

ANGELS IN BRITISH COLUMBIA: PRACTICE, POLICY AND PERSPECTIVES*

THIS IS A PRELIMINARY VERSION OF A HARVARD CASE STUDY

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*“The only way this part of the world will grow is through the angel investments.
There is no other way.”*

- [Angel Investor #1], Prominent BC Angel Investor -

Todd Tessier, the Executive Director of the Investment Capital Branch within the Ministry of Small Business, Technology and Economic Development (British Columbia, Canada), couldn't help but being a little bit distracted. Spectacular scenery was unfolding around him as the seaplane was lifting over the city of Vancouver, with snow-capped mountains in the north, the Fraser valley in the east, the gulf islands in the west, and the blue waters of the Georgia Straits to the south. Todd's responsibilities of bridging the world of provincial politics in Victoria, the capital of British Columbia, with the world of entrepreneurial finance, much of which was happening in the greater Vancouver area, frequently required him to take the half hour seaplane flight between these two cities. As the plane gained height he focused his mind back onto the big questions. Todd had overseen the development of a unique tax credit policy that supported not only the local venture capital industry, but also a burgeoning angel investment scene. While the program initially proved to be very popular, the global recession made investors increasingly skeptical of investing in technology start-ups. The program was up for Treasury Board review in Victoria and Todd had been asked to propose changes. He felt the pressure. There were as many opinions on what to change, as there were trees along the beautiful Pacific Northwest coastline. The key, of course, was to see the wood for the trees.

The Economy of British Columbia

British Columbia (BC henceforth) had a population of 4.4M people, approximately 13% of the Canadian population. It was the third most populous province in Canada after Ontario and Quebec, and the fourth largest economy also after Alberta. GDP per capita was \$45,150 in 2008.¹ Like most Canadian provinces, BC was hit by the 2008-2009 recession, with the economy declining by 0.3% in

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2008 and 2.3% in 2009.² For much of the late 19th and early 20th Century the BC economy was largely reliant on primary resource industries such as forestry, fishing, and mining. By 2010 the importance of the resource sector had diminished, though forestry and mining remained important sources of employment in rural regions of the province, directly providing 5.5% of the province's GDP. Construction, retail and services were increasingly dominating the local economy. The US was the province's largest trading partner, although East Asian economies also became increasingly important.³ The 2010 Winter Olympic Games in Vancouver and Whistler brought global attention to the province, boosting the already large tourism sector. Vancouver was the third-largest feature film location in North America and had been nicknamed 'Hollywood North'. Vancouver also regularly ranked in the top five globally in 'Quality of Life' surveys.

BC's economic development relied heavily on the creation of new small businesses and expansion of existing ventures. In 2007 there were about 360K small and medium size enterprises (SMEs) in BC, out of 2.4M SMEs in Canada.⁴ They accounted for 98% of all businesses in the province and provided 93% of the employment opportunities in technology sectors. Over 99% of all SMEs had less than 100 employees. Small businesses in BC with fewer than fifty employees employed around 1M individuals in 2004, representing nearly 60% of all private-sector employment in the province. 17% of Canadian SMEs could be defined as high-growth. They were responsible for nearly 55% of the 1.8M net new jobs created in the country between 1985 and 1999. BC's SMEs were particularly young, 14% of the province's SMEs being less than 3 years old, compared with 11% for the national average. BC's high technology sector employed over 81K people in 2007, generating 5.9% of BC's economic output. The technology sectors included new media, biotechnology, cleantech, medical devices, engineering, electronics, advanced manufacturing and information & communications technologies, contributing over \$9.3 billion to the province's GDP in 2007.

An early success story was MacDonald, Dettwiler and Associates Ltd. (MDA). Incorporated in 1969 it became a global leader in information system solutions for the aerospace industry.⁵ In the late 1980s, the basement of a home in Burnaby was the development base for 'Test Drive', a revolutionary video game from Distinctive Software.⁶ The game evolved into the franchise game 'Need for Speed' bought by Electronic Arts, a leading video game producer.⁷ The printing industry was changed in the early 1990s by Platesetter, a computer-to-plate machine, developed by Creo. The world's best selling business intelligence reporting tool, Crystal Reports, was developed in the early 1990s by Crystal Services, eventually acquired by SAP.⁸ BC also had its share of successful biotech firms, including Angiotech and QLT.⁹

BC's Angel Investors

After using their own funds (and possibly those of their family and friends) entrepreneurs requiring equity capital typically turn to angel investors and/or venture capital firms.¹⁰ See Exhibit 1 for generic overview of the fundraising process. According to Wikipedia "An angel investor or angel (also known as a business angel or informal investor) is an affluent individual who provides capital for a business start-up, usually in exchange for convertible debt or ownership equity." The fundamental difference between angels and venture capitalists is that angels invest their own money, whereas venture capitalists manage funds on behalf of a set of limited partners, mostly institutional investors.

The category of angel investors includes a large variety of types, some investing only in personal acquaintances, others investing in strangers; some investing small amounts, others investing large fortunes; some spending little time, others investing quasi full time; some investing on their own, others investing as part of angel groups. One way of categorizing angel investors was by the amount they invested, ranging from “smaller” angels (sometimes called checkbook angels), investing \$10K or less, to so-called “super angels” investing millions of dollars.

Obtaining information on angel investing is challenging because no systematic data is being collected on this part of the financial system. In addition to numerous interviews, the authors of this case study organized a survey of BC angels.¹¹ The survey focused on angels investing in high technology start-ups, ignoring other angels that invest primarily in real estate or low tech businesses. 95% of respondents were male, the average age was 53, with a range from 31 to 73 years. Exhibit 2 summarizes some of the base findings. Panel A describes the angels’ professional experiences while Panel B reports on their investment preferences.

Most angel investors considered making a financial return very important. Some noted that they were not satisfied with the returns to investing in stocks, bonds or real estate and therefore had shifted a small part of their portfolio into angel investments. Apart from the financial motivation, angels also emphasized the importance of remaining involved with their industry, and helping the next generation of entrepreneurs. Upon selling his company in 2004, [Angel Investor #2] reinvested back into the industry with the motivation to make more money. [Angel Investor #3] explained “I was always interested in business and made my first angel investment when I was in university”. For [Angel Investor #4] it was the “high risk – high perceived return that motivated me to become an angel investor”. [Angel Investor #1] started angel investing when he invested in a friend’s start-up.

There was no single approach to finding and evaluating companies. [Angel Investor #3] noted that the process was more personal: “I evaluate start-ups on a case by case basis. Most of the time it is about the people: are they credible, etc...? If I like the people, then I ask business questions. I do not care about business issues at first.” [Angel Investor #2] found that co-investing with the venture capital firms allowed him to benefit from their deal flow and due diligence. In the BC Angel survey, almost all angels reported checking the references of the entrepreneur, 80% emphasized consulting with other angels, and 52% reported to normally consult with customers, suppliers or competitors.

Beyond financing, the extent to which angels got involved with their companies varied considerably. 18% of respondents said they never sat on the board of directors, 47% did so for less than half their investments, and only 8% always did so. In terms of value-adding, 84% of angels reported provided business advice and mentoring and 62% introduced the company to their network of contacts. 43% provided fundraising expertise, 34% market development expertise and 30% product development expertise. Super angels could have larger concentrated ownership stakes that would increase their influence. [Angel Investor # 6], a super angel and former CEO of one of BC’s most successful companies, commented that “the issue with small investments is that angels do not get power to make changes in the company they invest. For example, if a founding CEO is running down the company and you need to replace him, you need to have substantial investment in the company to do so.”

Some observers of angel investing in Canada and the US suggested that Canadian angels were somewhat less sophisticated than in the USA. One local response had been the establishment of several angel networks. By 2010, there were several angel networks in the Vancouver area, and

some efforts to introduce networks in the rest of the province. Each network had its distinct approach, yet all aimed to bring angels together to share knowledge. Respondents of the BC Angel Survey reported several benefits of attendance: 51% enjoyed getting access to deals, 49% taking advantage of other angels' expertise, 38% to pool resources by co-investing. In addition to organizing regular events where pre-selected start-up teams would present their "pitches", the leaders of these networks frequently cooperated in organizing workshops for angels, covering topics such as how to structure deals or how to plan exits.

There were informal contacts between the Vancouver-based angel networks, and some of the US-based angel networks. [Angel Investor #7] commented on the close links with the Bellingham Angel group (Bellingham, WA, is located just south of the border, one hour drive from Vancouver, BC): "Up to one-third of their 2009 investments were in BC-based companies. When talking about syndicated deals, it's interesting to note who leads the investment deal – e.g. Vancouver angels would only invest in a Bellingham deal if a Bellingham angel lead, and vice versa."

One off-spring from the organized angel networks was the creation of so-called "angel funds." For example, Mike Volker, founder of the VANTEC network also launched the WUTIF fund, which allowed smaller angels to passively invest alongside some larger more active lead angels.¹² Angel funds introduced portfolio concepts commonly associated with venture capital funds into angel investing. Instead of concentrating their investments in a handful of companies, angel investors would diversify their investment portfolio by investing in an angel fund that made multiple investments on their behalf. Unlike venture capital funds, however, these funds had no (or low) management fees and carried interest. They had low overhead costs and their promoters often provided a large part of the capital. Angel funds blurred the line between angel and venture capital investing, since they were owned and managed by wealthy private individuals ('angels'), yet they involved delegation of investment decisions ('other people's money').

In addition to the organized angel networks, many angel investors emphasized the importance of their informal networks. [Angel Investor #8] noted that he only considered investing in a start-up if it had been referred to him by other angel investors that he considered savvy and experienced. [Angel Investor #6] said that he relied mostly on his professional contacts from his previous start-up, notably his former employees.

Angels and Venture Capitalists

While angel investors typically provided seed investment that would help entrepreneurs to start up, they rarely could finance start-ups all the way to exit. Their companies therefore often had to seek venture capital funding at some later stages. Venture capital investors generally limited themselves to a small number of high growth potential companies, mostly in the technology sector. Exhibit 3 shows the amount of investment in Canadian venture capital-backed companies. Since 1996, BC had accounted for approximately 13% of all Canadian venture capital investments. In the aftermath of the financial crisis of 2008, the venture capital industry had come under increased scrutiny worldwide. Some observers argued that the 'industry was broken', noting that over a 5-10 year horizon it had generated too few success stories and low returns while spending excessive management fees. One report suggested that the US venture capital industry would have to shrink to half its size.¹³ The Canadian VC market was not immune from these criticisms. Between 2007 and

2009 the amount of investments had declined by 49%. An open question was to what extent angel investor might be able to fill the gap that was left after the retrenchment of venture capitalists.

Angels and venture capitalists behaved differently in many respects. Angels tended to invest smaller amounts, invested at earlier stages, required less formalism, etc., although exceptions applied to each of these generalizations. [VC # 2] who had been an active angel investor before starting a VC fund explained the differences in investment strategies employed by angels and VCs as follows: "When you invest your own money you tend to make quicker decisions, but as an institutional investor, you need to go through many procedures such as due diligence and documentation. Nowadays, Canadian VCs also focus mostly on the risk factor". [Angel investor #6] further commented that "VCs are careful because as fund managers, when they invest other people's money in a company which might close down in 2 years, they will have to write the money off and face their limited partners. Angel investors do not have the same pressure because most of the time they invest their own money."

The relationship between venture capitalists and angel investors was sometimes described as a cautious cohabitation based on desired goals. Some angels argued that having angels helped companies raise venture capital funding. [Angel Investor #3] explained, "When angels invest that brings credibility to company, making it easier for venture capitalists to invest." However, there were also many challenges. One angel investor thought that the "relationships between venture capitalists and angels were horrible." Many angels argued that usually they had prior experience running businesses, and expertise within the company's sector. This gave them sometimes an advantage over venture capital firms who they thought did not always have partners with the relevant operational experience. They noted that, unlike in Silicon Valley where many venture capitalists were previous entrepreneurs, Canadian venture capital firms were mostly run by former bankers.

The most contentious issue was the valuation of follow-on rounds. Having invested at an early and very risky stage, angel investors were often frustrated that they lost influence at later stages, particularly when new investors dominated the follow-on rounds and offered lower valuations than hoped for by the early round angels. [Angel Investor #1] noted that "I invest relatively little money in the company and thus I have less influence than venture capitalists on the company affairs, structure and corporate governance. My investments have to align with the interests of venture capitalists who will have more control over the company." In addition to the issues of valuation and control, angels and venture capitalists often disagreed on the choice of securities. Venture capitalists almost always asked for preferred securities, whereas angel investors often held common equity. Even when they held preferred securities, they might be forced to convert them due to so-called pay-to-play clauses.¹⁴ This was particularly a problem for smaller angels, super-angels sometimes found it easier to work with the venture capitalists.

Looking at it from the other side, VCs often complained that angel investors paid too much in the early rounds, causing the entrepreneur to have unrealistic expectations and complicating subsequent financing rounds. As [VC #1] put it "angels tend to overvalue the deals and when they come to us after some time and ask us to pay for the overvalued deal, it becomes difficult because once we do syndicated deals there are other guys who will not be willing to overpay. Therefore, we actually ask angels to run by us their early stage deals, so that we can anticipate problems for subsequent VC investments."

While the frictions between angels and venture capitalists were universal, some observers believed that relations in BC were comparatively better than elsewhere. [Angel investor #9] noted that “BC angels were mostly successful technology entrepreneurs who gained the VCs respect due to their deep industry expertise and contacts.” He contrasted this with Alberta, “where many angels had made their fortunes in the oil and gas industry, but didn’t have the same deep understanding of high tech start-ups.” One interesting experiment came from “Yaletown Venture Partners”, a Vancouver-based venture capital firm that explicitly invited cooperation from angel investors. The firm had attracted several well-known angels as special limited partners. They not only invested in Yaletown’s funds (partly using the EBC program described below), but also shared their contacts and expertise.

BC’s Equity Capital Program

Historical origins

In 1982 the Quebec Federation of Labour convinced the Quebec provincial government to create so-called Labour Sponsored Venture Capital Corporations (LSVCC). These venture capital funds were sponsored by labour unions, with the primary objective of investing in local SMEs to create and maintain jobs. Private individuals, commonly referred to as retail investors, would receive tax credits when investing in LSVCC funds. In 1988 legislation was passed that enabled the federal government to support the creation of labor-sponsored funds in any province by sharing the tax credit burden between the federal and provincial governments. LSVCCs began to spread everywhere in Canada except Alberta and New Foundland. In the mid-2000s tax changes and poor returns reduced the popularity of LSVCCs.

The labor sponsored venture capital program generated considerable controversy. Proponents of the program argued that it helped to develop the Canadian venture capital market, and supported the financing of innovative companies, including Research in Motion (RIM), makers of the popular Blackberry smart phone. Critics of the program emphasized the high cost to the government and the overall poor performance of the LSVCC and their companies. There was also a belief that the government-sponsored LSVCC had crowded out private independent venture capital.

Program architecture

In British Columbia the Ministry of Small Business and Economic Development administers all of the equity capital programs. According to their website these “programs encourage investors to make equity capital investments in British Columbia small businesses that will enhance and diversify the provincial economy. The government recognizes that creating new small businesses and expanding existing ones will contribute to a healthy economy. These programs give small business continuous access to early-stage venture capital to help them develop and expand.”

There were four main programs.¹⁵ The first concerned so-called Employee Venture Capital Corporations (EVCCs), BC’s version of Labor sponsored funds. This was the only program that involved the participation of the federal government. All other programs were purely financed by the provincial government. The second program concerned so-called Retail Venture Capital Corporations (“Retail VCCs”) which were similar to LSVCCs in many respects. The third program concerned a different type of VCC fund not based on retail investors. To distinguish them from Retail

VCCs, we call them “Angel VCCs”, although this term was not part of the official language. The fourth was a program, called the EBC program. It did not involve any fund-based investing but instead provided tax credits directly to individuals who invested in eligible companies. Exhibit 4 outlines the company eligibility criteria. EVCCs and Retail VCCs were operated by venture capital firms, whereas investments under the Angel VCC and EBC program were made by angel investors. All these programs gave a 30% tax credit to investors that were residents of BC. Exhibit 5 illustrates the structure of VCC and EBC programs. Exhibit 6 compares the main rules across the four programs.

The EVCC program dated back to 1985 and emulated the standard Canadian labor-sponsored venture capital model. While all other programs were purely provincial programs, this program was shared between the provincial and federal government. Retail investors received a 15% federal tax credit on a maximum \$5,000 annual investment, with the B.C. provincial government offering an additional 15% tax credit. In 2010 only one venture capital firm, GrowthWorks, was operating under this program. As [Angel Investor #9] put it: “In BC, GrowthWorks was effectively granted monopoly access to the provincial tax credits and this exclusive access was in place for a number of years. When other funds were allowed to enter the market, GrowthWorks was so well established that the new funds were not well positioned to market their funds and never reached a sustainable size.”

The passage of the Small Business Venture Capital Act (SBVCA) in 1985 created a venture capital program that was independent of the federal government. One part of the program was the licensing of a small number of Retail VCC funds. These emulated some aspects of the labor-sponsored venture capital model (namely giving tax credits to retail investors), but also deviated in some important respects. The entire 30% tax credit was provided by the provincial government. Retail investors were limited to investing \$5K in EVCC funds, but they could invest up to \$200K in VCC funds. In 2010 there were four Retail VCC funds: the BC Advantage Funds (with the Advantage Growth Fund and the Advantage Venture Fund); BC Discovery Fund; and the Pender Growth Fund. The investment firms that managed these funds could separately operate unrelated financial funds.

While the Retail VCC funds were a relatively minor variation of the LSVCC model, the SBVCA also allow for a novel type of tax-advantaged VCC funds. Technically this type of fund was a dedicated investment vehicle (with a minimum capital of \$25K) to be used for investing in eligible business. While any BC resident could invest in Retail VCCs, only “qualified” investors could invest in these funds. To be qualified, an individual either had to be acquainted with an executive of the company (either through family or through a professional work relationship), or else be an ‘accredited’ investor.¹⁶ These alternative VCC funds quickly became the preferred investment vehicle for BC angel investors, hence our label of Angel VCCs. By 2010 there were over 100 such Angel VCCs. Many of these had been created to invest in a single company, but others invested in multiple companies.

The SBVCA was revised in 2003 when the provincial government introduced a ‘direct’ tax credit program where individuals could invest in an eligible business corporation (EBC) without first having to create a VCC investment vehicle. Under this program it was the EBC that had to register with the program, significantly reducing the investors’ paperwork. In the mid-2000s the Ministry also introduced an electronic submission system further simplifying the administrative process. To be eligible, the EBC had to have equity capital of at least \$25K prior to registration. The maximum equity capital that the EBC could raise was \$5M. See also Exhibit 6.

[Angel Investor # 1] preferred the EBC program: “I could invest directly into the company and this made the process easier. I used to invest through a designated venture capital fund, which required

getting a law firm involved, resulting in legal fees. Now thinking back, I would never do that again. The direct investment method is one of the best programs available.” 71.4% of the BC Angel Survey respondents preferred the direct EBC model over the indirect VCC model. After the introduction of the EBC program, the use of Angel VCCs for making a single investment essentially disappeared. The main users of Angel VCCs became the super angels, as well as the emerging ‘angel funds.’

Budgets

Exhibit 7 shows the total amount of funds raised under the various tax credit programs. The Labor-sponsored program had a budget of its own that allowed GrowthWorks Working Opportunity Fund to raise up to \$55M per year, resulting in a maximum of \$8.25M of tax credits for the province. In recent years the Working Opportunity Fund had been unable to raise its allocated amount. The unused tax credits could not be rolled over to another year, or be reallocated to another program.

The VCC and EBC programs were administered jointly under one annual budget of \$30M tax credits (since 2008), thus enabling up to \$100M of equity investments each year. While there was no clear division between the EBC and Angel VCC program, the Retail VCCs had guaranteed access to \$43M of investments, or \$12.9M of tax credits. Any unused funds could be reallocated. In addition to dividing the overall budget between angels and Retail VCCs, political demands required the Ministry to distinguish different budgets that catered to specific interests. In the fiscal year 2009, for example, there were four distinct budgets.¹⁷ The Community budget (\$3m tax credits) reserved funds for eligible investments outside of the Greater Vancouver Regional District or Capital Regional District, catering mostly to the geographically vast but much less populated interior parts of the province. The New Media budget (\$5m tax credits) was for investments relating to the commercial exploitation of interactive digital media. The Cleantech budget (\$7.5m tax credits) was reserved for investments that helped reduce BC’s carbon footprint. Finally, the Equity Capital Budget (\$14.5m tax credits) catered to all remaining companies that satisfied the eligibility criteria.

While the creation of these special budgets had a variety of political origins, some observers doubted their usefulness. One angel investor questioned the wisdom of having several targeted budgets, saying “Let the market decide”. In his book “Boulevard of Broken Dreams”, Josh Lerner of the Harvard Business School argued that it was tempting to add restrictions and over-engineer the programs. Although it was expected that groups receiving the subsidies would continue to target the local region for investments, he argued that governments should avoid to further micromanage the entrepreneurial process.

After the global financial crises in the fall of 2008, the overall budget of \$100M was no longer fully utilized. In the preceding years, however, there had been excess demand for the tax credits. After some time in the year, tax credits were no longer available. In 2006, the first year that this happened, investors were caught by surprise. It left a bitter taste with some investors, who argued that the tax credits should always be available, and who wanted to see a reallocation of funds from other budgets. In the following years many investors anticipated the budget closures, submitting their claims early in the year. Naturally this meant that the budget ran out even earlier. In 2008, the Equity Capital Budget ran out in early March, the New Media in mid-April and the Community Budget in mid-August, the newly created Cleantech budget never ran out.

In addition to the tax credit programs, the BC government launched the BC Renaissance Capital Fund (BCRCF) in 2008. This was a fund of funds that was wholly owned by the BC Immigrant Investment Fund. The purpose of the BCRCF was to attract successful venture capital managers and their capital to BC, in order to further develop innovative technology companies in the Province. The BCRCF was created for the purposes of pursuing investment in four key technology sectors: digital media, information technology, life sciences and clean technology. By 2010 the BCRCF had committed \$90M to seven venture capital fund managers based in the United States and Canada, who collectively had approximately \$2B in capital under management for investment.¹⁸

Program rules

In Canada (except Quebec) all personal income taxes were collected by a federal agency called Revenue Canada, which acted as a tax collection agent both for the federal and provincial governments. Investors that received a tax credit could use it to offset their personal incomes taxes. However, if a tax credit exceeded the individual's tax liability, the government would actually send the individual a check for the difference.¹⁹ The maximum tax credit that any individual investor could claim in one particular year was \$60K which equated to \$200K of equity investments.

Investors were required to make equity or equity-like investments. Preferred convertible shares were acceptable under the program, but simple loans were not admissible. No individual investor was allowed to control more than 50% of the voting shares. Investors in labor sponsored funds were required to maintain their investments for 8 years. The holding requirement for the VCC and EBC program was set to 5 years, although for the Retail VCCs the clock would only start from the time that funds were invested. See Exhibit 6. If investors sold their investments prior to the end of the holding period, they were required to either pay back their tax credits, or reinvest an equal amount within six months.²⁰ Repayment applied only to the original investment amount, not any capital gains. It was also pro-rated, so that an investor who divested after 3 years would only need to repay 40% of the original credit. The holding period requirement posed a difficulty to angels who wanted to exit their investments in less than 5 years. Basil Peters, a prominent BC entrepreneur, venture capitalist and angel investor, had written an entire book about the virtues of early exits.²¹ Others had their doubts. [Angel investor #9] noted "It is not realistic to invest in early stage technology companies and expect an exit in less than 5 years. Exiting too early has been one of the major causes of poor returns for the VC industry and for angels in Canada."

The company eligibility criteria were virtually identical across all programs (see Exhibit 4). Companies were considered eligible if they had less than one hundred employees (including affiliates), paid at least 75% of wages to BC-based employees, and were substantially engaged in authorized activities. The list of forbidden activities disqualifying companies from eligibility included financial activities (lending, acquiring securities), resource extraction (mining, forestry) and real estate investing.

Program evaluation

The Ministry of Small Business, Technology and Economic Development regularly evaluated various aspects of program performance. A 2005 study focused mostly on fundraising patterns, estimated

that angels accounted for 60% to 80% percent of early stage financing.²² The study also estimated that the tax credits increased the total amount of angel investments by 50%-70%.

Probably the most comprehensive evaluation report was to be released in October of 2010. It analyzed the performance of all the companies in the program for the period 2001-2008.²³ The study examined 517 companies, receiving a total of \$65M in federal and \$191M in provincial tax credits. 65% were funded only by angel investors, 16% only by retail investors and 19% by both retail and angel investors.

The report compared total tax credits with the estimated total taxes generated by the companies in the program. It considered both federal and provincial taxes, looking at sales taxes, employee income taxes and corporate taxes. For every \$1 of provincial tax credit, the BC government collected on average \$1.98 in provincial taxes. For every dollar of Canadian (i.e., combined provincial and federal) tax credit, the Canadian government collected \$2.92. See Exhibit 8 for additional details.

On average companies in the program created 2.43 new jobs per year. Companies backed by retail venture capital firms created 5.26 new jobs, companies backed only by angel investors created 1.08 jobs. However, the types of companies in these two groups were quite different, as retail-backed companies were larger, more mature, requiring more equity capital and more tax credits. If one compared job creation per \$10K of tax credits, retail-backed companies created 0.3 new jobs whereas angel-backed companies created 2.15 new jobs.²⁴

For every \$1 of investment benefiting from the tax credits, companies were able to raise an additional \$3.76 of outside equity investment, plus \$1.15 of debt. However, additional fundraising was considerably lower outside of the urban centers of Vancouver and Victoria: in the rest of BC companies only raised an additional \$0.84 of outside equity investment, plus \$1.19 of debt.

In terms of exit rates, retail-backed companies had 6% IPOs and 20% acquisitions, roughly matching national averages. Angel-backed companies, however, had much lower exit rates: 1% IPOs and 3% acquisitions. While this low exit performance was partly explained by the relatively young age of these companies, many BC angels had been disappointed by the lack of successful exits.

Based on publicly available returns data from the retail funds, the 5 year gross returns (Jan 2005 – Dec 2009) ranged from -57.2% to -11.1%. The Canadian Venture Capital Association (CVCA) benchmark generated a -19.3% return for the same period.²⁵ When calculating the net returns (net of tax credits and broker fees), the returns ranged from -24.24% to 19.58%. Measuring the returns to angel investors remained challenging, due to the fact that angels were not required to report returns. The BC Angel Survey provided some preliminary data, shown in Exhibit 9. Given its self-reported nature, and the possibility that angels with poor performance might be less likely to report, caution had to be applied when interpreting the data.

Direction of Change

In the fall of 2010 the program was up for evaluation. Todd needed to consider what changes he should propose. Since 2003 investments under the EBC and Angel VCC program had increased from \$39.6M to \$70.7M, whereas investments through retail vehicles (Retail VCCs and EVCCs) had fallen from \$90.7M to \$19.4M. Shrinking of retail funds happened in all Canadian provinces except

Quebec, but BC was the only one where this was compensated by business angel investments. Todd also believed that BC had a larger number of tech savvy angels who were working more closely with venture capitalists than in the other province. The question was what implications could be drawn from this? He was well aware that taking the lens of a policy maker was different from the perspective of the investors and entrepreneurs with whom he regularly met. In order to justify program changes, he not only had to explain why these changes would help the business community, he also had to justify their public policy rationale. What was the underlying market failure? Why should the government intervene? In addition he had to consider the pragmatic challenge of convincing politicians who had their own agendas. Todd reviewed the many alternative directions that different stakeholders were arguing for. There were four broad options to change the program

Option 1: Tweak

Most business people fundamentally believed that the current angel program worked fine, but that a few tweaks could enhance its value. There were many ideas on what program details should be modified. One pet peeve among investors was the holding period requirement.²⁶ Some investors also wanted to increase the investment limit of \$200K. 12% of respondent indicated they would invest more with a \$300K cap, although 60% indicated that they never reached the current cap of \$200K in the first place. One of the super angels argued that the program was irrelevant for him, since he could only claim tax credits against a tiny fraction of his investment.

There was also some discussion about the geographic scope of the program. Would it be possible to expand the definition of eligible investors, allowing investors from Alberta, possibly all of Canada, or even the U.S. to receive tax credits when investing in BC companies? Could the federal government be convinced to roll out an angel tax credit nationwide? There was also the possibility of cooperation among the western provinces of BC, Alberta and Saskatchewan. Each province had launched initiatives in this area, but there was no reciprocity or coordination across among initiatives.

Option 2: Grow

Within the investment community there was a shared view that more tax credits would lead to more investments. Most therefore wanted a larger tax credit budget. The total tax credit available had proven to be insufficient in those years where investment demand was high. Pointing to the decline in fundraising from retail funds, some angels argued that it would be easy to grow the angel tax credits by taking away from the retail funds' budgetary allocation. Others suggested an increase of both angel and retail venture capital budgets. They were hoping that the total budget be doubled, or even better, have no cap at all.

There were also those who favored raising the tax credit rate above 30%, especially in years where the budget wasn't fully used. Angel investors obviously liked the idea of higher rates, but policy makers also considered the likely impact on aggregate investments. The BC Angel Survey suggested that there were two types of angels: those who said that they wouldn't adjust their investment amounts at all (less than 25% of respondents), and those who said they would adjust them substantially (over 60%). Exhibit 10 provides the details of how changes in the tax credits would

affect the investment behavior. For those angels whose investments increased because of the tax credits there was a question of where they took the additional money from. Several angels explained that the trade-off was between more angel investments versus more investments in stock and bonds. [Angel Investor #1] also argued as follows “Tax credits reduce the risk for angel investors, and allow them to invest more. Therefore they can shift a greater part of their investment portfolio towards these tax-advantaged investments.” The survey also suggested that in the absence of the tax credit, 24% would seek more angel investments in other Canadian provinces and 40% in the US.

Growing the program was popular for people in the industry, but there were sceptics among policy makers, journalists and academics who believed that angel programs could be unnecessary or wasteful. In his book, Professor Josh Lerner argued that policy makers must be careful when determining the size of the venture initiatives. If the funds are too small then program will do little to improve the environment. If programs are too large, they can create an oversupply of capital relative to opportunities, thus disrupting healthy market dynamics. Inflated expectations could also backfire and hinder reasonable future government action. Professor Scott A. Shane also argued that policy makers needed tread carefully. He argued that there had been no convincing evidence of market failure, and policy makers needed to ensure that they were not merely intervening in response to lobbying from angels who simply wanted a subsidy.²⁷

Option 3: Amalgamate

The origin of the angel tax credit was closely linked to the retail venture capital tax credits, yet the programs differed in several important respects. The angel tax credit program was openly accessible and allocated tax credits on a first-come-first-serve basis, while the retail tax credit programs were based on exclusive licenses that had been awarded to specific fund managers. There were also many technical differences between the programs - see Exhibit 6. Many observers believed that a reform of the retail venture capital model was inevitable, given the disappointing returns and the dramatic decline in fundraising.

Any reform of the retail tax credit program could also impact the angel tax credit program. One simple suggestion was to amalgamate the two programs, harmonizing the rules and eliminating the budgetary restrictions across the different program segments. Retail venture capitalists would have to compete with angels for funding and tax credits. Amalgamation of the two programs would probably imply the loss of the remaining federal tax credits that were received by the Working Opportunity Fund.

Option 4: Redesign

One could also rethink the fundamental approach taken by the BC program. One argument was that companies, not investors should be the recipients of the tax credits. Various reasons were mentioned for this: investors were already wealthy whereas entrepreneurs were poor and thus more deserving of tax credits; companies could make better use of the tax credits than investors, and ultimately it is the companies, not the investors who created jobs and economic value. The approach of focusing on companies had been taken by one of Canada’s most popular tax credits, the Scientific Research and Experimental Development (SR&ED) Tax Incentive Program.²⁸

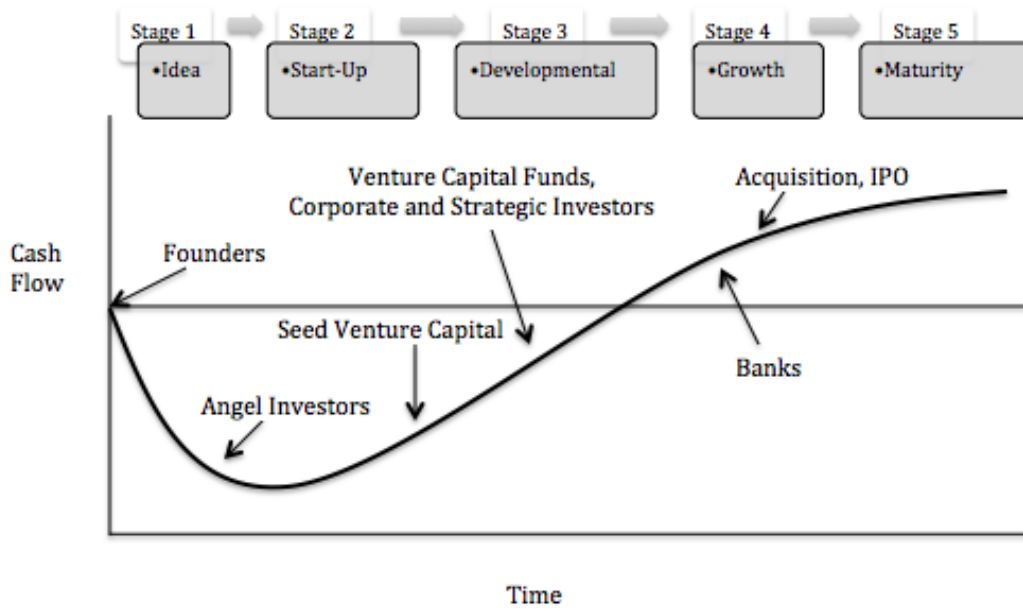
Another line of argument was that rewarding investments rather than success set the wrong incentives. Tax credits on investments facilitated risky investments, whereas a reduction in capital gains would focus investors to only place their funds into those companies with the highest chance of commercial success. Supporting this argument was a finding of the survey that 31% of respondents indicated that in the absence of capital gains taxes, they would make 30% more angel investments, and another 31% indicated that they would make 60% more angel investments - See Exhibit 10. Capital gains taxes in Canada were levied on half of the capital gains, taxing them at the marginal personal income tax rate. See Exhibit 11 for Federal and Provincial personal income tax rates.

There was also the possibility of looking further a field for alternative models of how to support angel investments. One intriguing concept was that of the co-investment fund. In New Zealand, for example, the Seed Co-investment Fund was a direct investment fund aimed at early stage businesses with strong potential for high growth.²⁹ The main objective of the Fund was to enhance the development of angel investors and angel networks, to stimulate investment into innovative start-up companies. The fund provided \$40M of matched investment on a 1:1 basis. Investment occurred alongside selected private investor groups (“approved co-investors”), with the Fund acting as a direct investor on the same terms as the co-investment partner.³⁰

Time to make a decision

The seaplane suddenly banked and started its decent into Victoria Harbor. Todd looked out of the window, admiring the quaint waterfront with the historic Empress hotel. Right next to it was another historic landmark building, the provincial parliament. It reminded him that the time had come to make a recommendation. Managing BCs venture capital programs wasn't exactly an easy job, but at least the commute was worth it.

Exhibit 1: The evolution of company financing



Source: <http://www.slideshare.net/deeturnbull/2009maybc-venture-capital-programs-1407067>

Exhibit 2: Select Findings from the BC Angel Survey
Panel A
Years of professional experience

10 years or less	11-20 years	21-30 years	More than 30 years	Average	Maximum
7.4%	25.9%	43.2%	23.5%	25.4	50

Type of work experience

General	Sales and Marketing	Research & Development	Finance	Operations	Other
77.9%	41.9%	29.1%	53.5%	45.3%	17.4%

Years of entrepreneurial experience

10 years or less	11-15 years	16-20 years	21-30 years	More than 30 years	Average	Maximum
12.5%	41.3%	18.7%	21.3%	6.3%	16.4	40

Number of companies started

None	One	Two	Three to five	More than five	Average	Maximum
15.9%	28.1%	14.6%	28.1%	13.4%	3	20

Years of angel investing experience

5 years or less	6-10 years	11-15 years	More than 15 years	Average	Maximum
27.4%	50.0%	14.3%	8.3%	9.5	30

Panel B
At what stage do you prefer to make your first investment in the company?

Idea	Product	Pre-launch	Sales	Sales	All stages
Concept	Development	Beta	(<2 years)	(>2 years)	
21.0%	36.5%	44.8%	37.5%	10.4%	14.6%

In what sectors do you like to invest?

IT	New	Life	Clean	Low	Real	Other
	Media	Sciences	Tech	Tech	Estate	
62.5%	32.3%	35.4%	65.6%	15.6%	19.8%	9.4%

How much do you typically expect to invest over the life of a company?

\$0-\$10K	\$10K-\$20K	\$20K-\$50K	\$50K-\$100K	\$100K-\$500K	>\$500K	Not disclosed
1.0%	13.5%	16.7%	37.5%	21.9%	4.2%	5.2%

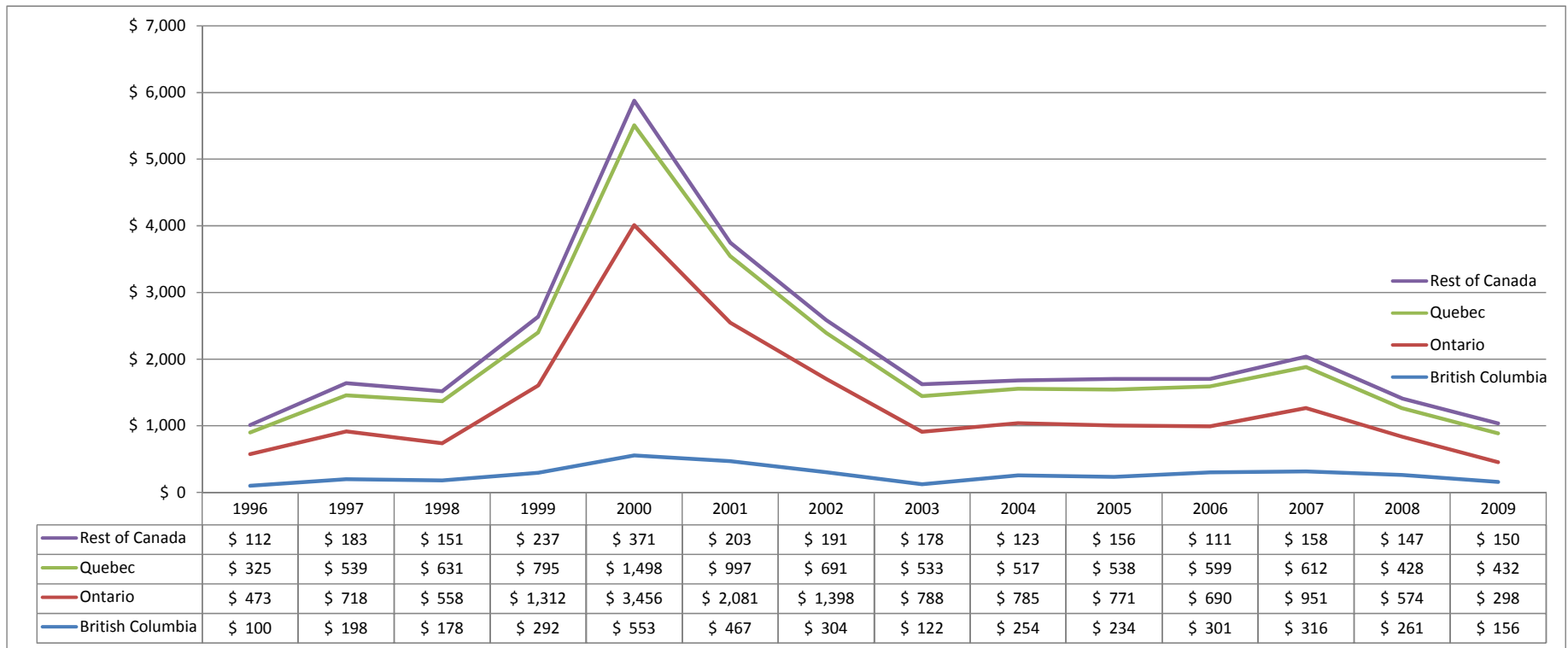
On average, how much do you typically expect to invest as an angel per year?

\$0-\$10K	\$10K-\$20K	\$20K-\$50K	\$50K-\$100K	\$100K-\$500K	>\$500K	Not disclosed
4.2%	11.6%	22.1%	27.4%	16.8%	7.4%	10.5%

On average, how many new investments do you plan to make every year?

One or less	Two	Three	Four or more	Average	Maximum
37.2%	43.6%	10.6%	8.5%	2.1	20

Exhibit 3: Venture capital investments into Canadian companies



Investments are denoted in million Canadian dollars.

Source: Canadian Venture Capital Association

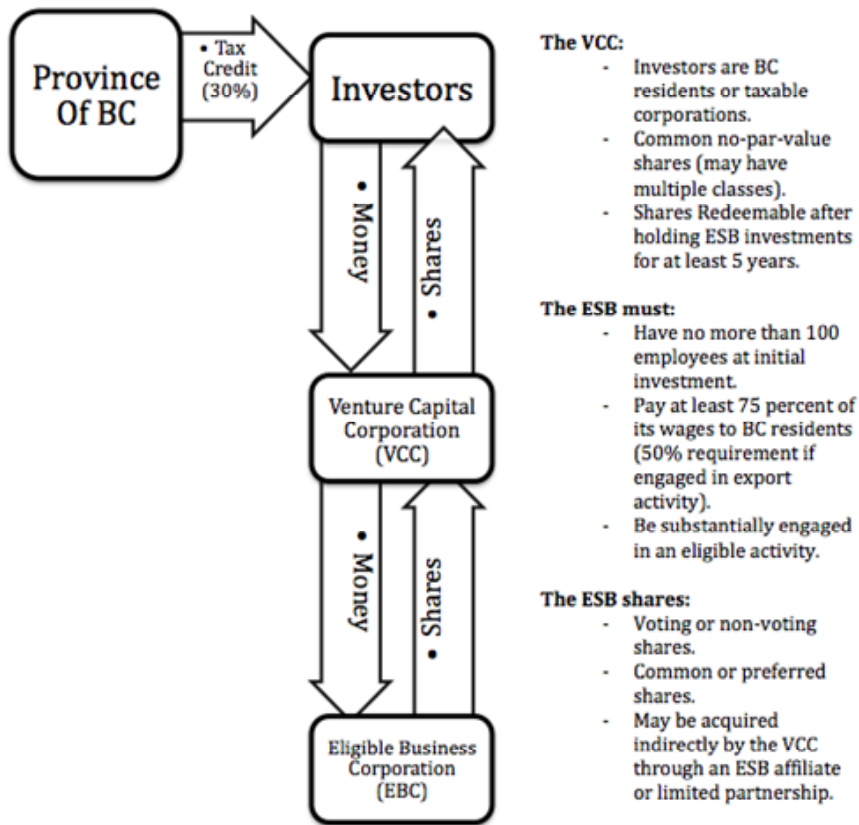
Exhibit 4: EBC Eligibility Requirements

A small business had to meet several requirements to qualify as an “eligible small business” under the program:

- The EBC had to be a corporation.
- The EBC had to be substantially engaged in British Columbia in one or more of the five qualifying activities:
 - **Manufacturing, processing or export of value-added goods produced in BC:** Producing, or putting goods or materials into marketable form by employees of the small business, from raw, unfinished or prepared goods or materials, by changing the form or content of those goods or materials into a finished product.
 - **Destination tourism.** To qualify under this activity, a business had to demonstrate that it did or would earn 50% or more of its gross revenues from tourists. A “tourist” was an individual who resided more than 80 km from the destination resort or attraction.
 - **Research and development of proprietary technology:** Research and development of proprietary technologies produced in BC, including services associated with marketing or exporting the technologies inside or outside the province.
 - **Development of interactive digital new media product:** A small business had to be substantially engaged in the development, within BC, of an interactive digital media product for commercial exploitation [with limitations].
 - **Community diversification outside of the Lower Mainland and the Capital Region.** A business located outside the Greater Vancouver Regional District and the Capital Regional District might have been engaged in an allowed activity if the business activity promoted economic diversification within the region.
- **Employment.** The EBC, together with any affiliates, could not have more than one hundred employees at the time of an initial investment by an investor under the program.
- **Presence in BC** The EBC had to pay 75% of its wages and salaries to employees who regularly reported to work at operations located in BC This rule was relaxed to 50% for businesses primarily engaged in the export of goods or services outside BC The EBC also had to maintain a permanent establishment in British Columbia and keep at least 80% of its assets in the province.

Source: BC Ministry of Small Business, Technology and Economic Development

Exhibit 5A: The VCC option³¹



Source: BC Ministry of Small Business, Technology and Economic Development

Exhibit 5B: The EBC option

Eligible Investors:

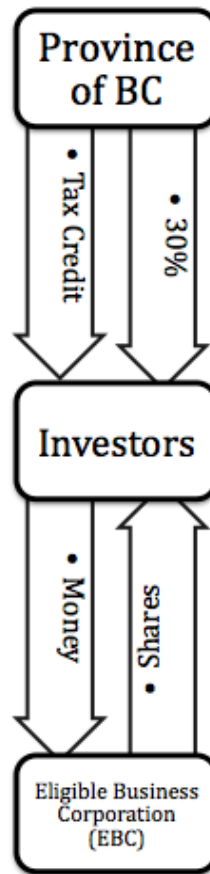
- Investors are BC residents or taxable corporations.
- Shares may not be redeemed, acquired or cancelled for at least 5 years. (transfers permitted with conditions).

The ESB must:

- Have no more than 100 employees at initial investment.
- Pay at least 75 percent of its wages to BC residents (50% requirement if engaged in export activity).
- Be substantially engaged in an eligible activity.

The ESB shares:

- Voting or non-voting shares.
- Common or preferred shares.



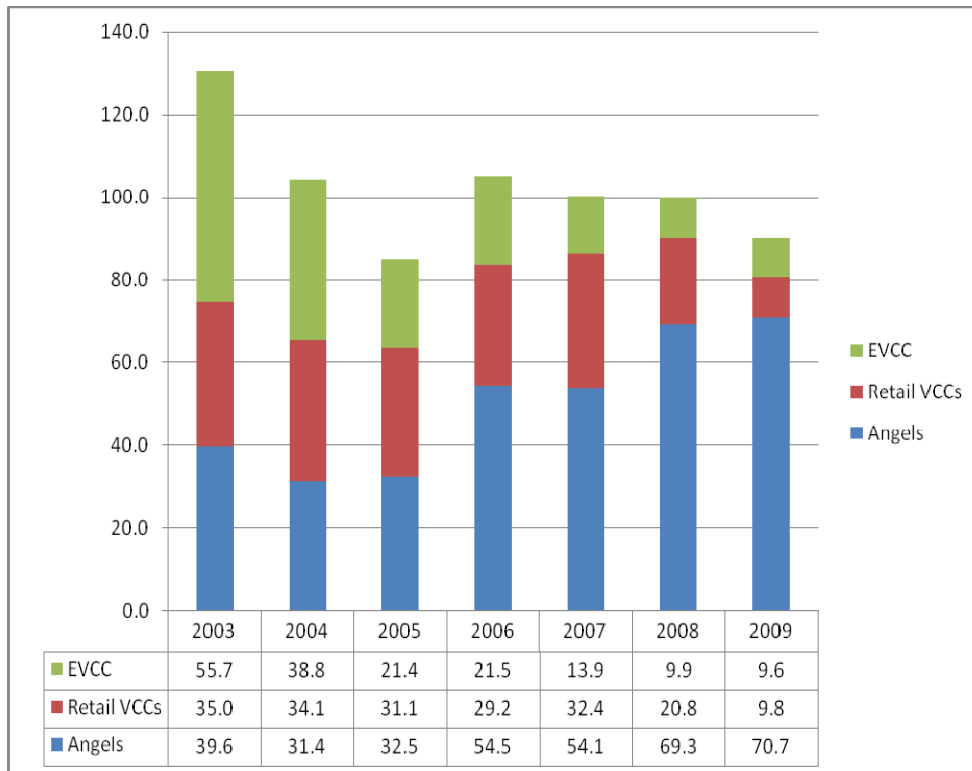
Source: BC Ministry of Small Business, Technology and Economic Development

Exhibit 6: Overview of BC Tax Credit Programs

	EVCC	Retail VCC	Angel VCC	EBC
Types of investors	Venture capital firms	Venture capital firms	Large angels and angel funds	Friends and families, Angels, VCs
Examples	WOF	BC Advantage	WUTIF	Aspreva
Tax credits	15% provincial, 15% federal	30% provincial	30% provincial	30% provincial
Budget (investments)	\$55M	\$43M	\$57M (shared)	\$57M (shared)
Maximum per investor	\$5,000	\$200,000	\$200,000	\$200,000
Maximum per company	\$10M invested into portfolio company over 2 year period	\$10M invested into portfolio company over 2 year period	\$10M invested into portfolio company over 2 year period	\$5M total lifetime
Pacing requirement	Invest 80% of funds raised within 4 years, 20% minimum per year	Tranche 1: 40% by end of year 2; Tranche 2: additional 40% by end of year 3	Tranche 1: 40% by end of year 2; Tranche 2: additional 40% by end of year 3	Receive tax credit after making investment
Holding requirement	8 years	5 years after completion of each tranche	5 years after completion of each tranche	5 years

Source: BC Ministry of Small Business, Technology and Economic Development

Exhibit 7: Funds raised under BC tax credit programs



This graph shows the amount of funds raised that received tax credits. The angel category includes the amounts raised by Angel VCCs and the amounts claimed directly under the EBC program. All amounts are shown in million Canadian dollars.

Source: BC Ministry of Small Business, Technology and Economic Development

Exhibit 8: Total taxes paid and tax credits received by BC companies

Totals 2001-2008, in \$M	All	Retail Portion (EVCC and Retail VCC)	Angel Portion (Angel VCC and EBC)
BC Taxes Paid	\$379.57	\$257.01	\$122.55
Federal Taxes Paid	\$368.04	\$238.49	\$129.55
Canadian Taxes Paid	\$747.61	\$495.50	\$252.10
BC Tax Credits	\$191.44	\$104.73	\$86.72
Federal Tax Credits	\$64.81	\$64.81	\$0.00
Canadian Tax Credits	\$256.26	\$169.54	\$86.72
BC Multiplier	1.98	2.45	1.41
Canadian Multiplier	2.92	2.92	2.91

The BC Multiplier is based on dividing total taxes received by the BC government by the total amount of tax credits paid out by the BC government. The Canadian Multiplier is based on dividing total taxes received by the federal and BC government by the total amount of tax credits paid out by the federal and BC government.

Source: Hellmann and Schure (2010).

Exhibit 9: Expected Returns of Angel Investments

	I don't know	I prefer not to disclose	Negative return	0% to 10%	10% to 20%	20% to 30%	> 30%
Estimated annual rate of return on portfolio	17.7%	19.8%	9.4%	13.5%	16.7%	11.5%	11.5%

Source: BC Angel Survey

Exhibit 10: Tax Credit and Investment Behaviour

	Same Amount	10% less	15% less	30% less	60% less	Not invest at all
If tax credit = 0% then I would invest	26.2%	1.2%	9.5%	27.4%	23.8%	11.9%
If tax credit = 15% then I would invest	24.7%	5.9%	11.8%	28.2%	15.3%	10.6%

	Same Amount	10% more	15% more	30% more	60% more
If tax credit = 45% then I would invest	18.6%	4.7%	12.8%	44.2%	17.4%
If capital gain taxes = 0, then I would invest	17.2%	6.9%	9.2%	33.3%	29.9%

Source: BC Angel Survey

Exhibit 11: Income tax rates for 2010

Federal income tax rate	income from	to	Provincial income tax rate	income from	to
15%	\$0	\$40,970	5.06%	\$0	\$35,859
22%	\$40,970	\$81,941	7.70%	\$35,859	\$71,719
26%	\$81,941	\$127,021	10.50%	\$71,719	\$82,342
29%	\$127,021	\$∞	12.29%	\$82,342	\$99,987
			14.70%	\$99,987	\$∞

Source: Canada Revenue Agency

¹ All dollar amounts refer to Canadian dollars. In August 2010 \$1US was worth approximately \$1.04CAN at the average exchange rate.

² Source: Statistics Canada, April 2009 Provincial Economic Accounts: <http://www.statcan.gc.ca/daily-quotidien/100428/dq100428a-eng.htm>

³ Imports were dominated by the United States (41.8%), China (22.6%), Japan (9.6%), South Korea (4%) and Mexico (3%), while key export markets were the United States (53.3%), Japan (15.1%), China (6%), South Korea (5.9%) and Taiwan (1.8%).

⁴ Statistics Canada defined small and medium sized enterprises (SME) as having less than 500 employees and less than \$50M in annual revenues.

⁵ http://en.wikipedia.org/wiki/MacDonald_Dettwiler

⁶ Holliday, Brent. 'Innovation that Pays: BC Technology in the World.' 7 July 2010.

<http://www.bcbusinessonline.ca/bcb/business-sense/2010/07/07/bc-technology-world>

⁷ <http://news.ea.com/news/ea/20091021005343/en>

⁸ Holliday, Brent. 'How to Grow Your Own', 6 January 2010. <http://www.bcbusinessonline.ca/bcb/business-sense/2010/01/06/how-grow-your-own>

⁹ Holliday, Brent. 'Innovation that Pays: BC Technology in the World.' 7 July 2010.

<http://www.bcbusinessonline.ca/bcb/business-sense/2010/07/07/bc-technology-world>

¹⁰ While angel and venture capital financing constituted only a small part of the overall financing of SMEs in BC, it played a much larger role for the high-growth SMEs in knowledge-based industries. SMEs in BC relied primarily on a combination of traditional lending (61% of companies) and the personal savings of the business owners (54%). Just 4.3% of companies in 2007 reported as having accepted funding from individuals unrelated to the founder's family. Risk equity capital (i.e., angel and venture capital) were reported by about 1.6% of all SMEs.

¹¹ Thealzel Lee from Rocket Builders (<http://www.rocketbuilders.com>) greatly helped with the design and promotion of the survey.

¹² See <http://www.wutif.ca/> and <http://vantec.ca/>

¹³ "Right-sizing the U.S. venture capital industry" by Paul Kedrosky, Ewing Marion Kauffman Foundation, June 10, 2009

¹⁴ A pay-to-play clause implies that if incumbent investors participate in the new round, they retain their preferred shares, but if they don't participate their shares are converted to common shares.

¹⁵ Yet another program provided tax credits for employee share ownership. It was somewhat distinct and typically attracted less than \$1M of investments per year.

¹⁶ 83.1% of the BC Angel Survey respondents were accredited investors. Accreditation required that the individual had a net worth of at least \$1M (excluding the value of their principal residence) or had earned at least \$200K each year for the previous two years (\$300K joined income if married) and had the expectation to make the same amount in the current year. The definition of accredited investors was very similar for Canada and the United States. Details available at http://en.wikipedia.org/wiki/Accredited_investor and http://www.bpsc.bc.ca/privateplacements.asp?id=2004#accredited_investor

¹⁷ Venture Capital Programs Spring 2009. <http://www.docstoc.com/docs/50972214/Venture-Capital-Programs-Spring-2009>

¹⁸ See <http://www.bccrcf.ca/BCRCF/Pages/default.aspx>

¹⁹ Corporations could also make use of tax credits, although they could only use them to offset actual tax liabilities.

²⁰ <http://www.tted.gov.bc.ca/MIT/SBIIO/VCP/VCC/Pages/TaxCredits.aspx>

²¹ "Early Exits" by Basil Peters, see <http://www.basilpeters.com/>

²² Jim Brander, Ed Egan and Tony Boardman, 2005, "The Equity Capital Program in British Columbia: An assessment of capital availability, program efficiency, and policy" Report commissioned by Leading Edge British Columbia, April 2005

²³ Thomas Hellmann and Paul Schure, An Evaluation of the Venture Capital Program in British Columbia, Report prepared for the Ministry of Small Business, Technology and Economic Development, October 2010

²⁴ Similar patterns were also found when analyzing alternative performance metrics, such as companies' growth in sales, assets or wages. The study also compared job creation of companies in the program against a broad set of BC companies outside the program, finding that companies within the program clearly created more jobs.

²⁵ This benchmark is based on the returns of so-called captive funds, which is the CVCA's classification of labor-sponsored funds.

²⁶ 67% of survey respondents indicating they would invest more if the requirement were relaxed.

²⁷ Scott A. Shane, *Fool's Gold, The Truth Behind Angel Investing in America*, Oxford University Press, 2009

²⁸ <http://www.cra-arc.gc.ca/txcrdt/sred-rsde/menu-eng.html>

²⁹ <http://www.nzvif.com/seed-co-investment-overview.html>

³⁰ The Scottish Co-investment Fund (SCF) was another related example of a co-investment fund.

<http://www.scottish-enterprise.com/investment-opportunities/invest-scottish-business/invest-scottish-co-investment-fund.aspx>.

³¹ This model applied to both the Retail VCCs and Angel VCCs.