IFISE PROJECT – WP 2

ITALIAN LITERATURE SURVEY

MARCH 2001

THE ITALIAN VENTURE CAPITAL AND PRIVATE EQUITY INDUSTRY

AN EVOLUTION OF THE ITALIAN VENTURE CAPITAL AND PRIVATE EQUITY INDUSTRY

Italy has an old history of informal venture capital destined to finance new ventures. The effervescent entrepreneurial mood that has always characterised the country pushed rich entrepreneurs and bank owners, at the beginning of the century, to privately move their resources into new emerging companies and technologies.

This spirit has continued to influence the born of new enterprises throughout the century, until a formal cluster of finance institutions decided to make venture capital investments the centre of their typical activity. This happened at the beginning of the mid 80's, more precisely in 1986 when 15 institutions formed A.I.F.I. – the Italian Venture Capital and Private Equity Association[1].

As a consequence, the history of a formal venture capital and private equity industry is quite new. Even though this history is so recent, it is possible to highlight some trends in these 15 years. At the beginning those financial institutions were concentrating their activity into genuine venture capital. Back in those years also our country had been quite influenced by the Silicon Valley success into financing new high technology companies and big names, such as Apple and Microsoft, were on the mouth of every young and dynamic entrepreneur.

Even if many venture capital companies tried to finance some good high tech companies, the inexperience of venture capital managers and a low tech entrepreneurial context, determined some failures which had two consequences: in the first place some venture capital companies failed together with the enterprises they contributed to found; secondly this failures scared the surviving venture capital and private equity firms, many of which decided to embrace the new LBO wave that, back in those days, was exploding in the UK and in some Continental Europe countries.

The first years of the 90s have been characterised by the private equity wave with the borne of new operators and the re-conversion of pure venture capital firms into private equity players. Looking at A.I.F.I.'s members matrix (Table 1), it is possible to see how the first years of the 90s have had a constant number of players on the market. As a matter of fact, after a period of four years needed to better define the competitive context, some traditional expansion capital and buy out operators took off.

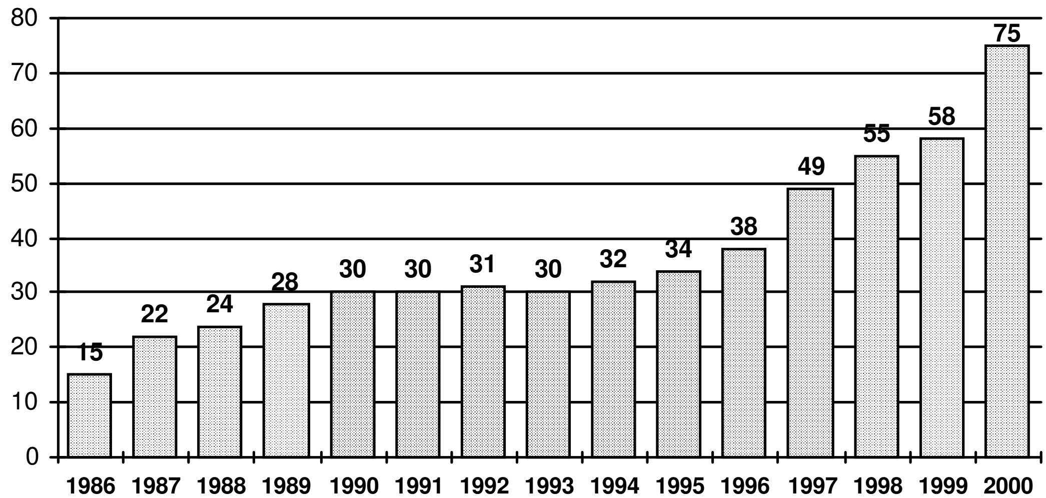
This trend lasted until 1998, year in which a new trend towards specialisation in the high tech sectors involved some new dynamic players. There are some important factors

[1] Cfr. " Italia", in Aifi, *Capitali per lo sviluppo – un'analisi del mercato internazionale del private equity e venture capital,* Il Sole 24 Ore, Milan 1999.

that can be outlined in order to explain this baking of genuine venture capital. In the first place the deregulation in the telecommunication sector which opened new opportunity to private players. Secondly Internet started to become a popular tool in Italy across 1997 and 1998. This new way of collecting and distributing information really had a small boom which lasted until the first months of 2000. A third important factor is the incredible attention that high tech has been catalysing since the Internet brought out the lacking of an important presence in the hardware part of the world wide web.

So a new context has been evolving to prepare also Italy in facing the new millennium, with a better technology focused entrepreneurial mood.

Table 1: A.I.F.I. members evolution (data at 12/31 of each year)



Source: A.I.F.I.

BACKGROUND

The Italian venture capital and private equity market has rapidly expanded over the last few years. Performance of the domestic economy, the improvement of the entrepreneurial environment, the establishment of the new privatised Stock Exchange, with the born of the Nuovo Mercato, and the rapid growth in number and size of MBOs, have all contributed to the development of the industry.

From a legal and fiscal point of view the sector is definitely going through a re-organisational phase, following important regulatory innovations introduced during the course of recent years.

Therefore the range of market operators has notably changed and today it includes a composite universe of players many of which still are not specialised by the industrial sector of intervention and mainly invest at expansion and buy-out level in Italian medium sized companies.

Anyway, as spotted above, a trend towards the high tech sectors, which started during 1998, has consolidated during the last 3 years with the consequence of sharply increasing the number of investors focused on this business area. In particular, at present, on 75~~52~~ full members 18 (24~~5~~%) are specialised on investments in the high tech sectors, with a greater concentration on Information Technology and Telecommunications. Besides this, it is important to remark that many operators have changed their investment strategy in the course of the past 3 years, focusing part of the funds managed in the high tech early stage investments.

At present, the universe is made up of Italian and international banks, financial institutions subsidiaries of banks or industrial groups, Italian closed-end funds, international closed-end funds advisory companies as well as public operators and financial institutions linked to the co-operatives system. Recently also some important incubators have started their activity in Italy, also attracting venture capital funds.

Until 1993, Italian banks with specific requisites were allowed to invest in firms' risk capital only through a subsidiary company. It was only in 1994, when the new banking regulations were approved, that credit regulatory authorities allowed banks to acquire directly minority shareholdings in companies. However this opportunity has not yet been fully accomplished as the majority still carry out medium to long term credit activities.

In this last year, the number of Italian banks playing a leading role in the private equity market has slightly reduced. At present, banks and their subsidiaries account for approximately 18% of all the players in the market. They are very active in every stage of investments, with a particular focus on replacement and expansion financing.

Investment companies, both private and those linked to large corporations, represented the first players on the market since it started to grow in the mid '80s. Through the years they have developed deeper skills and expertise, through direct investment in companies equity, or by supplying advisory or brokerage services. Today they account for about 11% and typically provide capital for expansion, replacement and buy-out investments.

The Italian closed-end funds represent today a 12,5% of the market, mainly because they have been introduced only in 1993. The investment quota were mainly subscribed by private individuals which were advantaged by the old law. As a consequence, a new law for closed-end funds only dedicated to institutional investors, with less restrictions, such as the condition of acquiring majority stakes, has been recently approved, introducing a new opportunity for the development of this important investment vehicle.

An increasing number of international closed-end funds advisory companies and subsidiaries of international banks operate on the Italian market, representing almost 42% of the market. These operators manage or advise a consistent amount of money mainly raised by the European or World-wide *mega funds* that do not have any specific geographical allocation. They are mainly focused on buy-out and early stage deals.

Public players and financial institutions linked to the co-operative system, which account respectively for 9,7% and 4,2% of all operators, have been very active in the past in investments at the start up level. Their objectives differ from those of the other players. Most of them are mainly dedicated to promote new entrepreneurship and to finance the Italian economic growth, some are dedicated to industrial reconversion of specific geographical areas. Moreover, the public players are today in a re-organisational process, in order to better accomplish the necessities of the Italian productive system.

Incubation is a very recent venture capital activity in the Italian context. It started in the first months of 1999 and today there are some 20 privately managed incubators in Italy. Two of these are already part of A.I.F.I. representing the remaining 2,6% of the analysed market[2]. ~~DA CONTROLLARE~~

THE MARKET IN 1999

The analysis of the Italian private equity and venture capital market, for the year 1999, has been realised in collaboration with the Italian branch of *PriceWaterhouseCoopers – Transaction Services.*

1999 has been an other exceptional year for the Italian venture capital and private equity industry, as the amount invested has overcome the 1,500 million Euro figure with an incredible growth rate of 88%. As a matter of fact, during the year about *Euro* 1,773 million were invested in 390 investments, corresponding to 309 enterprises (equal to an increase of 45% on the total number of transactions undertaken, compared to the previous year). In the mean time, the average unit value of transactions was *Euro* 4.5 million.

Such a consistent quantitative growth can be traced back, in the first place, to the remarkable increase of the operators' number in the last three years (the AIFI full

[2] The numbers highlighted in the AIFI surveys refer to all those members which are active on the investment side and also some financial institutions which do not belong to the member's matrix.

members have passed from 34 in 1996, to 58 at the end of ‘99), many of which have started operating during 1998. In the second place, a great contribution has been given by the better normative system and by the evolution of the entrepreneurial environment, more favourably inclined towards the risk capital institutional investors.

Subdividing the investments undertaken in 1999 by stage, in terms of amount invested, the last year figures have been modified, being the buy outs the most consistent investment category undertaken, followed by expansion capital, venture and other purchase of quoted shares, replacement capital and seed/start-up. If we consider the classification by number, the seed/start up figure is first, with 153 investments corresponding to 130 new companies.

For what concerns the geographical distribution, 90% of investments (by number) were made in Italy and, the greatest part of them, were concentrated in the northern regions (53% of the total, against a 29% in the Centre and 14% in the South).

Regarding the sectorial distribution of investments, it is important to underline the surprising growth of the operations made on high tech firms. Even though the amount invested in the traditional sectors remained very high (82%), the amount invested in high tech has known a sharp growth from the 11% of the last year to the 18% of 1999, reaching the 325 million *Euro* threshold (in 1996 this figure was only equal to 2% of the total amount invested). The amount invested in high tech has spotted a +225% growth, while the number of operations has reached the 195% growth, if both compared with the previous year. This was mainly due to a consolidation of the investors specialised in this business area, borne in 1998 and continuously expanding in 1999. If we separately analyse the distribution of the amount invested in the high tech sectors it is possible to highlight a predominance of the *Telecommunications industry* (*Telecom hardware*, *carriers* and *Communication*: 57%), followed by the *Internet* (14%), while the *Life Sciences* sectors are still scarcely considered (*Biotech*, 3%; *Health Care*, 3%).

Table 2: 1999 – Stage distribution of investments

	Amount (*Euro* Mln)	%	Number	%	Number of Com.	%
Seed/Start-up	147	8.3%	153	39.2%	130	42.2%
Expansion	356	20.3%	124	31.8%	103	33.3%
Replacement	118	6.6%	31	7.9%	24	7.7%
Buy out	878	49.5%	65	16.6%	45	14.6%
Venture and other purch. of quoted shares	274	15.3%	17	4.5%	7	2.2%
Total	***1,773***	***100.0%***	***390***	***100.0%***	***309***	***100.0%***

Source: AIFI-PWC

In 86% of cases the investments have concerned enterprises which had less than 200 employees while, a little more than a third of all the transactions, is concentrated on the bulk sector of zero to twenty employees.

Table 3: distribution % of the number of investments by number of employees

Employees	%
0-19	36.6%
20-99	23.6%
100-199	12.8%
200-499	13.8%
500-999	7.9%
Over 1000	5.3%
Total	***100.0%***

Source: AIFI-PWC

During 1999, international investors (advisors of international closed-end funds and international banks) have once more demonstrated to be the most active operators (by amount and number), followed by the Italian banks and their subsidiary investment companies.

Looking at the stage distribution of investments by classification of investors, the leaders of the start up category were the international investors, as well as in the buy out category. A better distribution could be found for the transaction of expansion financing, where the largest section of the market can be attributed to the Italian banks and their subsidiaries, closely followed by the Italian closed-end funds.

On the divestment front, during 1999, 170 operations were reported for a corresponding amount divested of *Euro* 578 million. The total amount divested, like the investments, has shown a huge growth if compared with the previous year (+72.4%). As a consequence, the average amount divested for single operation has sharply grown, passing from 2.6 to 3.4 million *Euro*.

The most used channel was trade sale, even though its quota has sharply reduced passing from 59% of total divestment in 1998 to 46% in 1999. In 8 cases (5%), equal to seven companies, the divestments came from the listing on the stock exchange of the participating enterprise (IPO). IPO's have brought to the listing of five companies on the Milan Stock Exchange and of two on the Nuovo Mercato.

If we consider IPOs and Sales post-IPOs, the amount divested through the Stock Market reaches 59 million Euro, corresponding to 10% of the total divested amount.

Table 4: 1999 – Stage distribution of divestments

	Amount (*Euro* mln)	**%**	**Number**	**%**	**Number of Com.**	**%**
Trade sale	214	37.1%	78	45.9%	73	50.5%
Sale to other VCs & Fin. Inst.	165	28.6%	13	7.7%	10	7.0%
IPO & Sales post-IPO	59	10.3%	20	11.8%	13	9.1%
Other	130	22.3%	53	31.2%	42	29.2%
Write off	10	1.7%	6	3.4%	6	4.2%
Total	***578***	***100.0%***	***170***	***100.0%***	***144***	***100.0%***

Source: AIFI-PWC

The Italian portfolio at cost at the end of 1999 was estimated at *Euro* 3,618 million, to which 1,100 companies can be attributed, against the *Euro* 2,417 million of December 1998.

On the fund's raising front, 1999 has signed an incredible spur if compared with 1998's figures, being the amount raised more than doubled. The total amount raised during 1999 has been equal to 2.2 billion *Euro*.

It is possible to divide this figure into three main parts: the funds coming from parent organisations corresponded to 49% of the total funds raised, while the funds coming from the market and from capital gains available for re-investments represented, respectively, 45% and 6% of the total.

Table 5: 1999 – Sources of new funds raised on the market

	New funds raised (*Euro* mln)	**%**
Banks	243.2	11.0%
Funds of funds	197.0	8.9%
Corporate investors	144.0	6.5%
Private individuals	127.3	5.8%
Pension funds	118.6	5.4%
Insurance companies	94.5	4.3%
Public sector	26.3	1.2%
Other	37.7	1.7%
Parent organisation	1,076.3	48.8%
Capital gain	142.0	6.4%
Total	***2,206.9***	***100.0%***

Source: AIFI-PWC

Only considering the source of the funds coming from the market it is possible to attribute the greater part to banks (25%), followed by funds of funds (20%) and corporate investors (14%).

The geographical origins of total new funds raised, which last year were for about 67% domestic, in 1999 have been characterised by the following distribution: 42% Italy, 34% Europe, 22% USA and 2% Other. The "non domestic" quota must be traced back almost exclusively to large international institutional investors (banks, pension funds and insurance companies) which have decided to allocate a part of their resources to the Italian market. It is interesting to notice that if we consider exclusively the new funds raised on the market, the quotas change as follows: Italy 28%, Europe 37%, USA 31% and other 4%, with this confirming that a greater part of funds have reached Italy from the international players.

Moreover, about 6% of the new funds came from *capital gains* carried out through previous transactions and were ready to be reinvested in the market.

The 1999 survey, also pointed out a very interesting data. As a matter of fact, it is possible to find out the target that the operators have, in term of amount raised dedicated to each investment stage. In particular, it is possible to verify the strategic allocation of the new funds raised to high tech, or non high tech investments, for each investment category.

Table 6: 1999 – Fund raising targets

	% of funds raised on the market		
	Total	**High Tech**	**Low Tech**
Early stage	**21%**	*91%*	*9%*
Expansion/development	**42%**	*52%*	*48%*
Management Buy Out-Buy in	**36%**	*7%*	*93%*
No specific target	**1%**	*33%*	*67%*
Total	***100%***	*100%*	*100,0%*

Source: AIFI-PWC

In conclusion, basing the analysis on the above exposed data, it is possible to state that the Italian venture capital and private equity market in 1999 has continued its quantitative and qualitative expansion phase, being today completely integrated in the international capital market and following the same development trends of the most important Continental Europe countries.

THE MARKET IN THE FIRST HALF OF 2000

The analysis carried out in the first semester of the year 2000 has been based only on some relevant information, if compared to the traditional ~~usual~~ annual analysis. As a matter of fact 2000 has been the first pilot year for all the national venture capital and private equity associations at European level, to find out how the market has moved during the first six months of the year[3].

The invested amount in the first semester of 2000 has overcome the 1 billion Euro figure. During the period about *Euro* 1,320 million were invested in 288 investments.

Subdividing the investments undertaken in first half 2000 by stage, in terms of amount invested, the last year figures have been slightly modified, being the buy outs still the most consistent investment category undertaken, though followed by replacement capital, expansion capital, and seed/start-up. If we consider the classification by number, the seed/start up figure is first, with 147 investments, almost the same number of investments of the entire 1999 (153).

Also during first semester 2000, international investors (advisors of international closed-end funds and international banks) have demonstrated to be the most active operators (by amount and number), followed by the Italian banks and their subsidiary investment companies.

[3] The first semester analysis (1st January 2000 – 30th of June) has been conducted by A.I.F.I. and the Italian branch of *PricewaterhouseCoopers – Transaction services*, in co-ordination with EVCA (European Venture Capital and Private Equity Association).

Table 7: 1999 – Stage distribution of investments

	Amount (*Euro* Mln)	%	Number	%
Seed/Start-up	160	12.1%	147	51.0%
Expansion	332	25.2%	96	33.3%
Replacement	384	29.1%	18	6.3%
Buy out	444	33.6%	27	9.4%
Total	***1.320***	***100.0%***	***390***	***100.0%***

Source: AIFI-PWC

Looking at the stage distribution of investments by classification of investors, the leaders of the start up category have been the international investors, as well as in the buy out category. A better distribution could be found for the transaction of expansion financing, where the largest section of the market can be attributed to the Italian banks and their subsidiaries, closely followed by the Italian closed-end funds.

It is very interesting to observe that the Italian venture capital and private equity industry appears very concentrated, also in the first six months of 2000. If we consider the entire industry (VC and PE), the first **five** players gather 42.0% of the Market in terms of number of investments, and 51.3% in terms of invested amount. If the analysis is broken taking into consideration the venture capital investments only, the concentration is even greater. In this case, the first **two** players obtain 47.6% of the market share, in terms of number of investments and 53.2% in terms of invested amount.

What this means is that in Italy there is still a lot of space for new entrants, but also the necessity to introduce real expert players on the market, to see a consistent growth in number of operators. Venture capital is a specialised market, but it also needs a high number of prepared players to be a real competitive market, ready to bring added value to the entire entrepreneurial system.

On the divestment front, 84 operations were reported for a corresponding divested amount of *Euro* 265 million. The total divested amount, ~~on the contrary of~~in opposition to the investments, has shown a stable trend if compared with 1999. As a matter of fact it is easy to make a projection on the final year, which would show almost the same figures of 1999. This behaviour of the market can be attributed to the fact that the great amounts of capital invested in the last two years are still immobilised into each single company. It is then foreseeable a growth in divestments in the next few years.

The most used channel has still been trade sale, reaching 65% of all divestments. In 4 cases (5%), equal to 4 companies, the divestments came from the listing on the stock exchange of the participating enterprise (IPO). IPO's have brought to the listing of one company~~ies~~ on the Milan Stock Exchange and of three on the Nuovo Mercato, which is becoming the preferential stock market for exiting a company through an IPO.

If we consider IPOs and Sales post-IPOs, the amount divested through the Stock Market reaches 66 million Euro, corresponding to 24.1% of the total divested amount, a great growth even if compared with the entire 1999.

The Italian portfolio at cost on June 30th 2000 was estimated at *Euro* 4,673 million, to which 1,304 companies can be attributed, against the *Euro* 3,618 million of December 1999.

Table 8: 1999 – Stage distribution of divestments

	Amount (*Euro* mln)	**%**	**Number**	**%**
Trade sale	172	65.4%	60	71.4%
IPO & Sales post-IPO	66	24.1%	8	9.6%
Other	22	8.6%	9	10.7%
Write off	5	1.9%	7	8.3%
Total	***265***	***100.0%***	***170***	***100.0%***

Source: AIFI-PWC

A FOCUS ON THE EVOLUTION OF THE HIGH TECH START UPS

As stated above, the genuine venture capital market in Italy has been following a strange trend. When the market was founded in the mid 80s the first movers were actually trying to follow the example of the Silicon Valley. Unfortunately, some hazardous investments produced the result of pushing the pioneers of venture capital away from the high technology companies. From then on, those operators which had an interest in realising risk capital investments, were being attracted by the LBOs fortunes.

The Italian Market was particularly interesting for those private equity players which had the experience to finance medium sized traditional enterprises. As a matter of fact, the Italian entrepreneurial scenario has always been characterised by many medium sized family owned companies, which had the necessity to expand their dimensions, specially when solicited by foreign competitors.

Obviously, this environment made it easy for the private equity players to expand their activity and to obtain high returns by way of investing into expansion capital and buy out investments. For about ten years the Italian market has been an interesting target for quite secure and remunerative operations. It is also important to highlight the preponderance of traditional companies within the entrepreneurial context.

Traditional sectors have been very important for the development of a modern economy, as they have represented the industrial base over which Italy founded its re-born after world war two. A first important consequence has been the lack of a strategic use of high technology within the economical development polices. On this matter, it is interesting to highlight that even though Italy has always been a net user of foreign technology, our technicians and engineers have always been very creative in using technology. One example is the invention of the Personal Computer. Even though Italy did not invent the chip, an Italian engineer had the idea to create a personal smaller computer. Olivetti, the most important Italian PC producer, licensed its PC to IBM for many years.

Even if many important problems are still influencing a spur in the high tech start ups, which will be deeply discussed more over, the venture capital industry has been able to give a first positive sign of interest for some specific high tech industries. In particular, the deregulation process in the ICT sector, that affected Italy in the past few years, introduced many new opportunities for the development of Telecommunication companies. This process is still very active and there are still open segments for new entrants. The venture capital companies that were born to follow this important trend have been numerous and, so far, successful.

An other phenomenon that attracted venture capital to Italy, like it happened in many other European countries, is the Internet. In 1998 there have been no investments in this incredible sector, but just one year later, the Internet represented 14% of the high tech investments for institutional venture capital. The first feeling is that the Market has not yet overcome this wave, as there are many new operators entering in this specific segment, almost every month.

The result of such particular trends, today is a developing genuine venture capital industry, able to focus growing resources into high tech start ups.

The real question remains if the projects that are financed by the Italian risk capital players are really high technology projects, or if high tech is only apparent and focused on the typical Internet services, characterised by low tech contents.

Analysing the investments made by the Italian VCs, it is important to highlight that the greatest part of the high tech investments is truly high tech, but it is also honest to know that a very large part of potential innovative and technological projects is still underrepresented by the institutional venture capital industry.

TABLE 8– 1999: HIGH TECH SECTORS IN ITALY

High Tech sectors	Amount (It Lit)	%	Number	%
Internet	88.624	2,6%	40	10,3%
Computer: hardware, semiconductors, software	76.829	2,3%	14	3,6%
Electronics	66.592	1,9%	8	2,1%
Health: instruments, medical equipment	21.698	0,6%	5	1,4%
Biotech	20.366	0,6%	4	1,0%
Telecom: hardware	23.635	0,7%	12	3,1%
Telecom: carriers	273.638	7,9%	25	6,4%
Communication: other	57.852	1,7%	10	2,6%
Total	**629.234**	**18,3%**	**118**	**30,3%**

Source: AIFI-PWC

THE ITALIAN INCUBATION ACTIVITY

As stated above, there have been some major causes that can explain the growth of interest that genuine venture capital has ~~taken~~ captured in the Italian financial scenario. Deregulation in the Telecommunication sector and the Internet may be considered as the two most important causes that explain the leverage venture capital has obtained, in the past two years.

If those are the causes, the spur of the incubation activity has to be considered one important result of the new scenario.

It is possible to say that traditional venture capital is ongoing a certain revolution. New operators are, as a matter of fact, entering this small industry, approaching it from different perspectives.

From one side there are some important big corporations, like i.e. Telecom Italia, Enel, and Seat-Pagine Gialle, that are launching their venture capital branches, which are many times structured as an investment fund (so, as an independent vehicle), in order to capture some of the innovations that are being produced by smaller entrepreneurs. These operators have ~~a more~~an industrial approach to venture capital, and are interested in funding companies that might be of interest to the corporation.

On the other side, venture capital has been characterised by the born of the so called incubators. These companies are, almost entirely, concentrated on the Internet and structured as de-structured consultancy companies, giving their advice to ~~new generating companies~~entrepreneurs willing to create new companies.

A study, carried out by A.I.F.I. at the end of 2000[4], gave the opportunity to make a picture of this rapidly evolving industry. As a matter of fact, only 5 months away from the results of that survey, we could say that the world of incubation has known many changes. Anyway, it is still very important to capture the characterisations it had when it was born.

Italy has faced the incubation phenomenon for the first time at the beginning of the second half of 1999. From then on the only comprehensive study on this subject has been carried out by A.I.F.I., the Italian Venture Capital and Private Equity Association. Here below the main observations on the Italian incubation system are traced.

In the first place, it is possible to highlight the presence of two different kinds of incubators:

- profit oriented incubators;
- non-profit oriented incubators.

The first ones are those considered by the A.I.F.I. study, and will be deeply discussed more over. The second ones, are typically public incubators with the purpose of economic and social development, through the use of public resources. The greatest difference lays in the fact the profit incubators will do everything to gain a profit, either in terms of consultancy fee, or in terms of equity ownership, while the non-profit incubators have different objectives.

One particular category of non-profit incubators is that of the universities. University Incubators do not have VC funds; are interested in scientific research projects; they have a physical presence in the university building; are focused only on the university projects; have great knowledge in patent filing. These kind of incubators are very important to help constitute a better relationship between the theoretical world of a university, with the practical world of business.

For Profit Incubators

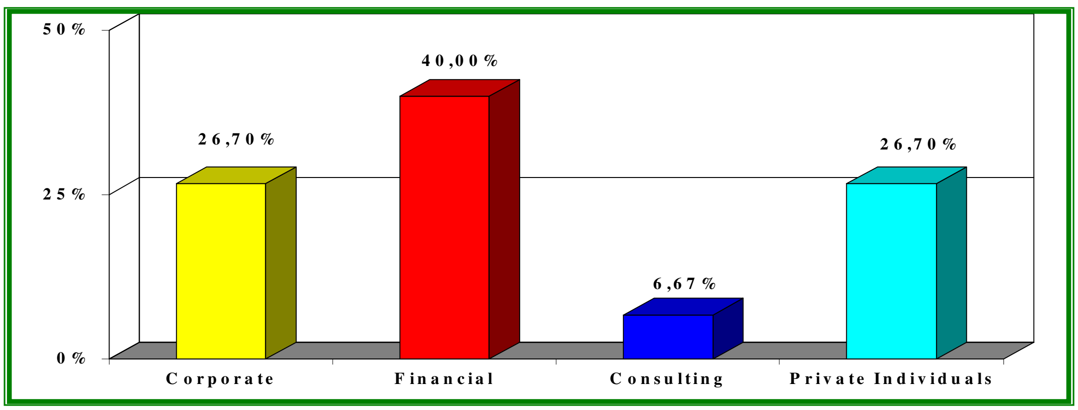
[4] A.I.F.I., Collana Capitale di Rischio e impresa: Quaderno n. 10, *Incubatori Privati: realtà internazionale e modello italiano*, Pubblicazione interna, Milano, 2001.~~Steffi inserisci la corretta dicitura del testo che raccoglie l'indagine!!!!!!!!!!!!!!~~

The first observation that can be made on the Italian profit incubators is on their origin, very tight to the financial world. As a matter of fact, the sponsors of the profit incubators analysed were mainly coming from the financial world (40%), followed by Corporations and Private Individuals (both at 26,7%). Interesting to notice that consultancy only counts for a smaller percentage in the sponsorship of these companies.

The managers of the incubators were mainly coming from precedent managerial or ~~enterpreneurial~~entrepreneurial experiences, followed by financial experts and consultants.

Most important, the funds have been raised from many different sources, as stated below:

Percentage distribution of Italian for profit Incubators by Sponsor



~~**inserire tabella sulle fonti di provenienza dei capitali**~~

There are 7 incubators, over a sample of 15 interviewed, that have immediate funds available for investing. These operators manage, all together about 550 million Euro. This great amount of capital should be addressed to new seed and start up projects, if we follow the logic under which an incubator is formed. There will still be time to verify how consistent this experience will be.

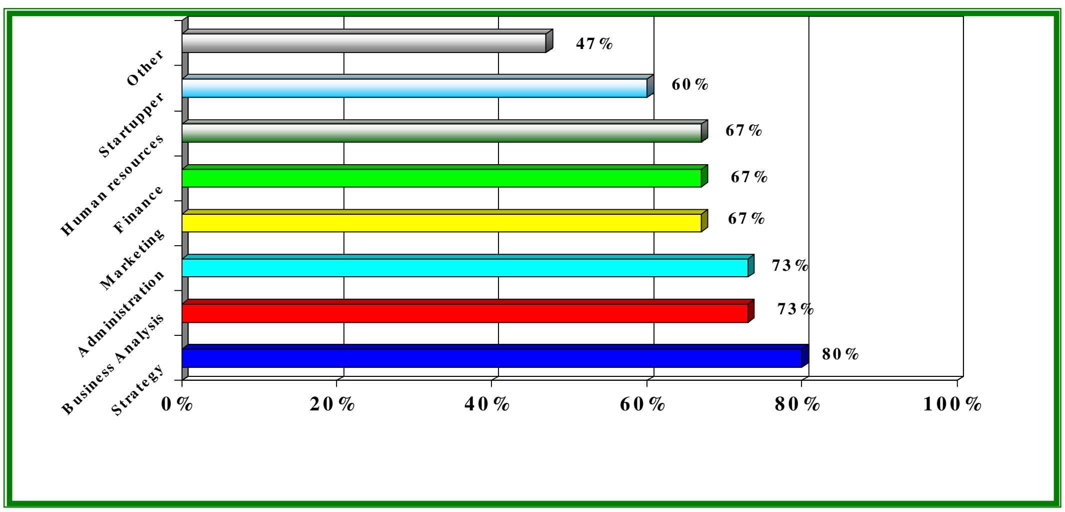
Concerning the geographical borders of investment, Europe as a all~~hole~~ becomes the real target for the incubators' investments. This phenomenon is important. To some extent it is a prove that nation wide investors and consultants are starting to enlarge their horizons to Europe, by this confirming that competition for technology is played at a global level, rather than national.

The Italian Incubators appear to be rather small. They have, all taken into consideration, 307 square meters of space available for the incubated companies, 35 working spaces and 15 full time consultants on average. In reality, these data have to be looked at as only a few of the sample considered really offers some space for the hosted companies, while all of them offer consultancy.

The offered services vary from business plan analysis and implementation, to a broad spectrum of consultancy (marketing, organisation, strategy, legal, fiscal, etc..), to more specific grounds of intervention, such as IPO support and patenting assistance. Recruitment and PR are also two important services offered by the Italian Incubators.

For what concerns the competencies that can be found in an Italian incubator, these may vary from a generic strategy competence, to business analysis, administration, marketing, finance, human resource, startupper (a sort of project manager, in charge of following the project from the beginning of the incubation process, to exit) and other.

Incubators internal competences by %

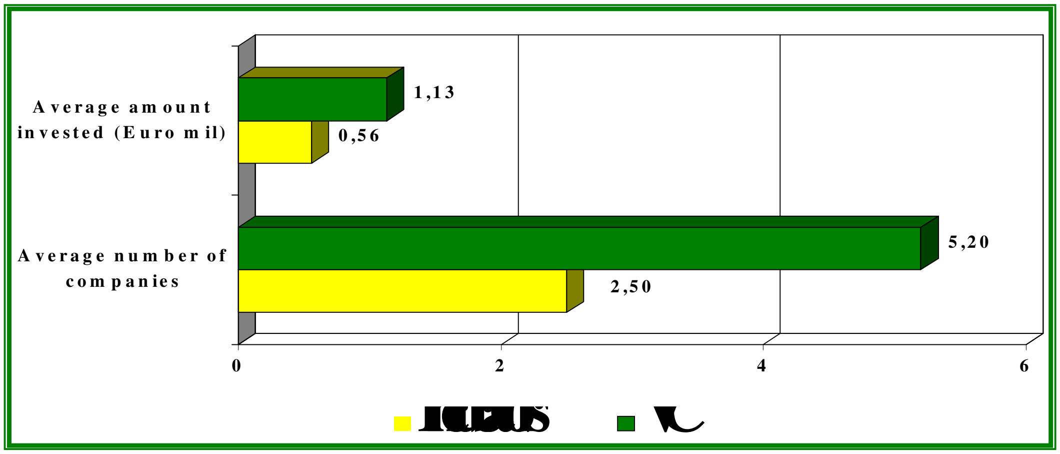


~~Inserire tabella competenze~~

The process for incubating a business may last from one to three months (50% of observations) and in 26% of cases lasts less than a month.

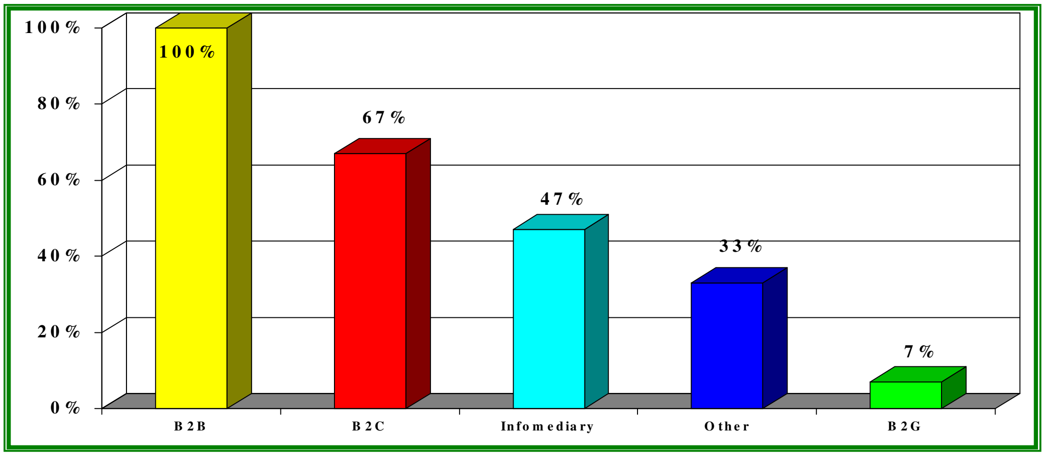
At the end of 2000 the 15 incubators analysed made 38 investments in 38 companies predicting an average incubation time of 11 months. If we compare this data with the one deriving from the only venture capital investments made in 1999, incubators invest half of the amounts invested by the VCs in a little more than half of the companies, on~~in~~ average.

Average amount invested and average number of companies



An other important issue for risk capital investments is the share percentage of the invested companies. If, usually, a VC is keen to hold majority stakes, incubators concentrate in the bulk of 1~~0~~ to 30% of the invested companies (70% of cases). Only 13% of the interviewed incubators tend to have majority stakes in their companies.

Internet business focus*

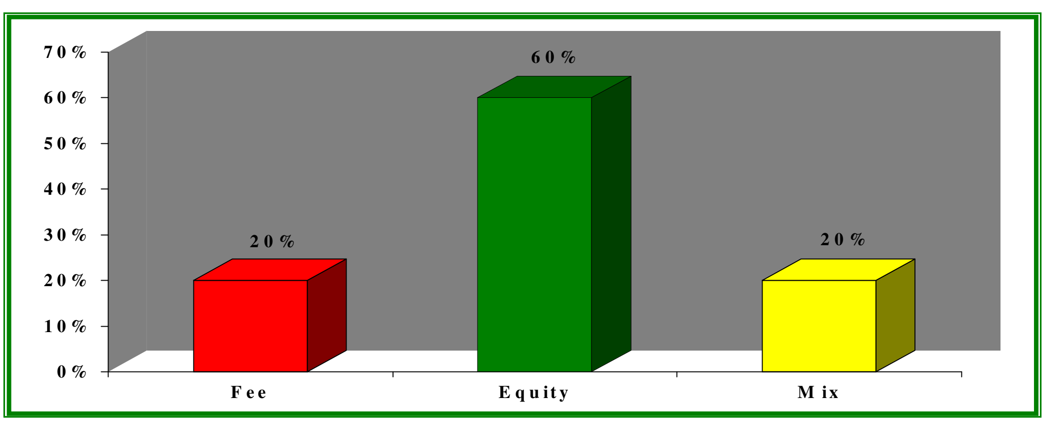


*** Multiple choice**

Concerning the business sectors and focuses, Internet is, by way, the most ~~analysed~~ considered one, followed by software, telecom and other ICT. Hardware and Biotech are not very much taken into consideration. Referring to the Internet it is possible to state that business to business is the mostly liked one, followed by business to consumer, infomediary and other.

The last observation it is possible to make is about the most common revenue model, adopted by the Italian incubators. It is interesting to see how most of the incubators are

Revenue model by %



equity oriented, by this confirming their strong attitude as pure investors, ready to lease their services in change of a stake of the companies they invest in. On the other hand there are only a few examples of incubators that are only fee oriented or using a mix of equity and capital.

In conclusion, it is possible to state that the incubation activity in Italy has just started, following, in a way, the United States model, with a bunch of operators with the following characteristics:

- Leaders background → Financial
- Capital → Available
- Revenue model → Equity

As it easy to understand these are typical characteristics of a VC fund. What this may mean is that some important financial player and also some corporation preferred to launch an incubator to start to make venture capital investments, rather than sustain all the procedures to activate a real financial fund.

Nowadays, many private incubators are changing their entrepreneurial formula in order to adapt to the market trends. Most of them are changing their internal competencies and they are moving to profitable sectors others than the Internet. In particular, private incubators that haven't got a venture capital fund are necessary undertaken a period of transformation. In fact, at the beginning of 1998 when they started their activity, they mainly invested in Web projects with the prospect of a future listing on the Stock Exchange, such strategy was not always successful though. Other incubators have a venture capital fund and behave like venture capital investors with a "hands on" approach on start up enterprises. It is important to underline that the incubation activity play an important role to create new enterprises in Italy because incubators have strategic and marketing skills, besides financial resources. In Italy, we need to spread the model of the Network Incubator , successfully experimented elsewhere. Many important regulations have been approved by the Government, that enhance the collaboration between University, venture capitalist and incubators. This seems to be the right way to turn business ideas in enterprise.

~~**Farei aggiungere più commenti da Roberto o dalla Prof, magari anche sulle evoluzioni più recenti del mercato!**~~

THE MAIN WEAKNESSES OF THE HIGH TECH START UPS

There are several factors that can be discussed in order to better understand which are the main weaknesses in terms of high tech start ups in Italy. These factors can be traced back to:

- a lack of a synergic~~stematic~~ dialog and relationship between the worlds of research, of enterprises and of finance;
- a lack of adequate human resources on the entrepreneurial side;
- difficulties on technology auditing activities~~a lack in the existence of technology auditing firms~~;
- an inadequate legal framework.

It is very important to clarify these issues in order to have a complete picture of the Italian high tech start up environment.

THE ABSENCE OF A SYSTEMATIC DIALOG BETWEEN SCIENTIFIC RESEARCH, ENTERPRISES AND FINANCE

In every context, also at international level, where venture capital and the research bodies have contributed to the born of new innovative enterprises, the actors of the process were very much linked to one another. To make a few examples, the Silicon Valley is located in a very entrepreneurial area, close to two of the biggest and most successful universities of the USA: Berkeley and Stanford. Also in Israel, where venture capital has grown a lot in the past 10 years, the university system is very tight to the entrepreneurial system and venture capital. This link is so strong that many talk about the Silicon Wadi. Also in the UK this spirit is very vital, especially around the Oxford area.

In Italy, on the other hand, these tree fundamental actors, in the past have never been tight and close to each other. The distance in between them, has determined a real gap. The gap is very strong whenever it gets to the knowledge this actors have of each other. The absence of an history of successful relationships is making it very difficult today to fight against the opposition that some players are making whenever some good results may be obtained by putting finance, research and enterpreneurship together.

Even though this has been true ~~untill~~until a couple of years ago, and Italy still carries the weight of such a situation, today universities, venture capitalists and entrepreneurs have just started to work together, in order to create a better entrepreneurial context. It is the task of every institution involved in this process to keep on working hard in order to stimulate all the actors of the process to create even deeper and better networks.

HUMAN RESOURCES ARE SOMETIME NOT PREPARED TO MANGE THE RISKY START UPS

Even though Italy has been able to attract more than 2 billion Euro in 1999, mainly from outside the nation, to be invested into venture capital and private equity, there are still some weaknesses in finding the right managers to be placed within the start ups. This means that capital is not a problem. There is even too much capital available for these industries.

The problem is that it is more and more difficult to find good trustful managers able to take a young company by the hand. Also on this issue only some universities are paying attention to this "hot" topic, launching specialisation courses in venture capital and management.

A very recent study, carried out by the EVCA – European Venture Capital and Private Equity Association – in co-operation with the University of Antwerp (UFSIA)[5] has demonstrated serious shortfalls in the extent of entrepreneurship creation in Italy. This comprehensive study provided an interesting view of higher education's role in stimulating new venture creation.

The study was realised at European level. Of the 129 respondents, 98% claim to offer entrepreneurial education, but of these, 65% would like to expand and improve their services.

The survey was addressed to 362 universities and other institutions if higher learning in the EU and Norway. The sample was not random, but in fact represents a set of universities with a level of interest in entrepreneurial education that is greater than the average for all EU universities.

Nevertheless, one of the main conclusions is that, although good intentions exist, European entrepreneurial education could develop much further.

Most courses on corporate finance deal with quoted companies, and this is very true for Italy. Investing in non quoted firms is perceived more as alchemy than science. Only 25% of respondents said they have venture capital links (structured co-operation, financial support or other concrete relationships). 35% said that the issue was under discussion while 43% said they have never even discussed the possibility. The most popular current initiatives in this area are guest speakers (96,1%).

The survey showed considerable variation in attitude according to country with France and Portugal being the most open minded towards the business community and with Belgium, the Netherlands, Ireland, Norway, Sweden and the UK seen as "all-rounders". "Hesitators" are Austria, Denmark and Italy, while Finland, Germany and Spain are viewed as "theorists".

Going back to Italy, on the other hand, the venture capital industry has been facing the problem of re-conversion of its human resources. Evaluation problems are somehow

[5] ENN – EVCA Network News – No. 1 December 2000, EVCA Zaventem, Belgium

different if we compare venture capital and private equity. Even if the greatest problem is the ability to understand the real growth potential of an high tech business. As a matter of fact, the first venture capital company that started to make start ups in Italy, was led by two technology and finance experts[6].

~~THE IN-EXISTENCE OF TECHNOLOGY AUDITING BODIES~~DIFFICULTIES ON TECHNOLOGY AUDITING STRUCTURES

One of the biggest problems venture capitalists in Italy have to face, when the investments come to the real high technology, is the absence of internal competencies to evaluate the business. The fact is that it is also very difficult to find ~~there is not even~~ a private or public body able to make this kind of technology due diligence.

It is fundamental that such ~~a company~~an organisation would be founded. Many venture capital firms would be able to externalise this part of the evaluation process to such a company, making it easier to destine their investments to pure high tech deals.

Italy has some of the most important and qualified researchers at European and global level, but did not mature the consciousness that by placing together these ‘brains” the technology potential of many entrepreneurial projects could be exploited.

Too often Italy has been a net exporter of highly skilled scientists and technologists towards those countries where they could find what they needed to start up a business. The ~~absence~~ existence of auditing firms specialised on the evaluation of high tech projects might reduce ~~enlarge~~ the gap Italy already has to face when it gets to having finance, enterprises and researcher sit around a table.

AN INADEQUATE LEGAL FRAMEWORK

Some observations on R&D laws

The Italian legal scenario about research is very old and not aligned with the rapid changes that characterise high tech in these last years. From one side research centres personnel mobility has been stopped, both on the public and private side. The careers of public researchers and university professors are based on the publications they produce and not on the enterprises they have contributed to found. Research within the university is mainly sponsored by private companies which are successively owners of any license and patent together with the university and not with the single professor or researcher. It is obvious that in such a way, researchers are not interested in patenting their invention as they will not have any economical benefit from such an experience.

Only recently the Italian Parliament has approved a law which should favour universities and research centres spin off, and re-organise the discipline and procedures to sustain scientific and technological research to favour technological transfer and researchers mobility.

[6] We are referring to Pino Venture Partners, led by Mr. Elserino Piol and Mr. Oliver Novick.

Legislative Decree, No. 297/1999, will come in force starting from January 2001. The main new facts introduced by this law, inspired by the United States Bayh-Dole Act[7], are:

- the possibility for the research personnel within the universities and public research bodies, to be temporarily moved in private companies, with a priority for SMEs. In such a way, the personnel will maintain the work relationship with its original entity. The job done for the private companies is eligible for academic career valuation.
- In case of patenting, eventual royalties deriving from those inventions made by university and public research centres personnel, are established by the different universities internal rules. This way, it has been introduced a criteria to encourage patenting and licensing, made with the use of universities resources and technologies.
- The law has opened the doors of universities to spin offs. Before the law was approved, university spin offs were a sort of illusion, specially because it was illegal to work both within the university and outside, using the public resources for private interests. Today, the researcher is more favourable to launch a spin off deriving from his internal university research, because the spin off is taken into account to evaluate the professor's career and makes the realisation of earnings, both for the researcher and for the public entity, possible.

Some observations on corporate and failure laws

The Italian law system, both for what concerns corporate and failure laws, and, more recently, in terms of financial laws, is affected by an heavy "punishment" system, with aspects that could be defined "ancient".

This represents surely a general problem for the Italian entrepreneurial system, but it is even a greater problem for venture capital and mainly start ups. Start ups, in fact, represent risky companies by definition. Moreover, judges are very rigorous on this subject and often tend to give an objective responsibility to companies directors of a failed company.

An other important issue for start ups, is about the directors' responsibility in case of negative net capital, deriving from Italian Civil Code articles No. 2448 and No. 2449. Start ups often have a low net capital to let the new entrepreneur, normally a person with ideas, projects and capability, but without capital, to get an important stake of the company. In the mean while, start ups have to incur in high research expenditures in a moment in which profits are very low. As a consequence we are considering companies affected by losses.

[7] The Patent and Trademark Law Amendaments Acts (35 USC, Chapter 18).

On the accounting side the problem is usually solved by treating research expenditures by way of depreciation. Problem is that this behaviour is not always considered legal, depending on the court the failure is being processed. This makes the civil punishments active determining the personal responsibility of directors.

It is very important to underline that such a problem is stopping VCs in taking an active position within the Board of Directors of the companies they invest in, as it is commonly done at international level.