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THE VENTURE CAPITAL MARKET IN CANADA

An Analysis of Recent Venture Capital Activity

March 31, 1993

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Department of Finance

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THE VENTURE CAPITAL MARKET IN CANADA

An Analysis of Recent Venture Capital Activity

I. Introduction

The venture capital market in Canada has been in a state of some flux in recent years. The rapid growth which occurred in the mid-1980s flattened abruptly in the latter part of the 1980s and industry indicators have stayed fairly flat since that time. The structure on the supply side has changed quite dramatically in recent years as institutional investors, (traditionally a key source of capital for venture investors) have cooled on the asset class, and individuals, responding to tax incentives, have stepped in to take their place.

Venture investment activity peaked at just over \$350 million in 1988, fell to \$270 million in 1990 and showed some signs of recovery by reaching \$308 million in 1992. However, a more detailed look at the 1992 data suggests that the apparent recovery has been driven by a handful of very large deals.

Finally, on the exit side, Canadian venture investors liquidated a total of 42 investments in 1992, including write-offs, and registered a gain of 1.63 times the cost of their investments overall. Private venture funds and crown investors together accounted for more than 80% of the dispositions.

This report analyses recent trends in the Canadian venture capital market, looking specifically at the supply of capital, at the investment activity of venture investors, and at their dispositions. The goal is to provide a sufficiently detailed understanding of the market trends to properly support government policy making. The key observations arising from the analysis are documented in the body of the report, but detailed tables can be found in the Appendix.

II. The Supply of Capital

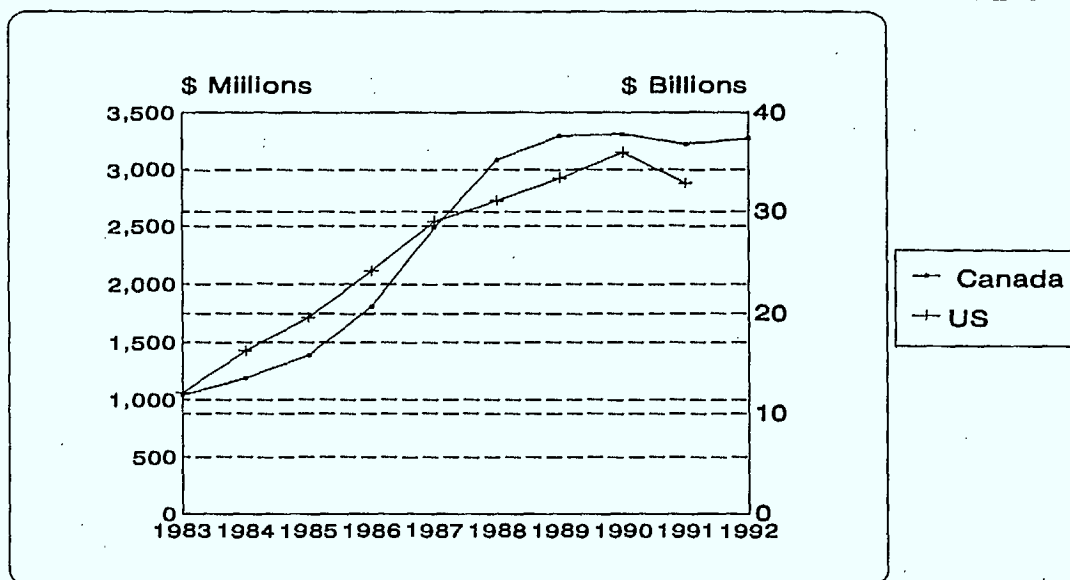
2.1 Capital Under Management Has Not Grown

At the end of 1992, the Canadian venture capital industry had almost \$3.3 billion of capital under management¹. Total capital under management represents all capital formally committed to venture capital funds, including capital that these venture firms have already invested in their portfolio companies and which they are still actively managing. It is important to note that while the amount of capital under management is an important indicator of the size of the industry, it does not, in and of itself, provide any indication of the amount of capital available for investment.

As figure 1 clearly indicates, the industry's aggregate resources have been relatively flat since 1988. In the four years prior to 1988, total resources increased by 250%; in the four years following, the increase plummeted to a meager 6%. This trend was not significantly different from that experienced in the US. over the same period.

FIGURE 1

Industry's Resources Stay Flat Capital Under Management, 1983-1992



Source: Macdonald & Associates

Although there has been little change on the surface with respect to the industry's resources, capital has in fact been moving in and out of the industry during this period. Some venture funds

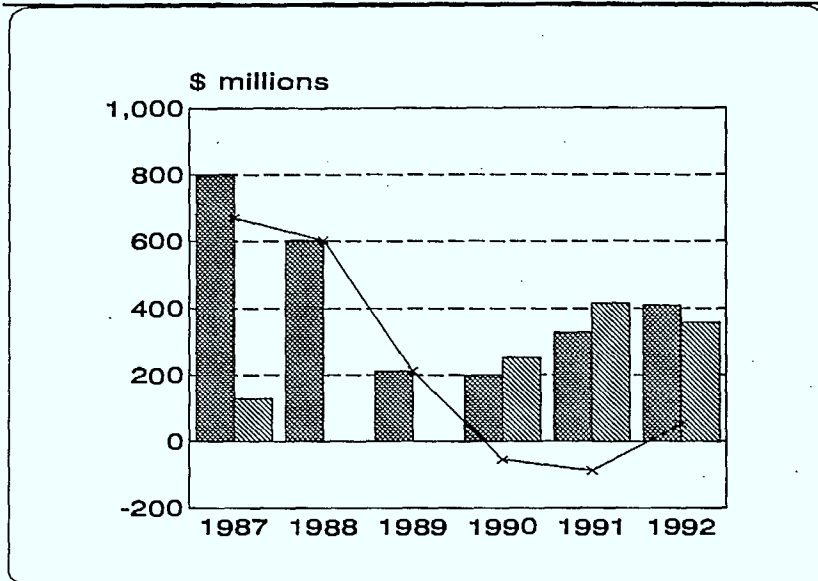
¹ Since three of the labour sponsored venture funds, including Working Ventures, The Crocus Fund, and The Working Opportunity Fund raise the bulk of their funds during the RRSP season, their capital is measured as of the end of February. Solidarité, which raises much of its capital through payroll deductions, is measured on a calendar year basis for the purposes of our database.

that were formed in the early 1980s are maturing now, distributing capital back to the investors, which results in capital leaving the industry. Several other groups, particularly those with corporate affiliations, have ceased operations altogether, taking more capital out of the system.

At the same time, over the past five years, other venture groups have been successful in their efforts to raise new capital, thereby augmenting the industry's resources, as evidenced by figure 2. In 1987 and 1988, Canadian venture investors together brought significant amounts of new capital into the industry, resulting in a healthy net increase in the amount of capital under management. However, by 1989, many institutional investors were stepping to the sidelines and not making any new commitments. As a result, the amount of new capital raised fell sharply, and by 1990 was not sufficient to offset the capital leaving the industry. As a result, there was a net outflow of capital in 1990 and 1991.

FIGURE 2

New Capital Offset by Capital Leaving Industry



Source: Macdonald & Associates

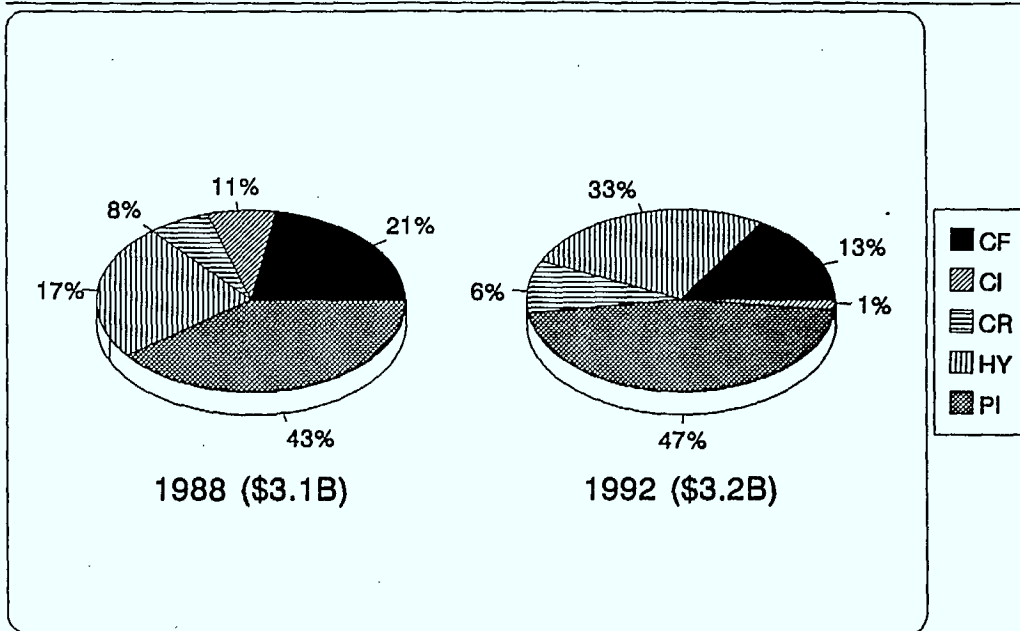
This downward trend started to reverse itself in 1992, with a net increase in capital under management of \$52 million. Although the \$409 million of new capital committed to the venture capital industry last year was only 50% of the new capital raised in 1987, it represented a 20% increase from 1991 and a 100% increase from 1990.

2.2 The Structure of the Supply - Who's Managing the Money?

Although the total amount of capital under management did not change significantly between 1988 and 1992, the distribution of that capital across the different types of investors did. As figure 3 illustrates, a considerable restructuring has taken place with respect to the management of the industry's capital.

FIGURE 3

Hybrids Accounting for Growing Share of Capital (Capital Under Management by Investor Type)



Source: Macdonald & Associates

The private independent venture groups, which raise most or all of their capital from outside investors, and which manage the largest share of the pool, managed a slight increase in their share of the industry's resources between 1988 and 1992, although much of this increase resulted from the establishment of CAI Capital in 1991, with its \$185 million of committed capital.

Perhaps the most dramatic evidence of the restructuring is the almost doubling of the share of capital being managed by the hybrid funds (which include Vencap Equities and the labour sponsored venture capital funds). There are only five hybrid funds in total, three of which account for more than \$1 billion of the \$3.2 billion under management across the industry as a whole.

In the other direction, we have seen a very sharp decline in the presence of the venture capital arms of industrial corporations, whose share of the industry's capital has fallen from 11% to only 1% over this period. Virtually all of these wholly owned corporate groups have closed down their venture operations. Molsons, Manvest, BCE, and most recently Noranda are but a few examples of corporate groups that have left the market. While some of these decisions were performance driven, many were also a function of the economic cycle and the need of large corporations to conserve cash and focus on core businesses.

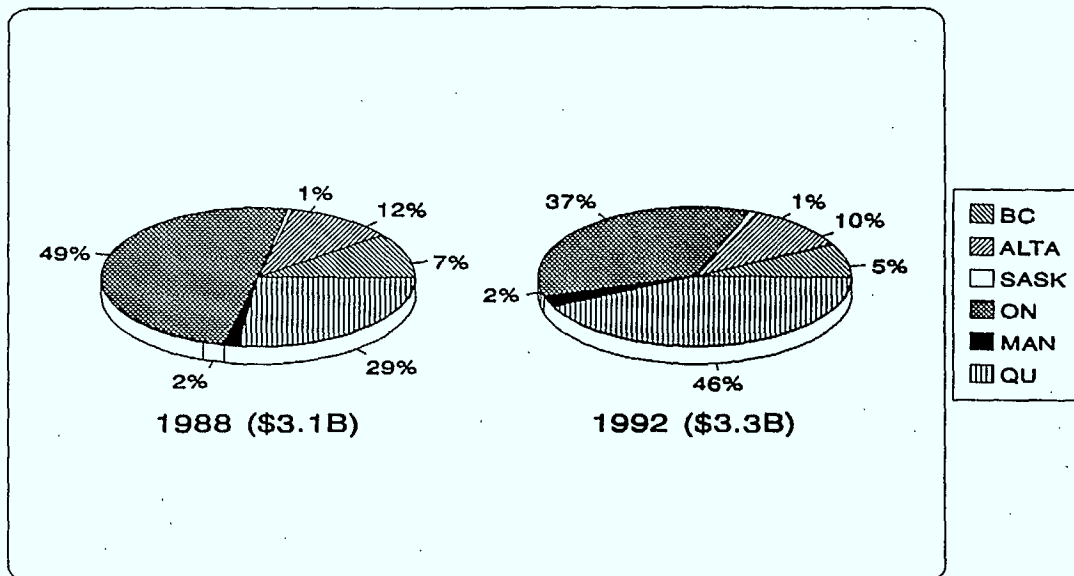
The share of capital being managed by the venture arms of financial corporations is also down significantly (from 21% in 1988 to 13% on 1992), reflecting the decision of groups like Great West Life, Crown Life and the National Bank to get out of the venture capital business.

2.3 Regional Distribution of Capital - Quebec Captures Almost all of the Growth

While the amount of capital being managed by venture capital firms in B.C., Alberta and Ontario declined in absolute terms between 1988 and 1992, the amount of capital being managed in Quebec almost doubled.² As a result, Quebec's share of the industry's resources rose from 29% in 1988 to 46% by the end of 1992, as shown in figure 4.

FIGURE 4

Quebec's Share of Capital Growing Quickly Capital under management by province



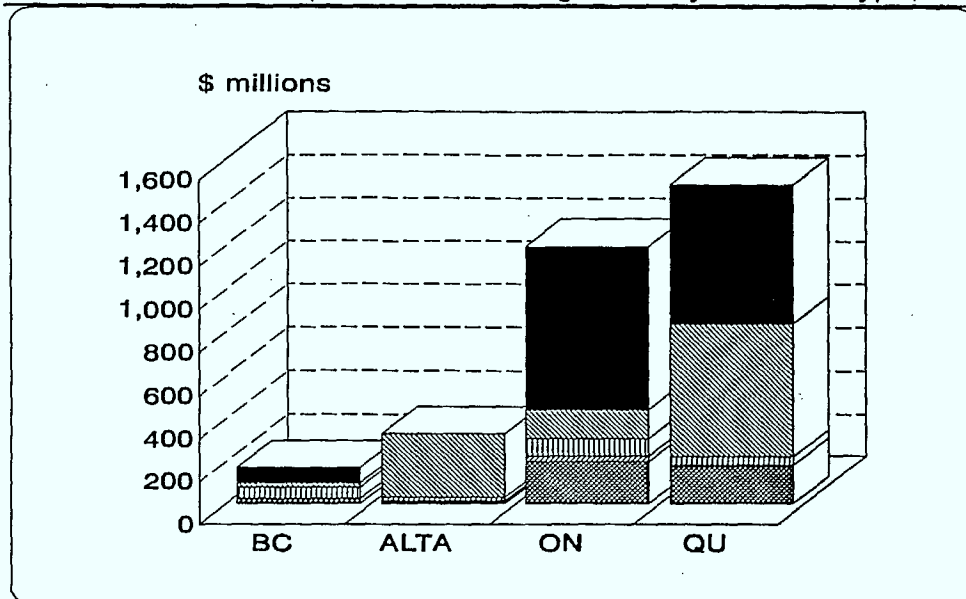
Source: Macdonald & Associates

When one examines the capital under management in each province by the types of investors managing that capital, significant differences between provinces are immediately apparent (see figure 5). At the end of 1992, 45% of the \$160 million managed from B.C. was in the hands of private independent funds, while just over a third was managed by crown-related venture firms. In Alberta, 91% of the capital under management is managed by the hybrid fund, Vencap Equities.

² The \$300 million committed by the Quebec government to the recently formed Innovatec is not included in these figures.

FIGURE 5

Investor Type Varies by Province
Capital Under Management by Investor Type; 1992



Source: Macdonald & Associates

In Ontario, 63% of the \$1.2 billion managed from that province, as of the end of 1992, was in the hands of private independent funds, while 52% of Quebec's \$1.5 billion was managed by hybrid funds (i.e. Solidarité). Given these significant structural differences, the availability of capital for investment in emerging growth companies could vary significantly between provinces in the near future.

2.4 Sources of New Capital - Individuals Have Become the Key Source

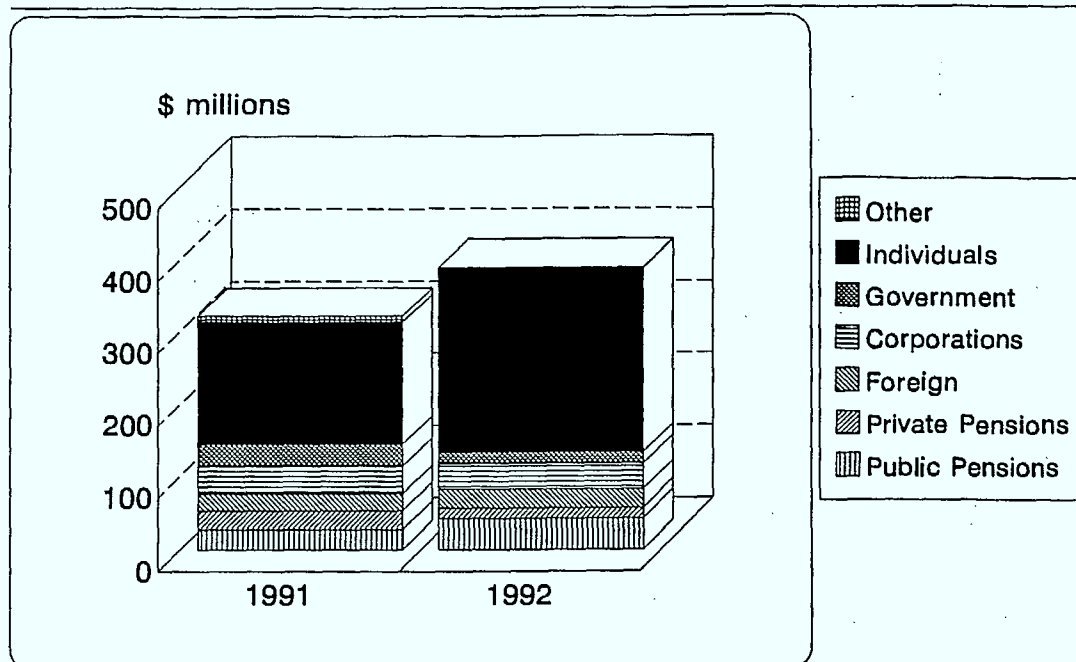
In 1991, individual investors committed \$168 million to venture capital funds, or 50% of all new commitments. In 1992, individual commitments accounted for 63% of new capital raised, primarily because of their investments in labour sponsored venture funds. Pension funds committed just over \$50 million of new capital in each of the two years.

As noted at the outset, the amount of capital under management is not indicative of the amount of capital available for investment. To calculate the liquidity within the venture industry, one must subtract the amount of capital already invested or committed to portfolio companies by each of the venture capital firms from their total pool of committed capital.

FIGURE 6

Individuals Becoming Key Source of New Capital

(New Capital Commitments by Source; 1991-1992)



Source: Macdonald & Associates

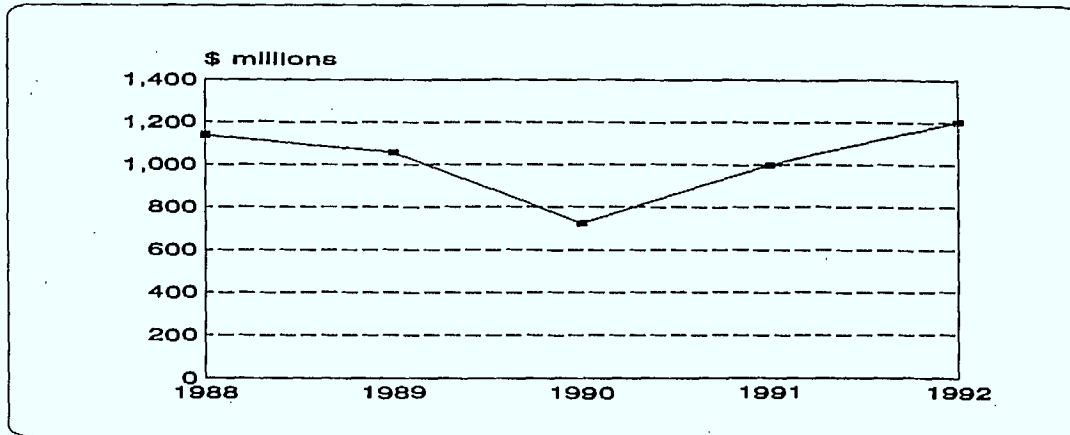
Figure 7 suggests that, aside from a rather steep dip in liquidity in 1990, the amount of capital available for investment in emerging growth companies has been fairly stable at about \$1.2 billion. Since the industry as a whole has invested somewhere around \$300 million a year in the past several years, the current supply of available capital should be sufficient to support the industry's investment activities overall for about 4 years. A four year supply of capital would normally be deemed to represent adequate liquidity.

However, when one takes a closer look at the composition of the liquidity, the conclusions are less obvious. It is to be expected that most of the available capital is being managed by the private independent and hybrid funds, since corporate and government groups tend to receive annual allocations rather than long term capital commitments.

The private independent funds collectively had about \$420 million available for investment at the end of 1992 having invested \$176 million during the year. At this rate, their existing supply of capital would sustain their investment activity for only slightly more than 2 years. The hybrid funds, by contrast, had \$676 million available for investment at the end of 1992 and invested less than \$60 million during the year, suggesting that their existing supply could sustain them at current activity levels for more than 10 years.

FIGURE 7

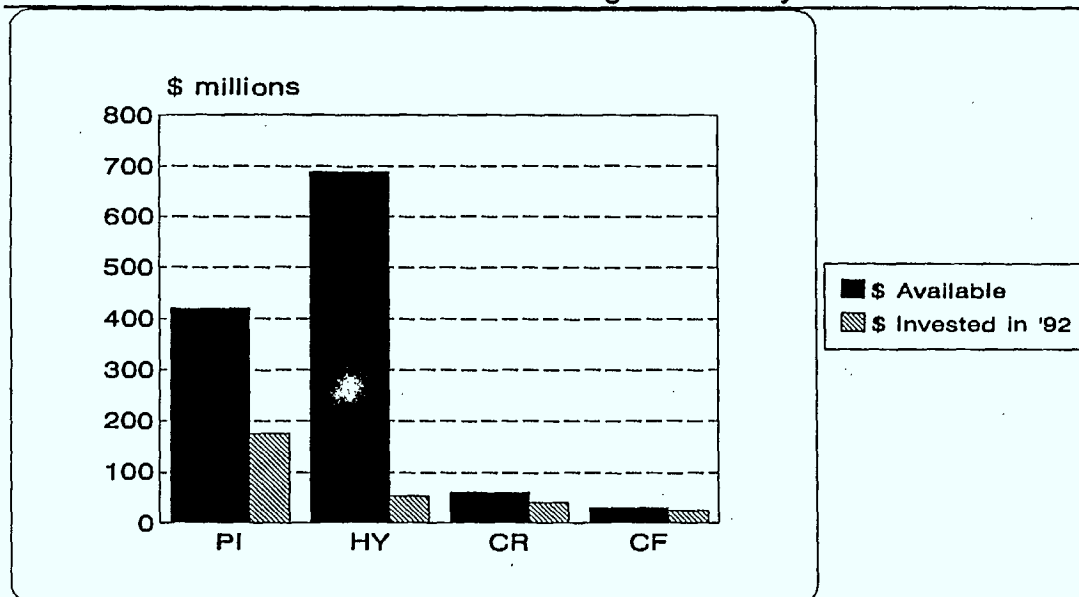
Liquidity Appears Stable and Adequate
Aggregate Capital Available for Investments



Source: Macdonald & Associates

FIGURE 8

But Heavily Concentrated in Hybrid Funds
Which are investing at relatively slow rate



Source: Macdonald & Associates

While the industry has a considerable amount of capital still available for investment, a large portion of it is concentrated in the hands of a very small number of investors. While these

investors might well increase the rate at which they put the money out, it is unlikely that the pace will pick up enough to dramatically shift the balance. Furthermore, given recent experience, it is reasonable to assume that the labour sponsored venture capital funds are likely to continue to attract significantly more new capital each year than they invest.

On the other hand, if the amount of new capital coming from traditional institutional sources continues to be depressed, private independent funds could invest their liquid capital and have trouble replenishing it with new supplies. Such a trend would clearly result in an even greater concentration of the industry's resources.

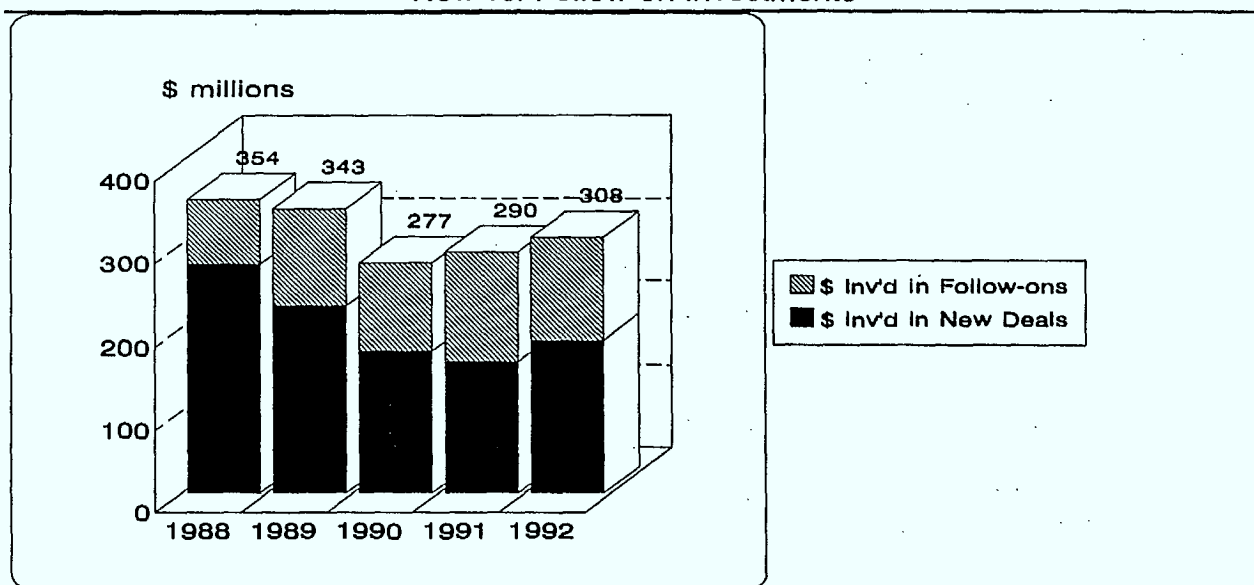
III. Investment Activity - Industry Disbursements

3.1 Aggregate Investment activity - Showing Modest Signs of Recovery

In 1992, the Canadian venture capital industry invested a total of \$308 million in 239 companies. This capital was disbursed through 276 rounds of financing (so some companies received two or more rounds of financing during the course of the year) which involved 333 investments (so some financings involved more than one investor). While total disbursements were up somewhat from 1990-91, they did not recover to the level achieved by the industry in 1988-89, as evidenced by figure 9.

FIGURE 9

Total Disbursements Up Slightly
New vs. Follow-on Investments



Source: Macdonald & Associates

It is important to note at the outset that the apparent recovery in investment activity in 1992 was driven primarily by 3 unusually large transactions which together accounted for \$50 million of the \$308 million invested.

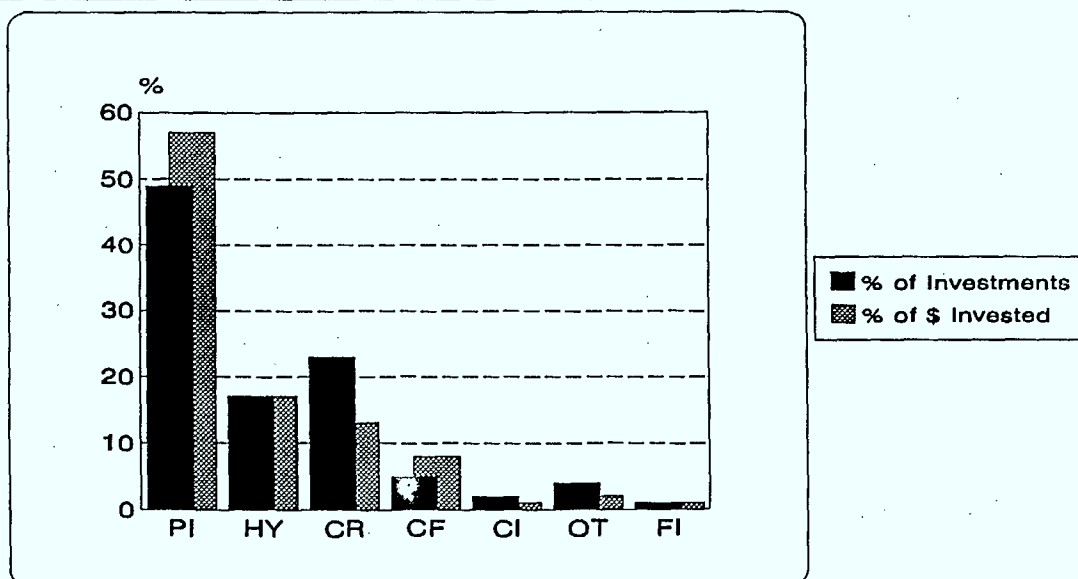
In 1988, almost 80% of the total amount invested by the industry went to new investments (as opposed to follow-on investments in existing portfolio companies). However, since then, the share of disbursements going to new deals has hovered in the 55%-65% range. In 1992, \$185 million was invested in new deals, or 60% of the industry's disbursements. When the three previously noted large transactions (all of which were first time investments) are excluded, the share of capital going to new investments was only 52%, or less than the average experienced in recent years. When one looks at the number of financings rather than dollars invested, only 48% of the transactions done in 1992 represented new deals, which is not significantly different from experience in recent years.

3.2 Disbursements by Region and Investor Type - Who is Doing What Where?

When the investment activity is broken down by the types of investors putting the money out, it becomes apparent that the private independent funds are still, by far, the most dominant in the market (see figure 10). In 1992, these funds were responsible for 57% of all capital disbursed and accounted for 49% of all investments. The hybrid funds accounted for 17% of both the dollars invested and the investments made. The crown-owned venture funds accounted for 23% of all the investments made although they accounted for only 13% of the disbursements. This suggests that the government funds typically invest smaller amounts of capital.

FIGURE 10

Private Independent Still Dominant Investors Share of investments and disbursements by investor type; 1992

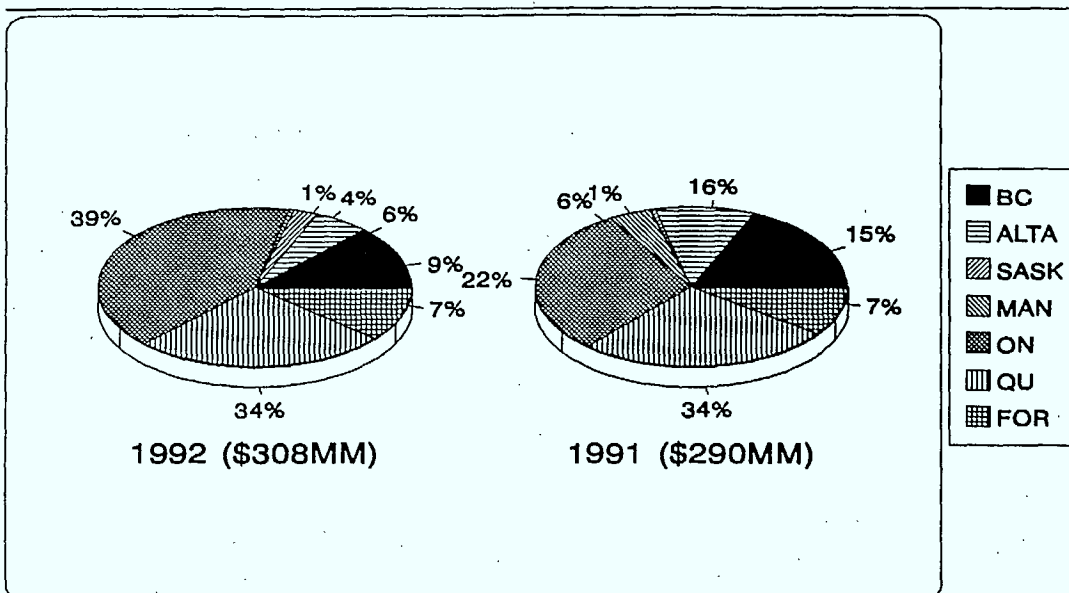


Source: Macdonald & Associates

Some very broad swings in the size of deals done in different parts of the country between 1991 and 1992 resulted in some dramatic shifts in the regional distribution of investment activity from year to year. As Figure 11 illustrates, B.C.'s share of total disbursements fell from 15% to 9%, representing an actual decline from \$43 million to \$27 million. While the number of deals done did not change significantly between the two years, the size of those deals did. In 1991, there was one \$10 million financing in B.C., and several other deals involved financings in the \$4-\$5 million range. While there was another \$10 million deal done in 1992, 30 of the 35 investments made in B.C. last year involved less than \$750,000 resulting in a decline in the aggregate amount invested.

FIGURE 11

Ontario's Share of Disbursements Jumps in 1992



Source: Macdonald & Associates

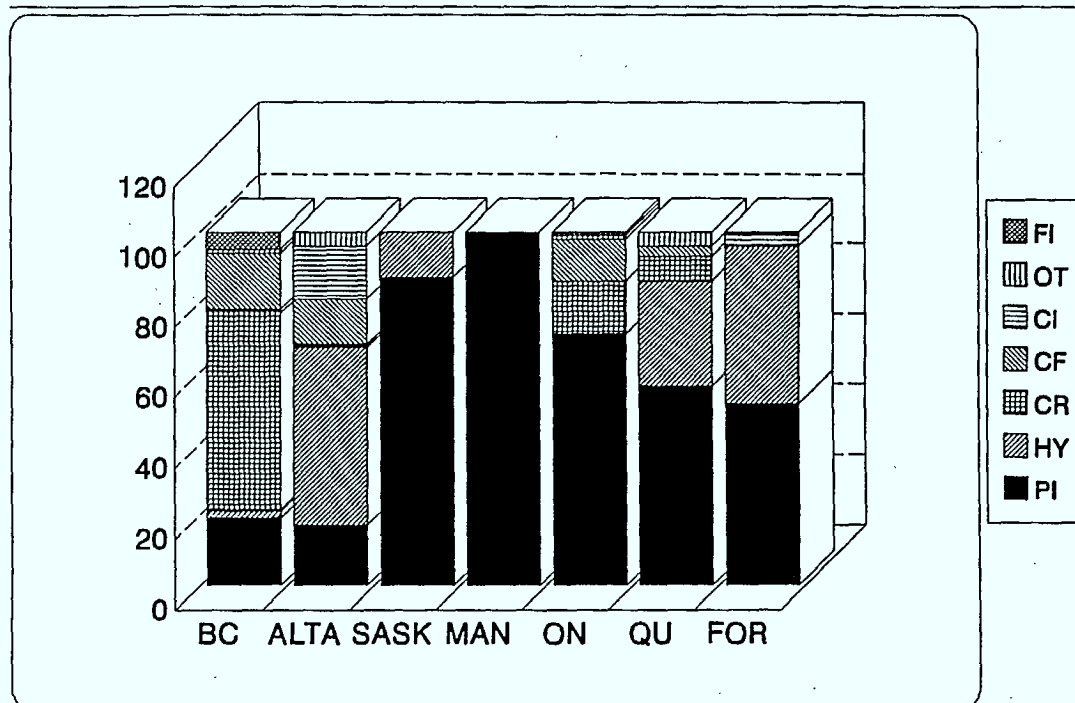
Alberta's share also declined from 16% in 1991 to only 6% of disbursements in 1992, simply because there were fewer deals done and the average deal size was smaller. In 1991, twelve Alberta firms attracted more than \$1 million and together they secured \$43 million. In 1992, only 5 firms attracted more than \$1 million for an aggregate investment value of \$12 million.

Ontario's share, by contrast, jumped from 22% in 1991 to 39% in 1992. This increase can be entirely explained by 9 Ontario-based deals done in 1992. These 9 transactions involved 13 investments, or 11% of all investments in Ontario, but accounted for \$65 million or 54% of the total amount invested in Ontario last year. These investments averaged \$5 million apiece, compared with an average of \$520,000 for the remaining 105 investments. The provincial data clearly reflects two quite different types of investment activity. Quebec's share of total disbursements stayed constant between the two years, as did the share going to foreign firms.

When the regional data is superimposed on the investor type data (figure 12), it becomes readily apparent that different types of investors play very different roles within the provincial markets. Private independent funds account for the lion's share of investment activity in Saskatchewan, Manitoba, and Ontario, although crown and corporate financial groups together accounted for about 25% of the amount invested in Ontario. It is interesting to note that while the crown related groups accounted for only 14% of the amount invested in Ontario, they accounted for 43% of all investments made. This further reinforces the observation that some of the government groups do tend to do smaller deals. The average investment by a crown related fund in Ontario in 1992 was \$330,000 compared with an average investment of \$1.5 million by private independent funds (although this average is skewed upwards by the handful of large deals).

FIGURE 12

Importance of Investor Type Varies by Province; 1992



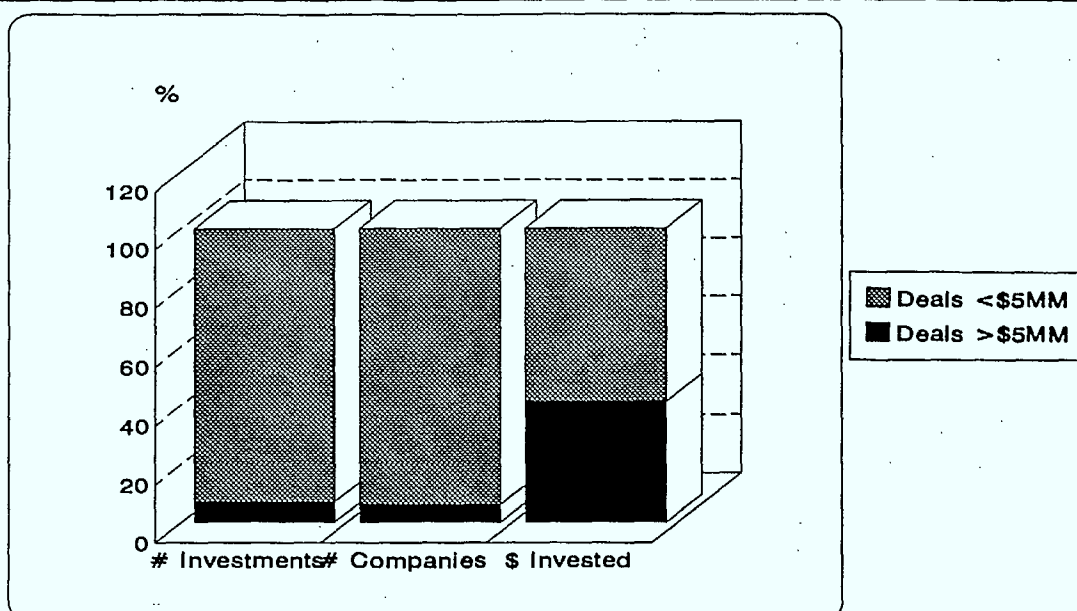
Source: Macdonald & Associates

In Alberta and Quebec, Vencap Equities and Solidarité, which are both hybrid funds, accounted for 50% and 30% respectively of the amount invested in their respective provinces. In British Columbia, crown related groups played an unusually large role in 1992, accounting for 57% of the \$27 million invested. This was up from the 16% share in 1991. Ironically, the B.C. deals done by crown investors in 1992 were generally smaller than those done in 1991. However, a number of government groups joined forces to invest more than \$10 million in one B.C. company last year, driving the government's share way up in a year when total venture investment activity in the province was down by almost 40%.

The impact of a handful of larger deals on the aggregate data cannot be ignored. As figure 13 shows, only 7% of all investments made in 1992 went into transactions of \$5 million or more, which involved only 6% of all companies financed. But these transactions absorbed 41% of the total amount invested in Ontario last year. These larger deals play a very important role in building threshold technology companies, and should not be discounted in any way. However, it is important to recognize the impact they have on the aggregate data so that one does not assume that investment activity levels are higher than they really are.

FIGURE 13

More Big Deals Done in 1992 Impact of transactions worth \$5MM or more



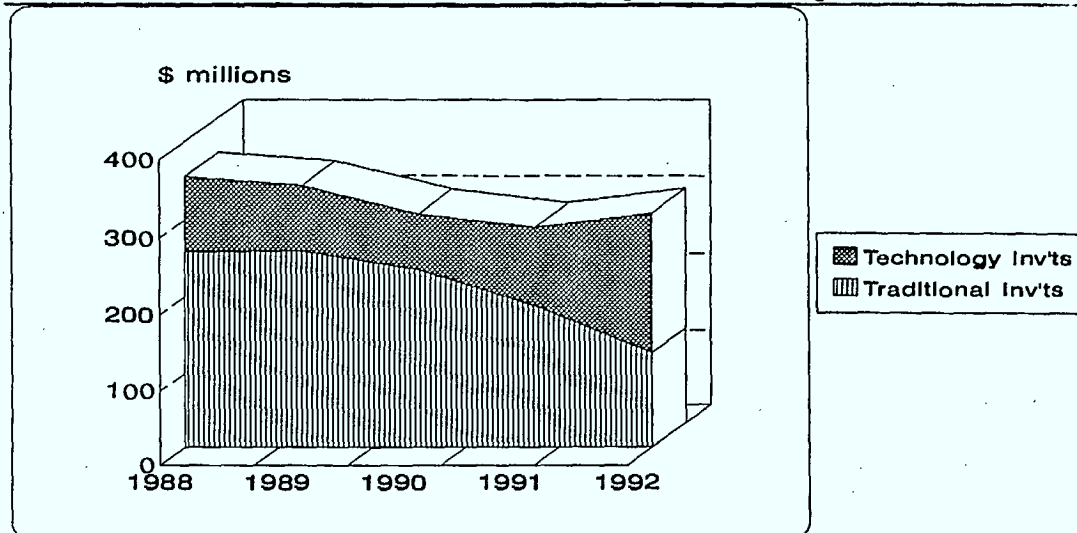
Source: Macdonald & Associates

3.3 Disbursements by Sector - Technology Companies Garner a Larger Share

At the aggregate level at least, technology companies appeared to be big winners in 1992. Of the \$308 million invested in 1992, \$182 million or 59% went to technology companies, representing a very sharp increase from prior years (see figure 14). A number of factors contributed to this increase. First, the venture community did 7 unusually large technology financings last year, which together accounted for \$79 million or 43% of the total amount invested in all technology companies. These deals obviously had a significant positive impact on the total amount of money invested in technology-based firms, and as previously noted, their importance should not be understated. However, they do perhaps suggest a greater level of activity than is, in fact, the case.

FIGURE 14

Sharp Increase in Shares Going to Technology Firms But a handful of large deals driving trend



7 technology deals in 1992 had total value of \$79MM
Source: Macdonald & Associates

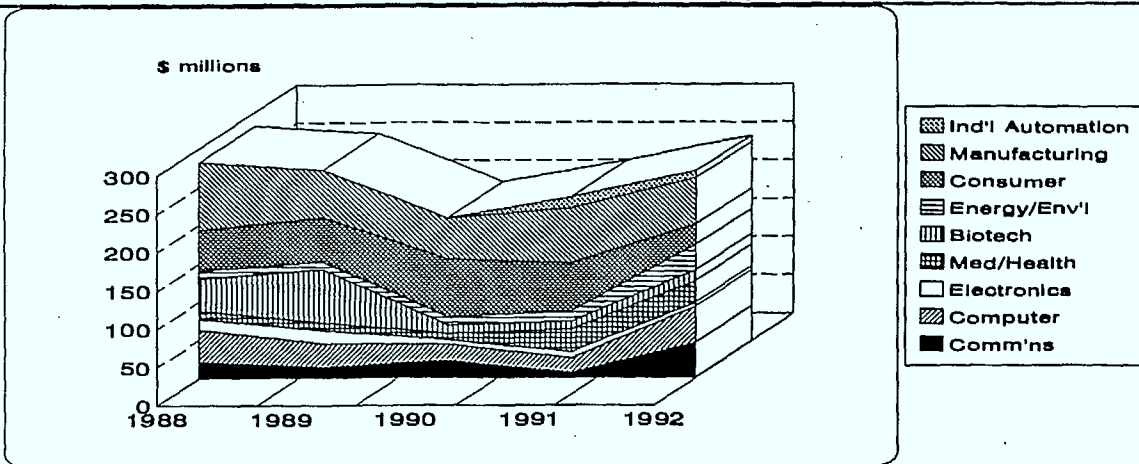
A second, and undoubtedly minor factor in the increase was the reclassification of industry sectors done by Macdonald & Associates over the course of the past year. To more adequately reflect the nature of specific investments, the industrial equipment sector used in the past was split into industrial automation and equipment, which captures technology-based firms in this area, and manufacturing, which encompasses those firms engaged in more traditional manufacturing activity. Environmental technology firms are also now classified separately (along with energy related ventures). Both of these changes have, in all likelihood, allowed us to capture more "technology-based" deals than we did in prior years.

When the data is analysed by sector (figure 15), one can see that there was a significant uptick in the amount invested in communications, computer and environmental related firms in 1992. While the trend in technology financings established last year is encouraging, it must be maintained in future years if the venture community is to make a useful contribution to creating the critical mass required in these emerging sectors.

Given the analysis of the industry's liquidity presented in section 2.4, the investment patterns suggested in figure 16 could be a cause for some concern with respect to future technology investment activity. The private independent and the crown related firms were by far the most active technology investors in 1992, as they were in 1991. However, the private independent firms had only about a two year supply of capital on hand at the end of 1992, and are facing a difficult fundraising environment.

FIGURE 15

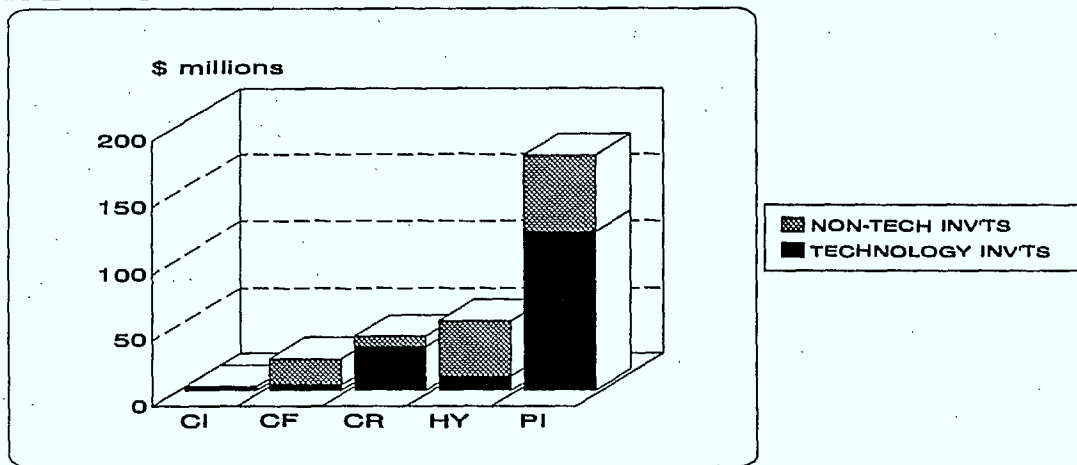
Communications, Computer and Environmental Firms Big Winners
Annual disbursements by sector



Source: Macdonald & Associates

FIGURE 16

Private and Crown Groups Most Likely to Finance Technology
1992 Disbursement by type of investor



Source: Macdonald & Associates

By contrast, the hybrid funds have considerably more liquidity, but overall, they have not, as a group, been very active investors in technology-based companies. The structure of the industry and distribution of liquid capital could therefore have a significant impact on the ability of Canadian technology companies to access venture capital in the coming years. A detailed

breakdown of the investment activity of each type of investor within each sector can be found in Table 2.8 in the Appendix.

3.4 Disbursements by Stage - Underlying Trends Have not Changed Much

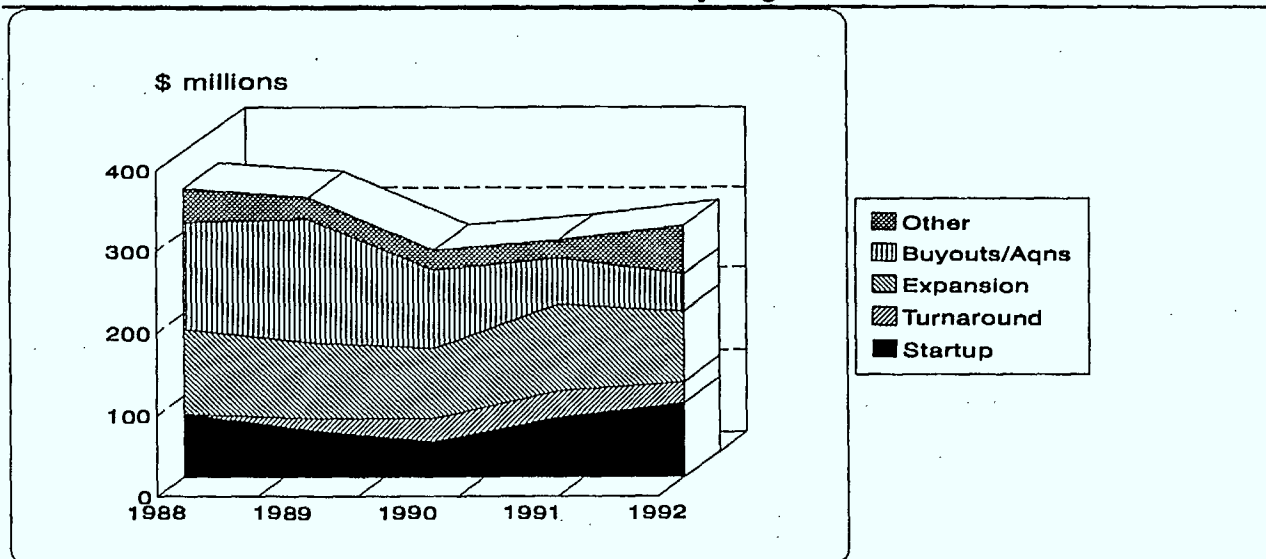
Overall, early stage investments accounted for almost 30% of the total amount invested in 1992 which represents a significant increase over prior years. However, the impact of a few larger deals again imply a change in direction when in fact the change involves only two or three deals. When the two unusually large investments totaling \$30 million are removed, the share of capital going to early stage companies falls to 21%, which is line with historical trends.

The amount of capital going to finance acquisitions and leveraged buyouts continue to fall last year, which was expected given the prevailing economic and market environments. The one notable difference from prior year trends was a significant increase in the amount invested in secondary purchases in 1992, reflected in the "other" category in figure 17.

FIGURE 17

Investments by Stage Reasonably Stable

Disbursements by stage



Source: Macdonald & Associates

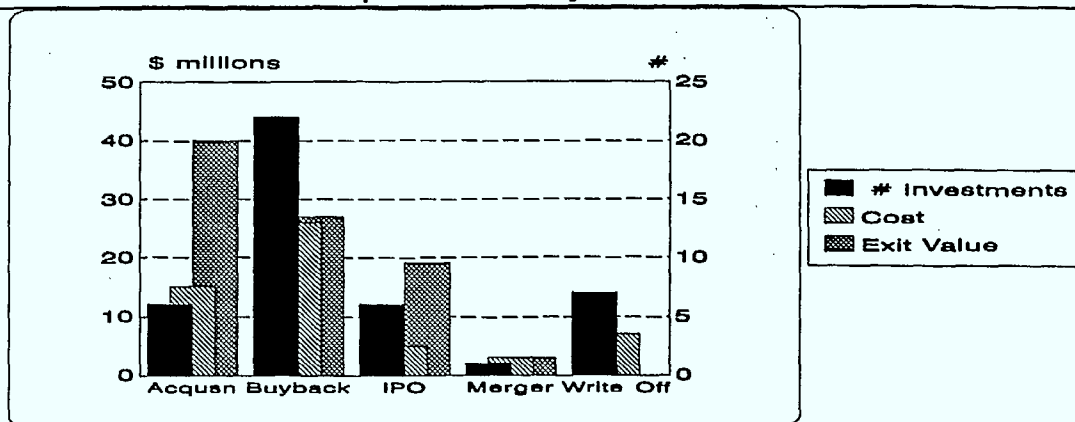
IV. Dispositions

Canadian venture investors exited from 42 investments over the course of 1992, compared with the 40 exits made in 1991. More than half of the dispositions were made through company buybacks, although, across the 22 transactions, investors just got their money back. Only 7 of the 42 exits made in 1992 were write-offs, compared with 15 of the 40 transactions in 1991.

Investors registered a gain of 1.63 on the basket of dispositions, with most of the gains achieved by exiting through an acquisition (2.7 times cost) or an IPO (4.8 times cost).

FIGURE 18

1992 Dispositions by Exit Mechanism

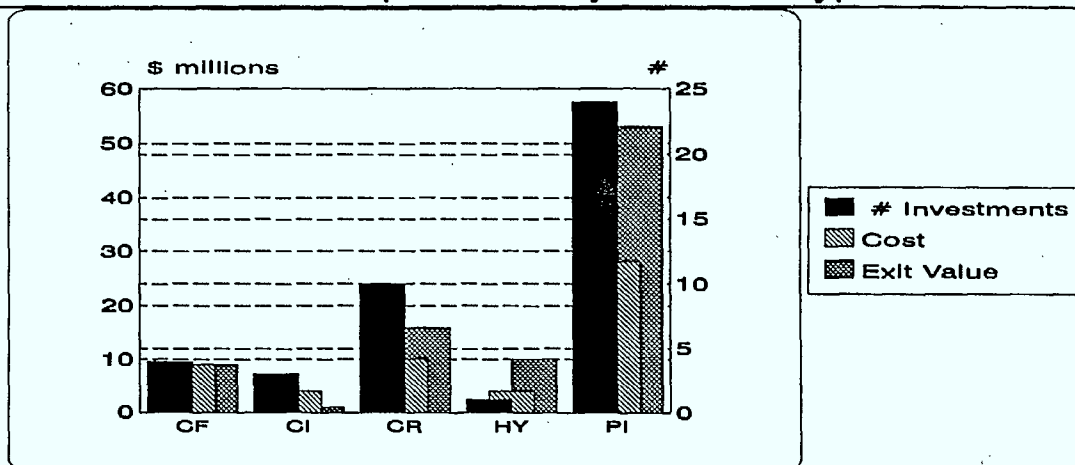


Source: Macdonald & Associates

Private independent investors were most active in exiting from investments last year, disposing of 24 investments over the course of the year and recovering 1.9 times their cost. Crown related venture funds exited from 10 investments and recovered 1.6 times their cost.

FIGURE 19

1992 Dispositions by Investor Type



Source: Macdonald & Associates

Appendix

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Table 1.1 Capital Under Management 1983 - 1992
Canada and the US (\$Millions)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CANADA	\$1,039	\$1,186	\$1,387	\$1,810	\$2,480	\$3,082	\$3,294	\$3,307	\$3,220	\$3,272
USA	\$12,100	\$16,300	\$19,600	\$24,100	\$29,000	\$31,100	\$33,400	\$35,950	\$32,870	n/a

Source: Macdonald and Associates

Table 1.2 Flows of Capital Within Canadian Venture Capital Industry 1987 - 1992
(\$Millions)

	1987	1988	1989	1990	1991	1992
New Funds Raised	\$800	\$602	\$212	\$200	\$329	\$409
Capital Leaving Industry	\$130	\$0	\$0	\$253	\$416	\$357
Change in Industry's Capital	\$670	\$602	\$212	(\$53)	(\$87)	\$52

Source: Macdonald and Associates

**Table 1.3 Capital Under Management
by Investor Type (\$ Millions)**

	1988		1989		1990		1991		1992	
CF	\$644	21%	\$699	21%	\$639	19%	\$502	16%	\$408	12%
CI	\$353	11%	\$339	10%	\$263	8%	\$128	4%	\$38	1%
CR	\$245	8%	\$252	8%	\$244	7%	\$196	6%	\$194	6%
HY	\$516	17%	\$560	17%	\$681	21%	\$865	27%	\$1,079	33%
PR	\$1,348	43%	\$1,510	45%	\$1,480	45%	\$1,529	47%	\$1,553	47%
<i>Total</i>	\$3,106	100%	\$3,360	100%	\$3,307	100%	\$3,220	100%	\$3,272	100%

Note: *CF = Corporate (financial) subsidiary*
 CI = Corporate (industrial) subsidiary
 CR = Crown owned
 HY = Hybrid
 PI = Private independent

**Table 1.4 Capital Under Management
by Province (\$ Millions)**

Province	1988	1989	1990	1991	1992
British Columbia	\$211	\$228	\$227	\$233	\$172
Alberta	\$387	\$387	\$372	\$358	\$331
Saskatchewan	\$22	\$27	\$23	\$20	\$36
Manitoba	\$70	\$70	\$70	\$22	\$50
Ontario	\$1,530	\$1,653	\$1,524	\$1,238	\$1,197
Quebec	\$885	\$989	\$1,084	\$1,340	\$1,486
Atlantic Canada	\$2	\$8	\$8	\$0	\$0
<i>Total</i>	\$3,107	\$3,362	\$3,308	\$3,211	\$3,272

Source: Macdonald and Associates

**Table 1.5 Capital Under Management
by Province, by Investor Type (%)**

Province	Type	1988	1989	1990	1991	1992
British Columbia	CF	18%	16%	17%	16%	15%
	CR	40%	37%	37%	27%	31%
	HY	0%	0%	0%	3%	12%
	PI	42%	47%	47%	54%	42%
	Sub-Total (\$MM)	\$211	\$228	\$227	\$233	\$172
Alberta	CI	10%	10%	12%	6%	4%
	CR	9%	9%	7%	9%	5%
	HY	74%	74%	82%	85%	91%
	PI	7%	7%	0%	0%	0%
	Sub-Total (\$MM)	\$387	\$387	\$372	\$358	\$331
Saskatchewan	PI	\$22	\$27	\$23	\$20	\$36
Manitoba	HY	0%	0%	0%	7%	10%
	PI	26%	26%	26%	93%	90%
	CF	74%	74%	74%	0%	0%
	Sub-Total (\$MM)	\$70	\$70	\$70	\$22	\$50

Source: Macdonald and Associates

**Table 1.5 Capital Under Management
by Province, by Investor Type (%)**

<i>Province</i>	<i>Type</i>					
Ontario	CF	24%	25%	25%	25%	17%
	CI	18%	16%	13%	7%	2%
	CR	4%	4%	4%	6%	7%
	HY	0%	0%	0%	4%	11%
	PI	55%	55%	59%	59%	63%
<i>Sub-Total (\$MM)</i>		\$1,530	\$1,653	\$1,524	\$1,238	\$1,197
Quebec	CF	22%	20%	16%	11%	12%
	CI	4%	4%	2%	2%	0%
	CR	8%	7%	7%	2%	3%
	HY	26%	28%	35%	38%	42%
	PI	40%	42%	40%	47%	44%
<i>Sub-Total (\$MM)</i>		\$885	\$989	\$1,084	\$1,340	\$1,486
Atlantic Canada	CI	100%	27%	27%	0%	0%
	PI	0%	73%	73%	0%	0%
<i>Sub-Total (\$MM)</i>		\$2	\$8	\$8	\$0	\$0
TOTAL (\$MM)		\$3,106	\$3,360	\$3,307	\$3,210	\$3,272

Source: Macdonald and Associates

Table 1.6 New Capital Commitments by Source
(\$ Millions)

1991

	<i>Public Pensions</i>	<i>Private Pensions</i>	<i>Foreign</i>	<i>Corporations</i>	<i>Government</i>	<i>Individuals</i>	<i>Other</i>	<i>TOTAL</i>
British Columbia	\$0	\$0	\$10	\$0	\$0	\$0	\$0	\$10
Alberta	\$0	\$0	\$0	\$0	\$2	\$0	\$0	\$2
Manitoba	\$0	\$0	\$0	\$0	\$0	\$2	\$0	\$2
Ontario	\$6	\$0	\$0	\$15	\$16	\$45	\$0	\$83
Quebec	\$21	\$25	\$23	\$22	\$12	\$121	\$9	\$233
<i>Total</i>	\$27	\$25	\$23	\$38	\$31	\$168	\$9	\$330

1992

	<i>Public Pensions</i>	<i>Private Pensions</i>	<i>Foreign</i>	<i>Corporations</i>	<i>Government</i>	<i>Individuals</i>	<i>Other</i>	<i>TOTAL</i>
British Columbia	\$0	\$0	\$0	\$0	\$0	\$21	\$0	\$21
Alberta	\$0	\$0	\$0	\$0	\$2	\$0	\$0	\$2
Manitoba	\$1	\$1	\$5	\$0	\$0	\$4	\$0	\$11
Saskatchewan	\$0	\$0	\$10	\$0	\$0	\$0	\$0	\$10
Ontario	\$8	\$5	\$10	\$17	\$14	\$136	\$1	\$191
Quebec	\$33	\$8	\$0	\$17	\$0	\$116	\$0	\$175
<i>Total</i>	\$42	\$14	\$25	\$35	\$16	\$256	\$1	\$409

**Table 1.7 Capital Available for Investment
by Investor Type (\$ Millions)**

Type	1992		1991	
PI	\$420	35%	\$382	38%
HY	\$689	57%	\$551	55%
CR	\$60	5%	\$42	4%
CF	\$31	3%	\$22	2%
CI	\$2	0%	\$3	0%
<i>Total</i>	\$1,202	100%	\$1,000	100%

Source: Macdonald and Associates

**Table 2.1 Annual Disbursements: Number of Investments, Financings, and Total Dollars
1988 - 1992 (\$ Millions)**

	<i># Investments</i>	<i># Financings</i>	<i># Companies</i>	<i>\$ Invested*</i>
1992	333	276	239	\$308
1991	289	241	232	\$290
1990	299	271	263	\$277
1989	359	325	300	\$343
1988	325	288	271	\$354

** 1992 investment data includes 3 deals of more than \$10 million with a total value of \$50 million.*

**Table 2.2 Share of Financings and Dollars Invested
New vs. Follow-on Investments (\$ Millions)**

	1992		1991		1990		1989		1988	
	#	\$	#	\$	#	\$	#	\$	#	\$
Follow-on	172	123	151	130	144	105	134	117	147	78
New	161	185	138	160	155	172	225	226	178	276
<i>Total</i>	333	308	289	290	299	277	359	343	325	354

Source: Macdonald and Associates

**Table 2.3 Total Investments and Dollars Invested
by Investor Type (\$ Millions)**

Type	1992				1991			
	#	%	\$	%	#	%	\$	%
PI	162	49%	\$176	57%	123	43%	\$140	48%
HY	55	17%	\$53	17%	43	15%	\$72	25%
CR	76	23%	\$41	13%	89	31%	\$36	12%
CF	17	5%	\$25	8%	14	5%	\$21	7%
CI	6	2%	\$4	1%	14	5%	\$14	5%
OT	13	4%	\$7	2%	4	1%	\$4	1%
FI	4	1%	\$3	1%	2	1%	\$3	1%
Total	333	100%	\$308	100%	289	100%	\$290	100%

**Table 2.4 Disbursements by Province
1991, 1992 (\$ Millions)**

<i>Province</i>	1992		1991	
	\$	%	\$	%
BC	\$27	9%	\$43	15%
Alberta	\$19	6%	\$47	16%
Saskatchewan	\$12	4%	\$2	1%
Manitoba	\$3	1%	\$16	6%
Ontario*	\$120	39%	\$64	22%
Quebec**	\$104	34%	\$97	33%
Atlantic Canada	\$0	0%	\$2	1%
Foreign	\$23	7%	\$19	7%
<i>Total</i>	\$308	100%	\$290	100%

* 1992 Ontario investment data includes 9 transactions (13 investments) with individual values of \$5 million or more, and a total value of \$65 million.

** 1992 Quebec investment data includes only 2 transactions (7 investments) with values of \$5 million or more which together accounted for \$36 million.

**Table 2.5 Total Investments and Dollars Invested
by Province, by Investor Type (\$ Millions)**

Region	Type	1992		1991	
		#Investments	\$ Invested	#Investments	\$ Invested
		%	%	%	%
British Columbia	PI	37%	18%	40%	58%
	HY	6%	2%	3%	6%
	CR	43%	57%	40%	16%
	CF	6%	15%	3%	5%
	CI	0%	0%	7%	8%
	OT	6%	1%	3%	2%
	FI	3%	5%	3%	4%
<i>Sub-Total</i>		35	\$27	30	\$43
Alberta	PI	25%	17%	18%	48%
	HY	39%	50%	35%	41%
	CR	4%	1%	32%	8%
	CF	4%	13%	0%	0%
	CI	18%	15%	12%	2%
	OT	11%	4%	3%	1%
<i>Sub-Total</i>		28	\$19	34	\$47
Saskatchewan	PI	92%	87%	100%	100%
	HY	8%	13%	0%	0%
<i>Sub-Total</i>		12	\$12	5	\$2
Manitoba	PI	100%	100%	71%	88%
	CR	0%	0%	14%	6%
	HY	0%	0%	14%	6%
<i>Sub-Total</i>		8	\$3	7	\$16

Source: Macdonald and Associates

**Table 2.5 Total Investments and Dollars Invested
by Province, by Investor Type (\$ Millions)**

Region	Type	#Investments	\$ Invested	#Investments	\$ Invested
		%	%	%	%
Ontario	PI	47%	71%	36%	50%
	CR	43%	14%	53%	22%
	CF	5%	12%	4%	16%
	CI	0%	0%	5%	10%
	OT	2%	1%	1%	3%
	FI	3%	1%	0%	0%
<i>Sub-Total</i>		118	\$120	96	\$64
Quebec	PI	48%	56%	45%	35%
	HY	30%	30%	26%	47%
	CR	9%	7%	17%	10%
	CF	8%	3%	10%	7%
	OT	6%	4%	1%	0%
	FI	0%	0%	1%	1%
<i>Sub-Total</i>		105	\$105	84	\$98
Atlantic Canada	PI	1	\$0	1	\$2
Foreign	PI	62%	51%	66%	48%
	HY	35%	45%	22%	19%
	CF	0%	0%	3%	11%
	CI	4%	4%	9%	22%
<i>Sub-Total</i>		26	\$23	32	\$19
TOTAL		333	\$308	289	\$290

Source: Macdonald and Associates

Table 2.6 Disbursement, 1988 - 1992
Traditional vs. Technology-Based (\$ Millions)

	<i>1992</i>	<i>1991</i>	<i>1990</i>	<i>1989</i>	<i>1988</i>
Traditional	\$126	\$188	\$205	\$259	\$258
Technology-based*	\$182	\$102	\$72	\$84	\$96
<i>TOTAL</i>	\$308	\$290	\$277	\$343	\$354

Note: Data for 1992 includes 7 large transactions with an aggregate value of \$79 million.

Table 2.7 Annual Disbursements by Industry Sector
(\$ Millions)

Sector	1992	1991	1990	1989	1988
Biotechnology	\$14	\$10	\$11	\$7	\$4
Communications	\$46	\$7	\$22	\$14	\$21
Computer-Related	\$47	\$19	\$22	\$31	\$42
Electronic Components & Instrumentation	\$5	\$8	\$6	\$17	\$14
Energy/Environmental Technology	\$33	\$13	\$11	\$10	\$11
Industrial Automation & Equipment	\$9	\$15			
Medical/Health Related	\$28	\$30	\$8	\$10	\$11
Consumer Related	\$27	\$63	\$75	\$58	\$53
Manufacturing	\$60 ₁₂₆	\$71	\$53	\$62	\$89
Miscellaneous	\$39	\$54	\$69	\$134	\$109
Total	\$308	\$290	\$277	\$343	\$354

Note: Because of re-classification of industry sectors beginning in 1991, data on the Energy, Industrial, Manufacturing, and Miscellaneous sector will not be comparable throughout the period.

**Table 2.8 Total Investments and Dollars Invested
by Sector, by Investor Type (\$ Millions)**

Industry(Technology)	Type	1992		1991	
		#Investments	\$ Invested	#Investments	\$ Invested
		%	%	%	%
Biotechnology	PI	87%	86%	58%	46%
	HY	4%	6%	17%	8%
	CR	9%	9%	17%	25%
	CI	0%	0%	8%	21%
<i>Sub-Total</i>		23	\$14	12	\$10
Communications	PI	45%	78%	40%	15%
	HY	9%	2%	13%	25%
	CR	23%	7%	27%	18%
	CF	9%	6%	7%	11%
	CI	5%	2%	7%	20%
	OT	9%	4%	0%	0%
	FI	0%	0%	7%	11%
<i>Sub-Total</i>		22	\$47	15	\$7
Computer-Related	PI	30%	69%	26%	34%
	HY	2%	1%	0%	0%
	CR	50%	15%	57%	38%
	CF	4%	8%	0%	0%
	CI	7%	5%	17%	28%
	OT	7%	2%	0%	0%
<i>Sub-Total</i>		46	\$47	42	\$19

**Table 2.8 Total Investments and Dollars Invested
by Sector, by Investor Type (\$ Millions)**

Industry(Technology)	Type	1992		1991	
		# Investments	\$ Invested	# Investments	\$ Invested
		%	%	%	%
Electronic Components & Instrumentation	PI	56%	58%	40%	47%
	HY	0%	0%	5%	2%
	CR	31%	34%	50%	27%
	CF	0%	0%	5%	25%
	OT	13%	8%	0%	0%
<i>Sub-Total</i>		16	\$5	20	\$8
Energy & Environmental Technology	PI	54%	47%	42%	62%
	HY	3%	1%	0%	0%
	CR	37%	46%	42%	11%
	CF	3%	1%	8%	12%
	FI	3%	5%	8%	14%
<i>Sub-Total</i>		30	\$33	12	\$13
Industrial Automation & Equipment	PI	40%	41%	35%	46%
	HY	7%	29%	4%	9%
	CR	46%	28%	53%	33%
	CF	7%	2%	4%	10%
	CI	0%	0%	4%	2%
<i>Sub-Total</i>		15	\$8	23	\$15
Medical/Health Related	PI	61%	67%	57%	77%
	HY	18%	24%	17%	10%
	CR	21%	9%	22%	6%
	OT	0%	0%	4%	6%
<i>Sub-Total</i>		28	\$29	23	\$30

Source: Macdonald and Associates

**Table 2.8 Total Investments and Dollars Invested
by Sector, by Investor Type (\$ Millions)**

Industry(Traditional)	Type	1992		1991	
		# Investments	\$ Invested	# Investments	\$ Invested
		%	%	%	%
Consumer Related	PI	47%	39%	49%	52%
	HY	31%	28%	29%	26%
	CR	9%	9%	10%	5%
	CF	6%	19%	2%	8%
	CI	3%	3%	7%	7%
	OT	3%	2%	2%	1%
<i>Sub-Total</i>		32	\$27	41	\$63
Manufacturing	PI	43%	36%	48%	61%
	HY	21%	31%	14%	16%
	CR	14%	7%	25%	10%
	CF	11%	20%	12%	13%
	CI	1%	0%	0%	0%
	OT	6%	3%	2%	1%
	FI	4%	2%	0%	0%
<i>Sub-Total</i>		72	\$60	65	\$71
Miscellaneous	PI	49%	55%	39%	18%
	HY	39%	38%	33%	70%
	CR	8%	3%	19%	7%
	CF	2%	1%	3%	3%
	CI	0%	0%	3%	2%
	OT	2%	2%	3%	0%
<i>Sub-Total</i>		49	\$39	36	\$54
TOTAL		333	\$308	289	\$290

Source: Macdonald and Associates

Table 2.9 Disbursements by Stage
(\$ Millions)

Stage	1992*	1991	1990	1989	1988
Early Stage	\$91	\$74	\$44	\$58	\$78
Expansion	\$85	\$104	\$86	\$93	\$103
Acquisition/MBO	\$45	\$57	\$94	\$151	\$131
Turnaround	\$26	\$32	\$28	\$14	\$0
Other	\$61	\$23	\$25	\$27	\$42
Total	\$308	\$290	\$277	\$343	\$354

*** 1992 early stage investment data includes 2 unusual large investments totalling \$30 million and a further \$6 million invested in other VC funds.**

**Table 2.10 Disbursements by Industry Sector and by Stage
1991, 1992 (\$ Millions)**

Industry(Technology)	Stage	1992		1991	
		#Investments	\$ Invested	#Investments	\$ Invested
		%	%	%	%
Biotechnology	Early Stage	70%	68%	83%	92%
	Expansion	17%	32%	17%	8%
	Other	13%	0%	0%	0%
	<i>Sub-Total</i>	23	\$14	12	\$10
Communications	Early Stage	59%	63%	67%	61%
	Expansion	27%	29%	26%	37%
	Acquisition/MBO	5%	1%	0%	0%
	Turnaround	9%	7%	7%	2%
	<i>Sub-Total</i>	22	\$47	15	\$7
Computer-Related	Early Stage	51%	15%	50%	26%
	Expansion	20%	45%	34%	36%
	Acquisition/MBO	7%	13%	7%	20%
	Turnaround	7%	3%	2%	1%
	Other	15%	24%	7%	17%
	<i>Sub-Total</i>	46	\$47	42	\$19
Electronic Components & Instrumentation	Early Stage	69%	67%	50%	20%
	Expansion	6%	3%	35%	50%
	Turnaround	19%	26%	10%	6%
	Other	6%	4%	5%	24%
	<i>Sub-Total</i>	16	\$5	20	\$8

Source: Macdonald and Associates

**Table 2.10 Disbursements by Industry Sector and by Stage
1991, 1992 (\$ Millions)**

Industry(Technology)	Stage	1992		1991	
		#Investments	\$ Invested	#Investments	\$ Invested
		%	%	%	%
Energy & Environmental Technology	Early Stage	47%	19%	33%	16%
	Expansion	26%	20%	58%	65%
	Acquisition/MBO	0%	0%	9%	19%
	Turnaround	7%	21%	0%	0%
	Other	20%	40%	0%	0%
<i>Sub-Total</i>		30	\$33	12	\$13
Industrial Automation & Equipment	Early Stage	53%	57%	57%	47%
	Expansion	33%	35%	35%	40%
	Turnaround	7%	2%	4%	10%
	Other	7%	6%	4%	3%
<i>Sub-Total</i>		15	\$8	23	\$15
Medical/Health Related	Early Stage	54%	31%	70%	30%
	Expansion	28%	10%	21%	66%
	Acquisition/MBO	4%	1%	0%	0%
	Turnaround	0%	0%	9%	4%
	Other	14%	58%	0%	0%
<i>Sub-Total</i>		28	\$29	23	\$30

Source: Macdonald and Associates

**Table 2.10 Disbursements by Industry Sector and by Stage
1991, 1992 (\$ Millions)**

Industry(Traditional)	Stage	1992		1991	
		#Investments	\$ Invested	#Investments	\$ Invested
		%	%	%	%
Consumer Related	Early Stage	19%	15%	27%	16%
	Expansion	34%	34%	41%	42%
	Acquisition/MBO	16%	24%	22%	38%
	Turnaround	12%	2%	2%	0%
	Other	19%	25%	8%	4%
<i>Sub-Total</i>		32	\$27	41	\$63
Manufacturing	Early Stage	17%	4%	14%	8%
	Expansion	22%	28%	23%	14%
	Acquisition/MBO	21%	43%	20%	39%
	Turnaround	32%	19%	23%	29%
	Other	8%	6%	20%	10%
<i>Sub-Total</i>		72	\$60	65	\$71
Miscellaneous	Early Stage	39%	43%	36%	40%
	Expansion	22%	18%	39%	34%
	Acquisition/MBO	14%	16%	0%	0%
	Turnaround	8%	2%	3%	13%
	Other	17%	21%	22%	13%
<i>Sub-Total</i>		49	\$39	36	\$54
TOTAL		333	\$308	289	\$290

Source: Macdonald and Associates

Table 3.1 Dispositions by Exit Mechanism
1991, 1992 (\$ Thousands)

Exit Mechanism	#	1992		#	1991	
		Cost	Exit Value		Cost	Exit Value
Acquisition	6	\$14,612	\$39,826	7	\$14,377	\$70,474
Company Buyback	22	\$26,464	\$26,662	9	\$21,312	\$36,253
IPO	6	\$3,998	\$19,339	9	\$15,714	\$36,319
Merger	1	\$2,500	\$3,200	0	\$0	\$0
Write Off	7	\$7,052	\$0	15	\$18,343	\$0
TOTAL	42	\$54,626	\$89,027	40	\$69,746	\$143,046

Source: Macdonald and Associates

Table 3.2 Dispositions by Investor Type
1991, 1992 (\$ Thousands)

Type	#	1992		#	1991	
		<i>Cost</i>	<i>Exit Value</i>		<i>Cost</i>	<i>Exit Value</i>
CF	4	\$8,900	\$9,200	6	\$6,537	\$12,000
CI	3	3,774	656	3	7,477	14,900
CR	10	10,021	16,129	6	16,529	18,656
HY	1	3,700	10,300	4	5,776	4,216
PI	24	28,230	52,742	21	33,427	93,274
<i>Total</i>	42	\$54,625	\$89,028	40	\$69,746	\$143,046

Source: Macdonald and Associates

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