

## CANADA'S VENTURE CAPITAL INDUSTRY IN 2002: SUMMARY OBSERVATIONS

In a year of market correction and investor caution, Canada's venture capital industry nonetheless showed signs of vigour, especially in the final months of 2002. By the end of December, industry capital flows totaled \$2.5 billion, achieved in part because of a last burst of technology-intensive activity in Q4, when \$754 million was disbursed, up by an impressive 51% from the \$500 million of the third quarter. Q4 also represented the highest rate of transactional activity all year, bringing the year-end aggregate to 677 companies financed.

In other words, the Canadian industry enjoyed a better-than-anticipated outcome to 2002. This being said, disbursement levels were down by 35% from \$3.8 billion in 2001, and most closely resemble those last seen in 1999, suggesting that venture investors are still feeling the effects of depressed public stocks, an uncertain economy, and, by extension, reduced exit options. Activity in the Canadian industry continued to prove stronger than it was in the United States, where fourth-quarter investment stayed flat and year-end capital invested, totaling \$US21.2 billion, was only half of the \$US 41.3 billion recorded last year.

Despite a turbulent ride, communications and networking still emerged as the sector of choice, attracting 27% of all disbursements, followed by life sciences, which captured 19%. In addition, while the activity of American venture funds, strategic corporate funds and other foreign investors in this country declined by 40% from \$1.1 billion last year to \$650 million this time around, their share of total capital invested remained relatively constant, at 26%, suggesting their continuing interest in Canadian deal opportunities. Canadian investors and their partners generally preferred existing portfolio firms in 2002, as well as companies at an early stage of development.

Fund-raising also slowed in aggregate terms in 2002, but was more broadly based than in 2001. New capital commitments totaled \$3.2 billion, with LSVCCs accounting for \$1.7 billion. However, the most compelling story resided with private-independent funds, which raised \$1.1 billion, or more than double their \$483 million of last year. New supply contributed to growth in industry's total pool of capital under management, which finished 2002 at \$22.5 billion. The pool of liquid capital (available for investment) also rose to \$7.4 billion.

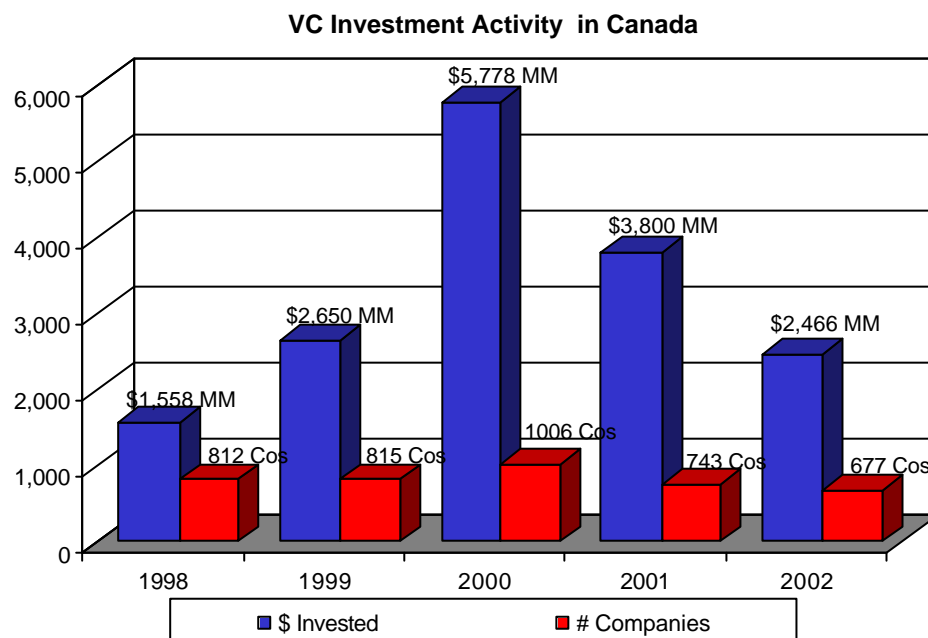
### **Notice of Data Changes**

*To stay abreast of trends in Canada's venture capital industry, Macdonald & Associates continually updates all company financing information. For this reason, current and historical aggregate data are subject to change. Website users should therefore be alert to revisions to quarterly and annual statistics, in total and across specific categories.*

## CANADA'S VENTURE CAPITAL INDUSTRY IN 2002: AN OVERVIEW

### INDUSTRY ACTIVITY RISES SHARPLY IN Q4

In a year of market correction, slowdown and investor caution, Canada's venture capital industry nonetheless showed signs of vigour, especially in the final months of 2002. By December 31<sup>st</sup>, capital flows totaled \$2.5 billion, achieved in part because of a last burst of technology-intensive activity in Q4, when \$754 million was disbursed, up by an impressive 51% from the \$500 million of the third quarter. A total of 259 Canadian firms obtained financing in this period, up by 22% from three months prior, and representing the highest rate of deal activity all year. Consequently, company financings rose to a year-end aggregate of 677.



In other words, the Canadian industry enjoyed a better-than-anticipated outcome to 2002, considering the substantial drop in activity that occurred between April-September, on the heels of the telecommunications meltdown in public markets. This being said, the industry remained much less active than it had been in the heady days of 2000 and 2001. Instead, investment trends of this past year more closely resemble those of 1999, when \$2.6 billion was deployed to 815 firms.

These data indicate that, despite a vital final quarter, the industry continues to feel the effects of a contraction created by depressed public stocks, an uncertain economy, and, by extension, reduced exit options. Indeed, Canadian venture professionals saw plenty of evidence of a weaker environment in 2002, including several examples of fund mergers, consolidations and closures, asset shedding and portfolio write-downs.

This evidence notwithstanding, the situation in Canada was fairly stable when viewed against the United States, where the venture capital industry has witnessed steady, and generally severe, declines in activity since 2000. According to Thomson Venture Economics, this pattern seems to have abated in Q4, 2002 when \$US4.2 billion was invested, down moderately from the \$US4.5 billion of the previous quarter. However, this contrasts with activity in the Canadian industry, which grew over this period. In addition, the year-end tally of dollars invested south-of-the-border was \$US21.2 billion, or half of the \$US41.3 billion recorded in 2001. By contrast, Canadian disbursements of \$2.5 billion were down by 35% from last year's \$3.8 billion.

Characteristic of the choppy waters of 2002, Canadian venture professionals increasingly fixed their sights on portfolios, with the aim of keeping companies afloat in time for the market's renewal. For the most part, fund resources were strategically reserved for follow-on transactions, which captured 74% of capital flows on balance, up from 63% two years ago.

By the same logic, much of the industry was less inclined to back innovative firms seeking venture capital for the first time, or at least those that could not demonstrate tangible revenue streams. For this reason, new investment activity sagged by all measures in 2002, with 264 companies securing only \$646 million, as compared to \$860 million last year and \$2.1 billion in 2000. As was observed in earlier quarterly reports by Macdonald & Associates, such numbers point to a major cash squeeze for first-time company transactions that has few precedents in the Canadian industry's history.

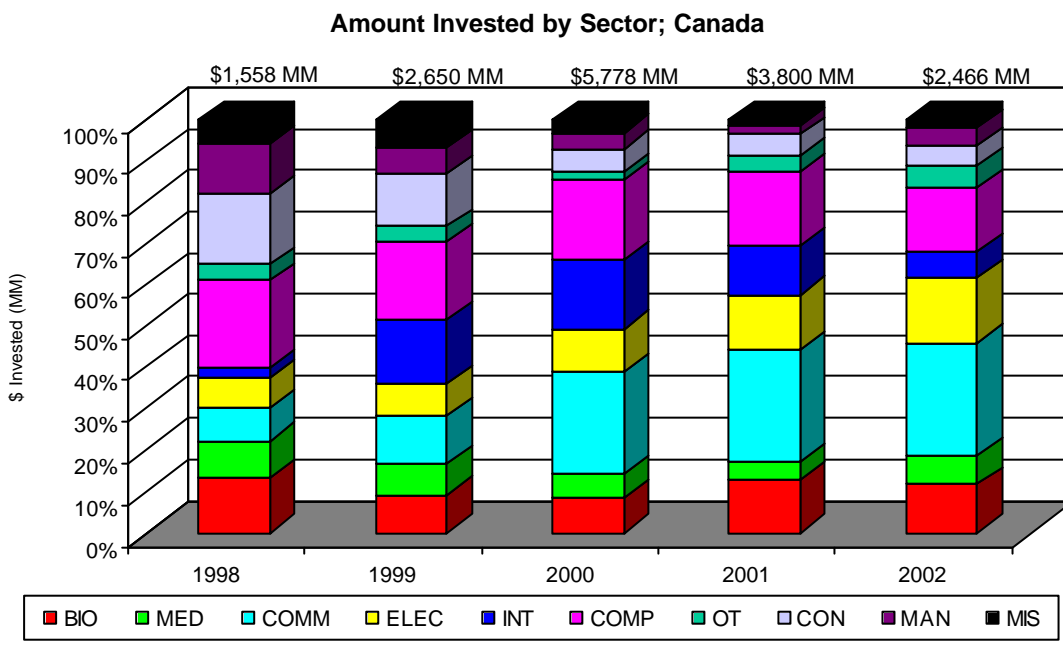
The trend towards industry resource conservation in 2002 was also apparent in company financing sizes, which at \$3.6 million on average, were well short of those of the recent past. In 2001, the average amount injected per company stood at \$5.1 million, while in 2000, the average was \$5.7 million.

Even in a softer market context, Canadian investor participation in deals located outside of the country – and primarily the United States – was steady, with \$536 million going to non-resident transactions valued at \$1.4 billion. Last year, Canadians invested \$671 million in deals abroad worth \$1.5 billion.

Adjusted for exchange rate differences, industry disbursements to Canada-based businesses in 2002 stood at 8% of those in the United States.

**COMMUNICATIONS STILL LEADING THE PACK**

For a third year in a row, communications and networking was the darling of emerging technology sectors in Canada, finishing 2002 with \$673 million in 59 firms. This took place despite a turbulent ride for the sector, which attracted most of this total dollar amount in the first three months, via a handful of exceptionally large deals, involving such high profile companies as Catena Networks and Innovance Networks. Thereafter, sector investment was heavily impacted by public stock devaluations, with the greatest erosion in activity occurring in Q2.



In the second half of the year, communications firms managed an appreciable revival, driven once again by syndicates of Canadian and American venture investors. For instance, between October and December, several major financings were completed, including those for S2IO Technologies, Meriton Networks, BTI Photonics and BelAir Networks. Such deals ensured that communications maintained its reputation for capital intensity, at least as compared to other sectors, given an average company infusion of \$11.4 million.

As a result, communications took a 27% share of total capital invested by the industry in 2002, a level that is on par with trends of the immediate past. This being said, both capital flows and deals done in the sector were well shy of those evident the year before, when \$1.0 billion was disbursed to 73 firms.

Assuming second spot in 2002 was biotechnology and other life sciences, with 149 companies garnering \$463 million. While the latter is 29% below the \$651 million obtained last year, life sciences sustained a particular momentum in the past year that was observable across North America. In Canada, one indicator of this development was the life sciences share of capital invested, which was 19% this time around, as compared to 17% in 2001 and 14% in 2000. Perhaps not surprisingly, Canadian venture funds specializing in life sciences have done surprisingly well in fund-raising.

Consistent with the past, biopharmaceuticals accounted for the greatest proportion of sector disbursements, illustrated by large, fourth-quarter deals engaging firms such as ParaTech Therapeutics and Celator Technologies, while medical device companies, such as Q4's VisualSonics, consumed much of the balance. Company financings averaged \$3.1 million.

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#### Top 10 Deals Done (By Size) in 2002

<b>Company</b>	<b>City</b>	<b>Province</b>	<b>\$ Committed (CDN)</b>	<b>Quarter</b>
Catena Networks Inc.	Kanata	ON	\$ 112,500,000	Q1
Innovance Networks Inc.	Ottawa	ON	\$ 88,000,000	Q1
Hyperchip Inc.	Montréal	QC	\$ 70,000,000	Q1
SiGe Semiconductor	Ottawa	ON	\$ 64,200,000	Q4
Silicon Access Networks	Ottawa	ON	\$ 58,500,000	Q1
Trillium Photonics Inc.	Ottawa	ON	\$ 43,500,000	Q1
ITF Optical Technologies Inc.	Saint-Laurent	QC	\$ 37,535,000	Q3
Castek Software Factory Inc.	Toronto	ON	\$ 34,200,000	Q3
Silicon Optix Inc.	Toronto	ON	\$ 26,625,000	Q2
Meriton Networks Inc.	Kanata	ON	\$ 25,500,000	Q4

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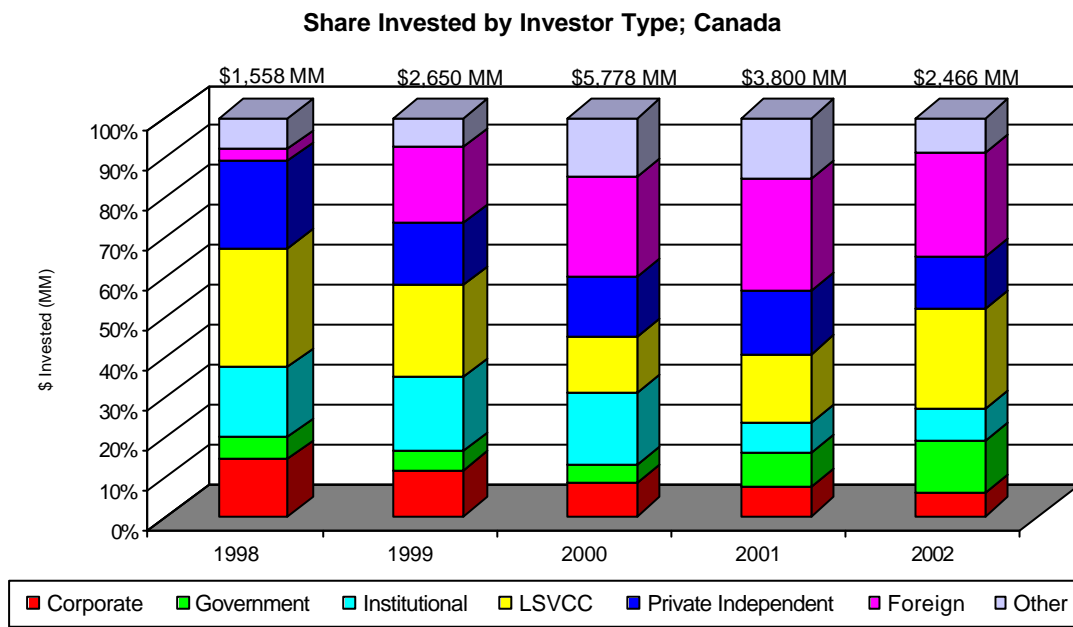
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Elsewhere in IT, semiconductors, electronics and computer hardware reflected \$382 million in 61 companies in 2002, with thanks in part to some of the biggest transactions of the year's final three months, including those featuring SiGe Semiconductor, SiberCore Technologies and SiRiFIC Wireless Corporation. With \$358 million going to 105 firms since January, computer software products also put on a good show, though capital flowing in this direction was particularly low relative to 2001, despite some very large Q4 deals involving Triversity and Linmor Technologies. The same can be said for internet-related firms, a total of 51 of which captured \$153 million. One year ago, software and internet-related activity secured \$642 million and \$452 million, respectively.

Along with life sciences, a Canadian technology sector that gained relative ground in 2002 was energy and environmental technologies. Companies like QuestAir Technologies, which received a supplementary financing in the fourth quarter, totaled 37 and absorbed \$103 million. Such backing is only 10% short of the \$115 million invested in 2001, when the sector first established a strong presence in the industry.

**FOREIGN INVESTORS DOWN BUT NOT OUT**

In light of the integral role that has been played by foreign investors in Canadian disbursement levels since 2000, short-term movements in foreign capital flows have been of concern to the industry. This was certainly true in the second quarter of 2002 when erosion in investment in the communications sector was matched by reduced cross-border activity on the part of American venture and strategic corporate funds.



In the year's second half, it became increasingly clear that non-resident attention to deal opportunities in Canada had not flagged, but in fact may even have diversified somewhat, perhaps as a consequence of the events of Q2. By the end of December, foreign sources, typically in combination with Canadian partners, deployed \$650 million, down by 40% from the \$1.1 billion they brought to Canadian transactions the year before. However, the foreign share of total capital invested in this country was largely unchanged – 26% in 2002 versus 28% in 2001 – suggesting that they have tended to keep pace with broader trend lines.

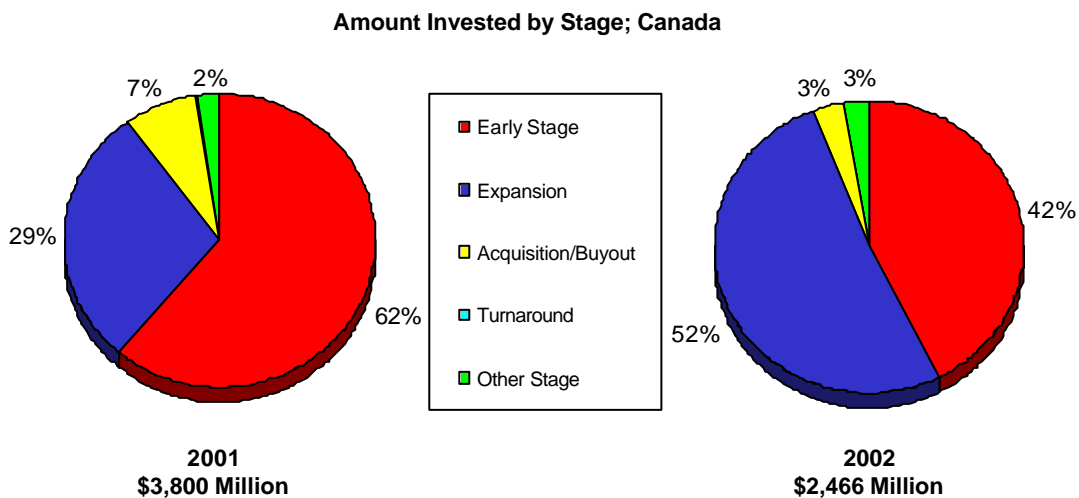
In a slower market, this indicates that key American and other foreign investor groups, such as VIMAC, Intel Capital Corporation, Seaflounder Ventures, Novartis Venture Fund, Kodiak Venture Partners, Prism Venture Partners, Menlo Ventures and Morgenthaler Ventures – to name only several funds that led in company financings this past year – have probably developed a lasting interest in an array of emerging Canadian technology sectors. Furthermore, foreign activity in 2002 remained high by historical standards, and eclipsed anything seen in all years excepting 2000 and 2001.

With the decline in the rate of foreign disbursements, LSVCCs emerged as the most active investor group in Canada in 2002, deploying a total of \$627 million, or one-quarter of capital invested as a whole, to 319 companies. Resources invested by LSVCCs this time around were not far short of the \$650 million attributed to them the year before, suggesting the key influence of government-legislated investment pacing rules. Government funds finished the year with \$329 million going to 201 firms, which even exceeds the \$323 million disbursed by them in 2001.

Private-independent funds accounted for \$313 million in 2002, which is close to half of the \$602 million they were responsible for in 2001. The activity of corporate funds and institutional investors making direct investments in the market was also sub-par, contributing \$144 million and \$183 million, respectively.

**FLEDGLING FIRMS STILL COMMAND ATTENTION**

Companies at an early stage of development have had considerable upward momentum in the Canadian industry since 2000, with some of the biggest names among venture-backed technology firms included in their number. Even in the contracted market of 2002, seed, start-up and other early stage deals continued to get done, with the result that 356 very young firms, or 53% of the total, absorbed \$1.0 billion, or 42% of all disbursements. In absolute terms, however, early stage investment is well off the standard set in 2001, when \$2.3 billion flowed to 412 companies.



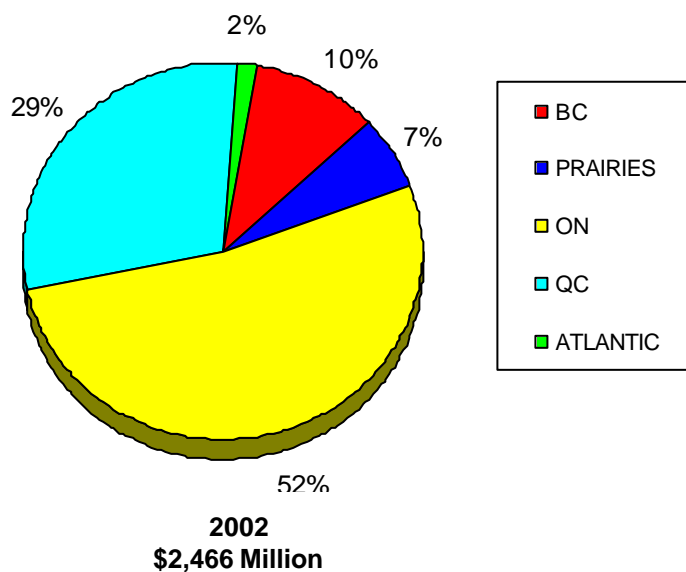
The largest category in this field was other early stage companies, which garnered \$511 million, illustrated in fourth-quarter financings for such companies as and BTI Photonics and BelAir Networks. Start-up companies, including Q4's Meriton Networks and ParaTech Therapeutics, finished in second place, taking \$443 million. Remarkably, seed investment, totaling \$94 million, actually improved over last year's \$90 million. Lower average amounts injected into all early stage firms assumed a major role in reduced capital invested – in 2002, this average was \$2.9 million, as compared to \$5.6 million in 2001.

Since the period January-March, expansion transactions made significant advances in attracting venture capital, relative to last year, with a total of 259 firms obtaining \$1.3 billion, or 52% of the aggregate, by December 31<sup>st</sup>. In the concluding three months of 2002, such companies included SiGe Semiconductor and Triversity. By contrast, expansions secured a more modest \$1.1 billion in 2001.

**MOST DOLLARS IN ONTARIO, FIRMS IN QUÉBEC**

Once again, Ontario-based companies captured the greatest portion of capital invested in 2002, with \$1.3 billion, or just over half of the total. This occurred despite a lull created in the middle of the year, when reduced dollars going to the communications sector undermined activity in the province. Some renewed emphasis of communications, along with other sectors native to Ontario helped to alter this trend in the final months. Key to this outcome was the Ottawa Valley, which was especially sensitive to up-and-downs in communications-related activity, but nonetheless finished 2002 with \$735 million, or 57% of provincial disbursements, followed by Greater Toronto, with \$449 million.

**Amount Invested in Canada By Region**



In part by attracting close to half of all life science dollars invested in 2002, Québec accounted for \$722 million of capital invested by the Canadian industry, or a 29% share overall. This level remains high by recent measures, given the one-quarter share Québec-based firms have typically obtained. Also, by a country mile, Québec continued to lead the nation in the number of venture-backed companies, which totaled 344 at the end of December, or 51% of the aggregate. The largest proportion of dollar streams – 73% – continues to be located in Greater Montreal.

With its diverse technology base, British Columbia reflected \$251 million in 64 provincially based companies in the past year, or 10% of national disbursements. This level is on par with British Columbia's usual take of industry activity, though below the 13% share managed by the province in 2001.

### **PRIVATE LPS RAISE ONE BILLION-PLUS**

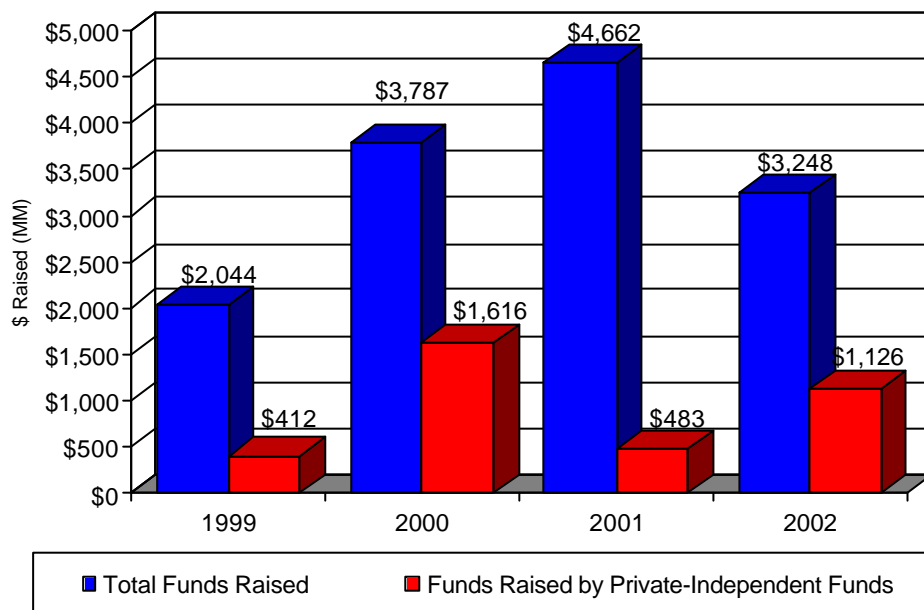
While much of the Canadian industry was monitoring supply stocks in anticipation of longer exit horizons, many were busy raising new capital in 2002. As a consequence of this activity, chiefly among LSVCCs and private-independent funds, the industry added \$3.2 billion in new capital commitments to its national pool. This is down by 30% from \$4.7 billion raised in 2001, but fund raising was much more broadly based this past year, given that almost half of the new capital of 2001 came from one institutional investor.

As was noted in earlier quarterly reports by Macdonald & Associates, the most compelling story here is the greatly increased new commitments to the limited partnerships (LPs) managed by private-independents. Between January and December, private LPs accrued over \$1.1 billion, primarily through the successful efforts of major management companies, including Celtic House Venture Partners, MDS Capital Corporation, MM Venture Partners, RBC Capital Partners and Skypoint Capital Corporation. Several new funds were also formed, including Lombard Life Sciences and MSBI Capital. Some of the most successful were investor groups targeting life sciences, in full or in part.

Private LP inflows in 2002 surpass by 133% the \$483 million raised by these funds last year and, indeed, beat all past annual outcomes, excepting 2000 when private-independents raised a total of \$1.6 billion in new supply. As such activity is a bellwether of the industry's long-term health, this is encouraging news.

Even more fresh capital was raised by LSVCCs. Propelled by a steady RRSP season, which included the creation of some new pools, the funds raised \$1.7 billion, which is just shy of the \$1.8 billion brought in by LSVCCs in 2001. Canada's largest LSVCC, the Fonds de solidarité (FTQ), was responsible for the lion's share of retail share purchases and also accounted for most money raised outside of the Q1 period. Other top fund-raisers in this category included Canadian Medical Discovery Corporation, FondAction, GrowthWorks Capital, Triax-Covington Corporation and VenGrowth Capital Partners.

**New Capital Inflows; Canada**



In addition, government funds brought a supplementary \$315 million into the industry, while corporate funds accounted for \$52 million in new commitments.

Given the prominence of LSVCCs in annual fund-raising, individuals remained the central source of inflows, accounting for \$1.8 billion, or 56% of all new commitments in 2002. Driven partly by the growing market presence of CPP Investment Board, pension funds contributed \$510 million, or 16% of the aggregate number. The milestone creation in 2002 of Canada-based fund-of-funds, including Edgestone Venture Capital Fund of Funds and TD Capital Private Equity Investors, will hopefully leverage still more institutional participation in 2003. The third biggest source of funds raised was governments, with \$354 million, followed by corporations with \$276 million, and foreign investors with \$221 million.

2002 witnessed not only brisk fund-raising in some quarters, but substantial fund mergers, consolidations and even a few closed-doors. It should also be mentioned that Macdonald & Associates was able to add to the database the reports of some long-standing investor groups that have not previously contributed data. When supply inflows, outflows and other factors are reconciled, the Canadian industry found itself with net \$22.5 billion under management, up 11% from the \$20.2 billion recorded in 2001.

Fund-raising also left an impression on the industry's liquidity position, which is stronger at the beginning of 2003 than it was when 2002 got underway. Capital available for investment rose to \$7.4 billion this time around, up from the previous \$6.3 million. In addition, liquidity is spread across a more diverse body of industry players than in it was last year, though many of these are especially large funds .

Once again, Canadian industry circumstances contrast sharply with those of the American venture capital industry, for which a mere \$US6.9 billion was raised in the past year, as compared to \$US40.7 billion in 2001. However, the situation in the United States is much different, given the highly potent fund-raising there in the late 1990s that led to a huge supply overhang in the weak investment climate of today.