinal Study, *Venture Capital* 6, 243-256.
- Lerner, J. (1994) The Syndication of Venture Capital Investments, *Financial Management* 23: 16-27.
- Lockett, A. & M. Wright (2001) The Syndication of Venture Capital Investments, *Omega* 29: 375-390.
- Markowitz, H. M. (1991) Foundations of Portfolio Theory, *Journal of Finance*, 46: 469-477.
- Reynolds, P. D., W. B. Bygrave, E. Autio, L. W. Cox & M. Hay (2002) *Global Entrepreneurship Monitor*, Babson College, Ewing Marion Kauffman Foundation & London Business School.

FIGURES AND TABLES

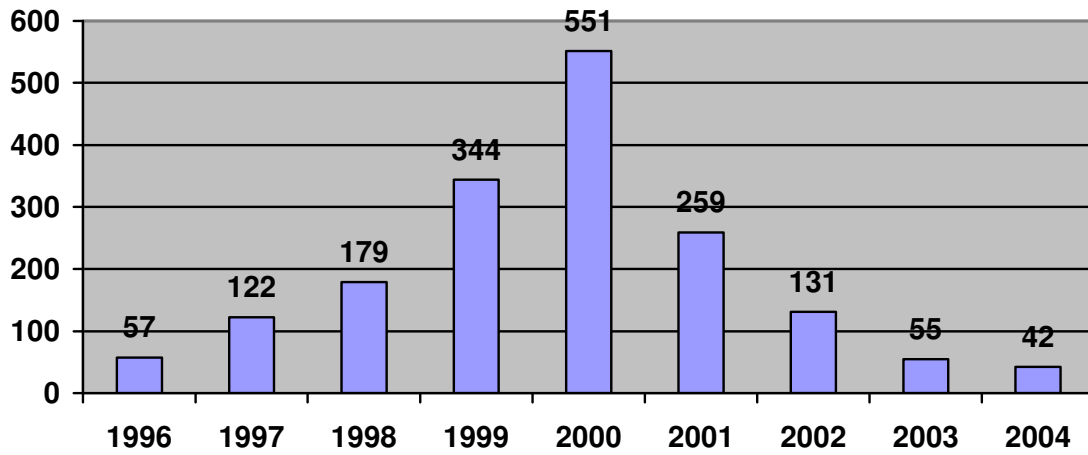


Figure 1. Total investment activity per year in the period 1996–2004

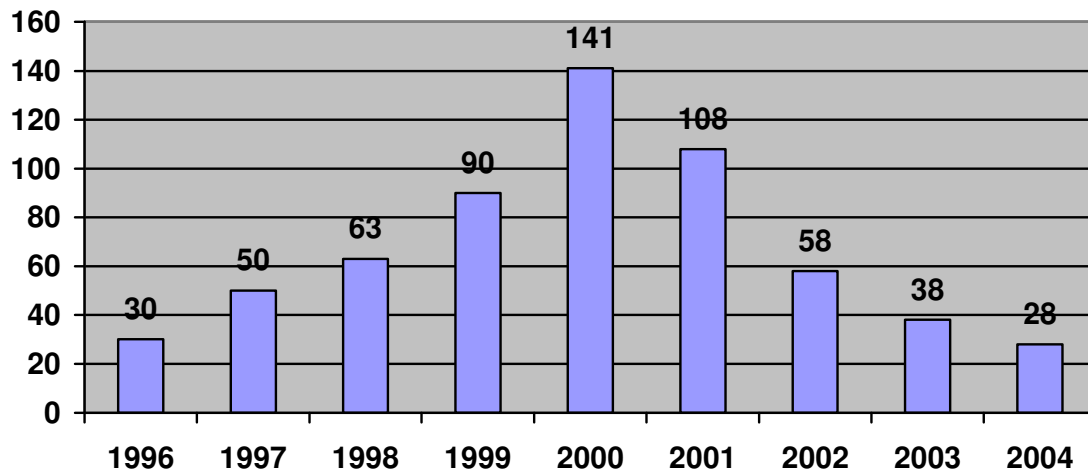


Figure 2. Number of VC firms that have made a new investment during 1996–2004

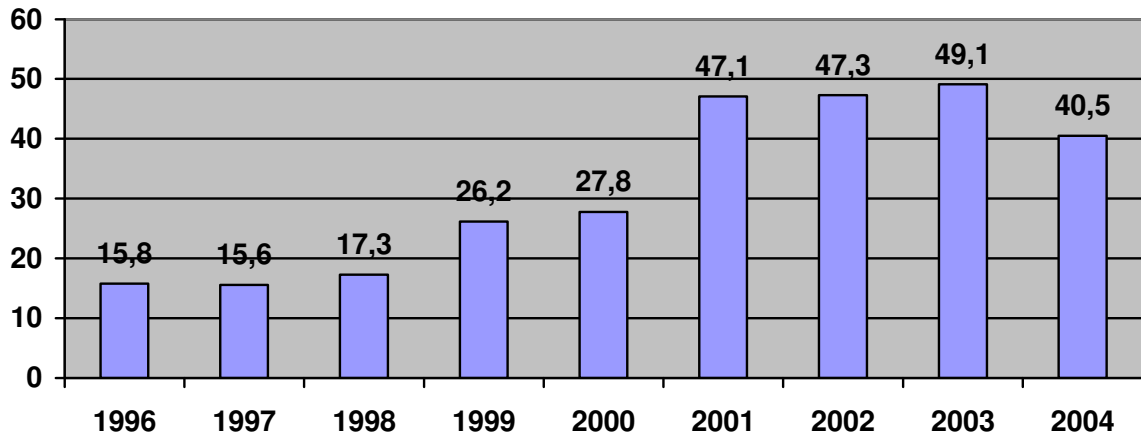


Figure 3. Percentage of syndicated investments of total investments 1996–2004

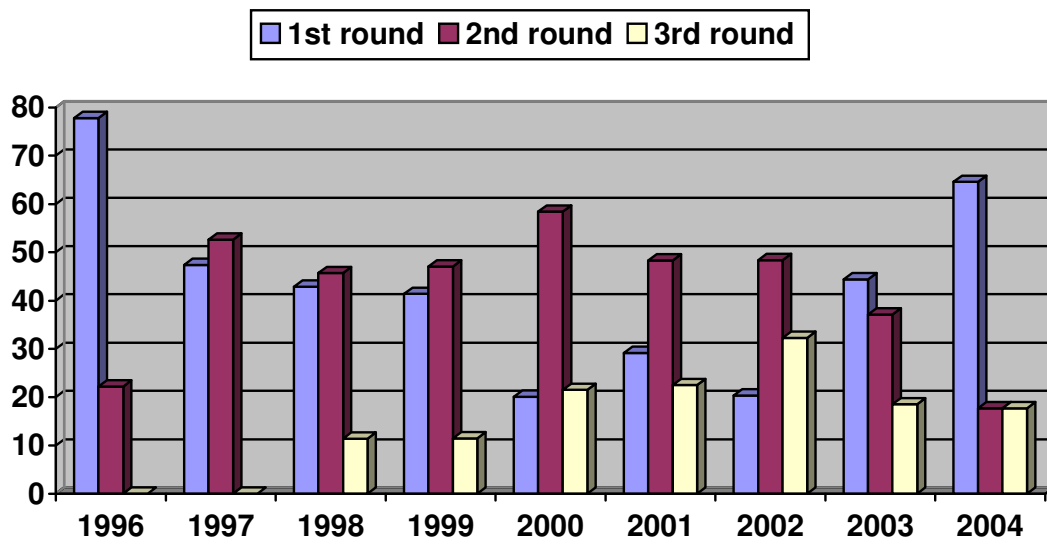


Figure 4. Percentage of type of syndication per year 1996–2004

Most active investor 1996	Percentage of total investments	Most active investor 1997	Percentage of total investments	Most active investor 1998	Percentage of total investments
3i	10.5 %	3i	7.4 %	The Swedish Industry Fund	7.3 %
SEB Företagsinvest	7.0 %	Health Cap	7.4 %	The 6 th Pension Fund	5.0 %
Start Invest	7.0 %	Innovationskapital	6.6 %	Novestra	5.0 %
Total big three	24.5 %		21.4 %		17.3 %

Table 1. The three most active investors 1996–1998

Most active investor 1999	Percentage of total investments	Most active investor 2000	Percentage of total investments	Most active investor 2001	Percentage of total investments
The 6 th Pension Fund	5.8 %	Ledstiernan	4.9 %	The Swedish Industry Fund	9.3 %
Investor Growth Capital	5.5 %	Provider IT Advisor	4.2 %	3i	8.9 %
3i	4.7 %	Affärsstrategerna	3.3 %	Brainheart Capital	3.9 %
Total big three	16.0 %		12.6 %		22.1 %

Table 2. The three most active investors 1999–2001

Most active investor 1999	Percentage of total investments	Most active investor 2000	Percentage of total investments	Most active investor 2001	Percentage of total investments
The Swedish Industry Fund	26.0 %	The Swedish Industry Fund	14.5 %	Nordic Capital	7.2 %
Företagsbyggarna	5.3 %	Innovationskapital	7.3 %	Scope Capital Advisory	7.2 %
CapMan	3.8 %	CapMan	7.8 %	Amplico Kapital	7.2 %
Total big three	35.1 %		29.1 %		21.6 %

Table 3. The three most active investors 2002–2004