Q2 2007

VENTURE CAPITAL MONITOR

A QUARTERLY UPDATE ON THE CANADIAN VENTURE CAPITAL INDUSTRY

The Canadian venture capital (VC) industry is a key contributor to the growth of innovative firms that commercialize research. For this reason, the health of this industry is an ongoing concern. The goal of this series is to provide current information about this key enabling industry. To this end, the series will track trends in investment activity, report on topical VC-related research and look at key technology clusters where VC investment is taking place.

INTRODUCTION

This issue reports on venture capital (VC) investment trends in the second quarter of 2007. It also discusses the challenges associated with collecting VC investment data in Alberta. The feature article examines how governments are influencing clean technology investment globally and within Canada. The "In Focus" article looks at growth of the wireless, information technology (IT) and geomatics sectors in Calgary and the key challenges facing those clusters in attracting talent and investment.

VC ACTIVITY OVERVIEW

Investment and fundraising trends

Venture capital investments in Q2 2007 reached \$426M, a drop of 12 percent compared with Q2 2006 (Table 1). However, the first half of 2007 has registered an increase in VC investments of 20 percent compared with the first half of 2006, from \$853M to \$1.03B, due to a good first quarter.

Fundraising activity continued its downward trend with \$272M raised during Q2 2007, down 42 percent from the \$466M registered in Q2 2006. For the first two quarters of 2007, fundraising has declined 21 percent, from \$940M to \$739M, compared with the first two quarters of 2006.

Table 1 VC investment and fundraising in Canada, Q2 2006 and Q2 2007

	Q2 2006		
	(\$ mil	% Change	
Investments	483	426	-12
Fundraising	466	272	-42

Source: Thomson Financial Canada 2007.

Fundraising activity was mainly driven by private independent funds, which accounted for approximately 70 percent of the funds raised, with the remainder raised by labour sponsored venture capital corporations (LSVCCs).

Deal size trends

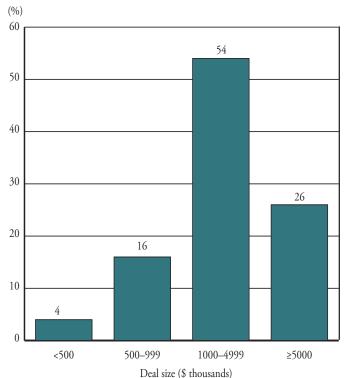
The average deal size in Q2 2007 was approximately \$3M with 75 deals, or 54 percent of the deals, in the range of \$1M to \$5M (Figure 1). Deal size for domestic investors still lags that of foreign investors. The average deal placed by domestic investors was approximately \$2.5M, down from \$2.8M registered in Q2 2006. The average deal for foreign funds was approximately \$6M.

VC investment stage trends

In Q2 2007, 72 percent of all VC investments were made in follow-on deals, slightly lower than the



Figure 1 VC deal distribution by size, Q2 2007



Source: Thomson Financial Canada 2007.

83 percent registered in Q2 2006 (Table 2). Seventy-six percent of the follow-on investments were focused on later stage companies, up from 51 percent for Q2 2006. During the last six quarters, about 75 percent of investments from domestic investors were follow-on deals. This highlights their focus on existing portfolio companies.

Regional distribution

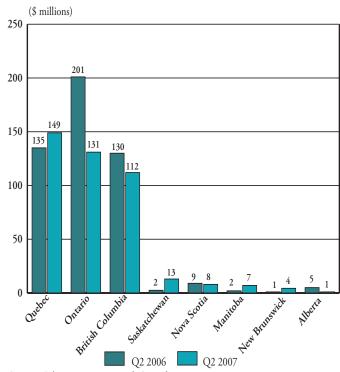
In Q2 2007, Quebec led all regions by attracting \$149M in VC investments, followed by Ontario with \$131M (Figure 2). Ontario attracted less VC in the second quarter relative to last year with investments falling from \$201M in Q2 2006 to \$131M in Q2 2007. However, as a result of a good first quarter, VC investments made in the first half of 2007, relative to the first half of 2006, have increased in most provinces, except in British Columbia and Nova Scotia. Ontario registered a 26-percent increase from \$350M to \$439M.

Table 2 New versus follow-on investments, Q1 2006 to Q2 2007

	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Q1 2007	Q2 2007
New (%)	19	17	15	28	13	28
Early stages (%)	66	52	65	60	73	46
Later stages (%)	34	48	35	40	27	54
Follow-on (%)	81	83	85	72	87	72
Early stages (%)	35	49	28	38	36	24
Later stages (%)	65	51	72	62	64	76

Source: Thomson Financial Canada 2007.

Figure 2 Regional distribution of VC investments, Q2 2006 and Q2 2007



Source: Thomson Financial Canada 2007.

Key sectors attracting VC investments

In Q2 2007, \$209M was invested in the IT sector, leading all other sectors as in previous quarters (Table 3). However, compared with Q2 2006, the sector saw a decline of 17 percent in VC investment. Similarly, \$127M was invested in the life sciences sector in Q2 2007, a decline of 10 percent compared with Q2 2006. The energy and environmental technologies (cleantech) sector witnessed a sharp decline of 45 percent in Q2 2007 relative to Q2 2006. This is in contrast to international trends of increasing VC investments in cleantech companies.

Table 3 VC investment distribution by sector, Q2 2006 and Q2 2007

	Q2 2006	Q2 2007	
	(\$ mil	% Change	
Life sciences	141	127	-10
Information technologies	252	209	-17
Energy and environmental technologies	67	37	-45
Other technologies	9	7	-21
Traditional	15	47	213

Source: Thomson Financial Canada 2007.

Investor trends in the VC market

As in Q1 2007, foreign funds represented the most active type of investors in the Canadian market in terms of total amount invested, although their share dropped to 29 percent from the previous 50 percent registered in Q1 2007 (Table 4). Private independent (PI) fund investment activity also dropped in Q2 2007 to \$59M, a 28-percent decrease from the \$83M invested in Q2 2006. LSVCCs, however, increased investment activity to \$119M from the \$98M investment level registered in Q2 2006.

Despite the decrease in VC investment in Q2 2007 for foreign and PI funds, they posted an increase in investment levels during the first half of 2007 compared with the same period in 2006, mainly due to a good first quarter.

Table 4 VC investments for LSVCC, private independent and foreign funds, Q2 2006 and Q2 2007

	Q2 2006 (\$ millions)	Share (%)	Q2 2007 (\$ millions)	Share (%)
LSVCCs	98.7	20	119.3	28
Private independent	83.2	17	59.4	14
Foreign	182.8	38	121.9	29

Source: Thomson Financial Canada 2007.

VC-related government activities

In Q2 2007, the Business Development Bank of Canada (BDC) invested in 18 rounds of financing that, with co-investors' contributions, totalled \$133.59M (Table 5). Farm Credit Canada (FCC) made three deals during Q2 2007.

Table 5
BDC deal distribution by stage of development, Q2 2007

		Financing (\$ millions)		
	Number of rounds	BDC's share	Other co-investors	
Seed	4	2.89	5.56	
Start-up	2	1.04	3.46	
Development	6	11.05	78.85	
Expansion (first-stage)	6	6.45	24.29	
Total	18	21.43	112.16	

Source: Business Development Bank of Canada, Q2 2007.

Alberta VC market and data collection issues

Canadian VC investment data captured by Thomson Financial raise an interesting issue for Alberta. Through 2002 to 2006, Alberta's reported share of Canadian VC investments was approximately 3.3 percent, while its share of gross domestic product (GDP) during the same period was about 15 percent. Taking into account its recent economic boom, it is likely that the level of VC activity in Alberta is being under-reported.

Robinson and Cottrell¹ examined the Alberta private equity market and found that between April 1, 2003, and July 31, 2003, there were 306 private equity financing deals raising approximately \$402.7M from various types of investors. Formal investors represented 37 percent of Alberta-based investors. Though not all formal investor deals qualify as venture capital deals, the report's data appear to support the view that Alberta's VC activity is being underreported, especially since Thomson Financial reported only six deals for the same period, and mainly by non-Albertan VC investors.

¹ Robinson, Michael J. and Thomas J. Cottrell. 2007. "Investment Patterns of Informal Investors in the Alberta Private Equity Market." *Journal of Small Business Management*, 45(1), 47–67.

A 2007 study² identified explanations for the underreporting of VC activity in Alberta. Of the 19 VC firms contacted for the report, seven indicated that they had never been contacted to participate in a formal survey. Furthermore, VC firms cited the need to maintain investor and investee confidentiality as the primary reason why they avoid reporting investment activity. Other major reasons cited include the time required to complete the surveys versus the benefit received, the lack of familiarity with surveying organizations and survey design issues.

Both studies suggest that, for a variety of reasons, challenges in capturing the actual flow of VC investments in Alberta exist.

The rise of Clean Tech

According to the CleanTech Venture Network,³ the cleantech industry encompasses a broad range of sectors that use new technologies to create economically viable products and services that optimize the use of natural resources or reduce, through application, harmful waste to the environment. Ten cleantech categories have been identified ranging from agriculture to renewable energy.

The increased awareness⁴ of environmental issues and the promise of commercially viable innovations to address those issues present important investment opportunities. Internationally, the cleantech sector has been attracting a great deal of VC interest. For instance, in the United States, VC investment in cleantech increased by 78 percent between 2005 and 2006 to US\$2.9B.

Public policy can fuel cleantech investment activity, for example, through public funding for clean technology research and development (R&D) or the enactment of new regulations and environmental laws. In 2006, global public funding

for environmental technology R&D reached \$48B, up 9 percent from 2005. The potential impact of government regulations and standards is illustrated by China's 2006 Renewable Energy Law,⁵ which contributed to driving VC cleantech investments in China from \$221.8M in 2005 to \$420M in 2006 and over \$500M in the first half of 2007.

In Canada, cleantech has received special policy attention in recent years. The science and technology (S&T) strategy, Mobilizing Science and Technology to Canada's Advantage, emphasized the importance of strong, clear environmental laws and regulations that work with market forces and the government's role in creating conditions for businesses and people to respond to environmental challenges with entrepreneurial innovation. In September 2007, Canada signalled its intent to join the Asia-Pacific Partnership, comprised of Australia, China, India, Japan, Korea and the United States, whose member countries produce 50 percent of global greenhouse gas emissions. The partnership is expected to urge the development and adoption of an effective and flexible climate-change framework that commits the world's major emitters to targets and concrete action against global greenhouse gas emissions.

The Canadian government has also emphasized a strategic focus on environmental sciences and technologies as one of four research priority areas. It established Sustainable Development Technology Canada, which promotes the development of sustainable technology infrastructure, reduces the risk associated with clean technologies, and attracts later stage private-sector investments. The agency provides funding to innovative companies through two funds: the \$550M SD Tech Fund™, which targets companies at the technology development and demonstration stages, and the \$500M NextGen Biofuels Fund™, which targets companies at the commercialization and market development stages.

² Elder, Brian and Michael Robinson. 2007. "Alberta Private Equity Markets Study."

³ A for-profit membership group that connects venture, corporate and institutional investors, entrepreneurs and service providers interested in clean technology.

⁴ A Globescan survey of 22 000 people in 21 countries revealed that 90 percent believe action is necessary to address climate change and almost 66 percent believe major steps are required very soon.

⁵ The law requires that power grid operators purchase resources from registered renewable energy producers. The law also offers financial incentives, such as a national fund to foster renewable energy development, and discounted lending and tax preferences for renewable energy projects.

Since April 2002, the agency has placed 11 calls for statements of interest, which drew 1319 submissions totalling \$12.2B in project potential. About 300 submissions were funded.

Despite these global and domestic trends and efforts, in 2006 the Canadian cleantech sector attracted only \$120M in VC investments, or five percent of the amount invested in the U.S. cleantech sector in the same time frame.

"IN FOCUS" — CALGARY

Calgary, one of Alberta's technology hubs, is known for its information and communications technologies (ICTs) cluster, which employs approximately 55 000 people. The dominant sector in this cluster is IT, which employs 19 900 people. This cluster has been supported by a rich research environment, including labs at the University of Calgary and TRLabs. TRLabs is a not-for-profit ICT research consortium that involves the telecom industry, universities and government.

The trigger for the development of the ICTs cluster has been attributed to Calgary's active wireless sector, which has its roots in the early 1980s with Alberta Government Telephones (AGT) entry into the development and implementation of wireless telecommunication systems. This was in response to the growing need of the Alberta energy sector for wireless communication devices. By 2001, the wireless sector employed an estimated 12 000 people in 100 active wireless firms in Calgary. However, the burst of the technology bubble in 2001 had a moderate impact on the wireless sector with large firms such as Nortel and Panasonic downsizing or ceasing operations in the city. Nonetheless, according to WirelessCity, a business advisory service provider, the wireless sector has recovered and currently consists primarily of small and medium-sized enterprises (SMEs) and employs 12 000 people in Calgary. A 2005 survey⁷ highlighted

the following characteristics associated with Calgary's population of wireless firms:

- 78 percent had less than 50 employees,
- 57 percent employed more than 10 percent of their staff in R&D activities,
- 72 percent had sales of less than \$5M and
- 23 percent of their employees graduated from Alberta's post-secondary institutions.

Alberta's WirelessCity initiative⁸ was launched in 2002 to help companies expand their markets and promote new start-ups. Its mandate is to showcase innovative, exportable, made-in-Alberta technologies to potential investors, customers and markets. According to WirelessCity, the main challenges facing wireless SMEs in Alberta are access to skilled workers and developing marketing capabilities.

Calgary's IT sector is younger than its wireless counterpart. According to Calgary Economic Development, Calgary's IT sector consists of approximately 1543 companies, with the majority providing IT-related services. It is characterized by the small size of its companies, with more than half of those IT firms employing less than 10 employees. A 2005 survey of 91 IT companies in Calgary indicated that

- 34 percent were operational for less than five years and 31 percent for 5–10 years,
- 65.4 percent had reported a positive cash flow in 2004 and expected to be profitable in the following year and
- 75 percent expected to expand their workforce within the following two years, with 30 percent indicating an expected increase in employment of at least 40 percent.

Geomatics⁹ is another important technology sector in Calgary. This sector, which employs approximately

⁶ Calgary Economic Development (CED). 2007. "Calgary: Advanced Technology — Information and Communication Technologies Sector Profile."

⁷ Alberta's Wireless and Telecom association cited in Calgary Economic Development (CED). 2007. "Calgary: Advanced Technology — Information and Communication Technologies Sector Profile."

⁸ A complete profile of the organization will be featured in a future issue of the Venture Capital Monitor.

⁹ Geomatics is the science and technology of gathering, analyzing, distributing and using information related to space — often referred to as geo-info.

11 400 people, revolves around high-end Global Positioning System (GPS) technologies and surveying data. Other technology sectors that are important to Calgary's economy include the electronics and digital media sectors.

The ICTs cluster plays an important role in Calgary's economy. In addition to skill shortages, the cluster faces equally important challenges in attracting professional investors with ICT investment experience. The Calgary-based angel investment community has typically been focused on energy-related investments; consequently, attracting ICT-related investments from that community is a challenge. According to WirelessCity, the cluster would benefit from a larger base of venture capital investors, experienced in placing technology venture capital investments, that could provide business advice and market knowledge to Calgary's emerging and expanding ICT firms, in addition to providing equity financing.

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VC MONITOR SURVEY RESULTS

The authors of this report would like to thank everyone who responded to the web-based survey that accompanied the last issue of the *Venture Capital Monitor*. Most of the survey's respondents (66 percent) were from the government sector. As well, more than a quarter of respondents have also read the *Small Business Quarterly*, which is produced by the Small Business Policy Branch and is available at http://www.ic.gc.ca/SMEquarterly.

What best describes your organization?			
Government	66%		
Angel/private equity investor	11%		
Small business	11%		
University or college	5%		
Financial institution	3%		
Other/undisclosed	5%		

NOTES

This publication is part of a series prepared by the Small Business Policy Branch. The branch analyses the financial marketplace and how trends in this market impact small businesses' access to financing. Current research is focused on high-growth firms, the aspects of both Canada's VC and general business environment that affect the success of these firms, and the key players in the risk-capital market (for example, VC firms and angels).

The Small Business Policy Branch is also responsible for the Small and Medium-Sized Enterprise Financing Data Initiative (SME FDI). The SME FDI is a comprehensive data-collection program on SME financing in Canada. In partnership with Statistics Canada and Finance Canada, Industry Canada reports on the supply of and demand for financing by small and medium-sized businesses. Further information and statistical findings and reports are available at www.sme-fdi.gc.ca.

To be added to the distribution list for this quarterly publication, please contact Julie Bedard at 613-941-1939 or **bedard.julie@ic.gc.ca**.

For questions related to the content of this publication, please contact Younes Errounda at 613-954-4369 or **errounda.younes@ic.gc.ca**.

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Multimedia Services Section Communications and Marketing Branch Industry Canada Room 264D, West Tower 235 Queen Street Ottawa ON K1A 0H5

Tel.: 613-948-1554 Fax: 613-947-7155

Email: multimedia.production@ic.gc.ca

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