Securities and Risk Reduction
in Venture Capital Investment Agreements

by

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1. Introduction

Federal Express is a commonly cited venture capital success story. Federal Express was begun by Fred Smith. It was not small; it did not use new technologies; in the earlier stages it was dependent upon massive loan guarantees; finally, the concept or idea was not new. Federal Express began with $250,000 in funds from a family trust (The Enterprise Company) matched by personal funds of the founder. The first outside investors provided loan guarantees. The first direct outside investment was a large ($U.S. 23.7 million dollar short term loan guarantee) from General Dynamics. The General Dynamics investment gave them an option to acquire 80.1 per cent of Federal Express stock for a price of $U.S. 16 million. By 1983, the company had revenues over $U.S. 1 billion and net income of $U.S. 88,933,000 plus its total assets were (in 1982) worth $U.S. 730,291,000 (Sigafoos, 1983).

The definition of venture capital to be used in this research is "long term financing (usually equity) leveraged with management support and provided to unlisted, potentially high growth businesses". It is a conservative definition in that it does not allow passive investment strategies nor investments in highly profitable albeit listed firms to be considered. "Long term" refers to financing extended for more than five years. "Management support" requires a more active involvement than
simply sitting on the board of directors. In order to provide some cut off point for those responding to questionnaires, "management support" meant spending a minimum of one day per month working on the problems of the investee and being available for more if required. The remaining term left open to subjective judgement is "high growth". For the purposes of this research the Management Investment Companies Licensing Board (MICLB) requirement for expectations of 20% per annum, compounded, has been accepted as the minimum acceptable projected growth rate.

A 1987 study conducted by the Bureau of Industry Economics (Review of venture capital in Australia and the MIC (Management Investment Company) Program) revealed some of the problems that arise when a definition of the topic to be reviewed is not carefully clarified. Admitting "no precise definition" (BIE 1987, p. 6) of venture capital, the report used common characteristics of venture capital to identify market participants in Australia. The BIE report then asserted that the venture capital industry was essentially established. Apparently, any firm satisfying some of the given venture capital characteristics was considered to be providing venture capital. Ralph-Ward Ambler, past chairman of the Management Investment Companies Licensing Board questioned the validity of the study at that time. Its assertion is even more obviously in error today for this study leads to the opposite assertion, that the industry is close to extinction.

The remaining sections of the introduction are used to present the hypothesis upon which this research is based and the
approach used to gather and analyse data that allows the hypothesis to be tested.

Section 2 is used to describe the origins and history of venture capital in both Australia and America. Initiatives taken by both federal governments, up to the current day, are included in the discussion. The data analysis is reported in section 3. It begins with a review of variables associated with an investee's stage of development (ISD). The ISD is considered to be a proxy for risk and, as such, should have an impact on the securities chosen for investment agreements. The dependent variables, securities, are then correlated with other explanatory variables using Spearman's correlations.

Finally, section 4 summarises the risk reducing methods that can be used by investees and investors. An overview of current conditions in each country's venture capital industry is provided along with the implications these conditions have for the future of risk capital. Suggestions are made as to how to improve venture capital opportunities in Australia.

1.2 Risk Control

Portfolio theory states that the risk of the portfolio as a whole will be less than the weighted average of the risk of each security within the portfolio, so long as the returns on the securities are not perfectly positively correlated. It is possible, so the theory states, to reduce the risk of the portfolio to that of the market by diversification. Even when
the correlation between investments is unknown, even if a suitable measure of risk cannot be determined, it should be possible to decrease the risk of the portfolio through diversification. In venture capital, then, the more varied the portfolio, in terms of both stages of investment and industries selected, the greater risk reduction through diversification ought to be.

While naive diversification (without recourse to the determination of systematic risk) is functional, its application in the venture capital milieu is limited. It is limited because venture capitalists leverage their investments with their knowledge, contacts and business expertise in specific fields. Venture fund managers specialize in order to increase their contribution to their investees. They leave broad portfolio diversification to their subscribers (those who invest in the venture capital fund). If broad diversification is not available as a major tool for risk reduction then the venture capitalists must be utilizing other methods to control the risks inherent in this industry.

It is hypothesized that investment agreements or contracts are a major factor allowing the venture capitalist to control and reduce the inherent risks associated with venture capital investing. Herein, we focus more specifically on the securities used in venture capital contracts expecting them to vary with the stage (risk) of the investee's development.

Once a venture capitalist has shown an interest in investing with an entrepreneur, the two parties enter into negotiations to develop a contract which will establish their partnership.
Contracts in venture capital investments will specify the amount of money to be made available, the timing of the investment, the types of securities (loans, convertible debentures, common shares, preferred shares, options, and warrants) and will contain a number of covenants, inserted by both parties and designed to protect each from specific risks. The research reported here is limited to the examination of investment agreements once the decision to invest has already been made. Other related topics are in Cornelius's PhD thesis (1992).

1.3 Methodology

It was hypothesized that there would be an empirical relationship between the investee stage of development (ISD) and the securities and covenants utilized. The investee stage of development is being used here as a proxy for risk, i.e., earlier stages are high risk, later stages are lower risk. It was anticipated that senior, risk reducing securities would be preferred over junior securities in the earlier ISD's.

Other variables which could also affect the selection of securities were tested. For example, experience in formulating contracts could have an impact on the investment structures chosen by venture capitalists. If industry experience is an important factor in the negotiation of investment agreements, it should be revealed in differences between the contracts utilised in Australia and those utilised in the United States.
The research involved a survey undertaken in both Australia and the United States. A questionnaire was developed and vetted in both countries to assure participation and understanding by potential respondents in each country. These questionnaires were then distributed, in person, by the researcher who also interviewed respondents. The selection of the United States and Australia as subject countries for this research was due to the researcher's familiarity with each. The United States was the first country to have an established venture capital industry, satisfying the requirement for an established venture capital culture, while Australia is only beginning to develop the industry and may or may not succeed in doing so.

The relative maturity of the industry in each country and consequently the varied experience levels of the actors, should be reflected in the ability of the venture capitalists to successfully use contracts to reduce risk. The differing experience levels were assessed quantitatively through the number of years management has been directly involved in the industry and the number of investments made which have successfully come to fruition, as well as qualitatively through discussions with respondents.
2. The Development of Venture Capital in America and Australia

2.1 United States of America

Interviews and literature on the topic suggest that the venture capital industry in the United States really began with General George Doriot who founded American Research & Development Corporation in 1946 (Adler, 1984, p.11). American Research and Development was not the first company which focused on providing what is now termed venture capital, however, it was the first to sell securities to the public (Dauten, 1951, p.278). Doriot, through American Research and Development, was also responsible for convincing the Securities and Exchange Commission (SEC), and ultimately the congress, to alter the 1940 Investment Company Act. This made it possible for institutional investors to participate in venture capital investments through organizations such as American Research and Development (Dauten, 1951, p.286).

Venture capital had its debut immediately following World War II. Due to consumer demand, small businesses were growing quickly and needed funds to finance that growth. New technologies were rapidly being commercialized and this process, too, required capital. But small businesses and the new technological businesses did not have access to long term funds, whether equity or debt. Evidence of the need which existed for venture capital financing can be seen in the 3000 applications received by Doriot's American Research and Development Corporation in its first four years of existence. Only 16 of these applicants received the funding requested (Donham, 1959, p. 146).
Small firms were also faced with a credit squeeze because of the consumption of capital by larger firms. Financial institutions, as today, found little need to take time analyzing the credit risks of small borrowers when large loans to established companies could be assessed in the same period. A prerequisite to survival, for small firms, became the willingness to accept a dilution of their ownership in return for capital contributions from investors. Those shareholders who wanted more immediate participation in the economic growth which was occurring at such an unprecedented rate, found an avenue for this participation in the small, capital starved new technology firms.

By 1950, there were ten major investment development companies (Dauten, 1951, p.277). Their success in providing finance for the development of new businesses and technologies had not gone unnoticed. Senator Sparkman, a Democratic congressman from Alabama, sponsored a Bill "designed to create a special institution to aid small businesses" (Noone, 1970, p.26). His efforts were suspended due to the Korean War but, in 1958, the Small Business Investment Act was passed.

Small Business Investment Companies (SBICs) are funded by government guarantees and direct loans as well as by private investors. From this beginning several types of venture funds have evolved including those which are still government sponsored (through both state and federal initiatives), private and public funds as well as industry sponsored and bank sponsored firms. Government regulations have had an influence on the health of all of these funds. Venture capital expanded throughout most of the sixties. However, in 1969 the Tax Reform Act increased capital
gains taxes and, with this increase, the wealth in venture capital funds began to diminish. Increased capital gains taxes were not the only problem confronting venture capitalists. Poor economic conditions, less active over-the-counter markets and reduced government support for research and development (R & D), forced investors to alter investment strategies from a portfolio concentration on new firms to one which emphasized expansion firms (Brophy 1984, p.6,12).

The Tax Reform Act of 1969 was modified in 1978 with capital gains taxes reduced to twenty-eight per cent. Venture capital's recovery in the late 70's and early 80's was not entirely due to changes in the tax rates. The increase in venture capital funds available has been correlated with improvements in the Initial Public Offerings (IPO) and National Association of Securities Dealers Automated Quotes (NASDAQ) markets (Bygrave, 1989).

The rejuvenation of the venture capital industry was also assisted in 1980 when government policies on the investments made by pension fund managers were clarified. Thereafter, those subject to the Employee Retirement Investment Security Act (ERISA) could and did invest considerable amounts in venture capital. At the same time the capital gains tax was again reduced, this time to only 20 per cent. Venture capitalists had more funds, the public security markets began to thrive and venture capitalists were again encouraged to make early stage investments. The increase in available capital, the expansion in the industry, had some profound affects on the size and structure of venture capital funds.
Three basic types of venture capital funds can be identified. Seed Capital Funds manage under $U.S. 30 million, make investments of up to $U.S. 1 million but usually in a range between $U.S. 100,000 to $U.S. 500,000 and invest in businesses that are in the earliest stages of development. Because of this early stage of development, the targeted returns for the seed capitalist are in the range of from 60 to 100 per cent per annum (Dotzler, Crosspoint Ventures, 1984, public lecture). This return, however, is not expected to materialize for some time; most seed investments are held from 5 to 7 years, sometimes longer (Hoban, 1981).

Traditional Venture Capital Funds manage between $U.S. 30-80 million and make average investments between $U.S. 1/2 to 2 million. The traditional venture fund targets investment opportunities in the middle range of investee development, from early expansion to mezzanine funding. These venture capitalists are looking for returns from 40-60% p.a. (Dotzler, Crosspoint Ventures, 1984, public lecture).

The final division or classification is the "Mega-fund". As the term indicates, mega-funds are very large, an arbitrary starting point could be any fund managing $100 million dollars or more (Silver, 1985, p.21). As stated earlier it is not just the amount of money under management that determines the venture capital classification but the type of investment preferred by the fund's management. Mega-funds tend to invest in developed firms preparing for public listing (mezzanine stage) or they are involved in management or leveraged buy-outs, takeovers and turnarounds. Some of their investments are made in firms which
are already listed companies. Because of the kind of investments made and their relatively low risk, mega-funds generally target returns between 20-30 per cent (Dotzler, Crosspoint Ventures, 1984, public lecture).

Not only have venture capital funds been undergoing changes since their beginning, but the types of people involved in their management have also changed. General Doriot was typical of the first American venture capitalists. Holding the rank of a brigadier general in the U.S. Army, he was a manager of people, not capital. At the pentagon he was a planner and a director of research and development for the war department. Prior to that he had been a professor of business at the Harvard Graduate School of Business Administration (Bylinsky, 1967, p.106).

Interviews with venture capitalists in the United States led to the belief that the majority of early venture capitalists obtained their primary degrees in either the sciences or engineering. This background allowed them to specialize in particular technologies where their knowledge made due diligence simpler and where they could advise the entrepreneur. This first generation of venture capital investors were usually retired from successful business ventures and hence brought a repetoir of business skills and contacts, as well as money, to the endeavour. Entrepreneurs came to value these non-pecuniary contributions as much if not more than the financial assistance provided, (Miller, 1985, p.116).

The shift from those with 15 to 20 years of venture capital management experience to those with only 2 to 3 years was noted early in the eighties (Dizzard, 1982, p.106), (Wall Street
The new less experienced, albeit well trained generation of venture capitalists, has resulted in a gradual shift of emphasis in venture capital. Those interviewed in the United States stated that the new generation of venture capitalists has a mainly business school background (Dizzard, 1982, p.106). They approach investments more conservatively due, at least in part, to their academic financial training. This training combined with disillusion about technology investments as a result of new issue market failures in 1984 (Juillard, 1987, p.31) has meant another refocusing of investment strategies.

By 1985, the segmentation of the industry into geographical, industry and stage specialists was common (Blair, 1985, p.5), (Brophy, 1984, p6). Most of the new players, and many of the experienced venture capitalists as well, found that risks were greatly reduced when investments were concentrated in the later stages of investee development (Dizzard, 1982, p.108), (Juillard, 1987, p.31). Before the market collapse of 1987, those interviewed said, the trend in venture capital became one of leveraged buy outs (LBOs). That is still the investment of choice of the largest funds. Because the total available venture funds have increased dramatically in size ($U.S. 5 billion increase in 1987) and the majority of this increase (42%) has gone to the top twenty firms (Venture, 1988, p.36), there simply isn't the management time available to cater to multiple small investments. The LBO/venture business appears to be concentrated in the hands of bank-affiliated funds (Venture, 1988, p.36). Other new trends in the industry include an interest in
turnarounds and a move away from technology dominated ventures (Juilland, 1988, p. 31,32).

The Small Business Investment Act of 1958 (as amended) prescribes a minimum private capital size for SBICs of $U.S. 500,000 (Section 302 (a)). It prohibits investments in firms for relending or reinvesting, investments in another SBIC, real estate investments, foreign investment, investments contrary to the public interest, investment in passive businesses, or in associated suppliers (SBIC Act, 1977, Section 107.1001, p.60). There is also a prescribed minimum period of investment which, except in the case of "disadvantaged concerns" is five years (disadvantaged concerns, with SBA approval, may be financed for a minimum period of 30 months (NASBIC July 1980 p. 27 section 107.301). The Act provides for government loans up to 300% of private paid-in capital and surplus to a maximum of $U.S. 35,000,000 (Sec. 303 (b-2)) plus guarantees of up to 400% of private paid-in capital and surplus less preferred securities (Sec. 303 (c-2-iii). This means that an SBIC with the minimum paid in capital has the ability to leverage its operational funds to $U.S. 4 million.

2.2 Australia

Venture capital in Australia had little governmental support until 1983-84 and this support ended on June 31st, 1991. Private efforts to fund venture enterprises, prior to government intervention in 1984, consisted largely of joint ventures aimed
at the exploitation of natural resources. Several studies, private and public, concluded that there was a dearth of long term funding available to small business entrepreneurs (Wiltshire, 1973, Johns, 1976, Crawford, 1979, Myers, 1980, Campbell, 1981, Espie, 1983).

Recommendations to counter this problem varied from the laissez faire, let market forces operate, argument of the Campbell Committee to the (more common) one that some government incentive was necessary to stimulate venture capital investment. The argument for government intervention in the market place was based on the existence of inequities which already existed due to previous government regulations. Recognition of the difficulties faced by small businesses seeking capital for growth led to the formation, in 1959, of the Commonwealth Development Bank. The CDB was, by its original charter, limited in the sectors it could service and in the types of funds which it could make available to the borrower. In practise, the CDB became a lender of last resort for primary industry. Little else was done to change the forces operating against small business for over two decades.

The financial deregulation measures of the early 1980's removed many of the more onerous problems that had confronted those seeking long term capital for small business. The removal of Division 7, a regulation which required a minimum distribution of profits, allowed small firms to retain earnings for further development. Once the ceiling on interest rates for loans under $A100,000 was dropped, the financial community could raise rates to compensate for the risks they undertook when lending to
smaller concerns. Higher interest helped lenders offer more capital to small concerns but these rates were often considered unacceptable by entrepreneurs. More banking licenses (16 in 1983) were intended to create a more competitive financial community which would be more responsive to the needs of business, small and large (DITAC, 1987,p.6). While deregulation helped, it did not alleviate the entire problem, for the small business person's access to equity capital was still limited.

In 1983, the Espie Report, mentioned above, was "prepared by the High Technology Financing Committee of the Australian Academy of Technological Sciences for the Minister for Science and Technology". It was undertaken to determine the availability of finance, in Australia, for high technology development. The Espie Report recommended an American SBIC type structure to promote venture capital investment in Australia. It resulted in the 1983 Management Investment Company Act, creating tax incentives for those willing to invest in the new venture capital companies and, through them, in new and growing technological concerns. Venture Capital in Australia today has developed, largely, from this initiative. It is yet to be seen if the limited term of intervention undertaken has been sufficient to successfully "kick-start" the industry.

Starting activities at a later time than their U.S. counterparts, Australian venture capitalists, with lower capitalizations and different market conditions, have emphasized manufacturing capacity and, perhaps due to Management Investment Companies Licensing Board (MICLB) business eligibility requirements, export potential in their investees. The managers
of the venture funds replicate the new breed of venture capital management in the United States. Annual reports of MICs and non-MICs where available, were checked for the qualifications of the management teams. Most funds were dominated by those with accounting, commerce and business educations although most also included one or two people with engineering or science degrees (Various Annual Reports, 1986-1987).

While the MICs had been created to foster the development of new technological industries, they were also being closely monitored by their subscribers who hoped to replicate the capital gains returned by venture capitalists overseas. Many of these subscribers, and apparently some of the new venture capitalists, were unaware of, or at least impatient with the 7 to 10 year venture capital cycle. Because the MIC companies were founded during a bull market they made their investments in quality companies at a high cost. Some of these investments could be disposed of on the (also new) second boards quite early and for a profit. Those which required more husbanding were kept in portfolios for later sale. Meanwhile, market speculators recognized the popularity of technological companies and created their own "venture capital" firms or "cash box" companies. Speculators and venture capitalists, as mentioned before, differ markedly in the value added to their investees. The warning given in November of 1985, by Ralph Ward-Ambler (later chairman of the MICLB), was apt. He expressed concern that technology firms were being taken public too soon and said:
"Excess zeal and enthusiasm by brokers in listing developing companies with innovative technology, especially when it applies in a boom market, foreshadows to me one single word - bust...the public shareholders lose patience and the value of shares fall below par at a time when the business needs new funds" (Ansley, 1985, p.31)

Prophetic words when two years later the market collapsed. Portfolios needed to be revalued and capital was lost. The strain that this event placed on the embryonic Australian venture capital industry was revealed by a number of mergers between MICs and other venture funds. Others altered their focus, some, like BT adopting the profile of merchant banks (Roberts, 1988 p.8) and others, like SAMIC, abandoning venturing entirely (SAMIC telephone interview, 1989). Difficulties in raising capital and supporting those investees in their portfolios caused MIC fund managers and their supporters to call for an extension to the MIC program. The government, conceding the difficulties in the market, extended the program to June 31, 1991 (1988 Business Tax Reform, May 1988 Economic Statement).

The Australian Management Investment Companies Act of 1983 (as amended) prescribed a minimum paid in capital of $Aus. 5 million (Part III, section 20-3) before an applicant could be licensed as an MIC. This capital, and any additional capital raising approved through the Management Investment Companies Licensing Board, allowed the original subscriber a 100% tax concession (subject to clawbacks for disposal prior to four full years) in the year of investment (Sec. 77F Australian Federal Tax Reporter). No other financial assistance was provided by the government to MICs.
The MICs were subject to a number of guidelines outlined in the MIC Act and supervised by the MICLB. They were required to make investments in "eligible companies", each company's eligibility being individually approved by the MICLB. Eligibility incorporated a broad range of conditions. An eligible business had to be small, that is, having no more than 100 employees nor more than $A 6 million in net worth (part III, section 29-6c). It must have maintained its "principal business activities or research and development operations" in Australia (part III, section 29-6b) and, most importantly the primary activity of the business had to:

(i) utilize innovative technology;
(ii) be export oriented;
(iii) be internationally competitive;
(iv) have a potential for rapid growth (20% p.a. in the first three years from investment); and
(v) have the potential for creating significant skilled employment in Australia (part III, section 29-6f).

The MIC program, as mentioned, officially ended on the final day of June, 1991. No new incentive program has been instituted to replace this one. However, those companies in the MIC program at the end of its official life, continue to operate and the tax concessions granted to their subscribers have not been withdrawn.
Both the U.S. SBICs and the Australian MICs are governed by an outside body. The U.S. Small Business Administration has responsibilities beyond the control of SBICs while the MICLB existed solely to monitor and provide government input to the MICs. Perhaps it is for this reason that the MICLB appears to be more prescriptive where the SBA is proscriptive. Both SBICs and MICs are limited in terms of the holdings they may take in an investee (50% without further approval from the governing body)(MIC Act section 33-1, NASBIC July 1980 p. 27 section 107.301) and in the proportion of their capital which may be invested in any particular investee (20%)(MIC Act Section 34, SBIC Act Section 306-a). Both must make annual reports available to their respective governing bodies.

MICs and SBICs as well as private venture funds can adopt a number of legal structures from a private partnership to listed public companies. Some of these variations are due to regulatory conditions within countries (e.g. those regulations governing the operation of either SBICs or MICs) and others to the preferences of the venture capitalists. The legal structure chosen by the venture capitalist is very often determined by the needs of subscribers to the fund. These include the subscribers' tax positions and need for access to capital. Venture capital funds can be set up under federal or state government charters, as private or as public companies. Venture capital can be the sole activity of wealthy family concerns or one of a number of pursuits of a corporation. Trusts and partnerships have been created with venture capital aims in part or whole.
Government control over these funds varies depending upon their selected structure and ownership. The structures available in the U.S. and Australia are essentially the same with the exception of limited partnerships. There are currently suggestions in Australia that legislation allowing standardized limited partnerships be adopted in all states and territories as "the limited partnership structure is recognised internationally as one of the most appropriate structures for a venture capital business" (MICLB Annual Report 1988-89, p. 26). Currently Queensland, Tasmania, Western Australia and most recently, New South Wales, allow funds to adopt this legal structure (Anderson, 1991, p.41). There are, however, slight variations in the laws regarding the liability of limited partners and it is not clear that limited liability as applied in one state carries over into another state.

3. Venture Capital Investment Agreements

3.1 Data Collection

A loosely structured interview combined with a questionnaire was selected as the most appropriate method to gather the information required for this study. The questions asked of respondents fell into three general areas. Section I requested information about the respondent's venture capital firm. The second and third sections referred to specific investments. For
reasons of confidentiality no responses have been identified with particular investors.

Potential respondents in Australia were selected from a list of Australian venture capitalists, compiled by the Department of Industry Technology and Commerce. The list was supplemented through conversations with individual investors who could recommend other investors not previously noted. The total number of Australian venture capital practitioners found through these sources was forty-four. Because the number of practitioners was so small an attempt was made to contact all Australian venture capitalists for the study. Many had moved leaving no forwarding address, left the industry or made no investments to date. This reduced the list of potential respondents to twenty-three.

All twenty-three were interviewed and forty-three usable questionnaires were returned from thirteen funds. Smaller funds, managing less than $A 30 million predominate but two sets of responses came from venture capitalists working in funds from the opposite end of the scale, from groups having over $A 100 million in capital under management. Different respondents worked in a range of positions for statutory authorities, for listed companies, for merchant banks and for privately held funds.

Due to the difficulties presented by the size and distribution of venture capitalists in the United States, a smaller percentage of venture capitalists were sampled there than in Australia. Most researchers place the number of active venture capitalists in the U.S. today at over 600. Personal
interviews with all or with a random sample of all American venture capitalists was not feasible given the limitations of time and finance imposed by external constraints.

Instead, a random sample from three cities, in the most active venture capital regions of the country, were selected. Thirty-five interviews were conducted and seventy-seven questionnaires were completed and returned in usable form from fifteen venture capitalists. The respondents were from San Francisco, Chicago and Boston. The capital under management was relatively evenly distributed between small (6 under $U.S. 30 million) medium (4 between $U.S.30-60 million) and large funds (5 with more than $U.S. 100 million). The majority of American venture capital funds, in this sample, were private limited partnerships.

3.2 Investee Stages of Development

The degree of risk associated with individual venture capital investments varies depending upon the stage of development reached by the investee. Normally the greatest risk is associated with the least developed venture while the least risk is associated with the most developed investee (Callinan, 1985, p.23), (Wan, 1986, p.233 [from Ratnatunga]). Because of this, ISD has been used as a proxy for risk. The earlier stages of investment were expected to use risk reducing senior securities while later ISDs (up to the mezzanine level) would use equity
whenever possible. LBOs by definition, however, would be expected to use debt.

Table 1 shows the significant coefficients for correlations between securities and ISD. Spearman's rank correlations confirm that the ISD has a significant impact on the selection of debt and equity securities in both Australia and America. In both cases, debt is used at later stages of development and equity used at earlier stages of development. Australian equity investment at the early stages of an investee's development tends to be made up of a combination of founder's (deferred) shares and preferred stock while the American investors, using a small proportion of founder's shares, rely on common and preferred stock.

A distinction can be made in the kinds of equity issues used in the two countries. American venture capitalists rely on hybrids and common stock at the earliest ISDs while the Australians make almost no use of hybrid securities. The most common of the hybrid issues taken up by American investors appears to be the warrant. Warrants are purchased documents entitling the holder to be issued with shares (usually common shares) by a particular date or upon the occurrence of a previously specified event. The fact that the National Companies Securities Commission, NCSC, (now the Australian Securities Commission, ASC) limits the use of warrants to non-corporate ventures would act as a constraint on the use of warrants in Australia. It would be expected, therefore, that Australian venture capitalists would use options or performance covenants in place of this security. They do have a higher proportion of
pure equity, than do the Americans in their early stage investments (over 99% compared to 58% at the seed level).

Investee stages of development have been categorized into six classes: seed, start-up, early expansion, late expansion, mezzanine, and LBO/MBO. These were considered to make up a rank ordering used for the correlations in this study (see appendix A).

Table 1: Spearman's Correlations of ISD with Securities

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<tr>
<td></td>
<td>(n=77)</td>
<td>(n=43)</td>
</tr>
<tr>
<td>Debt</td>
<td>.5281*</td>
<td>.4726*</td>
</tr>
<tr>
<td>Equity</td>
<td>-.1401</td>
<td>-.2793*</td>
</tr>
<tr>
<td>Preferred Stock</td>
<td>-.2335*</td>
<td>-.3235*</td>
</tr>
<tr>
<td>Common Stock</td>
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<tr>
<td>Founder's Shares</td>
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<tr>
<td>Hybrids</td>
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<td>.2036</td>
</tr>
<tr>
<td>Warrants</td>
<td>-.7722*</td>
<td>n/a</td>
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* significant to a 5% level

The minimal use of defensive securities at the seed stage in Australian investment agreements is curious. Out of seven (7) seed investments, six (6) used 100% equity and one used 95% equity and 5% options. Discussions with venture capitalists in Australia confirmed their propensity to use common or founder's shares for investments at this level. They stated that ventures at this stage had no basis for supporting any other form of security, ie the investor would simply have to take identical risks to the entrepreneur.

American investors, by contrast, make use of a far larger variety of securities including a large proportion of hybrids
and preference shares containing voting and participating provisions. This difference provides the American investors with a legal position senior to that of the investee, diminishing downside risk considerably. At the same time, convertible debentures and participating preference shares provide the investor with access to profits when/if they occur.

There is no provision in the Australian legal code preventing investors from taking similar defensive positions in their investees. While cumulative redeemable preference shares are treated as debt for tax purposes, participating and voting preference shares would be treated as equity. Although convertible debentures result in taxable income (through interest received) they do have the advantage of decreasing downside risk.

Despite the restrictions on the use of warrants in Australia, at least one investor found the substitution of options a reasonable alternative. It is not clear, from the information given thus far, why Australian investors feel they must take equal risk with their investees.

Explanatory variables associated with the venture capital funds include those which are indicative of size (total capital), variables giving some information on experience (venture capital experience of management and fund age) as well as those which provide information on the usual and actual capital investment outlay. The last investor variable 'year of investment' was included at the suggestion of an Australian venture capitalist who believed market conditions affected the types of investments made by venture capitalists.
Additional explanatory variables are associated with the investee. These include variables associated with the size of the investee (value and number of people employed) and with the age of the investee. The final two variables, equity holders and creditors were ranked according to the professionalism of these external holders of securities in the investee firm at the time the investment took place. Not all investees had either outside equity holders or creditors at the time of the investment. Since the data held no more than rank information, Spearman's correlations were used. The results are presented in Table 2.

Table 2: Spearman's Correlations of ISD and Explanatory Variables

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<th></th>
<th>US coeff.</th>
<th>Aust coeff.</th>
<th>n=77</th>
<th>n=43</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investor Fund Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>age of investment fund</td>
<td>-.1461</td>
<td>.4068*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>experience of management</td>
<td>-.2117*</td>
<td>.4129*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>total capital under management</td>
<td>.3623*</td>
<td>.3846*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>usual size of capital investment</td>
<td>.4333*</td>
<td>.0368</td>
<td></td>
<td></td>
</tr>
<tr>
<td>actual capital outlay</td>
<td>.4570*</td>
<td>.3360*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>actual year of investment</td>
<td>.2464*</td>
<td>.0888</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Investee Firm Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of people employed</td>
<td>.6662*</td>
<td>.6781*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>value at time of investment</td>
<td>.5226*</td>
<td>.2897*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>age of investee firm</td>
<td>.5589*</td>
<td>.6588*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>professionalism of creditors</td>
<td>.4426*</td>
<td>.2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>professionalism of external owners</td>
<td>.4366*</td>
<td>.0917</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant to a 5% level

Investor experience is significantly and negatively correlated with the ISD in both Australia and in America. The negative correlation means that more experienced investors in each country make up the majority of those who invest in earlier ISDs. Given both the higher level of risk associated with seed stage investment and the potentially higher level of returns, it
follows that experienced investors are needed to successfully control investment risk at this stage.

Total capital was another variable significantly correlated with ISD in each country. Larger funds, as measured by the total capital under management, preferred later stage investments. If one assumes that less capital is required in early stage investments than in later stage investments, then this outcome is logical. Looking at the significant correlation coefficients for the usual size of investments, outlay and value of the investee, this assumption appears to be confirmed. The usual investment size in America, and the value and outlay in both countries are all positively correlated with ISD.

Noticeably the age of the venture fund is significant in Australia where all venture funds are relatively young. Here, those who have been in business longer make significantly more investments in later ISDs. The predominance, in this sample, of MIC funds whose performance was being closely monitored by the MICLB and the public may account for this emphasis on later stage investments. It would be reasonable to assume that the later the ISD at the time of investment the sooner investors can divest themselves. Early divestment means that returns on the investment may be reported earlier thus satisfying those monitoring the performance of the fund. Additionally, as explained by one Australian venture capitalist interviewed in the course of this research (1991), returns in the later stages may be smaller but they are also more predictable. If subscribers are going to be kept in the fold in order to sustain second and third round investments, they must be shown results.
The age of the investee or the number of years the investee had been in operation at the time of the investment was significantly and positively correlated with ISD in both countries. Growth coincides with age in a logical progression with one exception. American ventures receiving mezzanine funding in preparation for a public offering had a mean age of two years, close to the mean age of many start-ups. Because there were only two mezzanine funding cases in the American sample, compared to an average of seventeen cases in each of the earlier ISDs, little weight has been attached to this result. The age of Australian mezzanine funded ventures, by contrast, continued to fit into the expected pattern of higher ISDs being associated with older investee firms.

Another investor variable considered was the year of the investment. The year of the investment would not have been expected to be significant in Australia as the number of years of investment have been limited. The significance in America reflects the trend toward later stage investment in more recent years, which has already been discussed.

Investee variables that were significantly associated with ISD include the professionalism of a) creditors and b) equity owners. The fact that creditors and external owners have been increasingly professional (moving from family and friends to institutional involvement) is, again, a logical association with ISD. As an investee firm's capacity to attract professional investors increases, so does its likelihood of turning to these sources for funds.
It would follow that as the ISD increases the need for venture capital and the assistance that venture capitalists can provide would decrease. This assertion is supported by the American cases but not by the Australian ones. Assistance provided to investees, in America, is significantly and negatively correlated with outlay while outlay is significantly and positively correlated with ISD. That is, American investors provide considerably more assistance to investees in the early stages rather than in the later stages.

In Australia, by contrast, the assistance provided is positively correlated with outlay and outlay is positively correlated with ISD. That is, the Australian managers provide more assistance at the later ISDs where, presumably, the Americans find it is needed less. Australian venture capitalists have their greatest outlay at the mezzanine level and it is this level that is significantly associated with the provision of assistance by investors.

3.3 Analysis of Securities used in Contracts

Securities were recorded as a percentage of the investment made using each particular category of securities (loans, convertible debt, preference shares, common shares, founder's shares, options and warrants). For example, an investment in a particular investee may have been made using 50% debt and 50% common shares with no part of the investment relying on hybrid
security instruments. Different forms of securities used are described in Appendix B.

Attitudes towards particular security variables differ between Australia and America. For example, redeemable preference shares are considered equivalent to debt in Australia and treated similarly for tax purposes. This is not true in America where redeemable preference shares are considered equity. To make the securities selected reflect equivalencies in both countries, some correlations were assessed using a simpler set of securities. This set was comprised of debt, hybrid and equity securities with preference shares distributed among the three categories depending upon its characteristics. That is, if the preference shares were both cumulative and redeemable but not voting or participating, they were considered debt. When preference shares included voting rights or participation but were not redeemable, they were equity. Preference shares combining elements of both debt and equity were classified as hybrids.

Table 3 shows that, as hypothesized, ISD has a significant correlation with the choice of security used in Australia. A discussion of this correlation was included in section 3.2, based upon Table 2. Value is the only other investee variable associated with the selection of securities in Australia. That lower investee values are correlated with the use of common stock is a result of the fact that the small value investee does not have the asset base to support debt, nor can it reap the tax benefits on interest payments available to the larger, more profitable investee. Additionally, the capital at risk in a
small investment is minimal while the potential for returns are
greater, in the successful venture, if the investor is
participating on an equal basis in the division of profits.
Finally, any entrepreneur who can support debt will usually
prefer that form of financing to giving up more ownership (and
control) in the venture.

Note the positive correlation between common shares and
investor ownership in the investee. Common stock, like
founder's shares, puts the investor in a position equal to the
other holders of this equity. (This is a simplification that
does not apply when various classes of common stock are
utilized). It is understandable that ownership would increase
with the use of common stock. When an investor's and investee's
rights are equivalent, the entrepreneur is less likely to oppose
a dilution of ownership than would be the case if the investor
took out senior securities.

Table 3: Individual Securities and Explanatory
Variables- Australia (All significant at 5%)

| Loans:                                      | Investee stage of development | .4726 |
|                                            | Grouped ISD (early, middle, late) | .5975 |
|                                            | Number employed in venture fund | .5023 |
|                                            | Year the investment took place   | .6089 |
|                                            | Assistance provided to investee  | -.4196|
| Preference Stock:                          | Number employed by investor     | .7515 |
| Common Stock:                              | Age of venture fund             | .2469 |
|                                            | Ownership % taken by investor   | .3572 |
|                                            | Year investment took place       | -.3959|
|                                            | Value of investee               | -.3432|
|                                            | Similarity of perceptions       | -.5425|
| Founder's Shares:                          | Investee stage of development   | -.7515|
|                                            | Grouped ISD                     | -.7515|

No significant correlations with Options, Warrants or
Convertible Debt and any Explanatory Variables
The remaining variables significantly correlated with the use of securities in Australia tend to be associated with the funding agency, not the investee. Larger funds, whether classified as large in terms of capital or number of people employed, prefer the use of debt to equity. They act, in fact, like mini merchant banks seeking opportunities for takeovers, acquisitions and LBOs rather than initiating new economic opportunities. Their returns come not from the increased value of the investee but from interest payments. Debt requires less overseeing, less assistance to the investee and is the logical instrument of choice for those with traditional financial and accounting training.

This emphasis on debt is not surprising given the period in which most of the funding reported in this research was provided. The Australian investments took place between 1984 and 1988, about half before October 1987 and half thereafter. The earlier investment years included more equity investments (common stock) in the investors portfolios, the later years more loans. The obvious association with market performance cannot be ignored as an influential factor in the choice of these securities. The correlation, in Australia, of common stock with a venture fund's age is probably related to this same phenomena. As venture capital started up in this country, equity positions were common. As the market collapsed equity positions were less common. Consequently, older funds are more often associated with equity than are younger funds.
One other set of significant correlations deals with the similarity of the investor and investee's perceptions of the future for the venture. When these perceptions are closely related the investor is likely to use common stock. When the obverse holds and perceptions for the future differ, the investment is more often in the form of debt.

Table 4 is the American equivalent of that just discussed. The use of securities for venture capital investments in the United States is quite different from the use of these securities in Australia although some similarities do exist. These include a positive correlation between ISD and debt and a negative correlation between ISD and hybrids (-.3524 in Australia and -.6231 in America). The hybrids used to finance early stage investments in the U.S. and in Australia are, however, different. American hybrids associated with early stage or small investees (in value or in number employed) are warrants while Australian hybrids were dominated by redefined preference shares.

Common stock was also correlated with early stage investments, however, when securities were grouped as debt, hybrids or equity, this particular equity correlation was not significant. Discussions with American venture capitalists led to the belief that common stock was usually coupled with another security in early stage investments. Because common stock allows the investor to participate in potential profits, the reasons for its use in the early ISDs are the same in America as in Australia.
### Table 4: Individual Securities and Explanatory Variables—United States of America

<table>
<thead>
<tr>
<th>Securities</th>
<th>Explanatory Variables</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans: grouped ISD</td>
<td>(early, middle, late)</td>
<td>.5809</td>
</tr>
<tr>
<td></td>
<td>year the investment took place</td>
<td>.6174</td>
</tr>
<tr>
<td></td>
<td>professionalism of external owners</td>
<td>-1.0000</td>
</tr>
<tr>
<td>Convertible Debentures:</td>
<td># employed by investor</td>
<td>.6124</td>
</tr>
<tr>
<td></td>
<td># of other investments</td>
<td>-.6644</td>
</tr>
<tr>
<td></td>
<td>age of investor</td>
<td>-.7116</td>
</tr>
<tr>
<td></td>
<td>value of investee</td>
<td>-.1969</td>
</tr>
<tr>
<td>Preference Stock:</td>
<td>professionalism of external owners</td>
<td>.3096</td>
</tr>
<tr>
<td></td>
<td>% of investee owned by investor</td>
<td>-.4455</td>
</tr>
<tr>
<td></td>
<td>$ outlay on this investment</td>
<td>-.2590</td>
</tr>
<tr>
<td>Common Stock:</td>
<td>investee stage of development</td>
<td>-.5698</td>
</tr>
<tr>
<td></td>
<td>grouped ISD (early, middle, late)</td>
<td>-.4933</td>
</tr>
<tr>
<td></td>
<td>% of investee owned by investor</td>
<td>-.5654</td>
</tr>
<tr>
<td></td>
<td>year the investment took place</td>
<td>-.5451</td>
</tr>
<tr>
<td>Warrants:</td>
<td># of investments in v.c. portfolio</td>
<td>.6181</td>
</tr>
<tr>
<td></td>
<td>age of investor fund</td>
<td>.5815</td>
</tr>
<tr>
<td></td>
<td>investee stage of development (ISD)</td>
<td>-.7722</td>
</tr>
<tr>
<td></td>
<td>grouped ISD (early, middle, late)</td>
<td>-.7372</td>
</tr>
<tr>
<td></td>
<td>$ outlay on this investment</td>
<td>-.8442</td>
</tr>
<tr>
<td></td>
<td>value of investee at time of investment</td>
<td>-.6348</td>
</tr>
<tr>
<td></td>
<td>age of investee firm</td>
<td>-.5766</td>
</tr>
<tr>
<td></td>
<td># employed by investee</td>
<td>-.8203</td>
</tr>
<tr>
<td>Options: 3 cases</td>
<td>only, positive correlations with age of investor, and #</td>
<td></td>
</tr>
<tr>
<td></td>
<td>employed in venture fund</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negative correlations with outlay, # of investments, total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>capital under management, experience of management, and the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>usual size of the investment</td>
<td></td>
</tr>
<tr>
<td>Founder's Shares:</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

All variables shown are sig to 5%

Some distinctions between investee value and size turn up in the American data that were not revealed in the Australian cases. For example age, number of investee employees and the value of the investee are all significantly correlated with the use of hybrid securities (convertible debentures, warrants and options).

One other investee related explanatory variable, positively correlated with the use of equity (specifically with preference
shares) is the professionalism of external shareholders at the time of the investment. Venture capitalists prefer investments where external shareholders are few in number or non-existent. It is easier to negotiate with the principals of a venture if they are the only other parties to the contract. When external shareholders do exist, and lack professionalism, the venture capitalist is happier leaving the risk in the hands of current owners. That is, they use debt. Where an investment is made in an investee having more professional external shareholders those shareholders will usually require the investor to take an equity position. In this case the venture capitalist obviously prefers senior securities and opts for preference shares.

American investors seek far more security in their investments than do Australian investors. Probably the most common form of ownership is taken through debt plus warrants. That is, an investment through warrants represents ownership to the investor even when not yet exercised. Additionally, investors feel that a debt position can be foreclosed if payments from the investee are not forthcoming. This too, then, represents potential ownership (interview 1991) and partially explains the negative correlation between ownership and equity, a correlation which is the inverse of the Australian position.

Younger American venture funds prefer to use convertible debt in their investment structure while the older funds tend to use warrants. Little difference exists between these instruments as both allow for potential ownership in the investee. It does show a contrast with the Australian funds where few hybrid securities are used at all.
When an American venture fund has made a large number of investments it is likely to be using hybrids (convertible debentures and warrants) in the investment structure. It is also likely to provide more assistance to these investees. Although this statistic does not show in table 4, a positive correlation does exist between equity and assistance in the USA. Equity positions, not being as secure as debt or hybrid positions, make the investor take a closer interest in the management decisions of the investee. A consequence of the fact that the investors' only potential return, as a shareholder, is through the growth and profitability of the enterprise.

The association between the year an investment took place and the use of debt that existed in the Australian sample also exists in the American one. Despite the greater number of years covered by the cases in the American sample, representing investments made between 1974 and 1989, the American investors are subjected to very similar market cycles. The influence of regulations governing capital gains taxes and pension fund participation in venture capital (ERISA), would have had some effect on investor's selection of securities.

Prior to 1978, when capital gains stood at 50%, investors would have preferred returns in the form of income (therefore using debt). After 1978, especially after ERISA passed in 1980, there would have been a shift toward equity investment. Another downturn would have occurred in the middle 80's when investor confidence in the high technology market was shaken. This downturn would, however, have been brief as the bull market picked up force prior to October 1987. Again, the shift toward
later stage investment would also be reflected in the greater use of debt securities.

A comparison of the use of securities for venture capital investment in Australia and the United States is revealing. The hypothesis upon which this research was based, that securities and covenants are used to reduce the risk of the investment (with risk revealed by the proxy ISD) is supported in America but not in Australia. This support, however, requires a deeper understanding of the way in which these securities are used than is given by a simple ranking of their seniority. Investors in both countries tended to use debt with later stage investments and hybrid instruments in earlier stages. Hybrids, especially as used in America, allow the investor the security of debt in the early stages of the investment with the possibility of ownership when/if the investee succeeds. Australian investors' use of hybrids is limited to preference shares that have characteristics of both debt and equity. Preference shares, having less seniority, are not as risk free as the American use of warrants, options and convertible debt. Even more damaging to the hypothesis, in Australia is the emphasis on Founder's shares for early ISDs.

The experience of investors has a high correlation with their use of hybrid instruments in the United States. Those investors who survive the current shake-out of venture capitalists in Australia will probably, given time, learn to use these same instruments. The emphasis, especially in Australia, on debt is related to the year of investment. Venture capital, here, began in a bull market but quickly entered lean bear
years. The need to conserve capital for investees already in portfolios and to have income to support these enterprises would have led to a reliance on debt as an investment strategy.

4.0 Conclusions

4.1 Risk Controlling Strategies

The risks in venture capital investing can be considered at three levels: subscriber's risk, investor's risk, and entrepreneur's risk. The contracts considered in this study are between the latter two parties, investors and investees. Entrepreneurial risk consists of the loss of control over their venture. Once an outside investor has become involved in the venture the entrepreneur is no longer self-employed but works for the owners of the venture. This loss of control is the major factor considered by most entrepreneurs when seeking venture capital funding. Entrepreneurial control can be maintained through debt funding, which is difficult for early stage ventures to support or through covenants (studied in Cornelius, PhD, 1992). Business risk has already been accepted by the entrepreneur before the venture capitalist is approached.

Successful venture capitalists in the United States have tended to diminish their risk by having specialized technical knowledge in the field of investment and by assisting the entrepreneur by drawing on their own business experience. Australian investors, by contrast, have attempted to take a
portfolio approach to their investments and to diminish the risk of this portfolio by adopting less risky, debt strategies.

With the American approach, investment protection is derived, in the early stages, through hybrid instruments which allow the investor to participate in the (potential) profits while minimizing losses. Australian investors have not made adequate use of hybrids in the early investment stages and consequently, have found these investments too risky.

However, the insurance provided by debt is not totally efficacious. In the final analysis, a successful company will provide rewards to investors while an unsuccessful company may have so little of value remaining to be distributed when it is wound up that the additional protection offered by debt is essentially worthless (RGE Smith 1984, p.151).

4.2 Comparative Overview of the American and Australian Venture Capital Industries

Venture capital in the United States has been established after continued long term support from government and from subscribers to investment funds. Government support has not consisted solely of grants and loans to SBICs. There has been an effort to foster a regulatory environment that encourages venture investments, an environment entirely absent in Australia. Additionally, most state governments have encouraged and supported a variety of venture initiatives. Australian government support for this industry has been extremely limited. The few state governments
that attempted to foster venture capital in Australia lost capital in the early years and quit.

The fact that the American venture industry has been established for forty-five years, has resulted in an implicit understanding, of the trade-offs between investors and entrepreneurs, that doesn't yet exist in Australia. Subscribers to investment funds and investors themselves, in Australia, tend to be impatient for returns on their capital. Entrepreneurs are reluctant to have their ownership diluted or to reveal, to potential investors, the proprietary aspects of the enterprise that make investment worthwhile.

Patient investors of capital and encouragement in the regulatory environment have created, in America, a large number of venture funds capable of filling a broad spectrum of needs. Subscribers can select a portfolio of investment opportunities within the venture capital industry while allowing the venture capitalists to specialize in their investee preferences. There appears to be neither patience nor regulatory encouragement for venture capital in Australia. The embryonic industry is small, providing limited opportunities for investors to diversify. As a result, the industry players attempt to invest in safer, later stage ventures, diversifying their investments through multiple industries. This means that the venture capitalists cannot adequately satisfy the needs of all entrepreneurs, especially those in seed and start-up stages where the support is most needed.
4.3 Implications and Future Directions for the Australian Industry

Few participants in the Australian venture capital industry perceive the government's efforts to date as successful. Most early entrants under the MIC scheme have dropped out, subscribers are withholding new capital investments and the Australian government has abandoned the program. Entrepreneurs still feel that there is a dearth of equity investors. Part of this problem arose from the manner in which the American SBIC program was adapted for the Australian environment.

Management Investment Company subscribers were encouraged to make their investments through a 100% tax concession provided they kept their capital in the chosen company for four years. Four years, in venture capital, is a medium term investment. The concession, therefore, designed to encourage investments in early stage ventures (which are long term investments) only provided medium term funding.

Capital, after four years of the program (1984-1987) was suddenly very difficult to raise. Because of their timing in the market, venture capitalists paid high prices for their early investments, which then needed to be nurtured through tough economic times. In order to provide second and third rounds of financing to investees already in their portfolios, investors could not take on new risky investments.

What was, and is, needed was a means by which capital could be raised for the long term and drawn down as required. The most common method of achieving this, in the United States,
is through limited liability term partnerships. The partnerships usually have a life of ten years with three draw downs of 40%, 30% and 30% of subscribed capital. Because the funds are limited liability partnerships, losses as well as gains are passed on to subscribers for tax purposes. Most states in Australia, Victoria, the ACT and the Northern Territories excepted, have legalized some form of limited liability partnership. These partnerships need to be legitimized across all stages and in a uniform way.

Venture capitalists have suggested tax exemptions on the sale of founder's shares which would allow both investors and entrepreneurs to re-invest in risky enterprises. The same purpose could be accomplished through specified tax roll-overs, where capital gains that are re-invested in the industry do not attract taxation. It has been suggested that the entrepreneurs who are good at starting ventures cannot get out of successful enterprises to enter new ones because they, also, cannot roll-over their capital gains.

The concept winning the most support from the federal government at the moment appears to be the idea of a "fund of funds". This would consist of one large fund capable of diversifying investments across many industries and stages of development. This diversified fund would, it is assumed, be capable of attracting capital from superannuation funds. The problems of a single large fund have been specified in the Espie Report (1983 p.48-49) and won't be reiterated here.

Even if such a large diversified "fund of funds" received matching capital from the government for all private investments
(as has been suggested) superannuation funds are unlikely to invest until the fund has a proven track record. Size alone does not guarantee successful diversification among a number of early stage opportunities. In fact, as this study shows, venture funds managing large amounts of capital tend to invest in later stage, lower return ventures. It is imperative to the success of venture capital that those who are managing the funds receive their rewards in direct proportion to the successes and failures that arise from their management strategies.

The Federal Government is still interested in finding a way to support the venture capital industry in Australia. A suggestion, drawn from the State of Michigan, is offered here. As with the fund of funds, this proposal would require direct government investment matching the investments of the private sector. The investments would be made, however, in selected small, limited partnerships. A maximum size could be in a range between $A 5-10 million. Government equity would be put in place only when the venture fund's management had subscriptions for half the equity from private sources. The incentive, for private subscribers, would be a cap on the government's equity returns at a rate comparable to bond rates. Any profits beyond this level, at the end of the term of the partnership, would be distributed on a pro-rata basis to private subscribers. The potential for much higher returns than would normally be available could make superannuation fund managers and private investors find it prudent to put a minimal proportion of their investments in venture capital.
Appendix - Definitions

A. Investee Stages of Development (ISD)

Seed Stage (research and planning): businesses which are still not off the ground and have yet to complete prototypes, or businesses which are start-ups trying to capture their first market share.

Start-up Stage (market entry): a new or recently incorporated business. While the management team is incomplete there may be a few employees, usually part time helpers. It is unlikely that any profit levels will have been established as the start-up business is often running on owners equity although a few businesses at this stage will be breaking even. Invested capital is used for completing the management team, for establishing a facility, for marketing and establishing controls.

Early Expansion Stage (market development): a business which is already operational and now ready to expand either into new regional or product markets.

Late Expansion Stage (market exploitation): an established business in need of working capital for increased plant/equipment/labour to meet the needs of growth.

Mezzanine funding (preparation for IPO): funding for legal and accounting/auditing needs prior to making an initial public offering in the public markets.

Leveraged Buy Outs and Turnarounds (self explanatory): a transfer of control to new shareholders, usually with new management (an MBO retains the current management).

B. Securities

Loans/notes: a debt instrument usually secured by pledged assets (usually a floating charge over all assets) of the investee. This debt can be subordinated to other lenders in order to give the investee access to bank loans. Bank loans tend to be secured by the investee's liquid assets. Loan or note holders do not participate in the profits of the company. Instead, they rely on the security and guaranteed yield provided by interest payments. Not all loans/notes are secured but, whether secured or not, all will include contractual covenants restricting some of the investee management's activities and prescribing other activities.

Convertible debentures: a hybrid security combining elements of debt and equity. Convertible debentures begin as debt with the holder receiving regular interest payments and being protected from downside risk. The debt may be subordinated to ordinary debenture holders in which case the holder of the convertible has second call on assets. Should the investee do well, the holder of the convertible debenture converts the debt into
common shares, usually without additional expenditure, and can participate in the investee's profits (Smith and Warner, 1979, p. 140). The security is useful for the issuer provided there are established tax earnings to be set off against interest payments. This, according to Chen and Kensinger (1988, p.36) is unlikely in the earlier stages of an investee's development.

Preference shares: senior equity or ownership rights in a company, junior to debt. The rights of preference share holders are delineated in the articles of association (Australia) or the certificate of incorporation (U.S.A.). Preference share holders in listed public companies usually have restricted voting rights and limited participation in the profits of the company (over their right to dividends). Venture capital preference shareholders usually have a broader range of assigned rights, depending upon the type of preference share held. The most common stipulations in preference share issues concern voting rights, redeemability, convertibility and the cumulative or non cumulative nature of unpaid dividends. Dividends can be either fixed or adjustable. When adjustable the rates are usually tied to government bond rates.

Common shares: ownership in a venture on an equal basis with other owners. That is, the common share holders have the right to vote on issues affecting the company, including the selection of a board of directors which is then responsible for the management of the company. Common share-holders, at the discretion of the board, have rights to dividends declared out of company profits after those dividends owed to preference share-holders have been paid. Common shares are subordinate to all other classes of securities except for deferred or founder's shares. To maintain voting control in the hands of a particular group of shareholders some firms issue different classes of common stock. The rights attached to the various classes of common stock are set out in the certificate of incorporation. The owners of the company (common share holders) maintain a right to the residual value of the company upon dissolution.

Founder's shares: the most junior of securities with a limited right to dividends. Another name for founder's shares is deferred shares indicating that these shares may participate in profits only after common shareholders have been compensated. Founder's shares are generally issued to the founder's of a venture in lieu of monetary considerations. When used at the mezzanine stage the founder(s) signal to the investing public their belief in the future of the venture (VHNW, 1985, p.709)

Warrants: a right to purchase stock at a predetermined price within a specified period of time or given the occurrence of a specified event(s). Warrants are usually attached to debt securities as "equity sweeteners", and as such, are purchased. They give the debt an aspect of convertible debt. But unlike convertible debt, the warrant is usually separable from debt and can be traded. Warrants represent potential equity and are not equity instruments in themselves. The issue of warrants, in
Australia, was limited by the NCSC (now the ASC) to non corporate ventures (NCSC regulation CA s 115).

Options: rights to purchase stock at a pre-determined price within a specified period of time. Options, in venture capital, are usually provided without fee. They are used as a reward for particular accomplishments. There is no significant difference, to the holder, between a call option and a warrant. However, the issuing firm is faced with one significant difference. "When a warrant is exercised, a firm must issue new shares of stock. Each time a warrant is exercised, then, the number of shares outstanding increases"(Ross, Westerfield and Jaffe, 1990, p.600).
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