

New Brunswick Capital Markets Study

A Platform for Market
Development

14 May 2010

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INTRODUCTION

In September 2009, the New Brunswick Securities Commission (NBSC) issued a request for proposals (RFP) seeking a qualified company to study the components of New Brunswick's capital markets, quantify them and describe their interrelationships. The Barrington Consulting Group was selected by the NBSC to conduct the study. Working collaboratively with NBSC, The Barrington Consulting Group carried out the study between October 2009 and May 2010.

This New Brunswick capital markets study is focused on capital markets serving small and medium-sized enterprises (SMEs) or ventures. Although there are markets for capital that serve organizations other than SMEs (e.g. community organizations, not-for-profit organizations, large organizations, etc.), they are generally not considered within this study.

The New Brunswick capital markets supporting SME business ventures are fundamental engines for sustained economic growth in the province. As such, maintaining and improving the performance of these capital markets is of considerable importance to both the private and public sectors. By identifying the individual contributors to SME venture capital markets, understanding their interactions and relating their activities to key performance indicators, all stakeholders will be in a better position to improve the New Brunswick capital markets over the long term.

The two primary components of the New Brunswick capital markets are ventures and investors. Ventures are individuals or organizations that require capital to initiate, innovate and grow their business or enterprise. Investors are those individuals and organizations that have capital that wish to earn a return on the investment of that capital.

Investors are considered direct contributors to the New Brunswick capital markets as they are involved in directly funding ventures at various stages of development. Direct contributors to the capital markets invest in ventures through three principle means: debt financing, equity investment and grants.

There are also indirect contributors to the capital markets. These contributors are not engaged in direct funding, but create value by assisting in the development of entrepreneurs, providing knowledge and expertise with respect to the capital markets and offering professional services to ventures.

All investors in capital markets have criteria with respect to the stage of development of a venture that they generally wish to invest in. Some investors are interested in funding ventures in an early stage of development. Others only invest in ventures that have matured to the point where they are earning revenue with a proven product or service. In the New Brunswick capital

markets, SME ventures in the seed, commercialization and revenue generation and cash flow positive stages are relatively well supported by investors. However those in the start up and late stages are generally not as well supported. Ventures have difficulty maintaining adequate funding through these stages. This is broadly referred to as the 'Valley of Death'. This challenge is typical for ventures in other geographic markets and is also a reality in New Brunswick.

The ultimate desired goal of New Brunswick capital markets is to support and enhance economic strength and stability through the realization of return on investment for investors. There are a number of metrics that measure the performance of the New Brunswick capital markets and determine if this goal is being achieved. The performance metrics have been developed so as to provide insight into the funding volumes feeding the capital markets, the return on investment from the capital markets and the potential economic impact of the capital markets. When used together, the performance metrics form simple and meaningful key performance indicators (KPIs). The KPIs gauge the performance of the New Brunswick capital markets in relation to the overall provincial economy and against other jurisdictions. In addition, the KPIs can be used to monitor the debt financing, equity investment and granting portions of the capital markets. The relationship between the key players in the capital markets, the outcomes they seek to achieve, performance metrics, KPIs governing the performance of the capital markets and the achievement of its ultimate goal are defined in the New Brunswick Capital Markets Performance Model.

There is general consensus among stakeholders that a number of challenges must be addressed in order for the New Brunswick capital markets to become more vibrant and for its stakeholders to be in a position to measure its progress accurately. There is a need for greater foreign and corporate investment in New Brunswick SME ventures. Universities need to continue to grow their significant contribution to capital markets through product commercialization efforts. New data collection processes involving the capital markets' stakeholders must be implemented in order to capture key information that is not readily available at the present time.

This study is meant to provide a platform for engagement and discussion among stakeholders pertaining to further development of New Brunswick's capital markets. The release of this study is an initial step from which stakeholders' feedback will be solicited regarding New Brunswick's capital markets. It is expected that stakeholders will consider and utilize the frameworks and capital markets performance criteria on an ongoing basis as part of their planning activities. The study is not intended to provide an exhaustive inventory of all components or sources of funding to the New Brunswick capital markets, but to address the major ones. As this study is a platform for discussion, it is expected that additional capital markets contributors, performance metrics and data sources will be identified by capital markets stakeholders. The NBSC welcomes

feedback from stakeholders in this regard as over time it will help to refine and improve the overall understanding of the New Brunswick capital markets among all stakeholders.

PURPOSE AND SCOPE OF STUDY

The NBSC is a Crown corporation established by the province of New Brunswick in 2004 to regulate the securities industry and ensure the efficiency and integrity of capital markets in New Brunswick. The mandate of the NBSC is to protect investors from unfair, improper and fraudulent practices and to foster fair and efficient capital markets and confidence in the province's capital markets.

In September 2009, the NBSC issued an RFP seeking proposals from qualified companies to perform a study of the New Brunswick capital markets. The purpose of the study was to identify and quantify the components of New Brunswick's capital markets and their interrelationships. It was expected the results of the study would help inform and shape future direction of the NBSC capital markets development strategy. The scope of the initiative included the following:

- identification and quantification of the components of the New Brunswick capital markets;
- identification of metrics and methods to measure the components of the capital markets; and
- identification and definition of the interrelationships between the components of the capital markets.

The Barrington Consulting Group was selected by the NBSC through the competitive RFP process and began work on the study in early October 2009. Working collaboratively with the NBSC, Barrington conducted the study over the next eight months, delivering the final report in May 2010.

Much consideration was given to the definition of components of the New Brunswick capital markets. Technically speaking, all currently operating New Brunswick businesses could be considered components of the capital markets. Each holds a book value that could potentially be turned into monetary return on investment if sold. Likewise, every taxpayer of New Brunswick could be considered a component of the capital markets as they contribute indirectly to funding the capital markets through taxes paid. However, direct capital funding is a significant input to the creation and growth of ventures that ultimately achieve return on investment for their investors through a variety of means (i.e. buyout, IPO, merger, acquisition, etc.). As such, this is the fundamental lens through which components of the SME capital markets were

identified. A decision was made early in the initiative to focus on aspects of the capital markets that could be measured relatively easily, could be influenced by stakeholders and were aligned with the primary purpose of the capital markets which is to generate a return on investment for investors. Therefore, for the purposes of this study, the scope of the capital markets was limited to organizational or individual investors directly contributing funds to SME ventures seeking funding through debt financing, equity investment or grants. The following working definitions for debt financing, equity investment and grants were adopted:

- Debt financing refers to capital provided to business ventures in exchange for the obligation of repayment of the principal amount with interest. This typically occurs through business loans provided by traditional chartered banks, credit unions, caisses populaires, etc.
- Equity investment refers to capital being provided to business ventures by investing organizations and individuals in exchange for equity positions in the venture. Angel investors, angel networks, venture capital and private equity firms generally undertake this form of investment.
- Grants refer to capital provided to business ventures from provincial and federal granting organizations focused on supporting businesses for a variety of strategic reasons, principally job creation. It is assumed that grant investment can come in a variety of forms including financial grants, forgivable and interest free loans, loan guarantees and strategic investments.

This study was conducted through active engagement with a broad range of stakeholders working on a wide range of initiatives to develop the New Brunswick capital markets. Numerous interviews were conducted in order to solicit insight, experience and advice from New Brunswick capital markets stakeholders. This coupled with the practical and theoretical knowledge of the consulting team and the output of its primary research formed the basis for this study. Scheduling constraints of some stakeholders as well as limits imposed by available time and budget prevented a more exhaustive set of stakeholders' interviews. However, the broad backgrounds of stakeholders engaged provided diverse and representative points of view to the project team.

It should be noted that the information gathered during this study represents a "snapshot in time". The stakeholders contributing to the capital markets, their interrelationships and the metrics that measure the performance of the capital markets will invariably change over time.

New Brunswick Capital Markets Funding Intensity and Performance Models have been introduced in this study. These models are meant to provide a reusable framework that can be

modified and updated to reflect future changes to the New Brunswick capital markets and its stakeholders.

OVERVIEW OF THE NEW BRUNSWICK CAPITAL MARKETS

Technical Definition of a Generic Capital Market

Before analyzing the components of the capital markets in New Brunswick, it is essential to establish a common point of reference on what a capital market is. Broadly speaking, a capital market is a market where individuals, companies and government can access capital or obtain financing by engaging in the buying and selling of securities. Securities can be either debt or equity. Participants in the capital market are comprised of those who have a deficit of funds or a surplus of funds. Those with a surplus of funds invest in the capital market by buying securities (either equity or debt) with the expectation that they will earn a return on their investment. Those with a deficit of funds participate in the capital market with the expectation that they can obtain financing by selling securities (either equity or debt) to those with a surplus of funds. This simple, ubiquitous supply and demand relationship is what powers the capital market.

Capital markets serve economies and society in several ways. They distribute capital across industries and society at large, they help create jobs and provide funding to socially beneficial enterprises. Capital markets also serve society by providing a means for those who have invested in capital markets to earn a return on investment. When a capital market is achieving this purpose, all of its other purposes can be fulfilled. If enterprises or ventures receiving funding through the capital market are unable to generate a return on investment for investors (over time and in aggregate terms) investors will cease to invest funds in the capital markets. They will invest in other markets where they believe they have a better opportunity to earn return on investment. When this happens, investment capital becomes scarce within the capital market and the market may eventually fail. As such, earning a return on investment for companies and individuals that fund ventures is a fundamental goal of any capital market.

Unique Properties of New Brunswick's Capital Markets

Based on feedback from stakeholders and the knowledge and experience of the consulting team, several unique properties of the New Brunswick capital markets have been noted. Although the New Brunswick capital markets possess the characteristics of a generic capital market, these unique properties make it distinct in several ways:

- *Relative Size.* The majority of stakeholders interviewed pointed out that New Brunswick's economy is smaller than several other provincial jurisdictions in Canada. As such, there

are fewer players in the New Brunswick capital markets. It was suggested that this is particularly true of equity and public markets. However, opinions were mixed in terms of the impact. Some stakeholders suggested the relatively small size of the capital markets was a barrier to growth. Others considered the small size an asset in terms of the relatively small and accessible group of senior-level business leaders.

- *General Lack of Medium-Sized Companies.* The corporate landscape of New Brunswick is generally comprised of many small enterprises and a handful of large companies. When considering the capital markets, this phenomenon has an influence on the types of investors that look at the New Brunswick capital markets as a place to invest.
- *Limited Foreign Venture Capital Investment.* It was pointed out that there is currently limited foreign venture investment in New Brunswick SME ventures. For example, some American venture capital firms have invested in a handful of New Brunswick companies in the past, but this is generally an infrequent occurrence today.
- *An Active Provincial Securities Regulator.* Stakeholders noted that New Brunswick has a provincial regulator that is active in fostering New Brunswick capital markets. Many stakeholders noted that the business community viewed the steps taken by the NBSC to develop capital markets favorably.
- *Two Distinct Groups of Capital Markets Contributors.* Two sets of stakeholders have been identified that contribute to the New Brunswick capital markets:
 - *Direct Contributors.* These are stakeholders who are actively engaged in the funding process of New Brunswick capital markets. This is done through advancing loans that may be secured or unsecured (debt financing), by obtaining equity from the organization invested in (equity investment) or through providing grant funding (grants). It should be noted that in the case of grant funding, provincial and federal granting agencies are usually more focused on achieving their mandated goals through funding than in achieving a financial return on investment. The return on investment is realized in the achievement of broad economic policy objectives. An inventory of identified direct contributors can be found in Appendix A. An inventory of key federal programs that also directly contribute to the capital markets can be found in Appendix B. Identified tax credits utilized by many New Brunswick SME ventures are found in Appendix C.
 - *Indirect Contributors.* These stakeholders are not engaged in funding the capital markets directly. However, they create significant value as a result of their focus on developing entrepreneurs, creating knowledge of the capital markets or supplying

professional services to players in the New Brunswick capital markets. An inventory of identified indirect contributors can be found in Appendix D.

IDENTIFICATION AND ASSESSMENT OF CAPITAL MARKETS COMPONENTS

Characteristics of the Generic Funding Intensity Diagrams

The Generic Funding Intensity Model has been adopted in this study as a means for identification and classification of capital markets components or contributors. The Funding Intensity Model is a standard and widely used model that is used to identify the common lifecycle stages of most SME ventures as well as the identification of where funding occurs. For this reason, it was utilized within this study. There are six key structural elements to the Funding Intensity diagrams that should be noted:

- *Venture Stages of Development.* The blue boxes at the top of the diagram describe a venture development stage continuum starting with basic and applied research, moving to commercialization, and eventually to cash flow positive status. This continuum is generic in nature and is meant to describe the experience of all firms through their development lifecycle. The length of time a venture spends in a particular phase will vary by the type of venture (e.g. high technology/innovation ventures versus traditional ventures). However the phases of development in the model are relevant to all new ventures.
- *Direct Contribution Stakeholders.* The dark grey lines represent the stakeholders that are involved in directly funding the SME venture capital markets. The position of the lines along the venture development stage continuum indicates the stage of growth of a SME venture that is of interest to the contributor in terms of investment of funding. These lines indicate where the stakeholders consider themselves to be playing.
- *Funding Intensity Indication.* The thickness of the direct contributor lines represents the relative funding volume a contributor makes in SME ventures if it varies between different stages of development. It is not meant to suggest funding volumes relative between direct contributors. It suggests the SME venture investment or funding preferences that a direct contributor tends to focus on.
- *Stakeholder Interrelationship.* The graph indicates where each of the significant players operating in the New Brunswick capital markets is focused. This will enable the stakeholders to be in an improved position to understand where each is involved,

thereby improving the opportunities for partnering, understanding gaps and identifying the capacity for further positive changes available within the capital markets.

- *Typical Funding Intensity Line.* The 'U' shaped line indicates the typical funding intensity for ventures in our capital markets. Generally, basic and applied research receives more funding, especially when being carried on in University environments or research laboratories. Upon moving an idea or innovation from the research facility to the start up and later stages of commercialization, there is usually a lack of product revenue resulting in a lack of funding by investors through the 'Valley of Death'. This is the area that frequently results in the commercialization process coming to a halt. Those organizations that are capable of obtaining funding during this time usually receive it from founder, friends and family investors, New Brunswick Innovation Foundation or angel investors. Upon reaching the commercialization stage, the venture is capable of generating revenues and as a result, the opportunity to obtain funding increases. Some ventures will then be able to reach the stage of being cash flow positive with access to traditional funding such as the chartered banks or other stakeholders.
- *Funding Intensity Diagrams Represent a Point in Time.* In outlining the stakeholders and their interrelationships, it is important to remember that the Funding Intensity diagrams represent a 'snapshot' of where contributions to the New Brunswick capital markets are currently. Over time these relationships will change and continuing to understand them will be an ongoing process.

Direct Contributors to the Capital Markets

The Funding Intensity diagram below in figure 1: Direct contributors to the SME venture capital markets depict the direct contributors to the New Brunswick SME venture capital markets at a macro level. These contributors provide funding to SME business ventures seeking capital through the capital markets. It should be noted that most of the loan grantors, equity-oriented contributors and provincial government agencies tend to provide funding to the capital markets in the later stages of venture development. The notable exceptions are the NBIF (whose mandate includes providing bridging through the 'Valley of Death'), individual angel investors, entrepreneurs and founders, friends and family. Although these groups do provide funding in earlier stages of venture maturity, it is comparatively small compared to the other direct contributors. Therefore, the traditional challenges of securing venture funding during the start up and late stage periods (i.e. the 'Valley of Death') exist for New Brunswick ventures. Please note

that in the diagram, organizations are organized according to how broadly they provide funding across the venture development continuum.

The Funding Intensity diagram in figure 2: Federal funding agencies depict the key federal granting agencies that provide capital markets funding. It should be noted that the majority of funding by federal organizations occurs in the early stages of development for ventures. Much of the funding is focused on basic and applied research and prototype development. The notable exception is ACOA that provides funding through the 'Valley of Death' through some of its programs.

The Funding Intensity diagram in figure 3: Tax credit contribution highlights some of the key tax credits available to SME ventures. Although other tax credits may exist and be available to New Brunswick ventures, the following tax credits were identified as significant and widely used among many SME ventures:

- Scientific Research and Experimental Development Tax Incentive Program (SR&ED)
- New Brunswick Research and Development Tax Credit
- Small Business Investor Tax Credit (SBITC)
- Federal Investment Tax Credit
- New Brunswick Film Tax Credit

Analysis of Behavior of Direct Contributors to the Capital Markets

As stated above, if the funding of direct contributors articulated in figures 1 and 2 are combined, it becomes clear that the majority of funding is focused on the very early stages and the very late stages of venture maturity (i.e. seed, commercialization and revenue generation and cash flow positive stages). Although the 'Valley of Death' does have some degree of coverage, funding is provided by a small group of contributors. In addition, the funding contribution of these contributors is largely unknown or currently immeasurable. Securing funding through the prototype development, product demonstration, product commercialization and market development stages is difficult. For many New Brunswick SME ventures, managing through the funding 'Valley of Death' is a very real challenge.

Due to the uncertainty related to the global economic recession that began in 2008 and continued into early 2010, there has been a tendency for equity investors to require ventures to move further along the development continuum before they will invest than was previously the case. As well, some of the stakeholders that were active in the capital markets have reduced their presence in our region as merger and acquisition activity has declined.

Indirect Contributors to the Capital Markets

The diagram below in figure 3: Indirect contributors to capital markets describe where some of the significant indirect contributors to the capital markets are providing support to ventures along the Venture Development Continuum. The figure indicates that there are programs and professionals in place to support ventures through the entire Venture Development Continuum. The indirect contributors certainly vary in terms of their areas of expertise and the general level of sophistication of the subject matter on which they provide guidance. However, in each case, they are providing support and knowledge to ventures that cross the majority of the phases of development.

Figure 1: Direct Contributors to the SME Venture Capital Markets

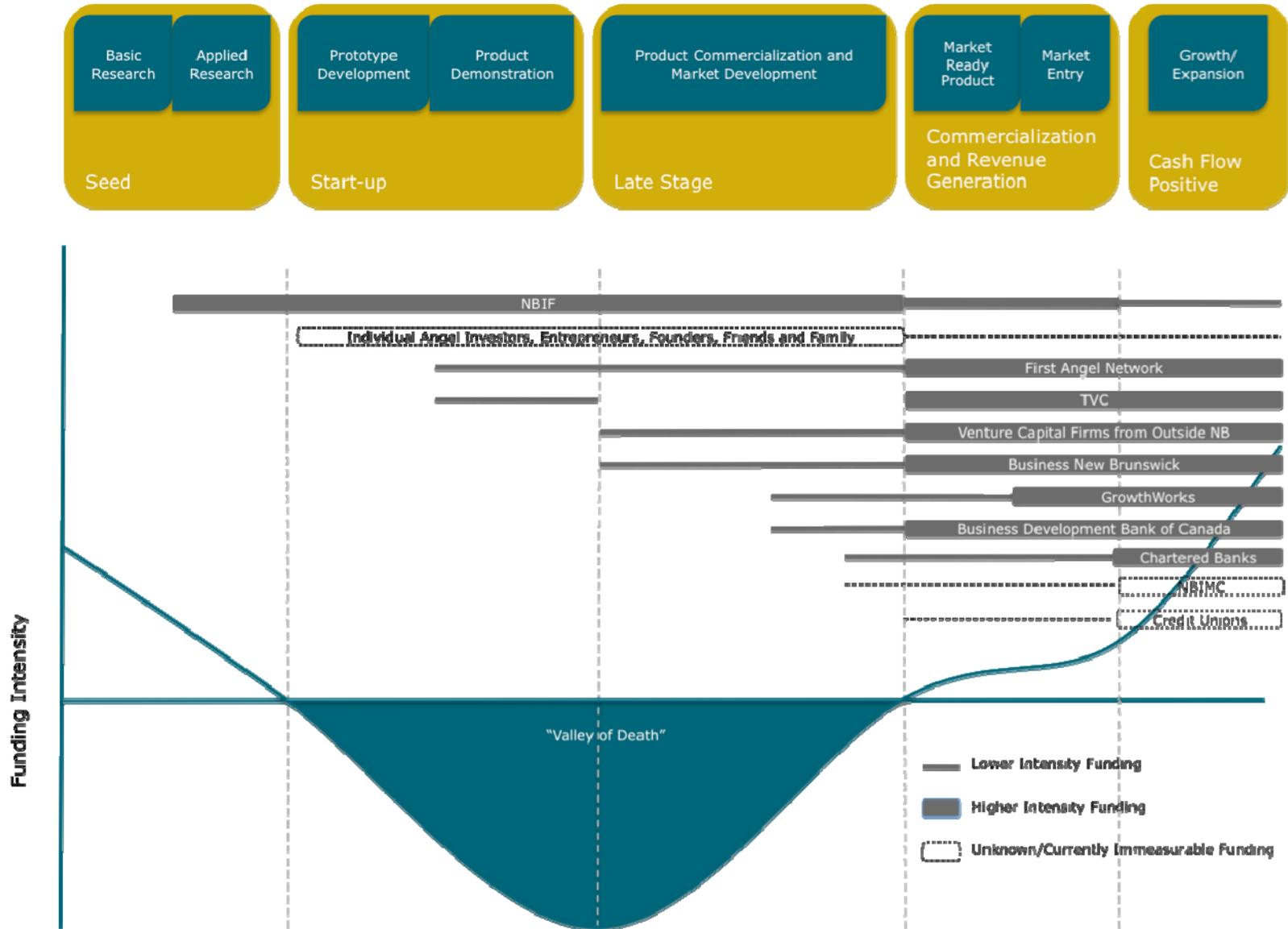


Figure 2: Federal Funding Agencies

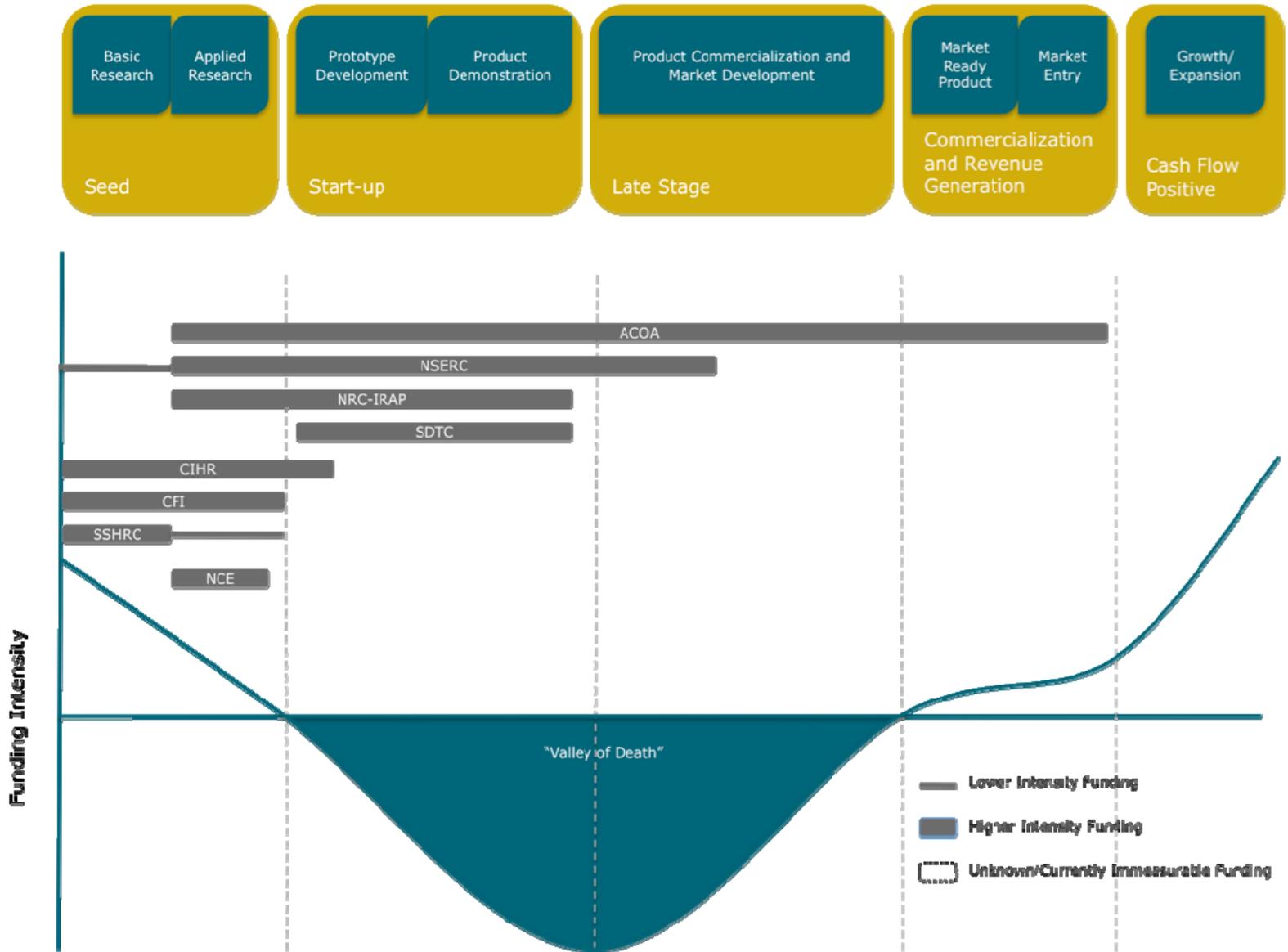


Figure 3: Tax Credit Contribution

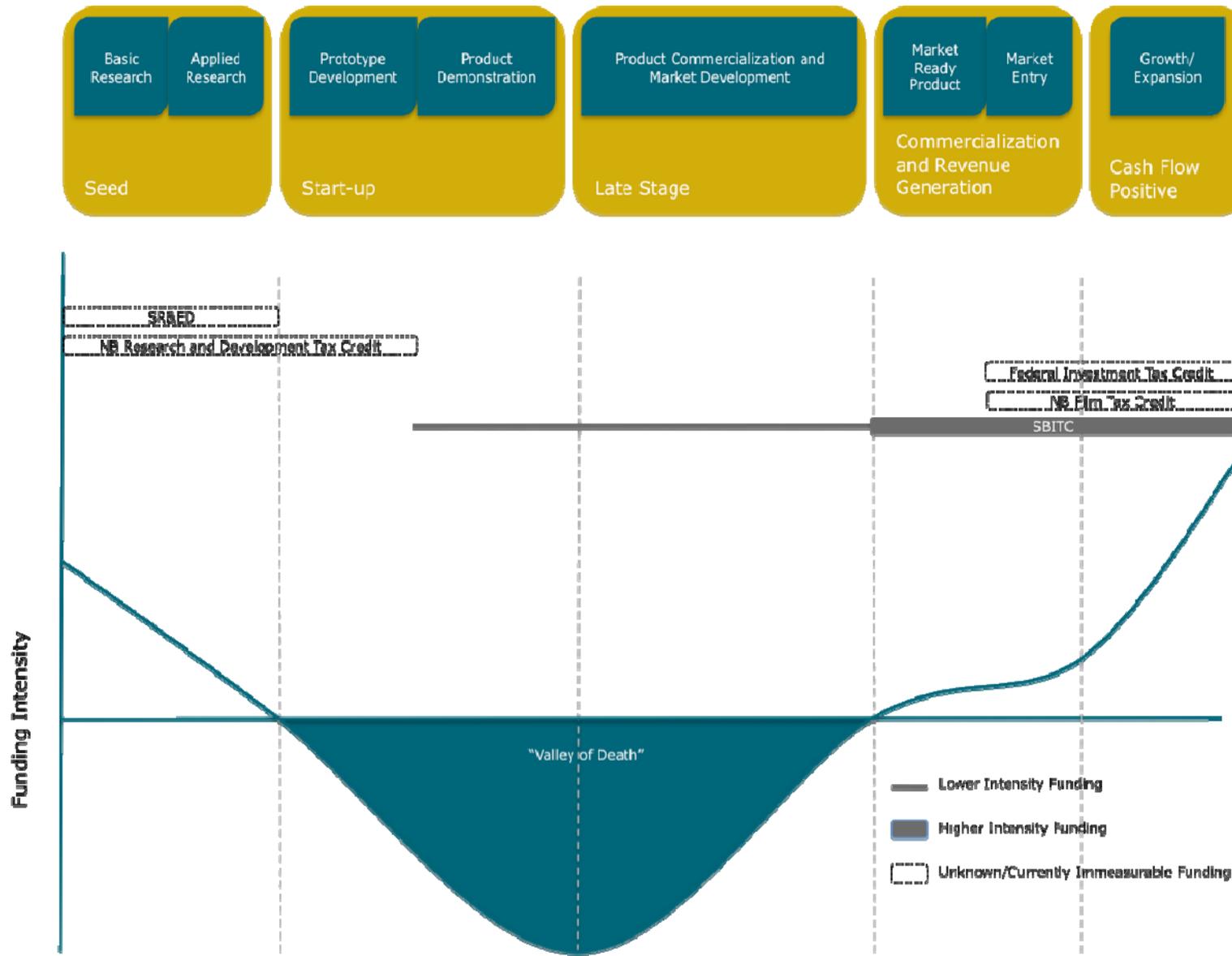
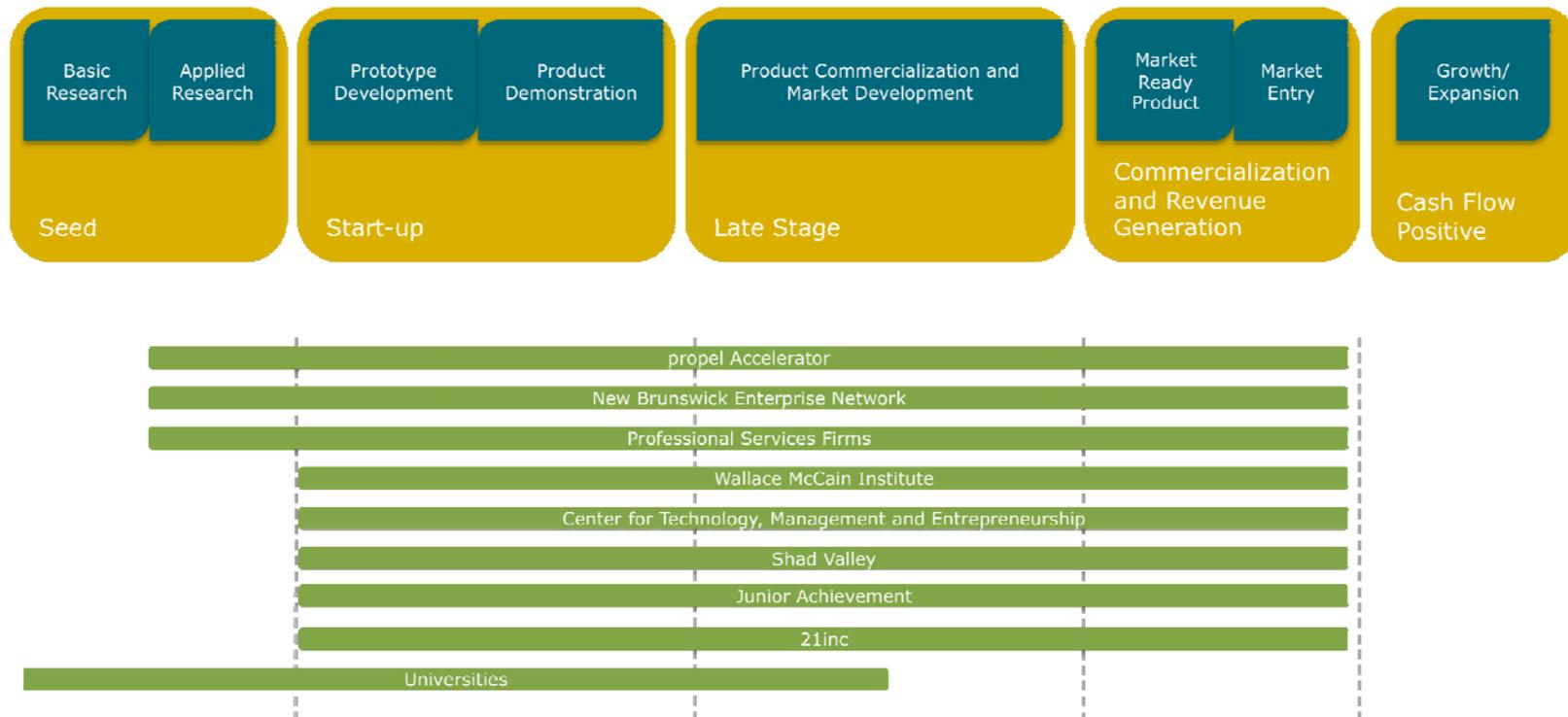


Figure 4: Indirect Contributors to Capital Markets

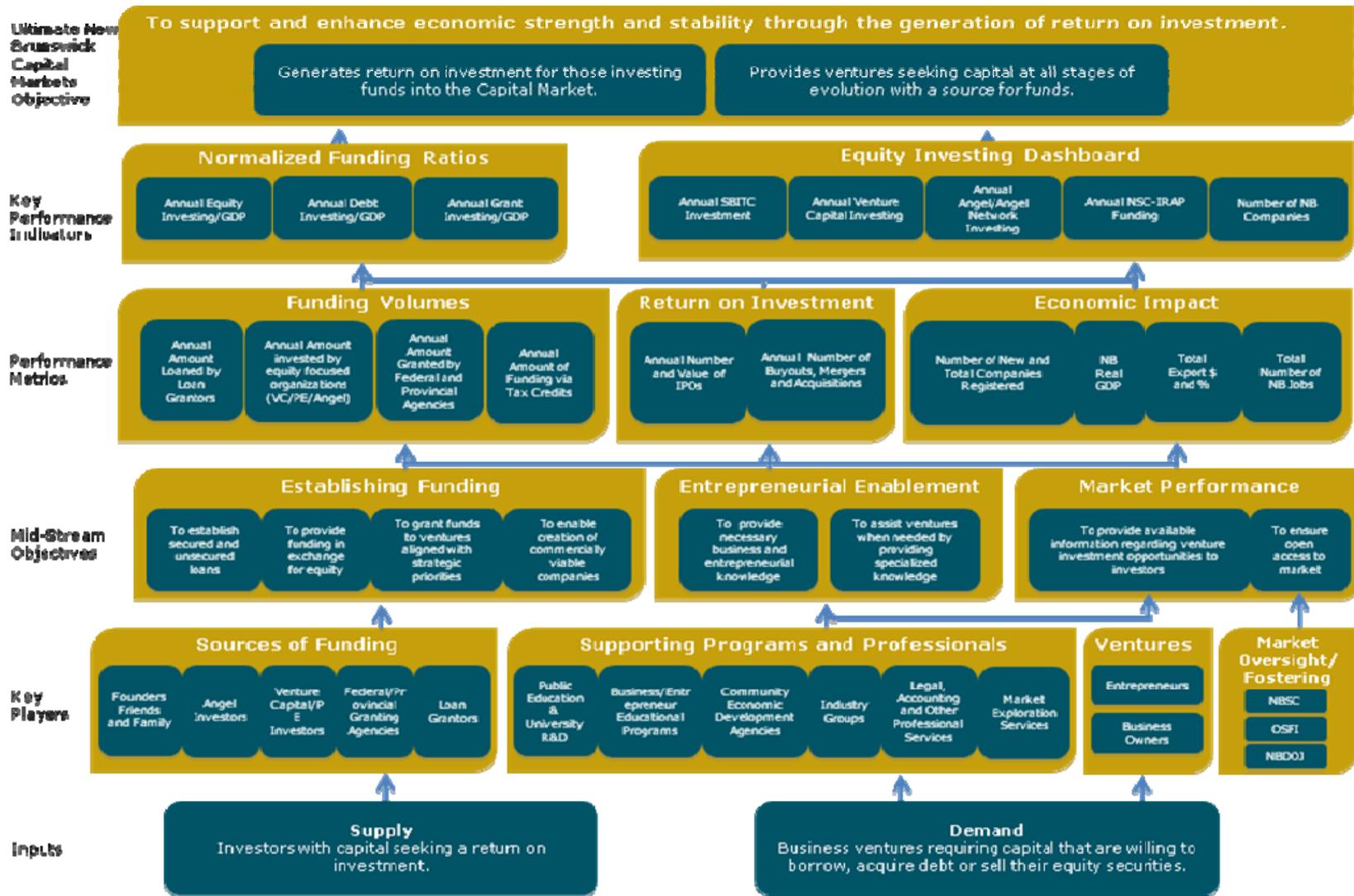


NEW BRUNSWICK CAPITAL MARKETS PERFORMANCE MODEL

When stakeholders engage in discussion of the New Brunswick capital markets, the lack of a single, shared frame of reference often hampers progress. Naturally, capital markets stakeholder has a specific area of interest and notion of what performance means. A common sentiment among stakeholders is that a common frame of reference around the capital markets would promote more focused and effective efforts to expand and improve the capital markets. The primary role of the New Brunswick Capital Performance Model is to provide a simple, common frame of reference for all stakeholders. Having this common frame of reference is very important as it will allow all stakeholders engaged in the development of the capital markets to “speak the same language”. The model has been constructed by considering the overall purpose of the capital markets, the basic groups that participate in the markets and the fundamental performance metrics and key performance indicators that would be broadly meaningful to the diverse set of stakeholders. The performance model is meant to provide a common lens through which all stakeholders can see themselves, identify interrelationships with other groups, and together observe the fundamental metrics and indicators that define the performance of the capital markets.

Figure 4 below presents the New Brunswick Capital Markets Performance Model. The model relates the inputs, key players, mid-stream objectives, performance metrics and key performance Indicators with the ultimate New Brunswick capital markets objective. Detailed descriptions of the meaning, relevance and interrelationships of the elements of the performance model follow the figure.

Figure 5: New Brunswick Capital Markets Performance Model



Inputs

Inputs



Like all capital markets, the forces of supply and demand govern the New Brunswick capital markets. The principle inputs to the New Brunswick capital markets are simply stated: those with capital and those seeking capital. Those with capital are investors who seek a return on investment and those seeking capital do so in order to evolve and grow their business ventures. Without either of these simple but powerful inputs, the New Brunswick capital markets cannot exist.

- *Investors with Capital Seeking a Return on Investment.* This is the first of the two primary inputs that must be present for any capital market to function. These are individuals, businesses and governments (broadly referred to in this model as investors) with capital and that wish to earn a return on an investment. The notion of return on investment will vary depending on the type of investor. Most investors (e.g. angel investors, venture capital firms, etc.) typically expect a financial return on their investment. Their expectations on rate of return are typically aligned with the perceived level of risk and uncertainty related to the venture and its market. Granting agencies (i.e. federal and provincial programs) typically do not have an expectation of a financial reward to the funding agency, but instead see their return on investment in terms of a successful venture's contribution to the funding agency's goals, objectives and mandate. Individual investors who are founders, friends or family of a business venture may have no expectation of financial gain from their investment. Instead, they may consider their return on investment in terms of seeing a loved one fulfill their dreams and achieve financial security. There is one thing that these different concepts of return on investment have in common: they all require the business venture to be successful for the return to be realized.
- *Business Ventures Requiring Capital That Are Willing to Borrow, Acquire Debt or Sell Their Equity Securities.* This is the second of the two primary inputs that must be in place for any capital market to function. There must be an individual or business (broadly referred to in this model as a venture) that has a requirement for capital in order to fund the venture's evolution and growth. It is this deficit of capital that creates the demand side

of capital markets. These ventures will typically offer to pay interest on funds loaned or provide equity in exchange for funds provided by equity-oriented investors.

Key Players



Sources of Funding

The first group of key players in the capital markets is the investors that represent sources of funding for ventures.

- *Founders, Friends and Family.* It is generally accepted that the group known as Founders, Friends and Family makes the first and perhaps most important contribution to many early ventures. The nature of investments made by this group inherently makes measuring their contribution to the capital markets very difficult. These funding arrangements do not have mandatory reporting requirements and often have little or no associated paperwork to formalize the transactions.
- *Angel Investors.* Angel investors provide funds to the capital markets by investing their own money into start-up ventures in exchange for equity or convertible debt instruments. Individual angel investors may organize into angel groups or networks (e.g. First Angel Network) to achieve economies of scale on operational costs, share research, reduce risk and pool financial resources.
- *Venture Capital Investors.* Venture capital investors typically fund early stage ventures with high potential. A desired outcome for venture capital investors is for the venture to eventually achieve an exit such as an initial public offering (IPO) or a buyout as a means for them to realize a return on their investment.
- *Federal / Provincial Granting Agencies.* There are numerous programs that have been established by agencies and departments of the Canadian and New Brunswick governments that contribute to the New Brunswick capital markets. These agencies most often provide funds to ventures in the form of grants or loan programs. Each agency and individual program has a particular mission and objective that dictates the type of venture that can be funded.

- *Loan Grantors.* Loan grantors most often provide funding to ventures through the capital markets in the form of business loans that can be secured by personal guarantees or collateral security or unsecured, but with a promise to pay. This group includes chartered banks, credit unions and caisses populaires. Occasionally, loan grantors will take equity positions in ventures in return for providing funding. However, these arrangements are relatively rare. Through business loans, loan grantors provide a very significant contribution to the capital markets in terms of total dollars.

Supporting Programs and Professionals

The next group of key players is the programs and individual professionals that are committed to assisting ventures by providing general and specialized knowledge, mentoring and advice with respect to developing entrepreneurs and accessing the New Brunswick capital markets. This group of key players is very important to improving the odds of success of ventures. The experience, mentorship and specialized knowledge that they provide are often crucial at several different points of time during the initiation and growth of the venture and can make the difference between success and failure.

- *Public Education and University Research and Development.* The public education system in New Brunswick plays an influential role in promoting primary and applied sciences to students as a meaningful pursuit at the post-secondary level. Students leaving high school for the province's universities have the opportunity to participate in research and development in a number of fields. The basic and applied research conducted at the university level is a significant source of innovation that can lead to opportunities for the creation of business ventures centered on the commercialization of a technology.
- *Business and Entrepreneurial Educational Programs.* There are a number of educational programs focused on very specific business and entrepreneurial skills that are relevant to accessing funds made available through the capital markets. These include those provided by the Wallace McCain Institute, the New Brunswick Securities Commission (through its Fullsail education programs), the Centre for Technology, Management and Entrepreneurship, 21inc., Junior Achievement and Shad Valley. This is only a partial list of organizations providing business and entrepreneurial educational programs in the province.
- *Community Economic Development Agencies.* These players are focused on improving the economic landscape of the communities and regions they are serving. The two most

significant players here are the New Brunswick Enterprise Network and the Community Business Development Corporations. The New Brunswick Enterprise Network is comprised of 15 enterprise agencies committed to economic development at the community level. Each enterprise agency provides a number of programs and services to small and medium-sized businesses. These advisory and information gathering programs are very helpful to ventures on a number of fronts including general business counseling, export market investigation, financial assistance information and human resource planning. The Community Business Development Corporations provide business counseling and mentorship to small business owners and entrepreneurs, offer professional development and training opportunities and provide coaching, guidance and advocacy on behalf of their clients.

- *Industry Groups.* There are a number of industry-specific groups that are focused on the growth of their specific industry in New Brunswick. Examples include propel Accelerator, Cybersocials and professional associations in law, accounting and engineering. These groups generally seek to support ventures through the creation of a community of passionate individuals within the industry vertical. These groups provide mentoring and assist ventures by connecting ventures with others in the industry that may have an interest in funding or partnering in other ways.
- *Legal, Accounting and Other Professional Services Firms.* Ventures often require specialized knowledge and expertise during business initiation such as business incorporation and shareholder agreement advice. Ventures also often require assistance when structuring financing deals. As well, ventures sometimes need assistance crafting their business operations, information technology strategies or marketing strategies. Assistance with the above challenges is often provided by any number of professional services firms. This includes law firms, accounting firms, business consulting, information technology consulting or marketing services firms.
- *Market Exploration Services.* Occasionally, groups of ventures from New Brunswick will travel together on trade missions or market exploration endeavors in a "Team New Brunswick" concept. The purpose of these initiatives is to explore export potential in key markets and to connect New Brunswick ventures with potential customers and possibly investors outside our region. Generally, it is the provincial and federal governments that would coordinate, organize and fund these initiatives.

Ventures

The ventures themselves represent the demand side of the capital markets. These are the individuals or organizations that are seeking funding in order to initiate, evolve and grow their business. Ventures are created and lead by entrepreneurs and business owners.

Market Oversight / Fostering

The final key players are the organizations that provide capital markets regulatory oversight and foster the New Brunswick capital markets among investors and ventures.

- *New Brunswick Securities Commission (NBSC)*. The NBSC mandate is to provide protection to investors from unfair, improper or fraudulent practices and to foster fair and efficient capital markets and confidence in capital markets. It works proactively to educate capital markets stakeholders and by doing so acts as a catalyst to foster New Brunswick capital markets. The Fullsail Capital Markets Initiative, including its Learning the Ropes educational component and roundtable discussions, is the primary means through which the NBSC brings focus to New Brunswick's capital markets.
- *New Brunswick Department of Justice and Consumer Affairs (NBDOJ)*. The NBDOJ is responsible for oversight of credit unions, cooperatives and loan and trust companies in the province. The credit unions, cooperatives & trust companies and examinations branch supervise the activities of credit unions and caisses populaires. The branch also administers the Cooperative Associations Act and Regulations and the Loan and Trust Companies Act in New Brunswick.
- *Office of the Superintendent of Financial Institutions (OSFI)*. The OSFI is a federal agency established in 1987 that is mandated to regulate and supervise federal financial institutions and private pension plans. OSFI regulates more than 450 financial institutions in Canada including domestic and foreign banks, trust companies, loan companies, cooperative credit associations and cooperative retail associations.

Mid-Stream Objectives



The ultimate New Brunswick capital markets objective is to support and enhance economic growth and stability through the generation of return on investment. There are several mid-

stream objectives that are the means by which the ultimate objective of the New Brunswick capital markets will be achieved. The mid-stream objectives are outcomes that key players, either alone or by working together, have direct influence in achieving. Within the performance model, there is a strong linkage between the achievement of the mid-stream objectives and achievement of the ultimate objective. If mid-stream objectives are being achieved (as measured by performance metrics), then it can be inferred that the ultimate objective will also be achieved. Progress in these mid-stream objectives will require that performance metrics be captured on at least a yearly basis in order to chart progress in developing the capital markets. Mid-stream objectives of the New Brunswick capital markets include the following:

Establishing Funding

- *To ensure there is an appropriate level of debt finance available.* Business loans provided to ventures by investors are a significant source of funds in the capital markets. Banks, credit unions and caisses populaires are the most frequent investors to provide loans although other key players can do so. In 2008, approximately \$5.7 billion dollars in debt lending was authorized for New Brunswick business ventures.
- *To establish an environment supportive of equity financing.* Providing funding to ventures in exchange for equity in the venture itself is another source of funds in the New Brunswick capital markets. Angel investors and venture capital firms generally provide this form of funding. Equity financing is often seen in the funding of revenue-achieving high-potential ventures that have normally progressed through the 'Valley of Death'.
- *To promote the granting of funds to ventures aligned with strategic priorities.* Programs offered by federal and provincial government agencies account for a sizable pool of funds provided to ventures. There are generally conditions related to the funds granted and often the funds are not required to be repaid to the granting agencies.
- *To enable the creation of commercially viable companies.* When sufficient funding of a venture has been established, the likelihood of a venture becoming commercially viable is improved. The creation and sustaining of a commercially viable company is a strong precursor of the ability of investors to earn a return on their investment, regardless of the type of investor.

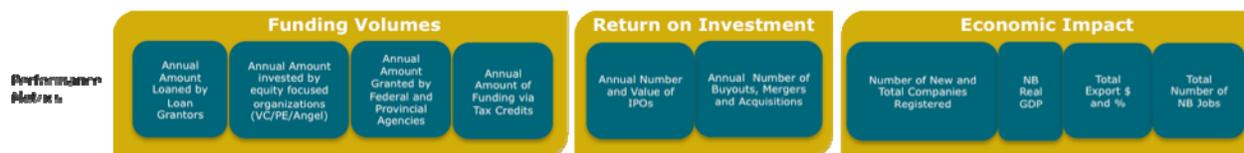
Entrepreneurial Enablement

- *To provide necessary business and entrepreneurial knowledge and skills.* Funding alone does not ensure that ventures will be able to provide a return on investment to its investors. Basic business and entrepreneurial knowledge is required for the venture to evolve and grow. Supporting programs and professionals aim to provide ventures with the business and entrepreneurial knowledge they require. The organizations and individuals included in the inventory of indirect contributors to the capital markets found in Appendix D help to achieve this objective.
- *To assist ventures when needed by providing specialized knowledge.* At times, very specific knowledge may be required by ventures that go beyond general business and entrepreneurial skills. This includes knowledge regarding the specific investor players within the New Brunswick capital markets and how to successfully approach them for funding (pitch development, assistance with business plans, market approach, financials, legal advice, etc.). Supporting programs and professionals often provide this mentorship and specific knowledge to ventures when it is required.

Market Performance

- *To provide information regarding venture investment opportunities to investors.* Supply and demand equilibrium in capital markets is achieved when ventures seeking funding at all stages are matched with investors with a variety of risk tolerances and expectations on the scale of their return on investment. To promote the correct pairing of investor with venture within the New Brunswick capital markets, visibility between investors and all investment opportunities is required. To encourage a high-performing New Brunswick capital markets, key players within the supporting programs and professionals group work to provide available information to both ventures and investors to facilitate the pairing of an investor with the right kind of investment opportunity. This is often done informally through networking opportunities and formally through business relationships between supporting programs and professionals and business ventures.
- *To ensure open access to the capital markets.* To encourage high-performing New Brunswick capital markets, they must be open both to investors and to ventures seeking funding. Through its work, the NBSC fosters the New Brunswick capital markets and endeavors to improve access while at the same time meeting its primary investor protection mandate. Under the Fullsail Capital Market Initiative, several seminars and presentations are conducted each year in addition to Fullsail summits.

Performance Metrics



The following performance metrics are relevant and meaningful metrics to gauge the achievement of mid-stream objectives and by extension the performance of the New Brunswick capital markets. The identified performance metrics have been chosen based on their validity in assessing the performance of capital markets in terms of achieving the ultimate objective of generation of return on investment. Each metric has also been considered in terms of accessibility of readily available data that can be used to quantify the metric. In most cases, there are a number of sources that have been identified for each metric. However, in the case of the return on investment metrics, there are currently insufficient data sources. Due to the importance of these metrics in terms of assessing the realization of the ultimate capital markets objectives, they have been included as performance metrics, although the supporting data is currently unavailable. Implementation of methods and approaches to collect this data has been addressed below in the Key Findings section.

The performance metrics are grouped in order to provide insights on three key performance aspects.

Funding volume metrics directly measure the annual amount of capital markets funding that originates from the following sources:

1. Loans from loan grantors (debt financing).
2. Investment from equity-focused organizations (equity investment).
3. Grants from federal and provincial agencies (grants).
4. Amount of funding through tax credits.

Measuring funding volumes is fundamental in understanding the capital markets. These metrics dictate how much capital is available to ventures and largely quantifies the supply side.

Return on investment metrics are also of fundamental importance as they indicate the extent that ventures have been able to generate a return on investment for their investors. Since the ultimate objective of all capital markets is to generate a return for those who invest in the

markets, understanding the return on investment generated through IPOs, buyouts, mergers and acquisitions is essential.

Basic economic impact metrics are beneficial to monitor concurrently with the capital markets specific indicators. By doing so, the relationship between the performance of the capital markets and some broad measures of performance of the New Brunswick economy can be established.

Each identified performance metric has been chosen to measure the elements that contribute to and result from the New Brunswick capital markets. When collected and analyzed on an annual basis the performance metrics will provide insight into the aspects that influence and govern the performance of the markets. Several of the performance metrics are used in combination to generate the overall capital markets key performance indicators that are described in the following section.

Funding Volumes

These metrics focus on the volume of funds invested in ventures across the major forms of investment. This includes investment by loan grantors, investment by equity-oriented organizations and investment by federal and provincial granting agencies. These metrics are extremely important as they define the volume of funding from debt, equity and granting sources on an annual basis. These metrics measure the supply side of the capital markets.

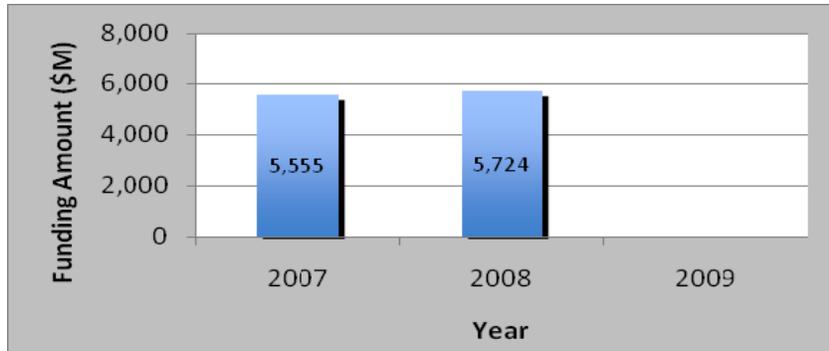
Annual Amount Loaned by Loan Grantors

No data was reported for credit unions, caisses populaires or other sources of debt financing in the sources utilized. Only data from chartered banks was available and used.

Table 1: Amounts Loaned by Loan Grantors

Funding Organization	2007 (\$M)	2008 (\$M)	2009 (\$M)
Chartered Banks ⁱ	\$5,555 (Authorized)	\$5,724 (Authorized)	Not Available
	\$3,006.4 (Outstanding)	\$3,314.5 (Outstanding)	
Credit Unions ⁱⁱ	Not Available	Not Available	Not Available

Figure 6: Amounts Loaned by Loan Grantors (Authorized)

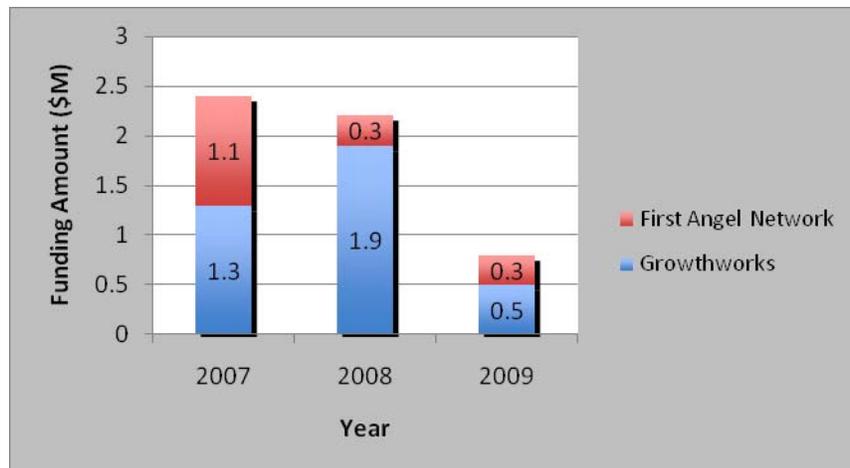


Annual Amount Invested by Equity-Focused Organizations

Table 2: Annual Amount Invested by Equity-Focused Organizations

Funding Organization	2007 (\$M)	2008 (\$M)	2009 (\$M)
<i>Venture Capital Investors</i>			
GrowthWorks ⁱⁱⁱ	1.3	1.9	0.5
Technology Venture Corporation ^{iv}	Not Available	Not Available	Not Available
<i>Angel Investors</i>			
First Angel Network ^v	1.1	0.3	0.3

Figure 7: Annual Amount Invested by Equity-Focused Organizations

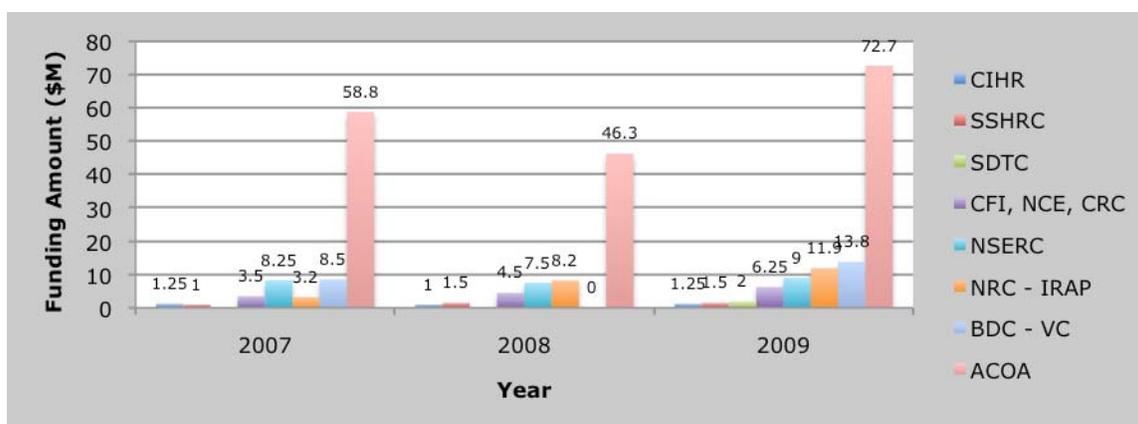


Annual Amount Granted by Federal and Provincial Agencies

Table 3: Annual Amount Granted by Federal and Provincial Agencies

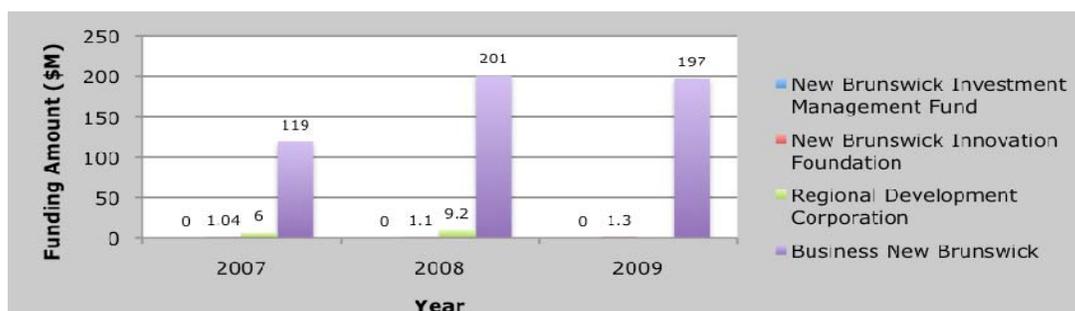
Funding Organization	2007 (\$M)	2008 (\$M)	2009 (\$M)
<i>Federal Agencies</i>			
Atlantic Canada Opportunities Agency (ACOA) ^{vi}	\$58.8	\$46.3	\$72.7
Business Development Bank of Canada Venture Capital (BDC-VC) ^{vii}	\$8.5	\$0	\$13.8
National Research Council – IRAP (NRC-IRAP) ^{viii}	\$3.2	\$8.2	\$11.9
Natural Sciences and Engineering Research Council of Canada (NSERC) ^x	\$8.25	\$7.5	\$9
Canada Foundation for Innovation, Networks of Centres of Excellence, Canada Research Chairs (CFI, NCE, CRC) ^x	\$3.5	\$4.5	\$6.25
Sustainable Development Technology Canada (SDTC) ^{xi}	Not Available	Not Available	\$2
Canada Institutes of Health Research (CIHR) ^{xii}	\$1.25	\$1M	\$1.25
Social Sciences and Humanities Research Council (SSHRC) ^{xiii}	\$1	\$1.5	\$1.5
<i>Provincial Agencies</i>			
Business New Brunswick ^{xiv}	\$119	\$201	\$197
New Brunswick Innovation Foundation ^{xv}	Not Available	\$1.1	\$1.3
New Brunswick Investment Management Corporation ^{xvi}	Not Available	Not Available	Not Available
Regional Development Corporation ^{xvii}	\$6	\$9.2	Not Available

Figure 8: Annual Amount Granted by Federal Agencies



It can be seen in the figures that the single largest contributor in federal grant funding is the Atlantic Canada Opportunities Agency. Funding by ACOA surpasses funding from all other granting agencies combined.

Figure 9: Annual Amount Granted by Provincial Agencies



The single largest contributor in provincial grant funding is Business New Brunswick. It should be noted that the funding contribution of Business New Brunswick to business ventures included financial assistance in the forms of direct loans, loan guarantees, equity investments and strategic investments.

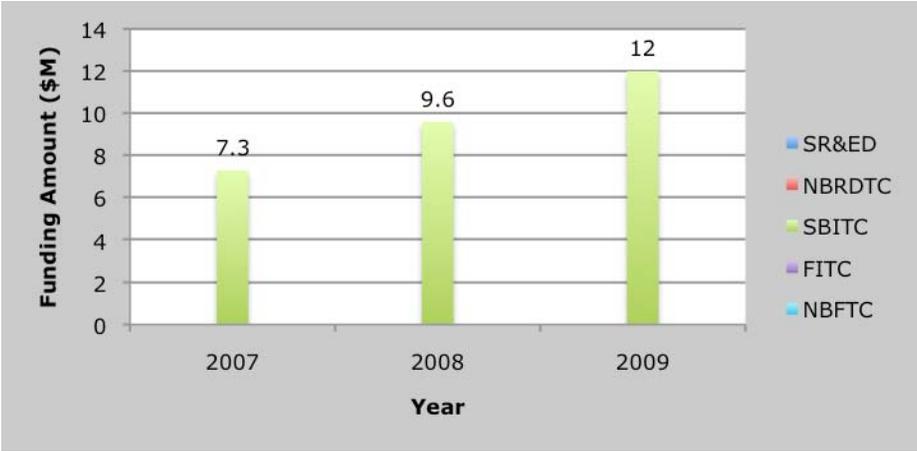
Annual Funding Through Tax Credits

Data supporting the volume of funding through the majority of tax credits was not readily available.

Table 4: Annual Tax Credit Funding

Tax Credit	2007 (\$M)	2008 (\$M)	2009 (\$M)
Scientific Research and Experimental Development Tax Incentive Program (SR&ED) ^{xviii}	Not Available	Not Available	Not Available
New Brunswick Research and Development Tax Credits	Not Available	Not Available	Not Available
Small Business Investor Tax Credit (SBITC) ^{xix}	\$7.3	\$9.6	12
Federal Investment Tax Credit	Not Available	Not Available	Not Available
New Brunswick Film Tax Credit	Not Available	Not Available	Not Available

Figure 10: Annual Tax Credit Funding



Return on Investment

These performance indicators suggest whether ventures were able to convert funding into return on investment for their investors. These indicators are extremely important in understanding the performance of the capital markets because they provide demonstration of the ultimate objective of the New Brunswick capital markets, to generate a return on investment for those

investing. However, these metrics are also the most difficult to capture. The means through which investors realize the return on investment are generally through IPOs, buyouts, mergers and acquisitions. Often the financial information related to these transactions is not publicly available since the deals involve privately-held companies. Although data is currently unavailable with respect to these performance metrics, the metrics themselves remain a fundamentally important part of the performance model. The need for mechanisms to be put in place to capture this data is discussed in the Key Findings section below.

Annual Number and Value of Initial Public Offerings. This is the sale or distribution of the privately-held stock of a company on public markets for the first time. It is a common exit mechanism for equity investors interested principally in short-term generation of return on investment.

Table 5: Annual Number and Value of Initial Public Offerings

Organization	Total Value of IPO
Not Available ^x	Not Available

Annual Number of Venture Buyouts. This is done generally as a buyout capital or a management buyout. Buyout capital is a specialized form of private equity, characterized chiefly by risk investment in established private or publicly-listed firms that are undergoing a fundamental change in operations or strategy. Buyout funds are often called such, even if their mandates are not exclusively buyout-related. Management buyouts are when financing capital is provided to facilitate the takeover of all or part of a business entity by a team of managers.

Table 6: Annual Number and Value of Venture Buyouts

Organization	Total Value of Buyout
Not Available ^{xi}	Not Available

Annual Number of Venture Mergers and Acquisitions. Mergers are the strategic combination of one business entity with another. Acquisitions are the establishment of control in one business entity by another.

Table 7: Annual Number and Value of Venture Mergers and Acquisitions

Organization	Total Value of Acquisition
Not Available ^{xxii}	Not Available

Economic Impact

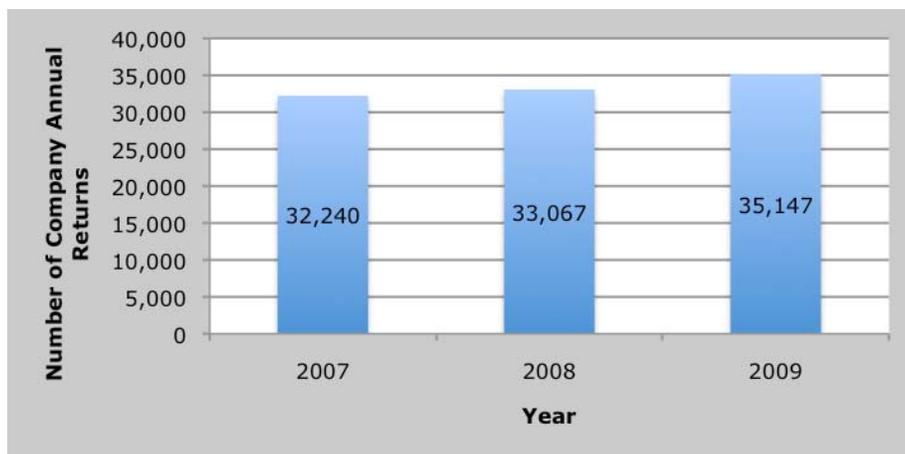
It is commonly held that high performing capital markets will positively impact the economic performance of a jurisdiction. These performance metrics focus on broader measures of the performance of the provincial economy. Movement in these indicators alone cannot be taken as strict evidence of the performance of the New Brunswick capital markets. However, the relationship between provincial economic indicators and the other capital markets-specific indicators will be useful to gauge the direct impact that the New Brunswick capital markets have on the overall economy.

Number of New and Total Companies Registered

Table 8: Number of New Brunswick Company Annual Returns

	2007	2008	2009
Total Number of Annual Returns for Incorporated or Registered Companies ^{xxiii}	32,240	33,067	35,147

Figure 11: Number of New Brunswick Company Annual Returns

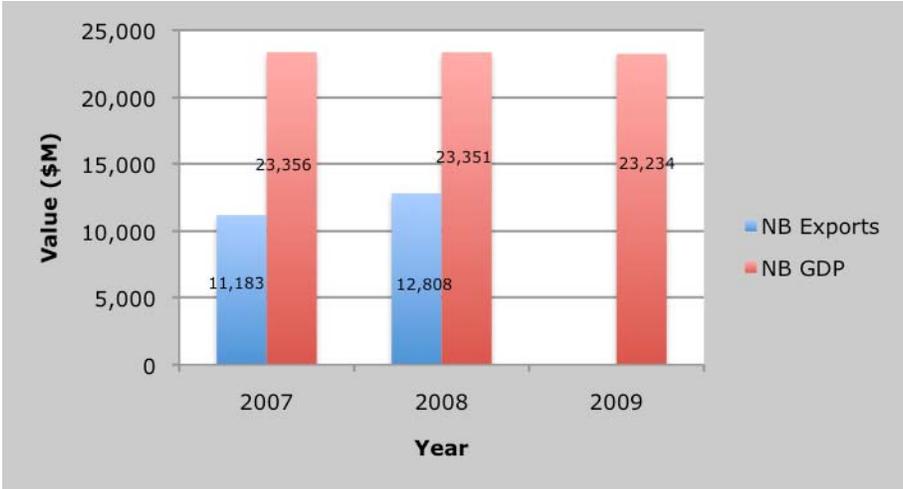


New Brunswick Gross Domestic Product and Exports

Table 9: New Brunswick Gross Domestic Product and Exports

	2007	2008	2009
NB Real GDP (\$M) ^{xxiv}	23,356	23,351	23,234
Value of NB Exports (\$M) ^{xxv}	11,183	12,808	Not Available

Figure 12: New Brunswick Gross Domestic Product and Exports

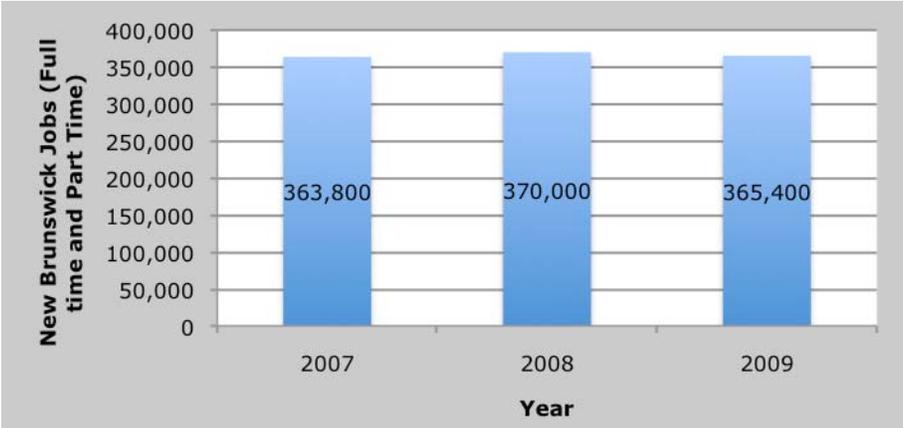


Total Number of New Brunswick Jobs (full time and part time)

Table 10: Total Number of New Brunswick Jobs

	2007	2008	2009
Total Number of NB Jobs ^{xxvi}	363,800	370,000	365,400

Figure 13: Total Number of New Brunswick Jobs



Key Performance Indicators



Understanding the Capital Markets Key Performance Indicators

The purpose of the capital markets key performance indicators is to synthesize the performance metrics in simple and meaningful ways to measure the health and vibrancy of the capital markets over time. It is intended that the key performance indicators will inform stakeholders of growth trends and comparative performance of the capital markets over time as the performance metrics are gathered on an annual basis. Stakeholders are encouraged to use these indicators to inform their decisions regarding budgeting considerations, strategic planning and policy setting.

Normalized Funding Ratios

Collecting and tracking the performance metrics cited above provides an understanding of the behavior of the New Brunswick capital markets from one year to the next. These indicators help define volume and level of activity in the New Brunswick capital markets. However, they do not provide insight with respect to the performance of the capital markets in relation to the overall performance of the New Brunswick economy. Nor are they useful in comparing the performance of the New Brunswick capital markets with other capital markets in other jurisdictions. Therefore, the following normalized funding ratios are being introduced as the first key performance indicator of the New Brunswick capital markets. To reflect the three key sources of funding within the New Brunswick capital markets, each is represented by a distinct ratio: the debt financing ratio, equity investment ratio and granting ratio. The summation of investment from all three sources is represented in the total investment ratio. In each case, the ratio is calculated by dividing the measurable annual volume of investment in the New Brunswick capital markets by the real gross domestic product (GDP) of the province. These ratios provide two primary benefits:

- *Ability to Compare Capital Markets Performance with Provincial Economic Performance.*
Growth in the capital markets from one year to the next suggests a positive situation.

However, if the entire economy of the province were growing at a significantly greater rate, the performance of the capital markets would be considered less impressive. Through the normalized funding ratio, the relative performance of the capital markets and the overall economy can be accounted for. From year to year, these ratios will help paint a more accurate picture of the performance of the capital markets.

- *Ability to Compare New Brunswick Capital Markets Performance with Other Jurisdictions' Capital Markets Performance.* It is difficult to compare the New Brunswick capital markets with that of other jurisdictions that have a larger economy. It is difficult to know if a larger jurisdiction's capital markets are more substantial than New Brunswick's because it has superior performance or if it is simply the result of synergies created by a larger economy. By using provincial GDP as a way to normalize funding volumes, a truer sense of the relative performance of capital markets can be achieved. In this way, the larger number between two provinces suggests the jurisdiction that has a greater level of investment in the capital markets contributing to its GDP.

Table 11: Normalized Funding Ratios

Funding Source	2007 (GDP = \$23,356M)		2008 (GDP = \$23,351M)		2009 (GDP = \$23,234M)	
	Total Investment	Investment/GDP Ratio	Total Investment	Investment/GDP Ratio	Total Investment	Investment/GDP Ratio
Debt Financing	\$5,555M	23.8%	\$5,724M	24.5%	Not Available	Not Available
Equity Investment	\$0M	0%	\$0.6M	0.003%	\$1.1M	0.005%
Granting	\$242M	1.0%	\$306M	1.3%	\$329M	1.42%
Total Investment	\$5,797M	24.8%	\$6,030M	25.8%	Not Available	Not Available

Figure 14: Annual Capital Markets Investing Against New Brunswick GDP

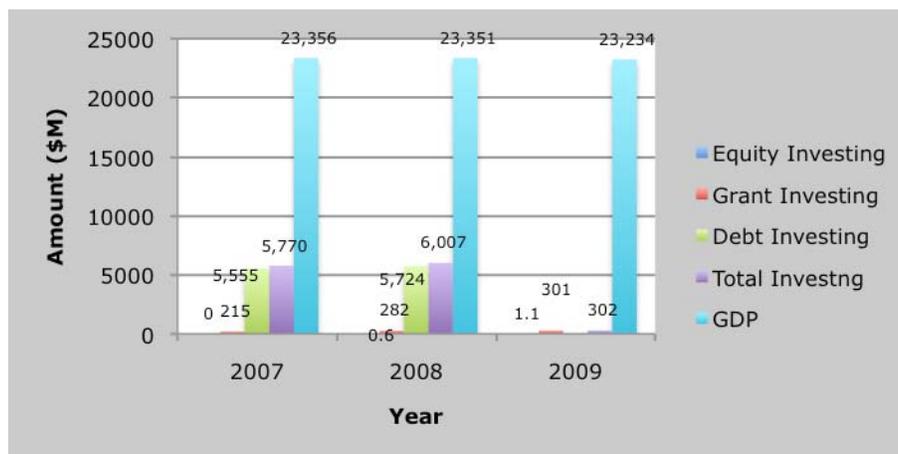
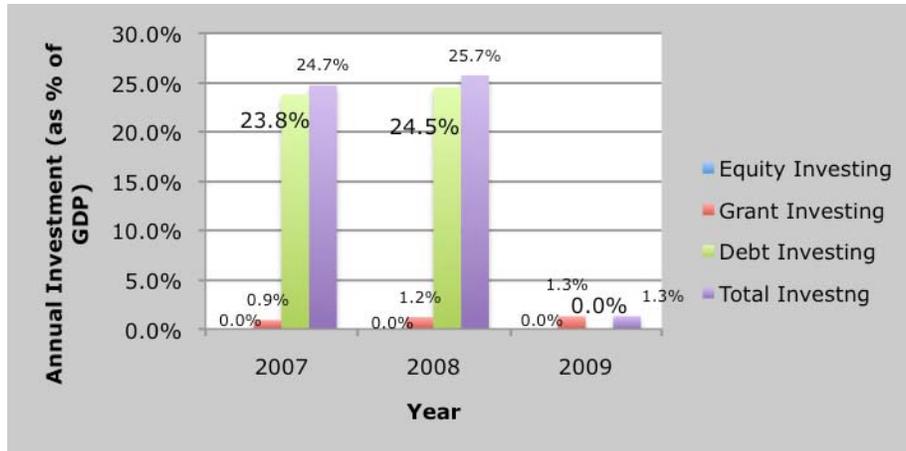


Figure 15: New Brunswick Capital Markets Investment as a Percentage of GDP



Equity Funding Dashboard

As has been pointed out above, there are three key sources of funding to the capital markets: debt financing, equity investment and grants.

Debt financing represents a very large proportion of the funding of the capital markets. The approaches used by banks that dictate lending are very well established by corporate head offices which are predominantly located outside of New Brunswick and Atlantic Canada. Pointing out opportunities to improve the New Brunswick capital markets to banks is not likely to change these well-established approaches.

Provincial and federal government agencies and programs provide granting investment. The volume of funds provided to the capital markets is significant. Granting agencies are typically open to adjusting their approach and criteria for funding in response to changing economic conditions. However, it is believed that the significant funding that is already provided through these agencies is not likely to be increased significantly over the coming years and indeed, it may decrease.

However, funding through the equity investment component of the SME venture capital markets has the potential to be positively influenced and fostered by capital markets stakeholders.

For this reason, an equity funding dashboard has been developed. The dashboard is a repackaging of previously identified performance metrics that have a significant relationship to equity investment. Based on the trend of each of the performance metrics of the dashboard, each would be assigned a 'traffic signal' colour in the overall health column. Red would suggest that a poor trend of investment or contribution to the capital markets is occurring and that additional support or strategies may need to be implemented. Yellow would suggest a neutral or possible

start of a negative trend for the performance metric. Additional support or action may be considered to create a positive trend. Green would suggest a positive trend for the performance metric. Additional focus is probably not required to bolster these metrics and additional effort and resources should be put towards improving the metrics with a yellow or red status.

At this time, there is insufficient data to positively conclude an overall trend for the metrics. The overall health of these metrics can be better understood and classified with the collection of additional data in upcoming years as identified in the Key Findings section.

Table 12: New Brunswick Capital Markets Equity Investment Dashboard

Performance Metric	2007	2008	2009	Overall Health
SBITC	\$7.3M	\$9.6M	\$12M	TBD
Venture Capital	\$0M	\$0.3M	\$0M	TBD
Angels/FAN	\$0M	\$0.3M	\$1.1M	TBD
NRC-IRAP	\$1.7M	\$1.9M	\$1.1M	TBD
New Brunswick Company Annual Returns	32,240	33,067	35,147	TBD

Ultimate New Brunswick Capital Markets Objectives

Ultimate New Brunswick Capital Markets Objective

To support and enhance economic strength and stability through the generation of return on investment.

- Generates return on investment for those investing funds into the Capital Market.
- Provides ventures seeking capital at all stages of evolution with a source for funds.

As previously highlighted, all capital markets, regardless of their size or volume, share the same fundamental ultimate objective: to generate return on investment for investors in the capital markets. The New Brunswick capital markets are no exception. They generate return on investment by providing ventures with funds that fuel initiation, innovation and growth. When ventures are able to initiate, innovate and grow, investors are able to realize a return on their investment in the New Brunswick capital markets. Investors must have confidence in their ability to generate return on investment by earning reasonable rates of return over time. This is fundamental for the long-term sustainability of the New Brunswick capital markets and the province as a whole. If they do not, they will seek other capital markets from which to generate return on investment and the supply side of the New Brunswick capital markets will shrink. The motivation for sustaining and improving the performance of the New Brunswick capital markets is clear. It is the key contributor to New Brunswick’s economy from which all other contributions, such as research, labour and future investment flow. Strong and high-performing New Brunswick capital markets will positively contribute to the strength and stability of the New Brunswick economy today and for future generations.

KEY FINDINGS

Over the course of this initiative, The Barrington Consulting Group has made a number of observations related to the New Brunswick capital markets. These observations were formed through the stakeholders' interview process, during the development of the capital markets performance model and during data collection and analysis. Guided by the knowledge and experience of the project sponsors and the members of the consulting team, the following key findings have been developed. These are provided in order to facilitate further discussion among stakeholders and to ultimately address commonly referenced challenges with respect to the New Brunswick capital markets.

Current Strengths of New Brunswick Capital Markets

Diversity of Direct Capital Markets Contributors

The New Brunswick capital markets benefit from a diverse set of individuals and organizations that are contributing directly and indirectly to it.

New Brunswick's network of angel investors can be sought out via a few well-placed phone calls and New Brunswick is served by a formalized angel network (FAN) that is focused on supporting companies in our region. Through FAN, entrepreneurs are able to connect with other experienced entrepreneurs, professionals and potential investors.

The New Brunswick Innovation Foundation (NBIF) has received forty million dollars from the provincial government with a view to fostering innovation in New Brunswick. In other jurisdictions, the NBIF would be referred to as a 'sovereign fund'. A sovereign fund is capital set aside by a jurisdiction to be used for investment purposes that will benefit the jurisdiction's economy. The focus of the NBIF has been on supporting applied research and funding to very early stage companies through the 'Valley of Death'. Since inception, this unique organization has funded 23 venture capital early-stage companies as well as more than \$17M directly invested in more than 750 applied research projects.

In terms of venture capital investments, New Brunswick has traditionally been served by the Business Development Bank and GrowthWorks. Both organizations have maintained local offices in our region. However, due to current market conditions, there has been a reduction in the number and value of investments being made in SME ventures in New Brunswick.

Active and Committed Indirect Capital Markets Contributors

The New Brunswick capital markets benefit from a number of indirect contributors that have been outlined earlier in the report. They are the important educational and mentoring

components that support the creation of knowledge and development of our entrepreneurs. They are also extremely passionate and supportive of vibrant and sustainable New Brunswick capital markets.

A Strong Entrepreneurial Spirit

New Brunswick has developed a strong entrepreneurial spirit over the years. There are numerous examples of New Brunswickers who have identified and developed market opportunities and created successful business enterprises. New Brunswick benefits from entrepreneurs who have worked outside of the province and have returned with deeper experience and a set of world-class skills. As well, many local entrepreneurs have had backgrounds with New Brunswick companies such as Spielo Manufacturing Inc., Kinek Technologies Inc. and NBTel (now part of Bell Aliant). In these organizations, they have gained experience with developing, packaging and marketing technology solutions and working with start-up technology companies.

Opportunities for Improvement

Increased Foreign Venture Capital Investment

Over the years, some investments have been made in New Brunswick ventures by venture capitalists headquartered outside of our province and region. These organizations are referenced in Appendix A as 'Venture Capital Firms from Outside New Brunswick'. The importance of these types of investments cannot be underestimated. Obviously, these companies are under no obligation to invest in New Brunswick companies. They do so with the expectation of achieving significant returns on their investment. They have freely chosen particular New Brunswick ventures to invest in over other opportunities. This suggests a very positive indicator of the strength of the venture and their belief in these investments. Although a positive signal in past years, anecdotal evidence from stakeholders suggests New Brunswick has not recently attracted this type of outside investment. Several reasons for this have been offered such as transportation difficulties and the lack of demonstrable 'exit' successes. New Brunswick possesses a number of venture capital-ready companies with more set to achieve this state of readiness in the coming years. Further effort needs to be dedicated to making New Brunswick a more open and inviting environment for foreign venture capital firms. These barriers have been discussed in the past and should be further addressed in order to attract more of this type of investment.

Increased Commercialization Efficiency from Universities

New Brunswick universities have been focused on basic and applied research with results that are recognized as being world class in a number of areas. The University of New Brunswick,

which carries out approximately 75% of the university research in our province, has increased their research funding budget from approximately twenty million dollars to fifty million dollars per year over the last five years. There have been a number of success stories in the commercialization of university research. However, stakeholders have consistently emphasized the need to continue developing the focus on commercialization within New Brunswick universities. This is a common characteristic of universities operating in jurisdictions with high performing capital markets. Pure and fundamental research that may not result in the direct creation of return on investment through commercialization is a valuable and desired role of universities. However, applied research with the specific goal of commercializing new technologies should also be given priority.

Implementation of Data Collection Processes

In order to more fully understand the New Brunswick capital markets on an ongoing basis, additional data that is currently unavailable must be gathered. It is recommended that data capture processes be implemented that relate to the following areas:

1. *Return on Investment.* The number and value of buyouts, mergers and acquisitions is difficult to collect from the public domain, as there are no requirements of businesses to disclose this information. Therefore, it is very difficult to understand the impact of the New Brunswick capital markets on return on investment. Professionals involved in equity investments (i.e. law firms and accounting firms) have shown a willingness to adopt processes to capture and communicate this data in an aggregate form. As they are the best source for a great deal of the local investment information involving mergers, buyouts and venture capital investments, their involvement is critical to gaining greater insight into the New Brunswick capital markets.
2. *Quantification and Segmentation of the Exempt Market.* In Canada, businesses can raise capital by selling securities, such as common shares or bonds, without providing a prospectus so long as they rely upon an appropriate prospectus exemption. When a business raises capital in this manner, it is issuing exempt market securities and raising capital in the exempt market. NBSC research suggests that the exempt market in New Brunswick is sizable. In 2009, New Brunswick firms raised approximately \$19.4 million from within New Brunswick and approximately \$106.5 million outside of New Brunswick (i.e. within Ontario, Alberta, Quebec, etc). Gathering additional information regarding the size and segmentation of the exempt market will be helpful in quantification of the entity of the New Brunswick capital markets.

3. *Number of Medium-Sized Companies.* Large companies often target medium-sized companies (e.g. 101 to 999 employees) as acquisition targets. Identifying a reliable source of data and actively collecting the number and growth of medium-sized companies in the province can approximate the potential for realization of return on investment through mergers and acquisitions of these firms.
4. *Number of Participants in Business-Oriented Education Programs Focused on Entrepreneurial Skills.* Understanding the number of participants in education programs of this type helps to understand the demand side of the New Brunswick capital markets. Measuring this is important as it can be used to assess the prevalence and interest of New Brunswickers in terms of launching entrepreneurial ventures. It is also very valuable in quantifying the contribution of many of the indirect contributors to the capital markets. A comprehensive inventory of all organizations providing business-oriented education programs focused on entrepreneurial skills in the province must be developed. A process must then be implemented to regularly collect data from each with respect to the number of individuals participating in the related programs.

Part of the mandate of NBSC is to foster the capital markets in New Brunswick. In the event you have any thoughts that you would like to communicate to the NBSC, we would ask you to contact NBSC at information@nbsc-cvmnb.ca.

APPENDIX A – IDENTIFIED DIRECT CONTRIBUTORS

New Brunswick Innovation Foundation

The New Brunswick Innovation Foundation (NBIF) is an independent corporation that supports the development of innovation in New Brunswick. The mandate is to strengthen the innovation capacity of New Brunswick by making investments in applied research and new growth-oriented businesses.

The model is unique in the sense that the investments that are made bridge a gap that exists between research and enterprise, and accelerates the development and commercialization of ideas that impact the New Brunswick economy.

The strategic priorities are:

- Applied Research and Commercialization. NBIF supports applied research by funding projects that show potential for commercialization and economic impact in the province, its universities, community colleges and research organizations.
- Enterprise Creation and Development. NBIF supports the creation and development of entrepreneurial ventures by offering equity capital, professional support and networking opportunities to companies that focus on innovation to grow.
- Venture Capital Investing. NBIF supports New Brunswick's capital markets by providing venture capital in the form of equity investment and attracting other equity and venture capital investors to the province.
- Talent Development. NBIF supports the retention, recruitment, and development of the brightest innovators and entrepreneurs by providing them with the funding, expertise, recognition and encouragement they need to succeed.

Individual Angel Investors

Angel investors are individuals who invest in businesses looking for a higher return than they would see from more traditional investments. Individual angel investors may be accredited or not. Many are successful entrepreneurs who want to help other entrepreneurs get their business off the ground. Usually they are the bridge from the self-funded stage of the business to the point that the business needs the level of funding that a venture capitalist would offer. For the purpose of this study, individual angel investors are considered as distinct from founders, friends and families.

Entrepreneurs

There are many variations on the definition of an entrepreneur. Generally speaking, an entrepreneur is someone who seeks out opportunity. For the purpose of this study, the word entrepreneur is used interchangeably with the founder of a venture who creates value by offering a product or service, by carving out a niche in the market that may not exist currently. Entrepreneurs tend to identify a market opportunity and exploit it by organizing their resources effectively to accomplish an outcome that changes existing interactions within a given sector.

Observers see them as being willing to accept a high level of personal, professional or financial risk to pursue opportunity.

Founders, Friends and Family

It is generally accepted that the group known as Founders, Friends and Family make the first and perhaps most important contribution to many early ventures. The nature of investment made by this group of investors inherently makes measuring the contribution to the capital markets very difficult. This is because there are no requirements for reporting these arrangements and often there is no accompanying paperwork to support them.

First Angel Network

The First Angel Network (FAN) is a not-for-profit organization created to bridge the gap between entrepreneurs and capital in Atlantic Canada through communication, education and networking. FAN is a member-based organization that offers a forum for angel investors to increase their exposure to quality, pre-screened investment opportunities and expand their network of like-minded investors. FAN also provides qualified entrepreneurs the opportunity to approach a community of active, accredited investors. FAN is the only angel network operating in the Maritimes and is a member of the National Angel Capital Organization (NACO).

Venture Capital Firms

Technology Venture Corporation

Technology Venture Corporation (TVC) is a Moncton-based firm that is focused on providing capital in exchange for equity positions in the funded venture. TVC believes that investing capital in good businesses and partnering with talented entrepreneurs with shared values will lead to thriving and successful industry leaders.

Venture Capital Firms from Outside New Brunswick

Investment by these venture capital organizations in our province is a very important indicator of the vibrancy of our capital markets. They generally do not have any requirement to fund growth companies located in our province, and when they choose to do so it is an indication that the money invested in New Brunswick will yield a higher return and a greater chance to create a return on investment than other opportunities elsewhere. As such, the number and value of investments made by venture capital firms from outside the province provides a valuable indication of the quality of investment opportunities at a point in time.

There have been a number of these investments since 2003, and some examples include:

- Q1 Labs - Polaris Venture Partners (Boston and Seattle), Menlo Ventures (California), Globespan Capital Partners (Vancouver)
- AHI - Kyoto Capital Partners (Vancouver)
- Radian 6 – Brightspark Ventures, Summerhill Venture Partners (Toronto, Ottawa, Boston)
- Anyware – Export Development Corporation (Toronto)

GrowthWorks

GrowthWorks is a recognized leader in the Canadian venture capital industry specializing in the management and growth of regionally-based venture capital funds (RVCs). GrowthWorks has combined assets under management of approximately \$1 billion, including \$670 million in RVCs.

GrowthWorks evolved as a result of the merger of the labour-sponsored funds in the region.

Business New Brunswick

Business New Brunswick provides a number of services to New Brunswick businesses to assist in their growth:

- New Brunswick Growth Program. The objectives of the NB Growth Program are twofold: to create sustainable employment opportunities in New Brunswick by financially stimulating small businesses to pursue opportunities within targeted sectors of the economy and to stimulate capital investment for small business start-up, expansion, diversification, innovation and productivity improvement.
- Financial Assistance to Industry Program provides funding for capital expenditures and working capital to enable the establishment, expansion or maintenance of eligible industries.

- Technology Adoption and Commercialization Program provides assistance to manufacturers, processors and selected services firms to help address the gap in financial support of the technological innovation and pre-commercial product development needs.
- Trade Assistance Program introduces New Brunswick companies to exporting and assists in the development of "new" export markets outside Atlantic Canada.

Business Development Bank of Canada

The Business Development Bank of Canada (BDC) offers financing, consulting services and venture capital and focus on small and medium-sized enterprises (SMEs). BDC's services are available across Canada in both official languages through a network of more than 100 offices with its head office in Montreal.

Canadian Chartered Banks

The banking industry includes 22 domestic banks, 26 foreign bank subsidiaries, 22 full-service foreign bank branches and seven foreign bank lending branches operating in Canada. In total, these institutions manage close to \$2.9 trillion in assets.

As major players in Canada's financial industry, the banks serve millions of customers. They include individuals, small and medium-sized businesses, large corporations, governments, institutional investors and non-profit organizations.

The major domestic banks offer a full range of banking, investment and financial services. They have extensive, nation-wide distribution networks and are also active in the United States, Latin America, the Caribbean, Asia and other parts of the world. Close to half of their earnings are generated outside of Canada.

Many large international banks have a presence here — through a subsidiary, representative office or branch of the parent bank. Most specialize in corporate and investment banking (e.g., niche financing) and have only one or two offices/branches. A notable exception is HSBC Bank Canada, which has a strong retail presence with branches across Canada.

New Brunswick Investment Management Corporation

The New Brunswick Investment Management Corporation (NBIMC) is the trustee and investment manager for the pension assets of approximately 49,000 members of the Public Service, Teachers', and Judges' pension plans.

The primary mission of the Corporation is to increase the long-term value of the pension funds it

manages and to assist the plan sponsors in meeting the pension promise to its members.

NBIMC is one of the only Canadian institutional pension fund managers who have consciously designed a separate investment portfolio in which to evaluate local investment opportunities.

Credit Unions/Caisses Populaires

When comparing credit unions and caisses populaires to banks, their smaller size, reduced services and membership model are the most distinctive features of the credit unions/caisses populaires system. All members are equal owners, regardless of the number of shares they hold individually, or the size of their respective deposits. Every member has a say in the direction the credit union will take, and in general has the right to seek election to the board of directors.

APPENDIX B – IDENTIFIED FEDERAL FUNDING AGENCIES

Atlantic Canada Opportunities Agency

The Atlantic Canada Opportunities Agency (ACOA) works with businesses and communities to make Atlantic Canada's economy more innovative, productive and competitive. ACOA has implemented several programs in order to achieve this objective:

- Atlantic Innovation Fund (AIF) encourages partnerships among private sector firms, universities, colleges and other research institutions to develop new or improved products and services.
- Atlantic Trade and Investment Partnership includes five initiatives to help Atlantic Canada promote international trade and attract investors.
- Building Canada Fund provides funding for municipal infrastructure projects, particularly in smaller communities. It focuses on improving infrastructure in areas such as water, wastewater, culture and recreation.
- Business Development Program (BDP) helps set up, expand or modernize businesses. It can also provide financing to develop innovative ideas and improve your competitiveness. Focusing on small and medium-sized enterprises, this program offers interest-free loans. Non-profit organizations providing support to the business community may also qualify.
- Canada Small Business Financing Program helps new and expanding small businesses access financing for land, buildings and equipment.
- Canada/Atlantic Provinces Agreement on International Business Development (IBDA) helps established exporters expand their activities into new and more diversified markets. It also helps new exporters get started.
- Community Adjustment Fund (CAF) provides funding for projects that will create jobs and employment opportunities in communities that are hard-hit by the economic downturn. Activities supported by the fund include science and technology initiatives, community transition plans that foster economic development and other measures to promote economic diversification in affected communities.
- Innovative Communities Fund (ICF) invests in strategic projects that build the economies of Atlantic Canada's communities.
- Recreational Infrastructure Canada (RIc) provides funding for projects to rehabilitate

recreational facilities across Canada, including upgrades and repairs of existing assets and new construction that adds to or replaces existing recreational infrastructure.

- Sector Export Strategies support the development of export development for specific industries in Atlantic Canada.
- Seed Capital Program is a community-based initiative made available by the Community Business Development Corporations (CBDCs) that has a variety of flexible financing options available to entrepreneurs.
- Trade Education and Skills Development helps entrepreneurs in small and medium-sized companies acquire the export skills and knowledge they need to export profitably.
- Young Entrepreneurship Development Initiative (YEDI) offers financial support to not-for-profit business organizations, colleges and universities, and municipalities for business skills training and financial support to Atlantic Canadian entrepreneurs under 35 years of age.
- Women in Business Initiative provides financial support to not-for-profit business organizations to then help women entrepreneurs find the resources they need to grow their business and compete.

Natural Sciences and Engineering Research Council of Canada

The Natural Sciences and Engineering Research Council of Canada (NSERC) is the national instrument for making strategic investments in Canada's capability in science and technology. NSERC supports both basic university research through discovery grants and project research through partnerships among universities, governments and the private sector, as well as the advanced training of highly qualified people.

National Research Council

The National Research Council (NRC) helps Canadian companies take new technologies to market. Through research collaborations and partnerships, community innovation, industry support and commercialization opportunities, Canadian firms benefit from their expertise and technologies while increasing their own innovation potential. NRC works to achieve this by working with clients in a variety of ways:

- NRC offers a comprehensive suite of research, technology testing and business support services.
- From St. John's to Victoria, NRC operates hundreds of state-of-the-art Research and Development facilities.

- NRC currently offers numerous technology licensing opportunities for businesses and industry.
- NRC Industrial Research Assistance Program (NRC-IRAP) supports innovative Canadian SMEs: grow stronger, grow faster, and grow bigger through technology.
- NRC plays a leading role in providing Canada with strategic S&T information, intelligence and connections to centres of advanced S&T around the world.
- NRC offers companies the chance to co-locate at world-class NRC research space located across the country. Known as Industry Partnership Facilities (IPFs), these facilities offer unique services to innovative technology-driven companies.

Sustainable Development Technology Canada

Sustainable Development Technology Canada (SDTC) is a not-for-profit foundation that finances and supports the development and demonstration of clean technologies which provide solutions to issues of climate change, clean air, water quality and soil, and which deliver economic, environmental and health benefits to Canadians. SDTC operates two funds aimed at the development and demonstration of innovative technological solutions. The \$550 million SD Tech Fund™ supports projects that address climate change, air quality, clean water, and clean soil. The \$500 million NextGen Biofuels Fund™ supports the establishment of first-of-kind large demonstration-scale facilities for the production of next-generation renewable fuels.

Canadian Institutes of Health Research

The Canadian Institutes of Health Research (CIHR) provide funding opportunities for the following themes of health research: biomedical, clinical, health systems services, social, cultural, environmental and population health.

Canadian Foundation for Innovation

The Canada Foundation for Innovation (CFI) is an independent corporation created by the Government of Canada to fund research infrastructure. The CFI's mandate is to strengthen the capacity of Canadian universities, colleges, research hospitals, and non-profit research institutions to carry out world-class research and technology development that benefits Canadians. Since its creation in 1997, the CFI has committed \$5.27 billion in support of more than 6,600 projects at 130 research institutions in 65 municipalities across Canada. The CFI normally funds up to 40 percent of a project's infrastructure costs, which are invested in

partnership with eligible institutions and their funding partners from the public, private and voluntary sectors who provide the remainder.

Social Sciences and Humanities Research Council

The Social Sciences and Humanities Research Council (SSHRC) is the federal agency that promotes and supports university-based research and training in the humanities and social sciences. Through its programs and policies, the Council enables the highest levels of research excellence in Canada, and facilitates knowledge sharing and collaboration across research disciplines, universities and all sectors of society. Through research and training programs, SSHRC fosters the development of talented and creative people who become leaders across the private and public sectors and who are critical to Canada's success in the globalized 21st century.

Networks of Centres of Excellence

Canada's Networks of Centres of Excellence (NCE) is focused on connecting research and development to the economic and social well-being of Canada. The NCE Secretariat Model is based on five central features:

- Mobilization of Canadian research excellence
- Training of highly skilled personnel in Canada
- Networking and partnerships with industry and other relevant partners
- Transferring knowledge generated to user sectors
- Promoting effective management structure

APPENDIX C – IDENTIFIED TAX CREDIT PROGRAMS

Scientific Research and Experimental Development Tax Incentive Program

The Scientific Research and Experimental Development Tax Incentive Program (SR&ED) is a federal tax incentive program, administered by the Canada Revenue Agency that encourages Canadian businesses to conduct research and development in Canada. It is the largest single source of federal government support for industrial research and development.

New Brunswick Research and Development Tax Credit

The New Brunswick Research and Development Tax Credit is applied to scientific research and experimental development (SR&ED) expenditures defined by the federal *Income Tax Act*.

Small Business Investor Tax Credit

The Small Business Investor Tax Credit (SBITC) is a tax incentive program implemented by the New Brunswick Department of Finance. Beginning in 2009, The New Brunswick SBITC provides a 30% non-refundable personal income tax credit of up to \$75,000 per year (for investments of up to \$250,000 per investor) to eligible investors who invest in eligible small businesses in the province. The SBITC helps create a source of capital to New Brunswick ventures by encouraging New Brunswick residents to invest in New Brunswick businesses. Although not a direct source of funding for ventures, it does provide incentive to other stakeholders that do contribute directly to the capital markets such as founders, friends and family and angel investors.

Federal Investment Tax Credit

The Federal Investment Tax Credit is available to companies making net investment in equipment and buildings in manufacturing, processing, mining, oil and gas, logging, farming and fishing. This credit applies only in the Atlantic Provinces and Quebec's Gaspé region.

New Brunswick Film Tax Credit

The New Brunswick Film Tax Credit is available to production companies to encourage the training and hiring of New Brunswick film personnel.

APPENDIX D – IDENTIFIED INDIRECT CONTRIBUTORS

propel Accelerator

propel Accelerator is a private, non-profit, Information and Communications Technology (ICT) association. It was assembled in 2005 by several experienced ICT professionals during a period of transition in their own careers who identified a need to share their own growth with the community.

Entrepreneurship is the method and underlying philosophy behind their activities. They believe it breeds the creativity and foundation required to build a modern economy. propel's goals include:

- to develop the necessary community-based infrastructure (ideas, people, capital) to expand entrepreneurship, innovation and economic activity in the sector;
- to accelerate growth in the region by attracting and growing new companies and facilitating the growth and collaboration of the existing companies; and
- to influence government to adopt policy and practices that will foster growth of the sector, especially through business start-ups.

propel does not duplicate existing assets or programs. When there is an opportunity to leverage an existing initiative, it will form partnerships in order to maximize the benefits to the ICT community.

New Brunswick Enterprise Network

The Enterprise Network is designed to create prosperity in communities throughout the province through its network of 15 regional enterprise agencies. By building stronger communities, the Enterprise Network is working to build a stronger New Brunswick. New Brunswick's approach to economic development puts communities in the drivers' seat of their own economic growth, by giving them real decision-making power and the resources they need to build on their own assets and strengths. It is community development from the ground up based on a partnership between municipal, provincial and federal governments and the community. The goal is to help businesses and community organizations take their future in their own hands. The role of each enterprise agency is to:

- provide leadership and partnership coordination;
- lead the development of strategic plans;
- create, implement and monitor regional integrated work plans;

- integrate local, provincial and federal priorities;
- offer business development assistance and counseling;
- support the development of strategic clusters;
- coordinate labour force development initiatives;
- facilitate management training for SMEs;
- support investment and export development activities.

Professional Services Firms

Lawyers, accountants and other professional advisors supply professional services to support entrepreneurs, business people and their organizations involved in the New Brunswick capital markets.

Wallace McCain Institute

The Wallace McCain Institute at the University of New Brunswick helps entrepreneurs develop the understanding, tools and relationships needed to grow their business, creating new opportunities for economic and social progress across New Brunswick.

The Institute creates an environment where entrepreneurs develop a network of like-minded peers and a deeper understanding of the keys to successful entrepreneurialism.

Participants work closely with each other and some of Atlantic Canada's top business icons, drawing inspiration and encouragement.

There are 11 different programs operating within the organization, the most well-known being the cohort program in which 15 entrepreneurs work together throughout the year to develop their skills.

Centre for Technology, Management and Entrepreneurship (TME)

The objective of the TME program at UNB is to provide students with a bias towards technology and an opportunity to build stronger business management, venturing and interpersonal skills. These complementary skills will allow them to effectively communicate their technological ideas and influence others in an entrepreneurial or intrapreneurial environment. The program is designed for students presently enrolled in undergraduate programs, graduate engineers and scientists already in the workforce.

Shad Valley

The Shad Valley Program is held every summer in 10 different universities across Canada, one of them being UNB. The program attracts top high school students from around the world to attend a university where they focus on several academic disciplines including sciences,

technology and entrepreneurship. The participants stay in one of the university's residences with all other Shad Valley participants. Some participants spend subsequent weeks working in a co-op job opportunity. The Shad Valley Program combines the concept of entrepreneurship with science and technology to form a program that stimulates the participants' minds and exposes them to real-world challenges.

Junior Achievement

Junior Achievement (JA) is the leading provider of youth financial literacy education. It provides the experiences that promote the skills, understanding and perspective students will need to succeed in a global economy and become productive, contributing members of society. JA provides programs in New Brunswick that reach thousands of students from grades 3 through 12. They provide educational business programs and conferences to youth with an emphasis on three educational pillars of success:

- Financial Literacy
- Entrepreneurship
- Work Readiness

21inc

Its purpose is to tap into latent energy, developing and inspiring New Brunswick's new and emerging young leaders. 21inc focuses on young people in their 20s and 30s from all sectors, providing them with the tools, networks with peers and established leaders, and confidence to become effective 21st century leaders.

It draws upon the collective knowledge and experience of established leaders and each other to develop the country's best leaders. Together with established leaders they are forging a dynamic community, building a culture of innovation, learning and opportunity. For young leaders that participate in 21inc activities, learning about the capital markets of New Brunswick and how to access them can be a powerful tool should they look to incubate and commercialize their ideas.

Universities

Universities in New Brunswick are focused on:

- Excellence in teaching and an environment conducive to the development of the whole person.
- Achieving national and international recognition for research programs.

- Providing broadly educated graduates.
- Serving as a source of information and expertise to help society understand and deal with major issues and opportunities.

In addition to being one of our society's most fertile breeding grounds for ideas, universities support the capital markets as environments for teaching business and entrepreneurial concepts to students. As well, universities provide valuable primary and applied research facilities and capabilities. Often new ideas and technologies are moved from the conceptual stage to the demonstrable stage within the university environment. In this way, universities represent a unique environment within which technologies and innovations can be incubated and commercialized.

APPENDIX E – ENDNOTES

Table 1: Annual Amount Loaned by Loan Grantors Details and Sources

i Chartered Banks

Source:

1. Canadian Federation of Independent Business
<http://www.cfib-fcei.ca/cfib-documents/rr3044.pdf>
2. SME Financing Data Initiative, Statistics Canada
[http://www.sme-fdi.gc.ca/eic/site/sme_fdi-prf_pme.nsf/vwapj/KSBFS-PSFPE_Dec2009_eng.pdf/\\$FILE/KSBFS-PSFPE_Dec2009_eng.pdf](http://www.sme-fdi.gc.ca/eic/site/sme_fdi-prf_pme.nsf/vwapj/KSBFS-PSFPE_Dec2009_eng.pdf/$FILE/KSBFS-PSFPE_Dec2009_eng.pdf)
3. Survey of Suppliers of Business Financing 2008
http://www.sme-fdi.gc.ca/eic/site/sme_fdi-prf_pme.nsf/eng/01991.html
4. Statistics Canada, Business Debt Outstanding
<http://www40.statcan.gc.ca/l01/cst01/busi04-eng.htm>

Note:

There is strong evidence that in SMEs most of the funding is accessed from the owner's personal equity and loans, and business loans. The chartered banks were the main suppliers of debt financing to SMEs. In Canada the chartered banks provided 68% of the financing while the credit unions provided 19% (the total of \$59.4 B in 2007).

ii Credit Unions

Source:

1. Survey of Suppliers of Business Financing 2008
http://www.sme-fdi.gc.ca/eic/site/sme_fdi-prf_pme.nsf/eng/01991.html
2. Statistics Canada, Business Debt Outstanding
<http://www40.statcan.gc.ca/l01/cst01/busi04-eng.htm>

Note:

Data suppressed to meet the confidentiality requirements of the Statistics Act in NB.

Table 2: Annual Amount Invested by Equity-Focused Organizations Details and Sources

iii GrowthWorks

Source:

1. Stakeholder Interview
2. GrowthWorks website
http://www.growthworks.ca/portfolio-companies/search_company.aspx

iv Technology Venture Corporation

Source:

1. Stakeholder Interview. TVC has made 10 investments in the Atlantic Canadian region (three of which were in NB) since inception.

v **First Angels Network**

Source:

1. Stakeholder Interview. FAN has made a total of 13 investments totaling over \$6 million. Four of the funded ventures are in NB.

Table 3: Annual Amount Granted by Federal and Provincial Agencies Details and Sources

vi **Atlantic Canada Opportunities Agency (ACOA)**

Source:

1. ACOA Project Information Site
<http://pub.acoa-apeca.gc.ca/atip/e/content/list.asp>

vii **Business Development Bank of Canada Venture Capital (BDC-VC)**

Source:

1. Thomson Financial
<http://www.canadavc.com>

viii **National Research Council – IRAP (NRC-IRAP)**

Source:

1. National Research Council - Disclosure of Grant and Contribution Awards Over \$25,000
http://www.nrc-cnrc.gc.ca/eng/disclosure/grants/index.php?action=quarter_list

ix **Natural Sciences and Engineering Research Council of Canada (NSERC)**

Source:

1. UNB Research Annual Report
<http://www.unb.ca/research/documents/AnnualReport07-08.pdf>
<http://www.unb.ca/research/documents/AnnualReport08-09.pdf>

Note:

University of New Brunswick conducts approximately 75 per cent of all university research in the province. Similar information for other institutes in NB was not located.

x **Canada Foundation for Innovation, Networks of Centres of Excellence, Canada Research Chairs (CFI, NCE, CRC)**

Source:

1. UNB Research Annual Report
<http://www.unb.ca/research/documents/AnnualReport07-08.pdf>
<http://www.unb.ca/research/documents/AnnualReport08-09.pdf>

Note:

University of New Brunswick conducts approximately 75 per cent of all university research in the province. Similar information for other institutes in NB was not located.

xi **Sustainable Development Technology Canada (SDTC)**

Source:

1. SDTC Website
<http://www.sdtec.ca/en/results/index.htm>

http://www.sdtc.ca/en/results/portfolio/leveraged_financing.htm
<http://www.sdtc.ca/en/results/portfolio/index.htm#>

Note:

In NB it is known that Atlantic Hydrogen and UNB received funds from SDTC but the amount is not known as SDTC did not report it in their annual report or to Thomson Financial as it has for its investments in Ontario and BC.

^{xii} **Canada Institutes of Health Research (CIHR)**

Source:

1. UNB Research Annual Report

<http://www.unb.ca/research/documents/AnnualReport07-08.pdf>

<http://www.unb.ca/research/documents/AnnualReport08-09.pdf>

Note:

University of New Brunswick conducts approximately 75 per cent of all university research in the province. Similar information for other institutes in NB was not located.

^{xiii} **Social Sciences and Humanities Research Council (SSHRC)**

Source:

1. UNB Research Annual Report

<http://www.unb.ca/research/documents/AnnualReport07-08.pdf>

<http://www.unb.ca/research/documents/AnnualReport08-09.pdf>

Note:

University of New Brunswick conducts approximately 75 per cent of all university research in the province. Similar information for other institutes in NB was not located.

^{xiv} **Business New Brunswick**

Source:

1. Department of Business New Brunswick 2008-2009 Annual Report

<http://www.gnb.ca/0398/menu/paf/ar/AR2008-2009.pdf>

2. Department of Business New Brunswick 2007-2008 Annual Report

<http://www.gnb.ca/0398/menu/paf/ar/AR2007-2008.pdf>

3. Department of Business New Brunswick 2006-2007 Annual Report

<http://www.gnb.ca/0398/menu/paf/ar/AR2006-2007.pdf>

^{xv} **New Brunswick Innovation Foundation**

Source:

1. NBIF Annual Report 2008 - 2009

http://www.nbif.ca/files/library/2009_NBIF_Annual_Report.pdf

Note:

Since inception, NBIF has invested a total of \$25.88M in 48 companies and 748 research projects.

^{xvi} **New Brunswick Investment Management Corporation**

Source:

1. SDTC Annual Report 2008-2009

<http://www.nbimc.com/Publications/AnnualReports.aspx>

2. SDTC Annual Report 2007-2008
<http://www.nbimc.com/Publications/AnnualReports.aspx>

3. SDTC Annual Report 2006-2007
<http://www.nbimc.com/Publications/AnnualReports.aspx>

4. Thompson Financial
<http://www.canadavc.com>

Note:

The NBIMF have not reported recent investments in NB-based companies according to Thomson Financial and Annual Reports.

^{xvii} **Regional Development Corporation**

Source:

1. Regional Development Corporation Annual Report
<http://www.gnb.ca/0096/PDF/AnnualReport07-08.pdf>

<http://www.gnb.ca/0096/PDF/AnnualReport06-07.pdf>

Note:

Funded projects were associated with economic diversification, education & training, infrastructure and R&D.

^{xviii} **Scientific Research and Experimental Development (SR&ED)**

Note:

CRA has indicated that this information can be made available but was not at the time of publishing this document.

^{xix} **Small Business Investor Tax Credit**

Source:

1. New Brunswick Securities Commission Annual Report 2008-2009
http://www.nbsc-cvmnb.ca/nbsc/docs/AnnualReport08-09-FINAL-WEBREADY_EN.pdf

Table 4: Annual Number and Value of Initial Public Offerings Details and Sources

^{xx} Source not available

Table 5: Annual Number and Value of Venture Buyouts Details and Sources

^{xxi} Source not available

Table 6: Annual Number and Value of Venture Mergers and Acquisitions Details and Sources

^{xxii} Source not available

Table 7: Number of New and Total Companies Registered in New Brunswick

xxiii Total Number of Companies Registered in New Brunswick and New Company Registrations in New Brunswick

Source:

1. Service New Brunswick Annual Report 2008-2009
http://www.snb.ca/d_t/AR-08-09-E.pdf

Table 8: New Brunswick Gross Domestic Product and Exports

xxiv NB Real GDP

Source:

1. Statistics Canada, Real Gross Domestic Product
<http://www40.statcan.ca/l01/cst01/econ50-eng.htm>
2. New Brunswick Department of Finance, 2009 Economic Update
http://www.gnb.ca/0160/budget/buddoc2010/nb_economy_10-e.pdf

xxv Value of NB Exports

Source:

1. New Brunswick Department of Finance, New Brunswick Domestic Exports
<http://www.gnb.ca/0160/Economics/ExportsTable.html>

Table 9: Total Number of New Brunswick Jobs

xxvi Total Number of NB Jobs

Source:

1. Statistics Canada, Labour Force Characteristics by Province, 2009
<http://www.statcan.gc.ca/subjects-sujets/labour-travail/lfs-epa/t100205a3-eng.htm>
2. Statistics Canada, Selected Labour Market Components by Province, 2008
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