Improving Chinese Expenditure Incentive Programs for Venture Capital Investment:

A Comparative Study of Government Expenditure Supporting Policies of Venture Capital Investment in the United States, Canada and China

by

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Abstract

This thesis will discuss the role of government in venture capital market and illustrate the national difference of that through a comparative study of government expenditure supporting policies of venture capital investment in the USA, Canada and China. Firstly, the prototype programs designed by Small Business Administration (SBA) of the United States and Canadian policies by the Business Development Bank of Canada (BDC) will be discussed. Secondly, the current Chinese government expenditure supporting policies will then be studied in the context of the Chinese venture capital market’s unique political, economical and legislative background. Ultimately, potential improvements in the future expenditure incentive programs in China will be explored.
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1 Introduction

The venture capital markets in the United States and Canada are as mature as their regular capital markets. The venture capital activities and the balance of supply and demand in these venture capital markets are primarily self-regulated by the market rules. However, governments normally play significant roles in correcting or compensating for market inefficiencies. Market failures that normally occur in venture capital markets per se are the equity gap due to information asymmetry, spill-over effect of the SMEs on innovation and employment, and distortions that divert capital from SMEs caused by the governments\(^1\). Governments of the United States and Canada have introduced a variety of policy instruments in response to those deficiencies. Among which, the expenditure incentive programs of the two countries were most representative of the national differences of the government roles in their respective venture capital markets. With a general antipathy toward government intervention in the marketplace, the United States Small Business Administration (SBA) facilitates private sector investment through equity financing programs such as Small Business Investment Company (SBIC), loan guarantees, and R&D spending. In contrast, with primary concern to protect domestic venture capital investment, the Canadian federal government makes available debt and equity financing directly to startup enterprises through the Business Development Bank of Canada (BDC).\(^2\) There are two significant teachings of these benchmark policies for emerging venture capital markets such as China. One is a demonstrative effect that shows the importance of government expenditure incentive programs and the possible models of relationship between government and venture capital market players. The other one is an early test of the various expenditure-program-designing tactics that not only aim at the fitness to the home background of a certain country but also strives for the best efficiency in realizing the underlying policy goals.

Experiences taken from matured markets as the US and Canada needs to be implemented in the Chinese venture capital market with extra cautious and appropriate modifications to adapt to the unique political, economic and legislative environment of China. Politically, the Socialist

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2 Ibid., at 459
favor for “the domination of public ownership of the means of production and social wealth” results in a generally stronger government presence in the nation’s economy sector; Economically, China is undergoing a transition from the traditional planned economy to the modern market economy, the government’s role in the financial sector therefore takes on a clear transitional character which I would describe as “decreasingly strong”. Legislatively, the nascent legal framework of the venture capital mechanism in China was built and driven mainly by the government instead of naturally grown and shaped out of the internal force of the marketplace, hence has revealed certain imperfections and a thick color of “utilitarianism”. However, Chinese government is taking initiatives to shift its involvement in the venture capital market from dominative role to assistive role. The three existing major state-level expenditure incentive programs in China, namely the National Industrial Technology Research and Development Budgets Funded Venture Capital Funds (ITRDF), the Government Directory Venture Capital Funds (GDVCF) and the National Industrial Technology Research and Development Budgets Participated Venture Capital Funds (ITRDPF), have jointly demonstrated such a functional change of the government with clear transitional characteristics. Meanwhile, the local government expenditure supports for venture capital investment, which often combined with the development of regional New Economy Zone or High Tech Parks, also aim to take advantage of the “utilitarian” feature of Chinese venture capital development.

In pursuant to the teachings of the North American benchmark and the intrinsic pattern of the domestic development of Chinese venture capital market, further improvement can be expected in Chinese expenditure incentive programs. Firstly, as the economic transition goes deeper, the role of government in Chinese venture capital market shall be continuously reduced and more targeted to prevent specific market failures. Secondly, in order to highlight the function of venture capital investment as a dynamic and efficient way of capital operation which well complements the general capital market, the “utilitarian” policy goal of promoting high-tech and knowledge-based industries behind the promotion of venture capital investment in China needs to be slightly weakened. Last but not least, the specific designing tactics of Chinese government expenditure programs could be advanced with an expanded private capital leveraging effect and an ultimate expectation of profiting the expenditure-sponsored venture capital funds even without further expenditure involvement.
2 Teachings from the North American Benchmark

Venture Capital (VC) investment, or Venture Capital financing, which originated from the United States and soon spread to the rest of the world, is generally categorized as a specialized form of private equity characterized by capital investment in Small-and-Medium-sized Enterprise (SME) with high-growth-potential, generally characterized by new technologies. The VC marketplace basically involves three principal players: the person in need of capital (entrepreneur), the person with capital to invest (the high-risk investor) and the person who puts the two together (the venture capitalists, or the venture capital entities).

From the venture capitalist’s perspective, the whole process of VC activity usually consists of 3 phases: the financing phase, the investing phase, and the exit phase.

In the financing phase, a VC entity collects a pool of fund from the outside investors, usually through private placement. The high risks and long time horizon associated with venture capital investment have made it more suitable to collect money from specialized high-risk investors who usually have better risk identification abilities and stronger hazard bearing capacity.

In the investing phase, since the entrepreneurs of startup companies would normally experience different financing stages, sequentially known as seed stage, first stage (startup expansion), second stage (market expansion) and third stage (mezzanine financing stage), the venture capitalists shall meet their respective financial needs accordingly. The investing activities of VC entities normally consist of 3 major steps: The very first step is project selection.

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3 Private Equity is an asset class characterized by ownership investment in privately-owned companies. See to: Thomson Reuters: “Canadian Venture Capital Overview”, University of Toronto, January 2010


5 Supra to note 1, at 4

6 A VC entity is an institutional Venture Capitalist, usually taking the form of a VC firm or a limited partnership VC fund. Jeffrey G. MacIntosh: “Venture Capital Financing” course ppt.1, University of Toronto, 2010
VC selects startups from a pool of candidates as investment target. The second step is investment arrangement. VC determines the type of investment and the expected amount of fund needed to invest in the target company. Finally, the VC moves on to project oversight. In this step, the VC supervises/participates in operation of the target company, and advises on risks and benefits involve throughout decision making processes.

In the exit phase, upon the maturity of the venture enterprise or its inability to further growth, the venture capitalists transfer their equity investment into money capital to reap the capital gains or to avoid further loss. Since the essence of venture capital investment is a special kind of capital operation, the VC exit phase that realizes the capital gains and recycles the capital into new project and new investment round is very crucial. The common methods of VC exit include initial public offerings, mergers and acquisitions, equity buy-backs and liquidations.

In North America, namely the United States and Canada here, the venture capital markets are as mature as its regular capital market. They set out a systemic “benchmark” for the rest of the world. The activities of VC players and the balance of the supply and demand of venture capital are primarily self-regulated by the invisible hand of the marketplace. However, oftentimes government has a role to play in there to correct or compensate for market inefficiencies. There are 3 major kinds of market failures associated with the venture capital market that require government intervention.

First is the equity gap in SMEs that arises from the perception among investors that “the higher transaction and monitoring costs associated with venture capital firms make investment in them uneconomic”. The efficient allocation of capital in the financial market is often dependent on full knowledge of the risks and returns associated with all available investments. However,

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8 This gap is limited to equity investment because the inability of small businesses to attract debt financing on terms comparable to those received by large corporations is not usually considered a market failure.


10 Supra to note 1, at 13
“the inherent long time horizon of investment in SMEs and the information asymmetries\textsuperscript{11} of venture capital investment make full knowledge of expected risks and returns almost impossible to acquire”.\textsuperscript{12} There are two different kinds of information asymmetries that are pronounced for SMEs. One is pre-investment information asymmetries that results in a mismatch of capital and projects, commonly known as adverse selection; the other one is post-investment information asymmetries that reflect the agency conflict between investors and the entrepreneurs, commonly known as moral hazard.\textsuperscript{13}

The second kind of market failure associated with the venture capital market is the “spillover effects” or externalities of SME on innovation and job creation that benefit the economy as a whole but are not captured by VC players right away in their immediate transactions\textsuperscript{14}.

Apart from the inherent market failures in the venture capital market, distortions that divert capital from small business may also be introduced by the governments themselves\textsuperscript{15}. “Since aggregate savings in the economy are limited, any measure that is successful in directing savings into [another area other than venture capital] will result in a lower level of financing available [for VC uses]”\textsuperscript{16}.

There are a variety of policy instruments that governments could use to address these market inefficiencies in the VC market. They could either tackle information asymmetries directly by

\begin{itemize}
\item Information Asymmetries: the differences in knowledge of an entrepreneur seeking investment on the one hand and external investors on the other.
\item \textit{Supra} to note 1, at 13
\item \textit{Ibid.}
\item \textit{Ibid.}
\item See also to: Jeffrey G. MacIntosh: “Legal and Institutional Barriers to Financing Innovative Enterprise in Canada”, Government and Competitiveness School of Policy Studies Discussion Paper Series, Queen’s University
\item \textit{Supra} to note 1
\item Neil Brooks, “Taxation of Closely-Held Corporations: the Partnership Option and the Lower Rate of Tax” (1986) vol.3, no. 4 \textit{Australian Tax Forum} 281-509, at 484
\end{itemize}
pushing for the creation of information exposure networks and cost-reducing incubators\textsuperscript{17}, or adopt a "second-best solution" by increasing the overall supply of venture capital\textsuperscript{18} which essentially serves as the function of underwriting the risks, compensating for spillovers and counteracting the distortions. One way that the second approach can be implemented is to lift the embargo on various institution investors of investing in venture capital funds. Another way is to make governments themselves a supplier of venture capital by directly investing in VC or leveraging private sector investment through expenditure programs and tax incentives, etc.\textsuperscript{19} Please refer to Fig. 2.1 for a categorization of government responses to market failures in VC market and their internal relationship summarized by this study.

![Fig. 2.1: Government responses to market failures in venture capital market and their internal relationship](image)

The government expenditure incentive programs that will be compared and discussed in this thesis belong to the latter category of government support. They are policies that leverage private sector investment into VC market through the involvement of certain amount of government expenditure. Some of these programs, such as R&D financing, also match expenditure or investments with prioritized projects, which address the "equity gap" directly. In

\textsuperscript{17} Supra to note 1, at 20

\textsuperscript{18} Ibid.

\textsuperscript{19} Supra to note 1, at 20
practice, the expenditure incentive programs, or “money incentive” programs, are quite attractive to private investors. Comparing to tax incentives, informational service and other government supports, government expenditure incentive programs for venture capital investment usually have a very quick and prominent effect in venture capital formation. On the other hand, they also tend be more costly, more government dominative, and less beneficial for the healthy development of VC activities in a long run. But this is not necessary. The potential disadvantages of expenditure programs can be overcome or reduced by proper design of the programs. So even for countries with a general dislike of government interference in the marketplace, such as the United States, government expenditure VC programs are still essential and abundant there. The designing tactic of VC expenditure programs is hence very crucial and very indicative of the general governmental attitude in the VC market of a certain country. Therefore, a comparison of different government expenditure programs of different countries is really a miniature of the comparison of different styles of government roles in their respective VC market.

Since the founding of the first venture capital firm in 1946 by Georges F. Doriot and the early establishment of SBA in 1953, the United States is commonly considered as the world pioneer in venture capital investment and in the associated government regulation. The later construction of Canadian VC market itself is an early practice of implanting the US benchmark regime into a foreign territory. Therefore the VC policies of the Canada are generally a lot similar to those of the United States’. But this is not the case in the respect of government expenditure programs. When it comes to crucial and influencing policies like expenditure programs, cultural difference and priorities distinction seemed to have played a quite notable role. With a general antipathy toward government intervention in the marketplace, SBA of the United States facilitates private sector investment through equity financing programs like Small Business Investment Company (SBIC), through loan guarantees, and through R&D spending programs. In contrast, with a primary concern of domestic venture capital investment attraction, the Canadian federal government makes available debt and equity financing directly to SMEs through the Business Development Bank of Canada (BDC). Both of the practices have some teachings for latecomer countries that are undergoing the construction of their domestic venture capital markets, such as China.
2.1 Policies of the United States Small Business Administration

The US Small Business Administration (SBA), established by the US Small Business Act in 1953, has been the responsible government agency of the United States in promoting small business and enacting VC investment supporting policies. The SBA’s mission is to promote and assist the development of SMEs through 2 primary methods: “championing small business interests” and “empowering entrepreneurs”\(^\text{20}\). The first method includes minimizing the regulatory burden faced by small businesses, providing easy access to information and ensuring that small business are treated fairly in the regulatory process mainly through lobbying efforts and regular reports to the Congress.\(^\text{21}\) The second method includes financing SMEs and providing counseling to SMEs\(^\text{22}\). The design of US government expenditure incentive programs for venture capital investment belongs to the financing service category of the SBA’s function, which basically involves programs of equity financing, debt financing, loan guarantees and R&D financing to SMEs.

2.1.1 Equity and Debt financing

The SBA finances SMEs and facilitates private sector investment to SMEs through various programs such as the Small Business Investment Company (SBIC) program, specialized SBIC program (SSBIC)\(^\text{23}\) and New Markets Venture Capital Company programs (NMVCC)\(^\text{24}\). Among

\(^{20}\) SBA Budget Request & Performance Plan: GY 2004 Congressional Submission (Washington, DC; Small Business Administration, Feb 10 2003), at 1

\(^{21}\) Ibid., at 3

\(^{22}\) The counseling service provides small business with business plan and other counseling services so that the entrepreneur will have the knowledge to be successful and be able to better attract VC funds.


\(^{23}\) SSBICs are specifically targeted toward the needs of entrepreneurs who have been denied the opportunity to own and operate a business because of social or economic disadvantage. The Small Business Program Improvement Act of 1996 repealed Section 301(d) and the result, no new SSBIC license are being issued. However, existing 301(d) licensees were "grandfathered" and still in operation.

See to: http://www.smallbusinessnotes.com/financing/sbic.html

\(^{24}\) NMVCCs were newly formed, for-profit investment funds with private management. Their objective is to promote economic development and the creation of wealth and job opportunities in their self-designated Low-Income (LI) geographic Areas. NMVCCs pursue this objective by making equity-type investments in smaller
these programs, the SBIC program is the most representative program that has not only played an instrumental role in the evolution of the private VC industry in the US but also remained important today.\(^{25}\)

SBIC was the first government expenditure sponsored venture capital fund program in North America. It was first introduced by the “Small Business Investment Act of 1958” (SBIA) to bridge the gap between entrepreneurs’ need for capital and traditional financing sources. The program involved multi billion dollar and served as government-sponsored “fund of funds” that invest long-term capital in private VC entities.\(^{26}\) An SBIC may be organized as a corporation, a limited partnership, or a limited liability company.\(^{27}\) The developing process of the SBIC can be summarized from its founding Act and later amendments.

(a) SBIA of 1958: Originally, SBIC needed $300,000 of capital to be licensed, of which at least one-half to be raised by private investors. The SBA was authorized to match private investors’ funds, to a maximum of $150,000, by purchasing subordinated debentures of the SBIC. In addition to matching the private sector investment, the SBA could lend additional funds to an SBIC, not exceeding one-half of its paid-in capital and surplus.\(^ {28}\) (E.g. if private investors raised $150,000 of capital for an SBIC, the SBA could leverage it with an additional $300,000.) The leverage could be loans or convertible debentures but could not be common equity in SBICs.\(^ {29}\)

See to: http://www.sba.gov/aboutsba/sbaprograms/inv/nmvc/INV_NMVC_INDEX.html

25 Supra to note 1, at 464


27 Small Business Investment Act of 1958 (SBIA), section 301(a)

28 SBIA, section 303(B)(2)

29 SBIA, section 102(10)
(b) 1976 Amendment: in Small Business Investment Act Amendments of 1967, the SBA leverage was increased with a distinction made between “regular SBICs” that provide both debt and equity capital and “VC SBICs” that invested at least 65 percent of their funds in venture capital.30 The amount of leverage was increased to 300% with SBA debentures for the former and 400% for the later, in both cases with a ceiling of $35 million. And SBA was authorized to guarantee debentures of SBICs, as an alternative to purchase.31

Despite the significant increase in SBA leverage, at this period there was a serious mismatching of debt obligations to equity investment, which not only led to “cash flow problems” that had brought about the demise of many SBICs, but also hindered the ability to further expand for surviving ones.32 As another result of such mismatching, SBICs tended to divert their attention from high-tech new ventures to other pursuits such as real estate development.33

Successful SBICs, in terms of fulfilling the objective of providing equity financing to SMEs, were limited primarily to bank-owned SBICs who did not really rely on government leverage.34 SBA gradually permitted banks to invest in SBICs from 1% to 5% of their total assets.35 Consequently, “private VC firms began to proliferate as the SBIC movement waned”.36

(c) 1992 amendment: significant changes has made to the SBIC regime in 1992.37 The amendment was designed to remove the “cash flow problems” associated with government leverage. A new form of government leverage is thereafter provided through “participating

30 Small Business Investment Act Amendments of 1967, 81 stat. 268
31 Pub. L no. 92-213, 85 stat.775
32 Supra to note 1, at 465
33 Ibid.
34 Ibid.
35 Ibid.
36 Ibid., at 466
securities”, which is defined to include “preferred stock, a preferred limited partnership interest or a similar instrument including debentures under the terms of which interest is payable only to the extent of earnings”\(^3\). The SBA can guarantee the redemption price and prioritized payments of participating securities, and a trust or a pool acting on behalf of the SBA is authorized to purchase such securities.\(^3\) The SBA (or the entrusted trust or pool) will receive a preferred return for the participating securities, plus a profit participation.\(^4\) Participating Securities SBICs must provide equity financing to SMEs at least equal to the outstanding amount of any participating securities.\(^4\) But they can actually receive from the SBA up to twice the amount of private capital they raise, with a ceiling of approximately $111.7 million.\(^4\) Through this way, an SBIC can provide financing to SMEs in the form of both equity and debt. Participating Securities SBICs are most suited for venture capital investments in companies that lack established sources of cash flow.

The 1992 amendments have had a profound impact on the amount of capital raised by SBICs. The total capital under management by SBICs grew from 3 billion to $17.4 billion through 1993 to 2010\(^4\). The nature of investments by SBICs has also changed dramatically by this amendment in the past 2 decades. The majority of SBIC financing has changed from straight debt to straight equity financing.\(^4\)

\(\text{38} \) SBIA, section 301(a), Participating Securities are preferred limited partnership interests which provide the SBA with (1) a current return equal to approximately 2.0% to 2.5% over the interest rate on Treasury Bonds with a ten-year maturity, contingent upon and payable only from cumulative realized partnership profits, plus (2) a share of the partnership’s profits.

\(\text{39} \) Supra to note 1, at 466

\(\text{40} \) Ibid.

\(\text{41} \) SBIA, section 303(g)(4)

\(\text{42} \) Supra to note 1, at 466

\(\text{43} \) Executive Summary, the deal Magazine, to date March 19, 2010,

\(\text{44} \) Supra to note 1, at 466
2.1.2 Loan guarantees

The vast majority of SBA financing of SMEs is provided through loan guaranty. The SBA has numerous loan guarantee programs. The primary lending program is the “7(a) loan guaranty” that set out in the section 7(a) of the Small Business Act. “7(a) loan guaranty” is available to SMEs that meets certain SBA requirement. When a private sector loan has been rejected, the business can request that the private lender reconsider the loan under the conditions established by the SBA for a 7(a) loan guaranty. If both the lender and the SBA accept the loan, the SBA will guarantee part of the loan: up to 85% of loans not exceeding $150,000 are guaranteed, and up to 75% of loans exceeding $150,000 are guaranteed. The interest rate, not exceeding the maximum rate of SBA, can be determined by the lender and the entrepreneur.

2.1.3 R&D Financing

In a lot of cases, federal government agency research spending would set aside a fixed percentage of these funds for awards to small business. The SBA is also responsible for the administration of these programs through which R&D funding is provided to SMEs. One of the most significant programs of this kind is the Small Business Innovative Research program (SBIR) established in 1982. The SBIR program requires any federal government agency that spends more than $100 million annually on external research to set aside a fixed percentage of these funds for awards to small business. The SBA administers the federal agencies’ implementation of the program, reviews their progress and reports annually to the Congress on the program’s operation. There are 3 phases to the SBIR program. “Phase 1 awards, for periods of up to 6 months in amounts up to $100,000, help winners determine a project’s feasibility; and phase 2 awards for periods of up to 2 years in amounts up to $750,000, support the development

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45 Ibid., at 456
46 SBA official website, 7(a) Loan Program, http://www.sba.gov/financialassistance/prospectivelenders/7a/works/index.html
47 Supra to note 1, at 456
48 Ibid., at 457
49 Ibid., at 457, see to Small Business Innovative Research Program Reauthorization Act of 1992
of phase 1 ideas; phase 3 awards is for the commercialization of the phase 2 results and requires private sector or non-SBIR funding.\textsuperscript{50} SBIR awards are made to companies as contracts or grants. Government does not enjoy equity participation in the awarded businesses. Another similar but smaller set-aside program is the Small Business Technology Transfer program (STTR) which started to make awards since 1994. The STTR program is designed to foster joint venture opportunities between SMEs and research centers\textsuperscript{51}.

With a mature free market force and a general dislike of government interference in the marketplace, the US expenditure programs have demonstrated an antipathy toward direct government investment in private enterprises\textsuperscript{52}. It put a lot of emphasis on the leveraging effect of the expenditure involved: the government expenditure would only go after private investment. Instead of letting SBA decide for itself on which project to help, the function of it is more like to support or to underwrite risks for private independent decisions. For example, even if the SBA is more intended to invest in high-tech new ventures, it would not do so directly, but rather to revise the mechanism of the program in a way that makes the investment in high-tech new ventures more attractive to private investors. Such philosophy of the expenditure program has limited the government interference to the minimum degree.

In addition, the US expenditure programs also look highly upon the self-surviving ability of the government-sponsored VC fund. The SBA shares the investment gains of an SBIC or other similar government-sponsored VC fund with a preferred position. Although this seems to be “less favorable” to private investors in the first place comparing to less stressful incentives such as tax credit or direct loans, however, such design of program highlights the operational capability of the expenditure-sponsored fund, which makes the VC fund more competitive. Eventually, the goal of a sponsored fund is to survive and succeed even without expenditure sponsor. This idea of government support is very advanced and worth learning by other countries.

\textsuperscript{50} Ibid., at 457, see to SBA official website, Description of the Small Business Innovation Research Program (SBIR) http://www.sba.gov/aboutsba/sbaprograms/sbir/sbirstir/sbir_sbir_description.html

\textsuperscript{51} SBA official website, Description of the Small Business Technology Transfer Program (STTR) http://www.sba.gov/aboutsba/sbaprograms/sbir/sbirstir/SBIR_STTR_DESCRIPTION.html

\textsuperscript{52} Supra to note 1, at 18
Above all, the SBA policies care not only about the promotion of small business but also about the development of venture capital investment itself as a fresh and mature way of investment and a dynamic and effective alternative in the capital market, which has contributed a lot to the United States’ world No.1 status in the venture capital field.

2.2 Policies of Business Development Bank of Canada

The Canadian government expenditure VC supporting policies are quite different from those of the United States’. Instead of establishing a separate government agency that advocates on behalf of the SMEs, the Canadian federal government provides alternative expenditure financing to Canadian SMEs through the Business Development Bank of Canada (BDC). Unlike the SBA programs that usually demonstrate an indirect leveraging feature, in contrast, the BDC makes direct equity investments and loans to SMEs, with a particular focus on technology and exporting.

In Canada, BDC is the most crucial institution that carries out Canadian expenditure VC policies. It is a crown corporation financial institution wholly owned by the Government of Canada created under the ad hoc Act passed by the Parliament (“Business Development Bank of Canada Act”). The concurrent BDC has developed from the former Federal Business Development Bank, and further from the former Industrial Development Bank. In the last chapter “Selected Non-Tax Government Venture Capital Programs” of his book “Venture Capital and Tax Incentives: A Comparative Study of Canada and the United States”, Daniel Sandler has made a good summary of such a policy evolution taken place in Canada.

2.2.1 The Industrial Development Bank

[The Industrial Development Bank (IDB) was created in 1944 primarily to “help wartime manufacturers convert their facilities for peacetime operations.” The IDB had an initial capitalization of $25 million, which consisted of par value shares held by the

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53 Ibid., at 459
54 Ibid.
55 Supra to note 1, at 458; See to Canada, House of Commons, debate
bank of Canada. The role of the IDB was that of a “Lender of last resort”: the IDB had the power to lend or guarantee loans to industrial enterprises that could not obtain other financing on reasonable terms. As a result, its lending activities were limited primarily to small business. In 1971 it began to provide small business with advice on how to operate successfully.

2.2.2 The Federal Business Development Bank

[The IDB was replaced by the Federal Business Development Bank (FBDB) in 1974. The mandate of FBDB was to continue to act as a “lender of last resort” and to provide counseling services to small businesses. The only significant difference between the IDB and the FBDB was that FBDB could provide equity financing to SMEs. However, more significant changes were considered necessary by the mid-1990s. At that time, not only had the FBDB nearly reached its lending ceiling of $3.2 billion, but also a substantive concern was raised that the FBDB was not meeting the changing needs of the Canadian economy. As small businesses moved away from traditional business sectors into the new and high tech economy, the FBDB’s mandate of being a “lender of last resort” would no longer suffice to direct VC investment into new economic sectors. At this point, a more aggressive and more signaling FBDB was expected by the Canadian VC market.]

2.2.3 The Business Development Bank of Canada

Under such circumstance, in 1995 the Business Development Bank of Canada (BDC) was created as a continuation of the FBDB to meet the changing needs of the Canadian economy. Improvement can be seen in following aspects.

56 IDB Act, section 12
57 IDB Act, section 15
58 The counseling program became known as CASE (Counseling Assistance for Small Enterprises) and was funded by the government in collaboration with the private sector.
59 The IDB was permitted to hold stock of a corporation but only with a view to resale; the FBDB was not subject to a similar condition.
60 Supra to note 1, at 459
a. **Mandate Change**: the BDC was given an updated mandate to SMEs and no longer limited to the role as “lender of last resort”. The new operating mandate requires it to “provide complementary services to Canadian small business”\(^{61}\) while operating on a commercial basis so that it earns a rate of return at least equal to the government’s cost of funds and recovers its costs for its consulting services\(^{62}\). In fact, the BDC has met this goal and made a profit in each year of operation since its inception.

b. **Gap Approach**: in order to fulfill the complementary mandate, the BDC adopts a gap approach that identified 4 major gaps in the marketplace that were considered to limit the proliferation and growth of SMEs and tech-based companies: the risk gap, the size gap, the flexibility gap, and the knowledge gap.\(^{63}\) Among which the knowledge gap is considered particularly important as the Canadian economy shifts to new economy businesses.\(^{64}\) Consequently 50% of all BDC new financings over the long term are to be in knowledge-based industries (KBIs) and exporters.\(^{65}\) The adoption of gap approach and focusing on gaps that private sector is perceived to have ignored makes BDC complements rather than competes with private sector investment.\(^{66}\)

c. **Specialized Group**: Also in order to fulfill this complementary mandate, the BDC is divided into 3 operating groups: the loans group (continues the mandate as a lender of last resort), the consulting group (consists of a national network of partnerships with SMEs consulting firms), and the investment group (which is responsible for venture capital and subordinated financing; act as “path breaker” by demonstrating to the private sector the commercial viability of investing in KBIs and supporting high-growth SMEs that do not have the

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\(^{61}\) BDC Act, section 14


\(^{63}\) *Supra* to note 62, at 14

\(^{64}\) *Supra* to note 1, at 459

\(^{65}\) *Supra* to note 62, at 38

\(^{66}\) *Supra* to note 1, at 460
tangible assets generally considered necessary to obtain funding from the private sector). The venture capital group of the BDC operates in a manner quite similar to private sector VC firms. In addition to direct investment in SMEs, the BDC also invests in private VC funds that it sees as complementary to its investment activities. The BDC estimates that it accounts for about 1/5 of the VC raised by the portfolio companies, that is, for every $1 of BDC venture capital, the company raises $4 of private sector venture capital.

**d. Capital Increase:** The capital available to the BDC was increased. BDC is authorized to have capital not exceeding $1.5 billion and is permitted borrowings and contingent liabilities of 12 times equity. In other words, the BDC has potentially $19.5 billion available for financing SMEs, an increase of $16.3 billion over the previous limit.

From the above we can see, in contrast to the US approach that leaves the investment decisions in the private sector, the Canadian version of government expenditure program for venture capital financing has demonstrated a favor for government direct investment. Direct investment by the BDC gives the federal government greater power in deciding which SMEs and which sectors of the economy to support, thus “adding a degree of political accountability for the investment decisions but also exposes the BDC to allegations of political manipulation in those decisions”.

In other words, the Canadian expenditure VC programs are more protective and attentive, but at the cost of more expenditure spending and greater potential for political interference in the investment decision-making process.

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67 Ibid.

68 Ibid.

The private funds have been predominantly seed capital funds because the BDC did not have the in-house expertise to invest at this stage, however, In 2002 BDC commenced its own seed capital initiative and since then has hired a number of seed capital specialists.

Still, other than seed capital, all of the VC investments undertaken by BDC have been syndicated deals, the BDC does not act as the sole investor, and in most cases not the lead investor.

69 Ibid., at 461

70 BDC Act, Section 23(1) and 30 (1)

71 Supra to note 1, at 461
One reason for its favor for direct government investment is probably because Canadian investors and entrepreneurs are more conservative than their US counterparts. It is often said that “American fosters individualism and daring whereas Canadian culture encourages aversion to risk”.\(^7\)

However, another more important reason, as I see it, is because the motives for Canadian government to develop and support venture capital investment is not as purely as to explore and establish a new particular kind of investment mechanism in the capital market. Behind providing incentives for venture capital financing, there is a more eager concern of ensuring sufficient funding to Canadian small businesses, or even, preserving capitals and investments within the Canadian territory. In order to prevent the “capital drain” that distorts too many domestic capitals into the more efficient US capital market, the Canadian government tends to compete it with more direct and instant incentives for the investors to stay. In the policies of BDC, especially in those of its early practice of IDB and FBDB, to a large degree, the government expenditure support was merely an alternative financing for Canadian SMEs and hence has not shown much leveraging effect to private venture capital investment. This kind of policies is understandable but short-sighted. Setting aside the problem of too much expenditure cost, even if these policies could keep the capitals within the border for now, they are not beneficial to the healthy development of Canadian venture capital market in a long run and would eventually enlarge its gap with US capital market, which subjects itself to a vicious circle. The new mandate of BDC of “providing complementary services to Canadian small business” rather than simply being the “lender of the last resort” was a big improvement on this, especially for those specialized policies of the venture capital group of BDC that attracts private venture capital investment. However, a “complementary function” is still not enough from a real “leveraging effect”. For now, Canadian small businesses are still relied too much on direct government expenditure.

### 2.3 Teachings from the United States and Canadian Models

A comparison of the BDC and the SBA illustrates the basic shape and elements of government expenditure incentive venture capital programs and a key policy difference between the Canadian and US federal government expenditure programs that target venture capital investment.

\(^7\) Ibid.
financing, which is largely resulting from the different underlying policy goals, cultural backgrounds and program designing tactics of the two countries. In my opinion, there are two most significant teachings of these benchmark policies for the latecomers of venture capital markets like China.

The first one is a benchmark effect that demonstrates the importance of government expenditure incentive programs and the possible models of relationship between government and domestic venture capital market. The North American practice has presented us with models of government roles in the venture capital market and of ready-made government expenditure programs. The analysis of the blueprint of a mature VC market, the inherent VC market failures and the government efforts in addressing these market failures has given us an integrated idea of the interactions among VC players and their respective relationship with the government. For latecomer countries like China, the governments usually have a mission to initiate the venture capital market. A deepened understanding of the intrinsic mechanism of venture capital market and those effective government expenditure VC programs is really a prerequisite to the proper implementation of such mechanism and programs into home market. Marketplaces like the US’s and CA’s have gained these experiences through a historical process with the accumulation of many years of successes and failures. Developing countries should take advantage of these experiences in order to save costs and time.

Another important teaching here is the concrete tactics for VC expenditure program designing. The United States and Canadian models of programs have been frequently imitated by other governments in the world. However, in order to implement or invent the best suitable expenditure programs that fit to the specific circumstance of each individual country, we need to understand the policy goals and legislative tactics underlying these ready-made North American models. In my view, two conclusions can be drawn from the analysis of the US and Canadian practice. First, the policy goal is really essential to the overall design of the program. The varied programs might be justified by varied goals. For example, with the primary goal of encouraging private venture capital investment and a general antipathy toward government intervention in the marketplace, SBA policies facilitate private sector investment through leveraging programs SBIC; whereas with a primary concern of domestic venture capital investment reservation, the Canadian federal government makes direct debt and equity financing to startup enterprises through BDC. Secondly, program designing tactics are also very important. Any slight difference
in the program could lead to quite distinct effects. For each single program, the governments need to be clear about the specific objective of the program, the best way the objective could be targeted, the possible distortions of the program and the compliance costs, etc. Besides, the American idea of “less favorable” policies that pressures diligent management with an ultimate goal to succeed without expenditure sponsors are quite worthy of learning by others.

3 Analysis of Government Expenditure Supporting Policies for Venture Capital Investment in China

While a benchmark regime is not easily to be transplanted into another territory, the teachings of the importance of government expenditure policies for venture capital investment and the principles and tactics of VC expenditure programs designing could be mirrored in a latecomer country of the venture capital market. The venture capital market in China and the associated government role in there have their unique political, economic, and legislative background. The existing expenditure incentive VC programs in China are already a mixture of international experiences and localized orientations, which have indeed taken on interesting Chinese characteristics.

3.1 Political, Economic, and Legislative Backgrounds of Chinese Venture Capital Market and the Associated Government Role

The Chinese VC market is quite nascent. The concept of venture capital haven’t appeared in China until 1985 when “the Decision of Central Committee of the Chinese Communist Party Concerning the Reform of the Science and Technology Management System” for the first time used the term “venture capital” in a binding document. Since then there are basically 4 stages of the VC development in China.

1985-1990: initiating stage. Several funding firms have established and two national banks have set up special programs to give venture loans for New and high-tech companies during this period. But these are far from the real venture capital yet.

73 Lin Chongcheng: “Venture Capital and Chinese Policy” University of Jilin Publisher, 2009, at 4
1991-1997: exploring stage. During this stage, first, local governments begins to set up expenditure funds or venture capital companies in New and high-tech development zone; second, international VC firms start to enter China, but the number of firms are very limited; third, the “Law of the People's Republic of China (PRC) on Promoting the Transformation of Scientific and Technological Achievements” for the first time embraced the “venture capital” concept into the law; forth, the department of science and technology of central government set up an ad hoc committee to study the implementation of venture capital into Chinese capital market. At the end of 1997, there were 51 venture capital firms appeared in China. The aggregated capital under their operation has amounted to 1.01 billion RMB (approximately 126 million dollars) with a growth rate of 83%\(^74\).

1998-2004: private source and foreign source of VC fast developing stage. In 1999, the state council has release the first central government’s document that is dealing with venture capital per se: “Several Opinions of the General Office of the State Council Regarding the Establishment of Venture Capital Financing Mechanism”. In these opinions, the state council “encourages local government, corporations, financial institutions, individual and foreign institutions to actively involve in the development of venture capital”\(^75\). As a result, Beijing, Shanghai and Shenzhen have led the way in attracting private capital in VC investment. At the same time, venture capital association has established in these cities, functioning as a platform for the communication between the VC institutions and local governments. The number of VC firms has peaked in 2001 to 323 with aggregated capital as high as 5.12 billion RMB (approximately 640 million dollars)\(^76\). However, venture capital has experienced some setbacks after 2001 without further government incentive policies.

2005-today: actively developing stage. There was a law and policy boom during this period. “The implementing policies for the middle-to-long-term outline of the PRC of the science and technology development (2006-2020)” has not only made the development of VC market one of

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\(^74\) Statistics from “China Venture Capital Yearbook 2009”, by China Venture Capital Research Institute Limited


\(^76\) Supra to Note 74
the country’s main developing goals in the future, but also set up concrete targets such as lowering entrance threshold, expanding types of VC sources, improving VC exits mechanism and providing foreign VC investment with foreign currency convenience, etc; the revised “PRC Law of Partnership” legitimized the limited partnership that is commonly considered as the most effective structure for VC funds; “the notice regarding tax policies for encouraging the development of venture capital firms” has expanded the beneficial tax treatment that once exclusively applied to new and high-tech VC firms to general VC investment firms; “Interim Measures on the Regulation of Venture Capital Entities” has formalized the regulation of VC entities and laid ground for government supporting policies; A series of three major government expenditure incentive venture capital programs has come into effect one after another since 2007. At the end of 2009, the number of VC firms has reached 556 with aggregated capital as high as 96.33 billion RMB (approximately 12.04 billion dollars)\(^77\).

The role of government in Chinese VC market can be seen in many aspects. On the supply side, government provides various incentives (expenditure incentives and tax incentives) for the formation of venture capitals, direct the investment into prioritized projects, lift embargo on institutional investors of VC investment, gives access to foreign venture capitals and improves the VC exit mechanism; on the demand side, government encourages entrepreneurial behavior and startup enterprises; on the regulatory side, government gives registration to VC enterprises, oversights the VC market and punishes for illegal activities. Again, my thesis tends to focus on the supply side of government role in Chinese VC market with an emphasis on the government expenditure incentive programs.

The current role of government in Chinese VC market is generally considered strong comparing to the practice of many other countries. This phenomenon has some justifications as well as some changing potentials. Politically, the Socialist favor for the domination of public ownership of the means of production and social wealth results in a generally stronger government role in everything; Economically, China is undergoing an economic transition from the traditional “planned economy” to a complete “market economy”, the role of government in the financing sector generally takes on a clear transitional character which I would describe as

\(^{77}\) *Supra* to Note 74
“decreasingly strong”.Legislatively, the nascent legal framework of the venture capital mechanism in China was built and driven mainly by the government itself instead of naturally grown and shaped out of the internal force of the marketplace, hence has revealed a thick color of “utilitarianism”. I will explain each of these factors in more details.

3.1.1 Political Reasons for a Stronger Government Role In-General

China is a Socialist country that “upholds the public ownership of the means of production as the mainstay while at the same time permitting and encouraging the appropriate development of other economic sectors as supplements to the public ownership”\(^78\). The nature of this political system has decided that, although the economic transition undertaken in China is moving toward less and less government intervention in the marketplace, at the end of the day, China could never favor a pure free market as much as North American countries do. Without attaching personal value to the Socialist political system and the associated favor for certain proportion of public ownership, the political factor is an objective background in China that not a single research could ignore. So when we are borrowing experiences from other countries or comparing ourselves to others, we should keep in mind that our ultimate goal of the development and reforms is still not exactly the same with countries like United States and Canada whose favor for maximized individualism and free market is inherent in the foundation of their nations.

3.1.2 The “Decreasingly Strong” Role of Government in the Financing Sector of an Economic-Transitional China

An efficient capital market in-general is an important prerequisite for an efficient venture capital market. According to “Several Opinions of the General Office of the State Council Regarding the Establishment of Venture Capital Financing Mechanism”, the establishment of a venture capital financing mechanism requires “the creation of a favorable external environment, a reformed financial system and an economic system which is appropriate to the economic patterns of the ‘socialist market economy’”\(^79\). Unfortunately, the financing sector in China is

\(^78\) “Decision of the Central Committee of the Communist Party of China on Several Issues concerning the Improvement of the Socialist Market Economy”

\(^79\) Supra to note 75, “Several Opinions VC Mechanism” art.1 sub (3)
pretty lagged behind, not only compared to the maturity of the capital market of North America, but also compared to the rapidity of development of many other economic sectors in China. The reason for the former is a general disadvantage of the developing countries; however, the reason of the later is because, to a large degree, the financial sector is bearing the cost of the concurrent economic transition in China.

Not being recognized as a complete market economy by many developed countries in the world, China is now adopting a “Socialist market economy”\(^\text{80}\). In the economic realm, “Socialist market economy” essentially means that China is undergoing an economic transition from the traditional “plained economy” to the complete “market economy”. During this process, a strong government role in the private sector, especially in the financing sector, is both currently justified and gradually unwanted by the changing demand of the economic transition. I would describe this unique government role as “decreasingly strong”.

a. Impact of a Change in the Social Ethic for Credit

The essence of the whole financing industry is credit: a trust between parties in financial transactions. During the economic transition period, the social ethic for credit is under transition as well. According to the theory of the famous Chinese economic and legal scholar Fei Xiongtong, along with the economic transition from the planned economy to the market economy, there is also an underlined social transition “from the traditional folk society to modern contractual society”\(^\text{81}\). The transition from the folk society to contractual society generally means the basis for social credit is gradually changing from the credit “that formed within community members upon their intimate relationship” to the credit that “formed among strangers through contracts”\(^\text{82}\). Such transition largely expanded the transaction radius from inner-community to inter-community. But as both ethics are coexisting in the transitional period when traditional ethic has already collapsed but the new ethic has not been fully established,

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\(^{80}\) The term “Socialist market economy” means to uphold the public ownership of the means of production as the mainstay while at the same time permitting and encouraging the appropriate development of other economic sectors as supplements to the socialist economy.

\(^{81}\) Fei Xiongtong: “China with a Nature of Folk Society” (1948, Shanghai)

\(^{82}\) Ibid.
there created a lot of morality vacuum and advantage exploiting opportunities.\footnote{Wong Shuguang: “Financial Evolution in Economic Transition” (2007) Peking University Press, at 20} This is the root of many problems occur in a transitional China.

Given such a background, the government, acting as the rules maker as well as a market supervisor during this period, also serves an extra function as a “substitute punisher” when the advantage-exploiting behaviors widely exist and the personal costs of punishing them by transactional parties themselves are very high\footnote{Ibid., at 39}. This is one of the justifications for a strong government role in private sector during economic transitional period. However, how fair the government is serving this function as a “substitute punisher” actually relates to its own level of morality, and has a direct impact on the quality and morality of the nascent market as a whole.\footnote{Ibid., at 40}

b. Financing Sector Becomes a Major Cost Bearer of the Transition

Chinese scholar Shuguang Wong had proposed a “Transition-Cost-Bearing Hypothesis” in his book “Financial Evolution in Economic Transition” and explained the reason why the financing sector of China is extremely laggard during economic transition period. The idea is that government is trying to make the financing sector a major cost-bearer of the whole systematic transition. In the process of all reforms, the state wants to make sure the stability of the national economy and its control power over the transition as a whole; and such stability and control power relies on the constant output of public economy. Therefore by retaining the singularity of the ownership structure and the monopoly of the market structure of financial institutions and restricting free capital movement in the capital market, the government was able to guarantee the constant financing for state-owned companies\footnote{Otherwise a lot more capital would flow to private companies driven by revenue maximization consideration.}, uphold the output increase of public economy and maintain macroeconomic stability.

There is no denying that the successfulness of economic reforms in China did benefit a lot from the stability of its financial system, however, the constant laggard of financing sector can
be seriously detrimental to the efficiency of capital allocation and greatly hinder further reforms and development of the economy. Therefore, a future effort of the Chinese government to gradually release its control over financial institutions and remove restrictions in capital market is inevitable.

c. Impact of the Open-up of Financial Market

If the above 2 factors are justifications for the currently strong government role in the China’s financial sector, the following 2 factors, on the contrary, are reasons why we are calling for a lessened public role in the future. As we understand the significance of future reform in financial sector, one way we can do it and also one reason why we should do it is the open-up of Chinese financial market to the world. While domestic incentive for financial reform is limited, introducing foreign investment could provide stimulation, motivation, pressure and successful models to change. This is exactly what China has experienced in its “reform and open-up” process in many other economic sectors; the same benefit should be introduced to financing sector as well.

Chinese government is indeed gradually opening its capital market. One of the evidences is its integration into the WTO regime with acceptance of commitment to international investment in general. Another piece of evidence is the establishment of the Qualified Foreign Institutional Investors (QFII) program which officially permits the entrance of foreign financial investors. More specifically, many international venture capital investment funds are introduced to China through the enactment of foreign venture capital excess policies. In fact, what China could get from the international investors is not only increased capital, but also refined system. Government shall proceed in this way.

d. Impact of the Private Credit Expansion

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87 Supra note 83, at 53

88 Most notably “Regulating Provisions Concerning the Administration of Foreign funded Venture Capital Enterprises” (Order of the Ministry of Foreign Trade and Economic Cooperation, the Ministry of Science & Technology, the State Administration for Industry and Commerce, the State Administration of Taxation and the State Administration of Foreign Exchange No. 2 (2003), March 1, 2003) and other regulations on the tax issues and archival filing requirements of Foreign VC Enterprises
In recent years, private credit has expanded very quickly vis-a-vis state credit. Private credit is a kind of informal financial activities existing outside the government supervision framework. In the past “planned economy”, because of its private nature and illegal status, private credit was regarded as a disturbance to formal economic order and stood on the complete opposite side of the state credit. However, during the economic transition, as the market force is gaining power, private credit has soon shown up a lot of advantages such as flexibility and market-sensitivity and become an efficient supplement to state credit itself. For example, informal venture capital financing, or angel investment, is a very typical kind of private credit, which becomes a crucial alternative to formal VC investment in most VC markets in the world. The inherent advantages of private credit and the inevitable trend of their expansion require our government to not only integrate and legitimize them, but also gradually allow them to play the major roles in the financial marketplace.

In sum, the financing sector in China and the associated government role in it have demonstrated clear “transitional” characteristics. On the one hand, such characteristics of the general capital market constitute an important economic background for us to understand the environment where Chinese venture capital market is born in and grown up. On the other hand, the role of government in the general financing sector of China also provides commonalities for the government role in venture capital market per se. As we can see later from the existing VC expenditure programs in China, the Chinese government role in its venture capital market is “decreasingly strong” indeed.

3.1.3 Legislative Framework of Venture Capital Financing Mechanism in China

In China, there was not a valid venture capital market before the laws came to regulate it. In other words, the VC activities and the VC mechanism is really initiated and constructed by the regulations of the government. Therefore a relatively complete structure of the venture capital financing mechanism can be found in Chinese regulations. According to “Several Opinions of the General Office of the State Council Regarding the Establishment of Venture Capital
Financing Mechanism”90 (“Several Opinions VC Mechanism”), “the main components of Chinese venture capital financing mechanism include VC entities, VC targets, channels of VC exit, intermediary service organizations and the government oversight system.”91 I will herein give a brief introduction of each component.

a. Venture Capital Entities

According to Art 2 of the “Interim Measures for the Administration of Venture Capital Enterprises”92 (“Interim Measures VC Enterprises”), the VC entity, or VC enterprise, refers to “any enterprise organization registered and established within the territory of the People’s Republic of China for the purpose of mainly engaging in venture capital activities”. The business scope of a VC entity is limited to VC investments, VC management service and VC consulting services.93 A VC entity may make investments in target companies by way of their stock rights, preferred stocks, convertible preferred stocks and other quasi stock rights.94 It may enhance its investment capacity by way of debt financing.95 But no VC entity is allowed to engage in any warranty business or real estate business except for the purchase of real estate for its own use.96

A VC entity may make investments with all its assets.97 This provision has breakthrough the reinvestment limitation for general corporations of 50% of their total asset set out in “the Corporate Law of the PRC”, which is extremely beneficial to the development of VC firms

90 Supra to note 75, “Several Opinions VC Mechanism”, Art. 1 (3)
91 Ibid.
93 Ibid., Article 12
94 Ibid., Article 15
95 Ibid., Article 20
96 Ibid., Article 13
97 Ibid., Article 14
whose very purpose of establishment is to invest in other companies. However, the investments made by a VC entity into a single enterprise shall not exceed 20% of the total assets of this startup investment enterprise.  

VC companies and VC funds are the legitimized forms of VC entities in China. According to “Interim Measures VC Enterprises”, a VC entity may be established in the form of a limited liability company, joint stock limited company, or any other enterprise organization as prescribed by law. Right now incorporated VC companies are still the mainstream form of VC entities in China. But limited partnership VC funds are strongly promoted by the government in recent years. Limited partnership is a more favorable structure for VC entity because the joint and several liabilities imposed on general partners could pressure the operational venture capitalists to diligent management whereas the limited liabilities of limited partners could give incentives for outside investors with big money to invest in the VC fund. VC funds shall use the method of private placement from specific investors with qualified risk capacity. VC funds shall be established as closed-end funds.

The expected life horizon of a VC entity shall not be less than 7 years. During its existence, a VC entity shall establish an effective internal encouragement and restraint mechanism and shall also suffice the registration requirement and archival filing formalities.

b. Venture Capital Targets

VC targets in China shall be startup enterprises or SMEs, especially for those in the high and new tech sector. In 2007 the National Development and Reform Commission and the Ministry of Finance formulated the “Industrial Guidelines for Venture Capital Investment Programs”, which has listed the top 10 most favorable VC target industries, including integrated circuit and software; telecommunication; digital audio/video; advantageous component; automobile and

98 Ibid., Article 16
99 Ibid., Article 6 (1)
100 Ibid.
101 Ibid., Article 19
electronic; value-added information service and digital content service; new pharmaceuticals; new materials; energy conservation and environment protection.

c. Channels of Venture Capital Exit

VC exit is a business act in which the return from a VC investment is obtained through an equity transfer. The main methods of VC exit include initial public offerings, mergers and acquisitions, equity buy-backs and liquidations. Through the “Initial Public Offerings” (IPOs) of the VC enterprises, venture capitalists reap their capital gains by selling their private equities to the public unspecialized investors on stock exchange.¹⁰² This can be realized either on the main board or on the second board of stock exchange. On Oct. 23rd 2009, China’s first Growth Enterprise Board was opened in Shenzhen stock exchange where matured SMEs can be listed with laxer restrictions; “Mergers and acquisitions” (M&As) means the acts whereby unlisted enterprises transfer part or all of their equity to other enterprises or individuals.¹⁰³ Through M&As, venture capitalists exit their investment by selling their equities to new investors at a higher price upon maturity of the enterprises; “Equity buy-back” means the act whereby the management level or employee of an enterprise buys back the equity that initially held in it by a venture capitalist¹⁰⁴; “Liquidation” happens when the enterprises are dismissed or bankrupted due to bad management. In such situation, venture capitalists exit their investment to avoid further loss.

d. Intermediary Service Organizations

VC intermediary service organizations include industry associations, science and technology project appraisal organizations, technology brokerages, venture investment consultancy and advisory organizations which target the special character and specialized needs of such investment.¹⁰⁵

¹⁰² *Supra* to note 75, “Several Opinions VC Mechanism”, Art. 4 (16)
¹⁰³ *Ibid*, Art. 4 (14)
¹⁰⁴ *Ibid*, Art. 4 (15)
¹⁰⁵ *Ibid*, art. 5(18)
e. The Government Oversight System

The government adopts archival filing management of VC entities. Where a VC entity has gone through the archival filing formalities in accordance with the “Interim Measures”, it shall accept the supervision of the archival filing administrative departments.\(^{106}\) If any of them fails to fulfill the administrative functions or fails to manage properly, the archival filing administrative department shall propose it to make corrections. If any bad consequences are caused, it shall propose it to hold the relevant managerial personnel liable for their negligence of duties.\(^{107}\) The archival filing administrative departments in China are classified into two levels, i.e. administrative department of the State Council and administrative departments of the provinces (including sub-provincial cities). The administrative department of the State Council shall be the National Development and Reform Commission. The administrative departments of a province (sub-provincial city) shall be determined by the government at the same level.\(^{108}\)

f. Venture Capital Sources

VC source is something that Chinese government mentioned very little in their regulations. It has not been singled out as one of the statutory components of the Chinese VC financing mechanism prescribed in “Several Opinions” but is in fact an indivisible component of any VC financing mechanism. In China, government financing is the major source of the venture capital in China. The government expenditure amounted to 25.24% of all the venture capital that source from the mainland China in 2008\(^{109}\), including public fiscal budget appointed to SMEs, government bonds, discount government loans and state-owned venture capital funds\(^{110}\). The actual government contribution is even larger than this figure. Because although the company investment (39.7%) and financial institution investment (10.65%) respectively has taken up a

\(^{106}\) Supra to note 92, “Interim Measures VC enterprises”, Article 3

\(^{107}\) Ibid, Article 29

\(^{108}\) Ibid, Article 4


\(^{110}\) Ibid.
large portion of the overall capital\textsuperscript{111}, however, a great portion of themselves are wholly-state-owned or state-shared.

Besides the government-source-dominating character of the venture capital source structure in China, another problem associated with it is the limited types of capital that are legit to invest in VCs. The government has removed restrictions of VC investment on trust companies, financing companies, individual and public units in the year 2006, however, a large amount of potential capital such as commercial banks, insurance fund, pension fund and social securities fund are still restrained from investing in VC market according to relative provisions scattered in respective regulations of different categories of institutional investors.\textsuperscript{112} These types of capitals are active VC capital sources in the VC market abroad. They are not only huge in amount but also fitful for the nature of venture capital.

\textbf{g. Policy Goal and the “Utilitarian” Feature of Venture Capital Financing Mechanism in China}

Set out in “Several Opinions VC Mechanism”, the policy goal of establishing a venture capital financing mechanism in China is “to promote the marketing of high and new technology achievements, realize the industrialization of such achievements, enhance the contribution of scientific and technological progress to economic growth and, through the creation of a favorable external environment, spur enterprises to actively become involved in technological innovation and scientific and technology venture activities and promote adjustments in, and the upgrading

\textsuperscript{111} \textit{Ibid.}

\textsuperscript{112} 1995 “The Insurance Law of the PRC” art 104: “the operation of the insurance company capital must be steady and safe, the capital in insurance company can not be used to establish securities service institutions or reinvest in other enterprises.”

1995 “The Law of Commercial Bank of the PRC”: the commercial bank in the Chinese territory can not make trust investment, equity investment; can not invest in non-banking financial institutions or enterprises.

1997 “Decisions of the State Council on Establishing a Unified Enterprise Pension Fund Mechanism”: Pension funds are used in total amount to deposit in banks or to buy national bonds, and are strictly restrained from any other kind of investment.

2000 “Interim Regulations on the Investment of National Social Securities Fund”, investment scope of social securities fund is limited to bank deposit, national bond, securities investment fund, stocks, and other securities such as highly rated company bond or financial bond. It rules out the venture capital as one of its permissible investment targets.
of, the industry and product structures to produce a benign cycle. The statute says nothing like to introduce a new dynamic and efficient way of investment, to activate the capital market or to improve the private financing sector in China. This situation is somehow similar to the Canada model where the primary government goal behind VC development is to prevent “capital drain”. In China, the primary goal of the establishment of VC mechanism is to promote high and new tech achievement, which I would describe it as a thick color of “utilitarianism”. In my opinion, such a “utilitarian” feature of the VC development in a certain country is quite understandable and not necessarily a bad thing. However, in order to satisfy the underlying goals, sometimes the government tends to sacrifice partial interests or long-term interests of the venture capital market development itself.

Altogether, above is the political, economic and legislative environment from where the Chinese government expenditure incentive programs for venture capital investment have grown in.

3.2 Existing Government Expenditure Incentive Venture Capital Programs in China

Sequently, there are 3 major state-level expenditure incentive programs in China: National Industrial Technology Research and Development Budgets Funded Venture Capital Funds (ITRDF); Government Directory VC Funds (GDVCF); and National Industrial Technology Research and Development Budgets Participated Venture Capital Funds (ITRDPF). One after another, these three serial programs have interestingly revealed a decreasing and transitional role of government, gradually from the “dominative” function toward an “assistive” one.

At the same time, local governments play a very crucial role in supporting VC activities in China. In most cases, the state-level VC programs need to be executed by local governments. Moreover, local governments are encouraged to adopt varied and specific policies to enhance its own VC market according to its unique economic situation. One of the most important features of the local government expenditure support to venture capital investment is its combination with the expenditure support of regional New Economy Zone or High Tech Parks, which is a good 

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113 Supra to note 75, “Several Opinions VC Mechanism”, Art. 1 sub (4)
demonstration of the “utilitarian” feature of Chinese venture capital development. In the latter part of this section I will illustrate such feature with the VC expenditure policies of Beijing ZhongGuanCun High and New Tech Park as a concrete example.

3.2.1 Industrial Technology Research and Development Budget Funded Venture Capital Funds (ITRDF)

Industrial Technology Research and Development Budget, or Industrial Technology Research and Development Fund, is a certain portion of Chinese government fiscal budget specifically applied to support national strategic, public or crucial industries and to promote the industrialization of technology innovations. The management of such budget is under the Minister of Finance of China (MOF) and State Development and Reform Commission (SDRC).

In order to promote the rapid and healthy development of the venture capital undertaking in China, to support the development of public welfare industries and national strategic industries, the MOF and SDRC have decided to take partial funds from the Industrial Technology Research and Development Budgets as venture capital expenditure. In 2007, they jointly enacted “Guiding Opinions on Experimenting the Use of Industrial Technology Research and Development Budgets as Venture Capital”\(^\text{114}\) (“Guiding Opinions ITRDF”). At this point, the first national-level government supporting VC program has been triggered on in China. Months later, another document “Operational Regulation on Experimenting the Use of Industrial Technology Research and Development Budgets as Venture Capital”\(^\text{115}\) (“Operational Regulation ITRDF”) has come into effect to specify the rules. Below is a general description of this program summarized from the two leading legal documents.

a. Principles of ITRDF

There are 4 basic principles of ITRDF. 1) Principle of market-based operation: the venture capital project undertakers, upon entrustment of the government, shall operate the business

\(^\text{114}\) “Guiding Opinions on Experimenting the Use of Industrial Technology Research and Development Budgets as Venture Capital” (“Guiding Opinions ITRDF”), MOF and SDRC, Cai Jian [2007] No.8

\(^\text{115}\) “Operational Regulation on Experimenting the Use of Industrial Technology Research and Development Budgets as Venture Capital” (“Operational Regulation ITRDF”), MOF and SDRC, Cai Jian [2007] No.953
independently in the marketplace and assume sole responsibility for its profits or losses.\textsuperscript{116} 2) Principle of innovation-orientation: the target projects shall be public projects of scientific and technological research and development and projects of achievement transformation at seed stage or startup stage in high-tech industries.\textsuperscript{117} 3) Principle of guiding effect: one important purpose of ITRDF is to guide social capitals into high-tech industry.\textsuperscript{118} However, such effect is not very obvious in this program. 4) Principle of lawful management.\textsuperscript{119}

\textbf{b. Entrusted Venture Capital Management Institutions}

In ITRDF, the MOF and the SDRC would entrust the management of venture capital to a professional management institution, which is jointly determined by the MOF and the SDRC through way of invitation to bid.\textsuperscript{120} In order for an entrusted management institution to be registered, it shall have no less than 100 million RMB of registered capital, 5 years or longer experiences in venture capital management, at least 5 practitioners with 3 years or more of work experience in the venture capital business, complete venture capital management bylaws and successful precedents in venture capital projects operation.\textsuperscript{121}

Duties of an entrusted management institution include recommending target projects; exercising investor’s rights to the invested enterprise; promoting the management of the invested enterprise; reporting the invested enterprise’s project progress to the MOF and SDRC at regular intervals; organizing the exit of venture capital and timely turning over the recovered funds to the treasury of the Central Government.\textsuperscript{122}

\textsuperscript{116} Supra to Note 114, “Guiding Opinions ITRDF”, art.1 (1)
\textsuperscript{117} Ibid., art.1 (2)
\textsuperscript{118} Ibid., art.1 (3)
\textsuperscript{119} Ibid., art.1 (4)
\textsuperscript{120} Ibid., art.2 (1)
\textsuperscript{121} Ibid., art.2 (2)
\textsuperscript{122} Ibid., art.2 (3)
The entrusted VC management institutions could receive a management fees consist of daily management expenditures and 20% of the investment proceeds.\textsuperscript{123} The MOF and the SDRC could increase or decrease the amount of entrusted management institution according to the changing circumstance.

c. Selection of Venture Capital Projects

The qualification of ITRDF target projects shall be the ones that are able to enhance the public interests, independent industrial innovation capacity and the core competitive strength of the enterprise. The qualified projects shall also have independent intellectual properties with high technical contents and promising market prospects.\textsuperscript{124}

Venture capital project may be selected in the following two ways: 1) the development and reform commission at each locality, jointly with the local public finance department, may recommend projects to the MOF and the SDRC in pursuant to the Guidance for Applying for Venture Capital Projects. The MOF and the SDRC shall then jointly decide whether to approve the investment projects and the exact investment amounts on the basis of an expert appraisal. 2) The entrusted management institution may recommend investment projects to the MOF and the SDRC. The MOF and the SDRC shall then jointly decide whether to approve the investment projects and the exact investment amounts on the basis of an expert appraisal.\textsuperscript{125}

d. Allotment of Funds: Special Fiduciary Accounts

The MOF shall, on the basis of the directory and amounts of the approved investment projects, as well as the investment agreements concluded between the entrusted management institutions and their respective invested entities, allot funds to the special fiduciary accounts of the entrusted management institutions. And the entrusted management institutions shall then allot the said funds to their respective invested entities.\textsuperscript{126}

\begin{flushright}
\begin{itemize}
\item \textsuperscript{123} Supra to Note 115, “Operational Regulation ITRDF”, art.6(2)
\item \textsuperscript{124} Supra to Note 114, “Guiding Opinions ITRDF”, art.3 (1)
\item \textsuperscript{125} Ibid., art.3 (2)
\item \textsuperscript{126} Ibid., art.4
\end{itemize}
\end{flushright}
ITRDF is the first national-level government expenditure incentive VC program in China. ITRDF is more like a state-owned VC fund: the source of the fund wholly comes from the national Industrial Technology Research and Development Budget. Although the MOF and the SDRC have entrusted the management right of the VC fund to a third party institution, they still have played important roles in many major matters such as the determination of entrusted management institution and target projects selection. Therefore, the role of government department is still magnificent in it. This program is similar to the US R&D financing programs such as SBIR or STTR, except that SBIR adds on funding to technology small businesses in successive phases and looks highly upon private capital involvement especially in its later phase. As for its feature of direct and strong government interference, this program is also similar to the early expenditure programs of Canada, except that the goal of ITRDF is to demonstrate a government preference toward industrial technology R&D projects instead of merely being a “lender of the last resort”.

3.2.2 Government Directory Venture Capital Fund (GDVCF)

In the year 2007, the Ministry of Finance and the Ministry of Science and Technology of the PRC has jointly formulated “Interim Measures of Government Directory Venture Capital Fund for Technological SMEs” (Interim Measures GDVCF 2007)\(^{127}\). Thereafter the most prominent government supporting VC program so far has been triggered on with 100 million RMB government fiscal budgets. One year later, another legal document “Guiding Opinions on the Regulation of the Establishment and Operation of Government Directory Venture Capital Fund” (Guiding Opinions GDVCF 2008)\(^{128}\) has come out to regulate the program in greater details.

GDVCF shares some commonalities with ITRDF in the principles and in the independent management mechanism. However, it is indeed quite upgraded than ITRDF in many ways, among which perhaps the most crucial distinction is that GDVCF mainly invest in VC entities instead of specific SME projects and emphasize on a leveraging effect of the government

\(^{127}\) “Interim Measures of Government Directory Venture Capital Fund for Technological SMEs” (Interim Measures GDVCF 2007), MOF and MOST, Cai Qi [2007] No. 128

expenditure to attract private capitals. Below is a general description of this program summarized from the two leading legal documents.

**a. Policy Goals of GDVCFs**

The purpose of GDVCF is to support technological SMEs growth and foster innovation by directing venture capital entities to invest in new and high-tech sector SMEs and startup SMEs. GDVCF is a policy directory fund rather than an investment fund. The GDVCFs do not directly engage in VC management as the general government-owned VC funds and do not directly invest in SME projects as ITRDFs do. The goal of GDVCFs is to exert the leveraging effect of government expenditure, increase the total supply of venture capital and adjust the market inefficiencies. The “directory” function of GDVCF is really reflected in 2 aspects, one is the gathering of private venture capital; the other one is the investment direction of the gathered funds. The supported VC entities are required to invest in startup SMEs or technology SMEs with at least a minimum proportion of their funds (not less than 2 times of the GDVCF investment). Private investors can choose to accept the support or not by freewill application. But due to the favorable terms the government could generously offer and the high public credibility that the Chinese government constantly enjoys in China, in practice, the GDVCF is quite effective in attracting follow-up investment.

**b. Principles of GDVCFs**

There are 3 major principles of GDVCF: “Market-orientation”, “Publicizing” and “Specialization”, which are very similar to ITRDF’s, but not entirely the same.

The principle of “market-orientation” is really to further decrease the government intervention and let the market naturally matches the proper programs with the increased supply.

129 Supra to Note 127, “Interim Measures GDVCF 2007”, article 2
130 Supra to Note 128, “Guiding Opinions GDVCF 2008”, article 1
131 Ibid.
132 Supra to Note 127, “Interim Measures GDVCF 2007”, article 16 (3)
133 Ibid., article 4
of capital. On the one hand, GDVCF shall only select VC entities as investment target instead of specific SMEs, leaving the choice of concrete programs to the VC entities as rational investors in the marketplace; On the other hand, there are also a set of rules in the “Interim Measures GDVCF 2007” that prevent too much administrative interference to the invested VC entities, such as GDVCF shall not become the largest shareholder or general partner in the VC entities and shall not involve in the daily management of VC entities\textsuperscript{134}, equity investment shall only take up a very small portion of the total fund of GDVCF (not exceeding 25%)\textsuperscript{135}, etc.

The principle of “publicizing” is reflected in the leveraging effect of the GDVCF to attract private capital.\textsuperscript{136} GDVCF is not run for profit, but rather to share its profit with private investors so that it could give incentives for the gathering of social capital to join in the investment in startup SMEs. Governed by this principle, the GDVCF could not only benefit a wider range of SMEs through indirect support, but also expand the policy effect of the government expenditure and enhance the overall financing environment of SMEs.

The principle of “specialization” emphasized on the choosing standard of VC entities, which secures that the GDVCF invested VC entities shall be capable, specialized, high-and-new-tech oriented VC entities.\textsuperscript{137}

\textbf{c. Establishment and Budget Sources of GDVCFS}

“Local governments beyond the sub-provincial level have the right to establish GDVCFs according to their own VC market demand and budget condition”\textsuperscript{138} which means, the Opinions did not set hard rules on the establishment right of GDVCF. This partly results from the unbalanced economic development among provinces. However, the Opinions went on to say that “the relative departments of local governments in charge of enhancing venture capital

\begin{itemize}
\item \textsuperscript{134} \textit{Ibid.}, article 16 (4)
\item \textsuperscript{135} \textit{Ibid.}, article 14
\item \textsuperscript{136} \textit{Ibid.}
\item \textsuperscript{137} \textit{Ibid.}
\item \textsuperscript{138} \textit{Supra} to Note 128, “Guiding Opinions GDVCF 2008”, article 2
\end{itemize}
development shall make feasibility reports to the government body of the same level, with the approval of the latter, GDVCFs could be established. Local governments shall adopt specific measures governing these GDVCFs according to their specific situation.”139 This means, the government and the relative department of the government have the right and obligation to approve and regulate the establishment of GDVCFs within its domain.

The GDVCF shall be established in the form of independent legal person. Relative department of the government may appoint or dispatch personnel to constitute a board of executors within the GDVCF, or delegate the management to a third party institution. The board of executors or the third party institution shall be responsible for the daily management of the fund and shall assume all the rights and obligations of any outward business on behave of that fund.140

The source of the GDVCFs comes from “the government fiscal budget specifically aims at the development of venture capital market; Profit of the investment and warranty business of GDVCFs; Earnings of the idle fund of GDVCFs which are deposited in the bank or purchased for national bond; Endowment of individuals, enterprises or social institutions.”141 Private capitals would be leveraged into VC investment but are excluded form the GDVCF budget source mainly to avoid the profitability of GDVCFs.

d. Targets of GDVCFs

Investment target of GDVCF include “venture capital entities (venture capital firms and venture capital funds as defined in the “Interim Measures startup investment enterprises”), venture capital management enterprises, SMEs service institutions with the investment function, and occasionally, startup technology SMEs.”142

e. Supporting Methods of GDVCFs

139 Ibid.

140 Supra to Note 127, “Interim Measures GDVCF 2007”, article 6

141 Ibid., article 3

142 Ibid., article 7; article 8, 9, 10 and 11 defines them in concrete criteria.
There are 4 ways for GDVCFs to support startup investment:

The first way is to make equity investment in or give financing guarantee to the VC entities, the primary goal of which is to support new VC entities and increase the overall venture capital to SMEs.\(^{143}\) However, equity investment shall only take up a very small portion of the total fund of GDVCF (not exceeding 25%) and GDVCF shall not become the largest shareholder.\(^{144}\) The equity of GDVCFs can be purchased by other shareholders or investors anytime at a favorable price.\(^{145}\)

The second way is follow-up investment, which means, the GDVCF and other VC entities jointly invest in startup SMEs. VC entities can apply for follow-up investment after project selection or within 1 year after the actual investment.\(^{146}\) The GDVCF could join in the investment with less than 50% of the actual investment of the VC entity, not exceeding 1 million RMB per project.\(^{147}\) The primary goal of this is to support existing VC entities and partly underwrite their investment risk. But the Guiding Opinions also emphasized that “follow-up investment is limited to investment in startup SMEs or SMEs in the new-and-high-tech industry. GDVCFs shall not directly involve in the operation of venture capital financing business under the disguise of follow-up investment.”\(^{148}\)

The third way is venture subsidy, which means, to give financial subsidy to VC entities that has already made investment in the startup SMEs before the GDVCF was established to help them. The subsidy shall not exceed 5% of the VC entities’ actual investment and shall not exceed 5 million RMB in total amount.\(^{149}\)

\(^{143}\) Ibid., chapter 3; Also see to Note 92, “Interim Measures VC enterprises”, article 3
\(^{144}\) Ibid., article 14
\(^{145}\) Ibid., article 15
\(^{146}\) Ibid., article 18
\(^{147}\) Ibid., article 19
\(^{148}\) Ibid., chapter 4
\(^{149}\) Ibid., chapter 5
The forth way is venture investment guarantee. In practice, VC entities tend to hesitate at valuable but risky SMEs. In these cases, the GDVCFs are designed to give initial financial support to such SMEs instead of VC entities, however, the interested VC entities are required to offer free management assistance to those SMEs. After the free assistance is done and the SMEs became qualified for their investment criteria, the GDVCF would grant another subsidy of not more than 2 million RMB to make up the assistance fee if interested VC entities went on to make equity investment in those SMEs.\textsuperscript{150} This way of support is extremely beneficial to the development of SMEs service institutions like high-tech business incubator.

\textbf{f. Management of GDVCFs}

GDVCF could either set up its own management institutions (such as the board of executers) or delegate the management right to a qualified third party institution. These third party institutions are usually called venture capital fund management centers. They are responsible for a variety of management duties including projects recommendation (final selection decision made by Evaluation Committees introduced in the following paragraph), GDVCF equity right management, GDVCF capital exit and progress oversight of the invested projects.\textsuperscript{151}

One of the most important issues in the daily management of GDVCFs is project selection. In this respect, both the “General Opinions” and “Interim Measures” have ruled that when GDVCFs select projects, they shall set up an impartial, open and justifiable Evaluation Committee\textsuperscript{152} consist of government stuffs, members of VC self-regulatory institutions and professional experts. The government stuffs shall not exceed half of the committee members. The evaluation decision shall be independent and are subject to public notice on the official websites of Minister of Finance, Minister of Science and Technology and relative major media for 2 weeks. The selected projects can only get support if there is no dissent claims against them\textsuperscript{153}.

\textsuperscript{150} Ibid., chapter 6
\textsuperscript{151} Ibid., article 36
\textsuperscript{152} Ibid., article 34; Also see to Note 92, “Interim Measures VC enterprises”, article 4
\textsuperscript{153} Ibid., article 37
From the above introduction we can see, GDVCF is designed to offer different kinds of financing support to different VC entities. The GDVCF participated VC entities are quite like SBICs of the United States. The government would sponsor VC entities with both equity investment and debt investment. The follow-up investment and venture subsidy of GDVCF which matches private capital investment with certain amount of government expenditure is highly similar to the SBA leverage in SBICs. But the equity investment of GDVCF is a bit unlike the SBA equity investment in SBICs through the “participating securities” because GDVCF is allowed to purchase both preferred shares and common shares of the VC entities. The venture investment guarantee, in my eyes, is a smart idea of dealing with “equity gap” associated with venture capital market. By making the initial investment in high-venture projects while requiring private VC entities to assist with the management of them, the GDVCF underwrites the risk of high-venture VC investment and indeed encourages such investment in a very reasonable way. At this point, the tactics of Chinese expenditure VC program are becoming more mature. It has drawn experiences from the world advanced practices and has also made some innovations on its own.

3.2.3 Industrial Technology Research and Development Budget Participated Venture Capital Funds (ITRDPF)

In order to gain more opportunities in the post-financial-crisis economic and technology development, enhance the independent innovation ability, upgrade the industrial structure in China, on Oct 29th 2009, the Minister of Finance and the State Development and Reform Commission has enacted the “Notice on the Execution of Venture Capital Plan for Sunrise Industries and Scheme of the Industrial Technology Research and Development Budget Participated Venture Capital Fund”154 (“Guiding Opinions ITRDPF”). As the name of the program has stressed, the key characteristic of ITRDPF is that the government expenditure has “participated” in the VC fund rather than solely funded on its own. This program is an upgraded version of ITRDF, and is even better designed than GDVCFs. It is the latest government expenditure program which aims at leveraging local government expenditure and social capital

into VC fund, further decreasing government intervention and increasing the efficiency of Industrial Technology Research and Development Budget as venture capital leverage.

**a. Capital Structure of ITRDPF**

The capital source of ITRDPF consists of national government expenditure (Industrial Technology Research and Development Budget), local government expenditure and social capital. Among them social capital constitutes the major source, which further include various investment institutions, large enterprises, foreign investors and management team, etc. Each ITRDPF shall have at least 250 million RMB in the fund, the national government expenditure participating portion of the fund shall not exceed 20% and the government shall not be the controlling shareholder in the fund; the participating portion of local government expenditure shall not be less than the portion of the national government expenditure; social capital shall amount to at least 60% of the total capital in the fund. National government expenditure participation could be relatively increased if the ITRDPF is primarily targeting angel investment in seed-stage SMEs.

**b. Investment Direction of ITRDPF**

The ITRDPF shall demonstrate a directive feature that invests in state prioritized high and new tech industries and local advantageous industries. A certain portion of the fund shall invest in the seed stage or start-up stage of enterprises. The IPRDPF is extremely encouraged to make angel investment in seed-stage SMEs. The investment direction shall be reflected in the shareholder agreement or the limited partnership agreement of the ITRDPF and executed during the operational process of the fund.

**c. Entrusted Management Institution of ITRDPF**

155 *Ibid.*, part 2, art 3
158 *Ibid.*, part 2, art 1
The ITRDPFs shall entrust the management duties of the fund to the profession management institutions who has constant good performance in venture capital management with experience of venture investment in 3 or more enterprises; at least 3 practitioners with 2 years or more of work experience in the venture capital business; fixed business location and eligible hardware and software facilities; effective internal management mechanism and standard measures for VC investment and risk management.\textsuperscript{159}

\textbf{d. Liquidation of ITRDPF}

The ITRDPF shall liquidate according to the market rules after the duration of the fund. However, those highly profitable and industry-promoting funds are encouraged to receive accumulative rounds of investment.\textsuperscript{160}

\textbf{e. Equity Rights and Management of the Government Expenditure}

Since the government expenditure only accounted for a small portion of the ITRDPF, one unique feature of this program is that, the management of the government expenditure is independent from the management of the fund itself.

(a) Entrusted Management of the National Government Expenditure

The management of the national government expenditure (Industrial Technology Research and Development Budget) in the ITRDPF shall be entrusted to a professional management institution by the MOF and the SDRC. The entrusted institution of government expenditure shall not interfere with the general management of the ITRDPF. It could only execute the shareholders rights within the extent of government shares. The entrusted institution shall manage the entrusted fund through special fiduciary account and regularly report to the MOF and the SDRC about the operational status of the entrusted expenditure. The MOF and the SDRC could delegate the supervision rights of important issue decisions of the ITRDPF to the local government or the

\textsuperscript{159} \textit{Ibid.}, part 2, art 2
\textsuperscript{160} \textit{Ibid.}, part 2, art 5
entrusted management fund (of the national government expenditure), to insure the realization of their policy goals.\textsuperscript{161}

(b) Equity Rights and Managing Expenses of National Government Expenditure

The national government expenditure shall not enjoy extra benefits than social capital does in pursuant to the ITRDPF charter. The national government expenditure and the local government expenditure shall enter the fund or exit the fund at the same time.\textsuperscript{162}

The national government expenditure, the local government expenditure and the social capital shall jointly pay an expense to the entrusted ITRDPF management institution (with an annual rate between 1.5\% and 2.5\%) and grant a certain portion of the capital increase profit (around 20\%) to it as allowance. In order to emphasize on the directive function and evaluation mechanism of national government expenditure, the Industrial Technology Research and Development Budget could grant a 50\% of its total capital increase profit to the entrusted ITRDPF management institution as actual allowance with a waive of the expense from its part. An even larger proportion of capital increase profit could be granted to ITRDPFs targeting angel investment in seed-stage SMEs.\textsuperscript{163}

ITRDPF is the latest government expenditure program and a very well-designed one. It has put a lot of emphasis on the leveraging effect of the government expenditure while further encourages the independent decision and management of the fund itself. If we look at the existing three programs together, the ITRDF is a government-wholly-owned VC fund that invests in SMEs of strategic industries with big decisions primarily made by the government departments themselves; GDVCF is a government-wholly-owned VC fund that invests in VC entities with an independent decision-making committee (but with almost half of its members as government staffs); whereas ITRDPF is a government-sponsored VC fund that make investment in SMEs with all decisions made by an entrusted third-party management institution totally in pursuant to the market rules. If we think that some ideas of the GDVCF are similar to the SBIC

\begin{itemize}
\item \textsuperscript{161} Ibid., part 3, art 1
\item \textsuperscript{162} Ibid.
\item \textsuperscript{163} Ibid., part 3, art 3
\end{itemize}
programs of the United States in essence, then it’s fair to say that the structure of ITRDPF is almost the same as the design of SBIC itself. The role of government in an ITRDPF is really just one of its independent investors with less than 20% of the total fund. However, in China, this part of fund could not only leverage private investment but also local government expenditure. Previously, sometimes private capital could not enter into the VC field if local governments do not consider the construction of VC market as a priority to pursue and are reluctant to set aside certain expenditures to support VC development. In response to those special circumstances, the new design of ITRDPF would give incentives to provincial governments to encourage VC activities within the region. This new program has demonstrated self-thinking of the Chinese government and a further progress in the mastering of the designing tactics of expenditure incentive VC programs.

From ITRDF to GDVCF to ITRDPF, there is a clear declination of the government manipulation and an increased leveraging effect of the government expenditure involved. From this evolution we can conclude, the government expenditure programs are indeed experiencing a transitional process along with the general process of transition of the financing sector in China. The associated role of government in the venture capital market is gradually changing from “strong” to “less strong”, from “dominative” to “assistive”.

3.2.4 Local Government Expenditure Support for Venture Capital Investment Combined with the Development of Local High Tech Parks

Local governments play a very crucial role in supporting VC activities. In China, there are 34 provincial level administrative areas. Each province can be further divided into sub-provincial cities and counties. The VC development in each province or even in each city is quite varied. Local governments are encouraged to adopt varied and specific policies to enhance their own VC market according to their unique economic situations. Up to now, 15 provinces have released specific provincial regulations to support the local development of VC investment.\(^{164}\)

\(^{164}\) Statistic comes from my own regulations research, including Beijing, Shanghai, Guangdong, Shanxi, Fujian, Zhejiang, Inner Mongolia, Tianjin, Jiangsui, Shandong, Shanxi, Xinjiang, Hainan, Chongqing and Hebei.
Meanwhile, the state-level VC programs oftentimes need to be executed or co-executed by local governments. The exact roles of the local governments have been respectively prescribed in the legal documents of the above 3 major government incentive programs (ITRDF; GDVCF; ITRDPF). Among these 3 programs, GDVCF offers more autonomy to each province and requires more joint support from them. In 2006, Suzhou Industrial Park has established the first provincial GDVCF in China. Since then, Tianjin Binhai New Industrial Park, Xi’an High and New Tech Park and Hangzhou government respectively established their own GDVCFs. Later the practice of GDVCF spread to big cities all over China one after another, notably including Beijing Zhongguancun New and High Tech Park, Shanghai Pudong New Industrial Park, Shenzhen New Economic Zone, Chendu New and High Tech Park, etc. The development of GDVCF was even more vigorous in recent years since the release of the state-level legal documents “Interim Measures (GDVCF)” and “Guiding Opinions (GDVCF)”. According to the statistics of China Venture Capital Annual Report 2009, up to the end of 2009, 20 out of 34 provinces in China now have their own GDVCFs\(^{165}\). The aggregated capital of GDVCF amounted to 8.85 billion RMB, accounted for 19.02% of the total amount of venture capital sourced from mainland China.\(^{166}\) However, the leveraging effect of GDVCFs in gathering and attracting slack private capital is even huger. Largely owe to the support of GDVCFs, in 2009, VC investment sourced from Non-Financial Enterprises accounted for 52.74% of the total VC in China and investment from individuals accounted for 23.47%.\(^{167}\) Up to now, 13 provinces have enacted provincial GDVCF regulations\(^{168}\). A lot of sub-provincial cities\(^{169}\) have even enacted their own GDVCF regulations within the city.

\(^{165}\) "China Venture Capital Annual Report 2009", China Venture Capital Research Institute Limited, 2010

See also to “Ten Estimate Trends of Chinese Venture Capital Development in 2010”, China Venture Capital Research Institute Limited, 2010

\(^{166}\) Ibid.

\(^{167}\) Ibid.

\(^{168}\) Statistic comes from my own regulations research, including Beijing, Shanghai Guangdong, Jiangsu, Zhejiang, Tianjin, Shanxi, Hebei, Henan, Fujian, Shandong, Shanxi, and Inner Mongolia

\(^{169}\) Such as Shenzhen, Guangzhou, Shenyang, Suzhou, Wenzhou, and a series of other cities of Jiangsu and Zhejiang provinces
One of the most notable characteristics of the local-level VC development in China is that, the local government support of VC investment is often combined with the development of the local New Industry Zones or High Tech Parks. Since the beginning of China’s Reform and Open-up process, driven by the interests of attracting foreign capital and new technologies, many New Industry Zones or High Tech Parks have been set up in provinces or cities all over China. For one thing, those New Industry Zones or High Tech Parks usually enjoy a lot of favorable financial policies and tax treatment, which is favorable for the establishment of VC entities as well, directly or indirectly. For another thing, these areas gather up a great number of new and high tech SMEs, which are promising targets of VC investment. As a result, both foreign VC entities and domestic VC entities are more willing to locate at these areas. Therefore the local governments and the High Tech Parks tend to offer more favorable policies for VC investment per se in these areas. Next I will take the VC expenditure incentive policies of Beijing ZhongGuanCun High and New Tech Park as a concrete example.

Beijing ZhongGuanCun New-and-High-Tech Park is one of the most typical High Tech Parks and one of the most active VC activities areas in China. The favorable policies of ZhongGuanCun New-and-High-Tech Park apply to both enterprises and VC entities in the Park, including direct financial support and bank loans convenience offered to enterprises, permission of Limited Partnership and expenditure incentive policies of Venture Capital Directive Fund targeting VC entities per se. Herein I would mainly focus on the expenditure policies targeting VC entities per se.

In 2007, ZhongGuanCun New-and-High-Tech Park has released “Administrative Measures of ZhongGuanCun Venture Capital Development Fund”. Since then, ZhongGuanCun Venture Capital Development Fund has been established and has become the core institution that encourages VC investment into enterprises in the Park. According to the document, Venture Capital Development Fund is further divided into Venture Capital Directive Fund and Venture Capital Entities Subsidy Fund. Venture Capital Directive Fund, operate in the name of “Beijing ZhongGuanCun Venture Capital Development Center” (BJZGCVCDC), is a specific fund that directs the social capital or existing venture capital entities investment into

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regional New-and-High-Tech enterprises. BJZGCVCDC is the management institution of Venture Capital Directive Fund; future profit and the exited capital would be recycled into the fund; the main supporting methods of Venture Capital Directive Fund include follow-up investment and equity investment. BJZGCVCDC would follow up a partner VC entity to invest in an ordinary enterprise with an additional 10%-30% of the total investment\textsuperscript{171}; but when it comes to high-and-new-tech SMEs which are receiving assistance from the Business Incubators, BJZGCVCDC could follow up the partner VC entities with as high as 100% of the total investment into the target high tech SMEs\textsuperscript{172}. Besides follow-up investment, BJZGCVCDC could also establish a VC firm or VC fund\textsuperscript{173} jointly with the social capital or foreign investment groups. It may make an equity investment into the established VC entity with no more than 30% of its total fund.\textsuperscript{174}

Such expenditure policies of ZhongGuanCun New-and-High-Tech Park has greatly enhanced the total amount of venture capital in the local area and effectively directed them into prioritized industries of the region. The phenomenon of the combination of local government expenditure support to VC activities and the local development of the New Industry Zones or New-and-High-Tech Park have indeed well-demonstrated the “utilitarian” feature of the Chinese VC development as I have described earlier: only for where the new industries grow, VC investment is emphasized and developed. This is not a perfect situation. However, for now, at least within these New Industry Zones or New-and-High-Tech Park, the “utilitarian” feature of Chinese venture capital market could be taken advantage of in a good way.

\textsuperscript{171} Ibid.

\textsuperscript{172} Ibid.

\textsuperscript{173} There are certain criteria for such VC entities, including: the scale of the fund shall not be less than 100 million RMB; the time horizon of the fund shall not exceed 10 years; the target of investment shall be SMEs in the prioritized industries and at the seed stage or growing stage.

\textsuperscript{174} Supra to Note 170
4 Improving the Future Expenditure Incentive Venture Capital Programs in China

From the concrete Chinese expenditure incentive programs in China, we can already see some unique Chinese characteristic and a clear progressive trace. In pursuant to the teachings of the North American benchmark regime and the intrinsic pattern of the domestic development of Chinese venture capital market, further improvement can be expected in future Chinese expenditure incentive programs.

First, as the economic transition goes deeper in China, the role of government could be continuously lessoned. The present government role in Chinese VC market is gradually changing its function according to the changing demand of a transiting market. Since the economic transition is still ongoing, such effort still needs to be proceeded. The decrease of government intervention shall be reflected not only in VC policies design, but also on the execution of the policies; not only limited to state-level expenditure programs, but also expanded to local expenditure programs at all levels. However, the government role in the marketplace is not necessarily “the less, the better”. Along with a general elimination of unwanted government interference, the remaining role of government in Chinese VC market shall be more targeted to the perceived market failures associated with the venture capital market per se. Consequently, future expenditure incentive VC programs shall be designed to directly address the equity gap, spillover effects and distortions of other government policies in Chinese VC market.

Second, in order to perfect the venture capital market as a dynamic and efficient portion of the general capital market, the “utilitarian” policy goal of promoting high-and-new-tech industries behind the development of venture capital investment in China needs to be slightly weakened. As I have pointed out earlier, in order to satisfy the underlying goals, sometimes the government tends to sacrifice partial interests of venture capital market development and distort their VC policies from the right direction which is beneficial to the VC development in a long run. In fact, the innovation promotion and high-tech industry developing function of venture capital investment is only an inherent spillover effect of itself which is exaggeratedly looked upon by a lot of countries (especially developing countries). Our eyesight shall not be blocked by one of its many advantages. In my opinion, the main contribution of venture capital investment to the world still comes from its dynamic capital operation nature. With the more healthy
development of venture capital financing activities and more complete construction of venture
capital market, other advantages of the VC investment could benefit the Chinese economy to a
larger degree in the future, possibly including activating the investment cycle, diversifying the
capital market and upgrading the private financing sector in China. In this respect, Canada is not
a very successful example. We should borrow more experiences from the SBA policies of the
United States which care not only about the promotion of small business but also about the
development of venture capital investment itself as a fresh and mature way of investment and a
dynamic and effective alternative in the capital market.

Third but not least, the specific designing tactics of Chinese government expenditure
programs could still be advanced, though China has already made a good play of those policy
designing techniques in its existing programs, especially in recent programs. With the teachings
of the US practice that highlighted an ever expanding private capital leveraging effect and an
ultimate goal of profiting the expenditure- sponsored VC fund eventually without further
expenditure support, China should proceed in its exploration of best-suited and best-effective
expenditure incentive VC programs. Other tactics, such as the American favor for “preferred
shares or preferred limited partnership interests” as the form of government equity investment;
the different phases of US R&D financing provided to R&D SMEs at different stages; the “gap
approach” used by BDC to determine and provide “complementary services” to SMEs, etc., are
worth considering in later Chinese programs. Moreover, for those special problems resulting
from the unique background of China, self-thinking and clever techniques such as high-venture
investment guarantee of the GDVCF, local government leverage of the ITRDPF and combined
support of VC investment and local High-Tech Park also need to be highlighted in the future.

5 Conclusion

In this thesis I have discussed the role of government in venture capital market and have
illustrated the national-level difference of it through a comparative study of government
expenditure supporting policies of venture capital investment in US, Canada and China.

After an examination of the United States benchmark policies and the Canadian version of
expenditure programs, along with an analysis of the unique political, economic, and legislative
background of Chinese venture capital market, I have concluded that the existing expenditure
incentive VC programs in China were already a satisfying mixture of international teachings and
localized orientations. The evolution of the three serial expenditure programs in China has demonstrated interesting Chinese characteristics and a clear trace of self-improvement. In the future, as the role of government in the Chinese venture capital market is moving toward more “assistive” and less “utilitarian”, more targeted, more integrated and more effective designs of expenditure incentive programs for venture capital investment could be expected.
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