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***STIMULATING SAVINGS, AND
MOBILISING INVESTMENT FLOWS TO
THE SMALL AND MEDIUM ENTERPRISE SECTOR:
A CASE FOR VENTURE CAPITAL***

by

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INTRODUCTION

Small business ranks as the third largest economy in the world, after the United States and Japan.¹ Statistics provided by the US-based Small Business Association lend credence to this statement, indicating that the small business sector in the United States contributes almost 50% to that country's employment and more than one-third of its GDP. In addition, in the United States and Canada, over the past few years, the venture capital industry has made an impressive contribution to overall economic growth, specifically through its assistance in the development of the small business sector. By way of example, a series of surveys² indicate that venture-capital backed companies generated employment at annual average rates of at least 20% in the United States (over 40% in Canada), while US-based Fortune 500 companies eliminated jobs at an average rate of 1%, and Canada's Corporate 500 grew jobs at an annual average rate of only 7%. In both countries, a significant proportion of the jobs created by these small businesses represented skilled employment, and at a rate higher than that created by the economy as a whole.

Despite the remarkable results experienced by the small and medium enterprise sector in some developed countries, the failure rate among small businesses continues to be high. A 1990 study of small business loan defaults by the University of Western Ontario indicated that as many as one-third of small businesses fail due to an inadequate level of equity in their capital structure.

The primary objective of this paper is to explore the role of venture capital as a facilitator of sustainable economic development in the Caribbean through its success as a mechanism by which:

- 1. the level of savings is increased;*
- 2. an adequate proportion of these savings is directed to small and medium enterprises thus providing an alternative but complementary option to debt financing; and*
- 3. small and medium enterprises are monitored and guided in the critical formative years of their life cycle, thereby serving to increase the success ratio of the sector.*

¹ Steve Alesio, President of American Express Company's Small Business Services Division.

² Annual Economic Impact of Venture Capital Study ; Economic Impact of Venture Capital Investments in Canada.

THE SAVINGS ENVIRONMENT

According to World Bank statistics³, over the last thirty years there has been a significant and increasing divergence in global saving rates. Since the early 1970s, there has been a decline in world saving rates, as well as a widening of the gap between industrial country and developing country savings rates. In fact, the world savings rate declined steadily to a level of 19% in 1993-94, down from a peak of 25% in 1973.

The divergence has been especially dramatic within the developing world, as savings rates have doubled in East Asia, stagnated in Latin America, and deteriorated in Sub-Saharan Africa. The situation is reflective of disparities in growth experiences among countries and regions. Sustained saving and growth rates have been the exception rather than the rule during the last forty years of development experience, as only a small group of less developed countries (LDCs) has accomplished the transition from a low-saving-investment-growth trap to a high-saving-investment-growth path in recent decades.⁴ These countries, collectively described as take-off⁵ economies, have experienced consistently high levels of savings over the past thirty years, with Botswana and Singapore being particularly high performers in this area. Both countries increased their average rates of saving from just over 12% of GDP during the period 1960-73 to approximately 40.0% of GDP during the 1984-93 period. The performance of others, such as Indonesia, Korea, China, and Malaysia, while not as spectacular, were equally impressive, as their individual savings rates over the most recent 1984-93 period were over 30%. As can be seen from Table 1 (a), most of the take-off economies are located in East Asia, with only Chile, Botswana, and Mauritius representing other regions of the world.

³ "Saving Across the World, Puzzles and Policies", World Bank Discussion Paper No. 354, Klaus Schmidt-Hebbel and Luis Servén, page ix.

⁴ Ibid., page 123

⁵ "Take-off" economies are defined, in the World Bank Discussion Paper No. 354, as those countries that have achieved sustained high rates of growth and savings over the past two decades.

According to St. Rose⁶ the minimum savings rate to which countries within the Caricom region should aspire is 30%, in order to minimise dependence on foreign savings to fund the regions' investments.

However, when considering the performance of the Caricom region over the past nine years (see Table 2), it is evident that our savings rates have been much lower than those of our Asian counterparts. At least half of the territories under review have experienced savings rates below 20%, with Dominica's rates falling to an unprecedented 2.7% over the 1993-95 period. Thus far, Guyana has been the lead performer, averaging rates above 30% over the 1990-95 period, and within the most recent three-year period turning out rates that make the country's performance in terms of savings more akin to that of an Asian tiger. In general, the region's performance in mobilising savings has been lacklustre over the past ten years, with all but four of the twelve countries listed in Table 2 exhibiting a pattern of declining savings over the period under review. The region has turned in an overall savings rate of barely 21% within the past decade, with the performance of the more developed Caricom territories countries at 21.4% being marginally above that of the 18.1% average savings rate of the less developed countries of the Caricom region.⁷ Factors adversely influencing the rate of savings include the low returns associated with fixed-income and other deposit instruments, taxation on interest income, and deficient market structures (such as the lack of an effective secondary market in many countries) for trading in equity and fixed-income securities. In addition, inadequate regulatory systems for the effective administration of stock markets, of smaller jurisdictions in particular, also mitigate against the development of vibrant capital markets in the region to which savings could be channelled.

In view of the direct correlation identified between savings, investment, and GDP growth this situation has serious and adverse consequences for sustainable economic development. In the words of Schmidt-Hebbel and Serven⁸, "...while raising saving is

⁶ "Savings and Investment: Imperatives of Capital Market Development in the Caribbean", Marius St. Rose, Caribbean Development Bank, Address to Participants at the 14th Annual Caribbean Conference of Accountants, June 1996.

⁷ Ibid., Selected Economic Aggregates for CDBs Borrowing Member Countries, Appendix, page 2.

⁸ "Saving Across the World, Puzzles and Policies", World Bank Discussion Paper No. 354, Klaus Schmidt-Hebbel and Luis Serven, page 128.

not sufficient for achieving sustained growth, it does appear to be a necessary condition for higher growth.”

THE INVESTMENT ENVIRONMENT

A comparison of investment trends between the high-performing take-off economies and the Caricom region prove to be quite instructive. For instance, over the 1984-93 period, the average ratio of gross domestic investment to GDP for the take-off countries was 33.5% (Table 1 b refers), while the same statistic as applied to the Caribbean Development Bank's group of seventeen borrowing member countries (BMCs)⁹ for the 1989-94 period was 21.4%.

Within the broad regional classifications, there were distinct variations in individual performance. For example, there was a surplus of savings over investment at levels of between 8% to 10% in countries such as Botswana, Hong Kong, and Taiwan that coincided with a trend towards declining growth rates in GDP over the three periods under analysis (see Table 1). This pattern contrasted with the experience of economies like China where savings and investment rates matched almost perfectly, and which experienced the highest GDP growth rate of the countries under review between 1984 and 1993. Notably, all the take-off countries with positive savings-investment gaps of greater than 3.5 percentage points also experienced GDP growth at decreasing rates over the three decades under review. On the other hand, take-off economies exhibiting surpluses under 3.0 percentage points or deficits between savings and investment rates within the last decade also experienced increasing rates of GDP growth over the past thirty years. The data seem to point toward a positive relationship between efficient investment of savings and sustainable economic growth.

Generally speaking, the Caricom region experienced significant gaps between domestic savings and investment levels. Countries such as Guyana, Dominica, Grenada, St. Kitts/Nevis, and St. Vincent exhibited savings - investment deficits of more than 10.0 percentage points between 1993 and 1995. All countries, with the exception of Trinidad and Barbados, had insufficient savings to fund investment activity. At the other end of the spectrum, Trinidad recorded surpluses of savings over investment reaching as high as

⁹ BMCs: Bahamas, Barbados, Guyana, Jamaica, Trinidad & Tobago, Belize, Anguilla British Virgin Islands, Cayman Islands, Turks & Caicos Islands, and the OECS territories.

almost 12.0 percentage points during the most recent period under review. Trinidad's experience suggests that the country may lack sufficient areas for investment into which its pool of savings could be effectively channelled. With the possible exception of Guyana, the average GDP of the region has been substantially below that expected of dynamically charged economies, averaging under 5% over the period 1989-94 (Table 2 (b) refers).

In general, the inadequate level of regional savings with which to fund investment activity has left a gap to be funded by foreign investment flows, in particular foreign aid. Foreign aid cannot be considered a permanent source of investment for sustainable economic development within the region. In addition, the mercurial nature of foreign investment was amply demonstrated by the Mexican peso crisis, where the abrupt withdrawal of foreign portfolio inflows brought the Mexican economy to the brink of collapse, and triggered adverse "spill-over" effects on other emerging market economies. The 1995 crisis was exacerbated by a combination of factors, notably a continuing period of low and declining domestic savings (Mexico's national savings rate had been decreasing steadily over the previous twelve years, moving from a peak of 26% in 1983 to a trough of 17% in 1993). Declining savings, combined with an increase in Mexico's rate of investment during a period of structural reform and a consequent need for massive capital inflows to finance the resulting deficit, set the stage for the debacle that followed.

A key related issue is the productivity of investment activity within the Caricom region. An analysis of the composition of private sector investment by the Caribbean Development Bank indicates that a substantial proportion of investment is directed towards the real estate and distribution sectors, while the few investments in productive areas (hotels, factories, farms) have been made by largely foreign-owned companies.¹⁰ According to St. Rose, "... the three main problems with (the region's) savings are that it should be at a higher level, that too large a proportion is saved abroad, and that too small

¹⁰ "Savings and Investment: Imperatives of Capital Market Development in the Caribbean", Marius St. Rose, Caribbean Development Bank, Address to Participants at the 14th Annual Caribbean Conference of Accountants, June 1996, pg. 12.

a proportion of what is saved domestically goes into financing of directly productive investment.”¹¹ A measure of the national productivity of capital, the incremental capital output ratio (ICOR) is around 4.4 for the borrowing member countries of the Caribbean Development Bank, above the 3.0 rate considered desirable by Mr. St. Rose. Lower ICOR levels denote higher productivity, and vice-versa. This supports the view that investment is not being sufficiently geared toward the productive sectors of the economy.

¹¹ Ibid., pg. 11.

FINANCING OF THE SMALL AND MEDIUM ENTERPRISE SECTOR

There is no standard definition of the term "small business" among or even within the countries of the Caribbean region. For instance, in the Bahamas, the classification of a business is based on gross income returns, with a "small" business earning between \$100,000 and \$250,000 in gross income. The Barbados Small Business Association's definition of a small business is one that earns up to B\$2.0 Million in revenue, has up to B\$1.0 Million in equity, and employs a maximum of twenty-five employees. In Belize, the small enterprise sector comprises enterprises employing not more than twenty-five persons with an annual turnover of up to Bz\$250,000, an investment in machinery and equipment of up to Bz\$100,000, and net assets not exceeding Bz\$200,000. By contrast, the Guyana Small Business Association's definition of a small business includes owner-managed enterprises employing less than 15 workers. The definition of a Jamaican small business is one that has a maximum full-time employment of forty-nine persons, and whose net worth (excluding land and buildings) does not exceed US\$100,000.¹²

The small and medium enterprise sector in the Caribbean has traditionally been financed with loans from government- or multilateral-funded agencies. Banks have usually been loath to provide this sector with financing due to the perception of higher risk associated with the sector, and have attempted to compensate for the "deficiency" by charging interest rates above prime as well as imposing stringent collateral requirements. By way of example, in St. Kitts, commercial banks generally hold excess liquidity indicating a lack of appropriate investment projects to be financed by banks. Kittian banks have displayed a historic preference for short-term lending for trading purposes, as opposed to long-term lending for manufacturing or service enterprises. In some

¹² "Draft National Reports on Small and Microbusiness in the Caribbean" - Prepared by the Organisation of American States, Department of Economic and Social Affairs and the Caribbean Community CARICOM Secretariat.

territories, such as Trinidad and Tobago and Barbados, the state has instituted credit guarantee schemes through the mechanism of a separately funded institution, as in the case of Trinidad & Tobago's Small Business Development Company or through the Central Bank as in the case of Barbados, which has served as an enticement to the financial sector to provide loans to the small and medium enterprise sector. This facility has succeeded in varying degrees throughout the islands that offer such credit guarantee schemes. A common criticism of the credit guarantee scheme has been the level of bureaucracy associated with accessing this financing which served as a deterrent to small businesses.

Accordingly, many small businesses in the Caribbean are constrained by limited access to financial opportunities provided to larger, more established businesses. In islands such as St. Vincent and the Grenadines small-scale enterprises operate largely in the informal sector of the economy where access to financing, information, technical assistance and training is limited. An insignificant proportion of small businesses in Belize was able to secure credit through the formal sector as collateral requirements proved to be a deterrent to the sector, particularly for those at the lower end of the scale. A joint study conducted by the Organisation of American States (OAS) and the Caricom Secretariat found that small businesses in Jamaica have received funding primarily through the efforts of the government in conjunction with various bilateral sources. However, significant undercapitalisation, inadequate staffing, and the inability to access a pool of savings to provide a cheaper source of finance have constrained retail lending in Jamaica. This situation has serious consequences for the cost and availability of financing, as well as the long-term viability of Jamaican small businesses.

In Suriname, the major credit source for small entrepreneurs comes from personal savings and funds from family. One of the key problems hampering small business development in Suriname is the weakness of an institutional structure for promoting small and medium enterprises, indicating a need for greater private sector involvement. In St. Kitts/Nevis the major impediments to small business development have been found to be the lack of skilled labour, affordable finance, and infrastructure to support the sector.

Very little equity has been provided on a structured basis to the small business sector, and the overwhelming instrument of choice has been in the form of loan financing. Accordingly, the various development banks throughout the region have by and large been the vehicles through which small business have typically been financed through the extension of loans at rates close to prevailing commercial bank rates. Some of the regional development banks experienced problems with loan delinquencies, which in some cases, posed a threat to the institutions' viability. For example, the government's main vehicle for small and micro-enterprise support, the Grenada Development Bank, held a crippling EC \$7.0 Million in non-performing loans. In addition, the National Development Foundation of Grenada, another financial intermediary, was reported to have held a considerable amount of non-performing loans in its portfolio mainly due to improperly structured loan approval criteria during the entity's start-up period.¹³

In an attempt to increase the rate of repayment, in some territories community-based loans have been used as a form of financing to the sector. For example, the Scotia Enterprise Fund in Guyana provides unsecured loans to groups of between five to six persons who must have had at least six months previous business experience. However, the main drawback was that only 20% of these loans were provided to the productive sector. The Association for Rural Transformation (ART) in Grenada -- a lender of last resort -- provides loans whereby the community shares the responsibility for ensuring project implementation and loan repayment. While the European Community-funded Cooperation for Development in Guyana provided unsecured loans only to productive endeavour, as well as technical and entrepreneurial training to recipients, the maximum repayment period was eighteen months, too short to allow meaningful (optimal) utilisation of the funds. A noteworthy feature of this programme was the supervised credit facility which may very well have contributed positively to the institution's high repayment experience.

¹³ "Draft National Reports on Small and Microbusiness in the Caribbean" - Prepared by the Organisation of American States, Department of Economic and Social Affairs and the Caribbean Community CARICOM Secretariat

THE ROLE OF VENTURE CAPITAL IN THE DEVELOPMENT OF ENTREPRENEURSHIP

The Austrian economist Joseph Schumpeter believed that entrepreneurs were the driving force behind a vibrant economy, creating and re-distributing wealth through a process he called “creative destruction.” Schumpeter’s theory of creative destruction sees innovative entrepreneurs generating new wealth by essentially creating chaos within the industries and destroying established market structures in the process. Thus Schumpeter viewed numerous business failures as a sign of a vibrant economy as long as they were accompanied by numerous business formations – this being part of the “chaos” of entrepreneurship. Examples to support Schumpeter’s theory can be found in the manner in which Federal Express revolutionised the system for package shipping and delivery, as well as Microsoft’s introduction of a new computing platform which had a profound and lasting effect on the computer industry.

Classic venture capital can be defined as the supply of equity funds and expertise, over the medium to long term, to unlisted companies with superior growth prospects. Equity financing, as opposed to debt, is important as the preponderance (overburden) of debt has been cited as one of the major causes of small business failure. The injection of equity (with little or no collateral requirements) gives rise to the acronym “risk capital” which is another name for classic venture capital, since it means that venture capitalists share the risks and rewards associated with being a shareholder in the investee company. The venture capitalist solicits funds from individual and corporate investors, which are then re-invested in a portfolio of private companies. Accordingly, the venture capitalist acts as a financial intermediary in the sourcing and distribution of funds to young companies. Generally, the venture capitalist will remain invested in a company for periods ranging from between five to ten years, so as to facilitate the anticipated growth and development of the investee company. Investee companies may require venture capital at two main stages:

- * “early stage”: seed financing to prove a concept, start-up financing to develop a product, and other early stage financing to initiate commercial manufacture; and
- * “expansion stage” : second stage financing to provide working capital for a company which is producing but may not be making a profit; later stage financing to be used for plant expansion or marketing; and bridge/mezzanine financing for companies that expect to go public within a year - or raise term debt.¹⁴

In addition to financing, classic venture capitalists also provide the benefit of their business expertise and contacts, to assist in the development of the companies in which they invest. Thus, the hallmarks of venture capital can be described as:

- * patient capital
- * personal involvement of the venture capitalist to provide guidance to investee companies during the critical early years.

The investment philosophy of American Research and Development (ARD) - the first venture capital firm in the United States to provide risk capital in a structured form to new and high-growth firms - faithfully mirrored the above-mentioned characteristics of the classic venture capitalist. Prior to the creation of ARD in 1946, equity capital to fast-growing companies (and future industry leaders) was usually provided by “angel” investors, typically scions of wealthy families or other high-net worth individuals with both the capital and the appetite for such investments. Companies such as Eastern Airlines and Xerox were among the first beneficiaries of angel investing.

The classic venture capital investing process is outlined in Table 3, illustrating that venture capitalists invest more than just cash in investee enterprises, they also create value for the firms by nurturing these companies throughout the period of their investment. For instance, in the United States, when venture capitalists fund a young firm, they automatically confer on it a “stamp of approval” which leads the way for a host

¹⁴ “*Investment Funds in Emerging Markets*”, Lessons of Experience-Series 2 : International Finance Corporation, July 1996, pg. 10.

of other services becoming readily accessible. "Venture lawyers" will usually work for a minimal fee, anticipating that when the firm grows large enough to generate large legal bills, it will remain loyal to the lawyers with whom it has developed a relationship. Similarly, accounting firms will handle a venture-blessed start-up for next to nothing, while charging their Fortune 500 clients millions. Even landlords will lease properties to venture-capital backed firms at a discount, while bankers are more conducive to providing these firms with loans on more favourable terms due to their increased creditworthiness resulting from the additional equity injection in their capital bases. For the typical venture capitalist, the real work begins with the injection of equity capital. In the majority of cases, the venture capital company retains a board presence along with an equity stake, and is likely to remain closely involved with the investee company throughout the investment period. Accordingly, such a close working relationship mandates that most venture capital companies can only make a few investments per year, and so the portfolio of companies in which any one venture capitalist is invested in at any time is likely to be limited to ten.

In the United States in 1978, venture capital companies received the majority of their funding from high net-worth individuals and families (32%), with institutional investors such as insurance companies (16%) and pension funds (15%) being the next largest groups of suppliers of capital to the industry. By 1988, the picture had changed dramatically, with pension funds (46%) emerging as the dominant supplier of funds to the venture capital industry, while the influence of individuals and families had diminished significantly (8%). The share of funding by insurance companies also decreased by almost half of its 1978 contribution, representing in 1988 just 9% of the total funding. The pattern of investment in venture capital companies exhibited in 1995 showed little change from that of 1988 as pension funds (public and private) at 51% remained by far the dominant group. Banks at 12%, were the next largest funding group to the industry. It is significant that banks were manifestly absent among the contributors to the industry as recently as seven years ago.

According to information supplied by the European Venture Capital Association (EVCA), the sources of venture capital funding have remained fairly constant between 1989 and 1995. In 1989, the major contributors to the European venture capital industry were banks (31%), others (20%), and to a lesser extent, pension funds (13%) and insurance companies (14%), with individuals and families representing a marginal 2% of the total source of funding. A review of the 1995 data indicate that pension funds (27%) and banks (26%) remained the dominant contributing groups to the European industry underscoring the influence of institutional investors to the industry. Although the European venture capital industry was a US\$33.0 billion one at the end of 1995, more than half of the region's investments were used to finance changes in the firm's ownership, such as management buy-outs. In reality, less than 6% of European venture capital investment goes toward assisting start-ups. Reasons advanced for the more reserved approach taken by Europe's venture capitalists include the profile of the bulk of investors in the venture capital funds. According to the Economist, "the notion of investing in ten different companies, hoping to make a killing on the one that survives, is alien to their culture."¹⁵

The shift in the primary sources of venture capital funds during the period under review from individual to institutional investors has had a profound effect both on the stage of development at which companies have been financed, as well as the instruments used to finance investee companies. Venture capitalists have expanded their range of instruments to include "quasi-equity" such as loans or bonds which may, under specific conditions, give the lender the right to convert to share capital. Examples include convertible bonds or preferred shares, and debt instruments with warrants attached. The shift towards debt-type instruments has coincided with an apparent evolution (noticeably among developed regions) away from the traditional equity and expertise combination to what Bygrave and Timmons refer to as "merchant capital".¹⁶ The focus of merchant capital is more on financing expansion and restructuring of established companies, management buy-outs and buy-ins, as opposed to seeking to finance and nurture young,

¹⁵ "Europe's Tentative Ventures", The Economist, January 25, 1997, pg. 21

¹⁶ "Venture Capital at the Crossroads" - William D. Bygrave/Jeffrey A. Timmons

innovative companies utilising radical new technologies with the objective of revolutionising their chosen industries.

As is illustrated in Table 5, the economic impact of venture capital is clear. Based on the results of surveys conducted among small businesses in Europe, Canada, and the United States, the data present a graphic depiction of the contribution that young, venture-capital financed companies have made to job creation and economic development in the regions surveyed. These venture-capital backed companies not only generated employment at a rate faster than their more established counterparts, they also tended to create skilled jobs (such as engineers, scientists, managers) at a quicker pace than could be found for the economy as a whole.

THE CASE FOR VENTURE CAPITAL IN THE CARIBBEAN

In recent years, small business has become the primary engine of growth in developed and developing countries alike. As the take-off countries have amply demonstrated, high proportions of domestic savings used to fuel investment in productive enterprises combine to have a profound and positive impact on the affected economies. It is reasonable to surmise that once the high rates of savings can be maintained, and these savings continue to be plowed into productive endeavours, sustainable growth in GDP will result. The link identified between savings and investment by a World Bank report regarding the former socialist economies, also known as "transition economies" applies equally to the Caribbean region: "the scope for recovery and growth in the transition economies depends crucially on adequate volumes of efficient investment. While net international capital flows to these economies are increasing, the evidence is unambiguous that in the near future their investment will have to be primarily financed by savings."¹⁷

The rate of savings and investment within the Caribbean is below that of other fast-growing developing regions. Traditional venture capital, by providing equity and business and managerial expertise, has been a key contributor to overall economic growth by playing a notable role in the development and success of the small and medium-sized business sector. Properly implemented, the benefits that venture capital financing can provide to Caribbean economies are substantial. Venture capital can aid in increasing the level of savings in the Caribbean region to levels that would match the region's investment requirements, thereby minimising the need to seek foreign savings to fill the existing gap between domestic savings and the level of investment activity. To be meaningful, the savings should be directed toward enterprises engaged in productive activity, rather than the distributive sectors of the economy.

¹⁷ "Saving Across the World, Puzzles and Policies", World Bank Discussion Paper No. 354, Klaus Schmidt-Hebbel and Luis Servén, page 119.

The industry sectors in which venture capitalists chose to place their funds in the various countries and regions are informative. For instance, as Figures 6 - 9 illustrate, the highest proportion of European venture capital funds went to companies producing consumer items (22.5%), while the focus of Canadian venture capital firms was on the manufacturing (21%) and computer (18%) sectors. By contrast, and underscoring their emphasis (focus) on this sector, about 70% of U.S. venture capital investments were made in technology-related companies, with 46% in computer-related companies. While both U.S. based and Canadian venture capital companies seem to have made significant investments in computer-related industries, the proportion of investment made by European venture capitalists in that industry was less than half that of their American and Canadian counterparts. As Figure 9 illustrates, the focus of the Jamaican venture capital funding seems to have been primarily on the services sector (38%), followed by agriculture (33%) and manufacturing (27%). It is likely that venture capital activity within the Caricom region would be directed toward sectors as represented in the Jamaican study, rather than the technology thrust exhibited by the American and Canadian venture capitalists.

The provision of government-sponsored incentives, such as the tax credit offered to individual and institutional investors in Trinidad & Tobago's venture capital programme, as well as the implementation of a propitious regulatory environment should facilitate an enabling environment for the emergence of a thriving venture capital industry. Table 6 details the ingredients for a successful venture capital industry, compiled by the International Finance Corporation. A caveat: while government support is an important criterion for success, particularly to inspire confidence in an industry that is relatively new to the Caribbean, care should be taken not to overburden a burgeoning industry with too many legislative restraints / regulatory hurdles which may have the effect of retarding the growth of the venture capital industry. For instance, in the case of Trinidad and Tobago, legislative amendments permitting investment in venture capital funds by pension funds and insurance companies would provide an entree for a potentially significant group of investors into the country's nascent industry.

As has been noted earlier, pension funds and insurance companies have the potential to become significant contributors to the development of venture capital, as these institutional investors have the medium to long-term investment outlook required for a venture capital fund. However, Caribbean venture capital funds would have to employ stringent safeguards against having undue influence exerted by these large institutional investors which may adversely affect the types of companies to which funds are channelled. Ideally, a portion of venture capital funds should be earmarked to foster the emergence of innovative companies in non-traditional sectors of the economy, in order to offset the historical reliance on one or two core products as drivers of the economy. Facilitating the growth of innovative young companies will thus encourage economic diversification, by giving birth to hot new industries.

An entire industry is poised to develop around venture capital, comprised of supporting services to Caribbean venture capital funds. For instance, lawyers, accountants, financial and strategic planners, and other consultants specialising in venture capital assisted enterprises, will foster the provision of essential adjunct services to these enterprises at an affordable cost. Additionally, an active venture capital industry should encourage the development of the Caribbean's capital markets – moving from thinly traded, underdeveloped stock markets to actively traded, well-developed regional stock exchanges. A preferred method for venture capitalists of exiting from their investments in private unlisted companies is the initial public offering -- readily available in countries with a developed stock market. Venture capital assisted companies may be more inclined to list on the stock market, as having had an equity partner in their companies for at least five years should have reduced the traditional reluctance of Caribbean businesses to having outside partners in their business. This will facilitate a shift away from overdraft and other debt financing towards equity to provide funds for operation. Cross-border listing will also be greatly enhanced.

**RANKING OF "TAKE-OFF" COUNTRIES BY CHANGES IN SAVING,
INVESTMENT, AND GROWTH RATES**

Table 1 (a) : Gross Domestic Saving / GDP

| | 1960-73 | 1974-83 | 1984-93 |
|-------------------------------|---------|---------|---------|
| <i>More than 30% increase</i> | | | |
| Botswana | 12.49 | 20.73 | 39.76 |
| Singapore | 12.40 | 36.28 | 43.87 |
| <i>20-30% increase</i> | | | |
| Indonesia | 10.62 | 29.60 | 31.63 |
| Korea | 10.93 | 25.20 | 35.10 |
| <i>10-20% increase</i> | | | |
| China | 24.25 | 30.44 | 36.65 |
| Mauritius | 13.63 | 19.83 | 24.07 |
| Malaysia | 24.44 | 31.62 | 34.67 |
| Thailand | 19.67 | 22.77 | 31.07 |
| <i>5-10% increase</i> | | | |
| Chile | 16.44 | 17.08 | 25.19 |
| Hong Kong | 24.90 | 31.69 | 34.51 |
| Taiwan | 21.80 | 31.99 | 31.57 |

Source: "Saving Across the World": *World Bank Discussion Paper No. 354* by K. Schmidt-Hebbel and L. Serven.

Table 1 (b) : Gross Domestic Investment / GDP

| | 1960-73 | 1974-83 | 1984-93 |
|-------------------------------|---------|---------|---------|
| <i>More than 15% increase</i> | | | |
| Indonesia | 12.45 | 25.14 | 28.68 |
| <i>10-15% increase</i> | | | |
| China | 23.42 | 30.11 | 36.27 |
| Korea | 20.07 | 29.78 | 32.94 |
| Mauritius | 15.69 | 25.68 | 27.10 |
| Singapore | 25.40 | 43.31 | 40.16 |
| Thailand | 21.69 | 27.49 | 34.19 |
| <i>5-10% increase</i> | | | |
| Chile | 17.17 | 18.95 | 22.66 |
| Malaysia | 20.37 | 30.16 | 30.20 |
| <i>Less than 5% increase</i> | | | |
| Botswana | 25.91 | 38.56 | 29.77 |
| Hong Kong | 25.25 | 29.02 | 26.23 |
| Taiwan | 22.84 | 30.17 | 22.00 |

Source: "Saving Across the World": *World Bank Discussion Paper No. 354* by K. Schmidt-Hebbel and L. Serven.

Table 1 (c): GDP Growth Rate

| | 1960-73 | 1974-83 | 1984-93 |
|---------------------|---------|---------|---------|
| Less than 3% | | | |
| Chile | 1.28 | -0.16 | 5.31 |
| China | 2.26 | 5.41 | 8.25 |
| Mauritius | 1.95 | 2.03 | 5.84 |
| | | | |
| More than 0% | | | |
| Indonesia | 2.27 | 4.37 | 4.16 |
| Korea | 6.93 | 6.51 | 7.52 |
| Thailand | 4.61 | 4.37 | 7.23 |
| | | | |
| Less than 0% | | | |
| Botswana | 6.24 | 6.78 | 4.58 |
| Hong Kong | 7.01 | 6.20 | 5.17 |
| Malaysia | 4.14 | 4.46 | 3.76 |
| Singapore | 7.13 | 6.49 | 5.56 |
| Taiwan | 7.44 | 6.60 | 4.74 |

Source: "Saving Across the World": *World Bank Discussion Paper No. 354* by K. Schmidt-Hebbel and L. Serven.

Table 2: FINANCING INVESTMENT IN CARICOM (%) 1990 - 1995

| COUNTRY | INVESTMENT | | | DOMESTIC SAVINGS | | | S-I | | |
|------------------------------|------------|---------|---------|------------------|---------|---------|---------|---------|---------|
| | 1987-89 | 1990-92 | 1993-95 | 1987-89 | 1990-92 | 1993-95 | 1987-89 | 1990-92 | 1993-95 |
| Barbados | 17.7 | 14.7 | 13.1 | 18.0 | 18.7 | 15.8 | 0.3 | 4.0 | 2.7 |
| The Bahamas | 22.3 | 21.2 | 20.1 | 28.8 | 10.7 | 14.7 | 6.5 | (10.5) | (5.4) |
| Belize | 31.6 | 30.8 | 25.2 | 24.0 | 26.6 | 18.6 | (7.6) | (4.2) | (6.6) |
| Guyana | 29.4 | 38.4 | 47.3 | 20.9 | 31.0 | 36.8 | (8.5) | (7.4) | (10.5) |
| Jamaica | 25.9 | 27.9 | 27.5 | 20.9 | 27.0 | 23.6 | (5.0) | (0.9) | (3.9) |
| Trinidad & Tobago | 15.0 | 14.9 | 15.7 | 20.8 | 24.8 | 27.4 | 5.8 | 9.9 | 11.7 |
| Antigua & Barbuda | 42.1 | 34.6 | 32.4 | 24.7 | 31.2 | 23.9 | (17.4) | (3.4) | (8.5) |
| Dominica | 32.4 | 35.1 | 19.7 | 11.3 | 12.6 | 2.7 | (21.1) | (22.5) | (17.0) |
| Grenada | 37.7 | 40.0 | 31.4 | 14.4 | 16.1 | 17.0 | (23.3) | (23.9) | (14.4) |
| St. Kitts/Nevis | 50.4 | 46.0 | 37.8 | 24.5 | 23.3 | 20.3 | (25.9) | (22.7) | (17.5) |
| St. Lucia | 25.4 | 25.1 | 24.7 | 14.3 | 13.6 | 19.1 | (11.1) | (11.5) | (5.6) |
| St. Vincent & the Grenadines | 30.9 | 31.4 | 26.5 | 15.8 | 15.4 | 11.7 | (15.1) | (16.0) | (14.8) |

Note: Gross Domestic Investment and Gross Domestic Saving to Gross Domestic Product (at current market prices).

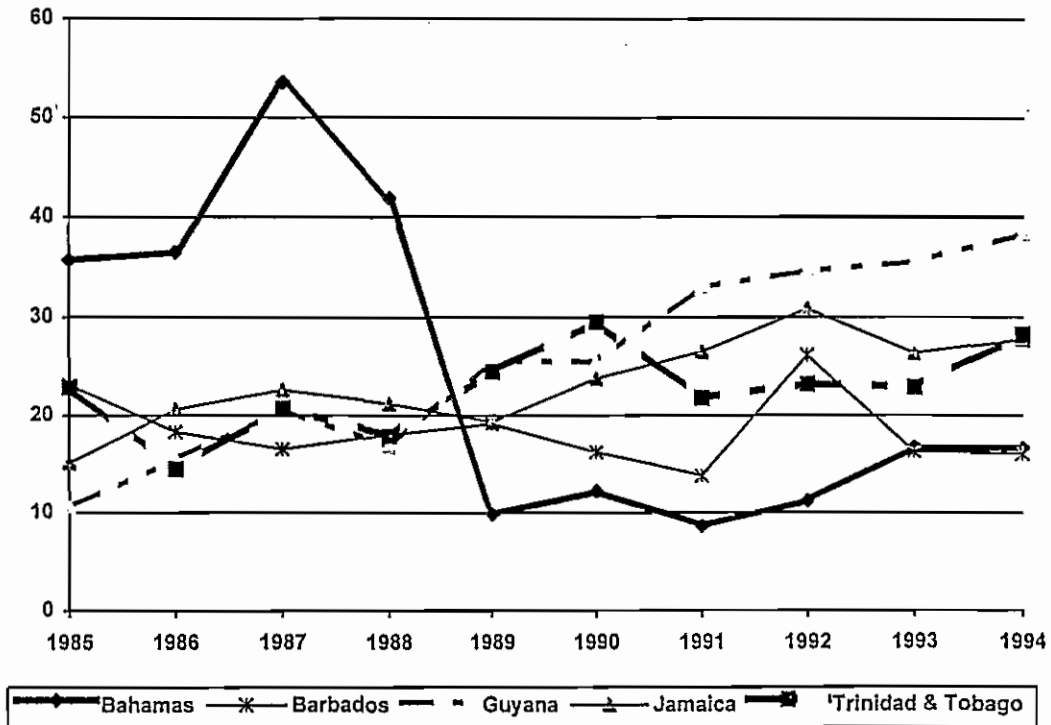
Source: Caribbean Development Bank 's Annual Report 1996; "Savings and Investment in the Caribbean: Empirical Evidence and Policy" in *The Savings / Investment Environment in the Caribbean: Emerging Imperatives*, ed. R. Ramsaran.

Table 2 (b): ANNUAL GDP GROWTH IN CARICOM (%)

| COUNTRY | 1989-94 |
|------------------------------|---------|
| Barbados | -2.1 |
| The Bahamas | 0.5 |
| Belize | 5.8 |
| Guyana | 6.0 |
| Jamaica | 1.8 |
| Trinidad & Tobago | 0.6 |
| Antigua & Barbuda | 3.4 |
| Dominica | 3.0 |
| Grenada | 1.8 |
| St. Kitts/Nevis | 3.6 |
| St. Lucia | 3.8 |
| St. Vincent & the Grenadines | 4.1 |

CARIBBEAN DOMESTIC SAVINGS RATIOS (1985-1994)

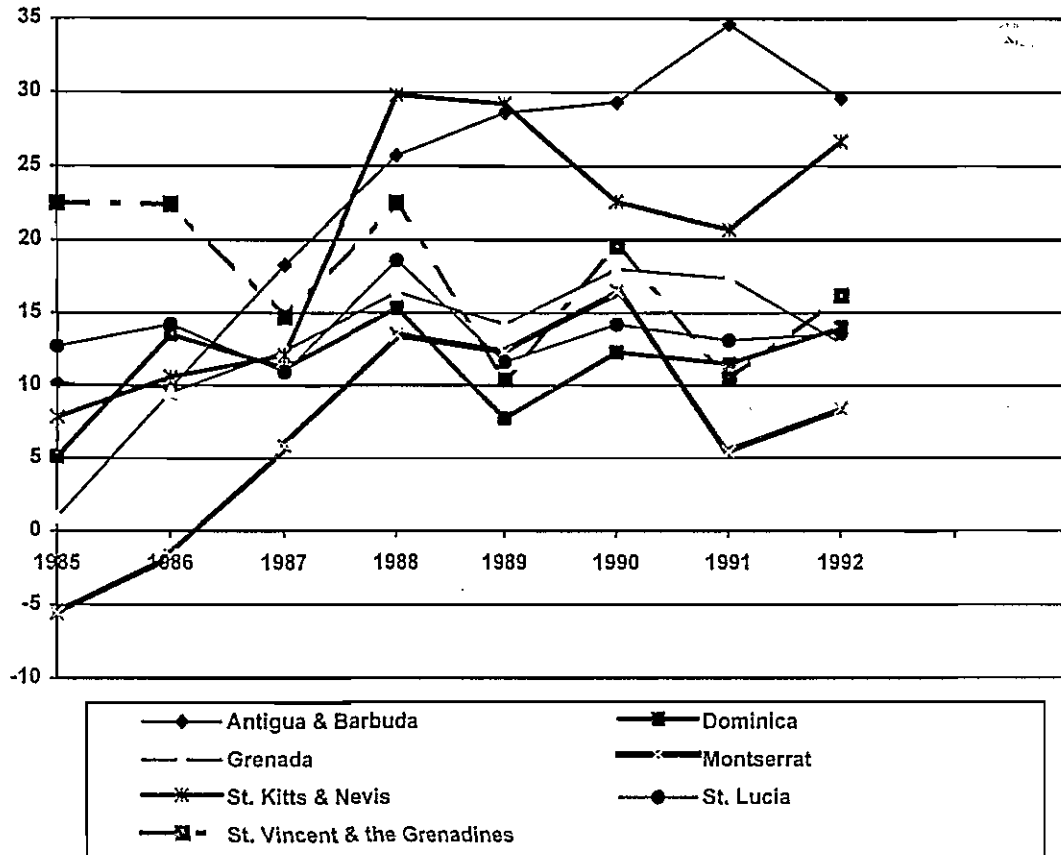
Figure 1: MDCs



Note: Ratio of Domestic Saving to Gross Domestic Product (at current market prices).
 Domestic Savings = Gross Domestic Product - Consumption Expenditure.

Source: Caribbean Development Bank 's Annual Report 1996; "Savings and Investment in the Caribbean: Empirical Evidence and Policy" in *The Savings / Investment Environment in the Caribbean: Emerging Imperatives*, ed. R. Ramsaran.

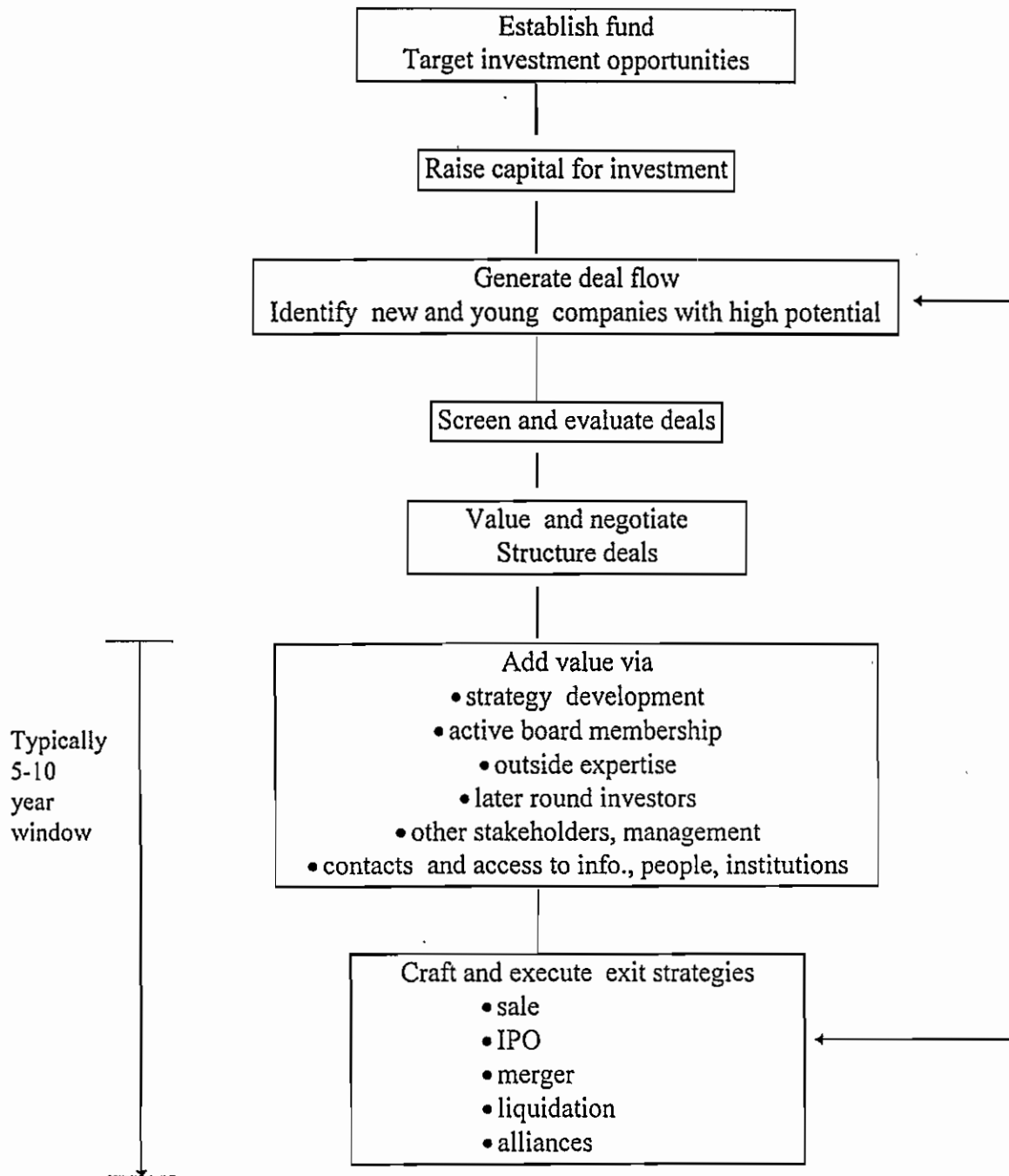
Figure 2: OECS



Note: Ratio of Domestic Saving to Gross Domestic Product (at current market prices).
 Domestic Savings = Gross Domestic Product - Consumption Expenditure.

Source: Caribbean Development Bank 's Annual Report 1996; "Savings and Investment in the Caribbean: Empirical Evidence and Policy" in *The Savings / Investment Environment in the Caribbean: Emerging Imperatives*, ed. R. Ramsaran.

Table 3: CLASSIC VENTURE CAPITAL INVESTING PROCESS



Source: "Venture Capital at the Crossroads" - William D. Bygrave / Jeffrey A. Timmons

Table 4: WORLDWIDE VENTURE CAPITAL GROWTH
US\$ Billions

| | 1986 | 1987 | 1988 | 1989 | 1990 (Est.) |
|--------|------|------|-------|------|-------------|
| USA | 24.1 | 29 | 31.1 | 33.4 | 35 |
| Europe | 8.95 | 15.6 | 20.1 | 24.8 | 29 |
| Japan | 3.26 | 4.5 | 6.16 | 7.5 | 10 |
| Canada | 1.3 | 1.83 | 2.5 | 2.78 | 3 |
| Korea | 0.45 | n.a. | 0.903 | n.a. | 1 |

Source: "Venture Capital at the Crossroads" - William D. Bygrave / Jeffrey A. Timmons

SOURCES OF VENTURE CAPITAL FUNDING

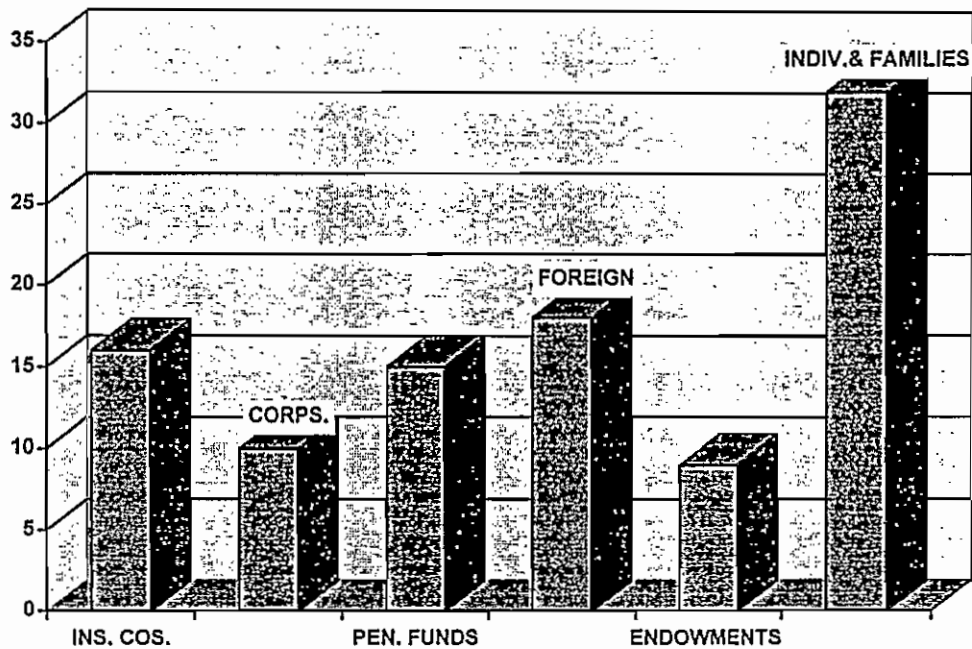


Figure 3: Source distribution of Venture Capital Funding: United States of America (1978)

Taken from: "Venture Capital at the Crossroads" - William D. Bygrave/Jeffry A. Timmons

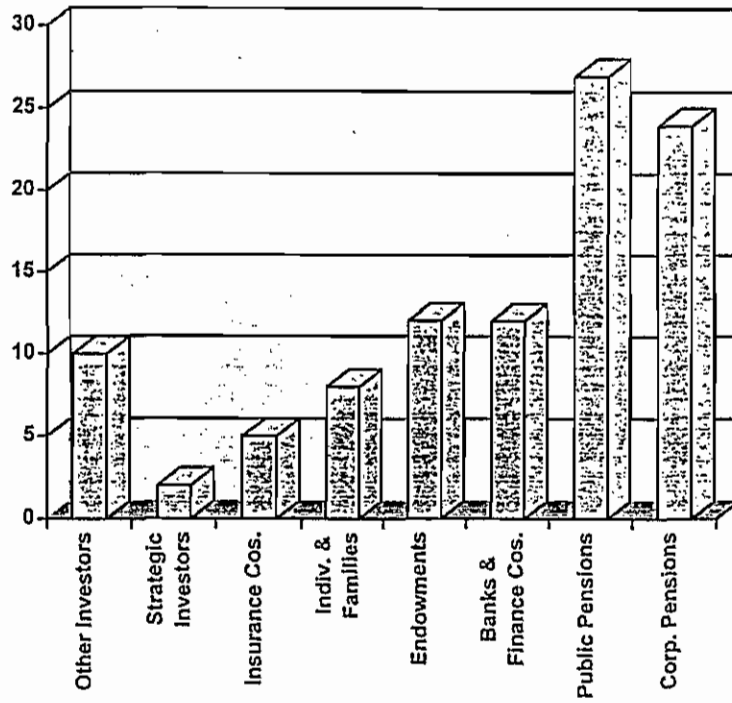
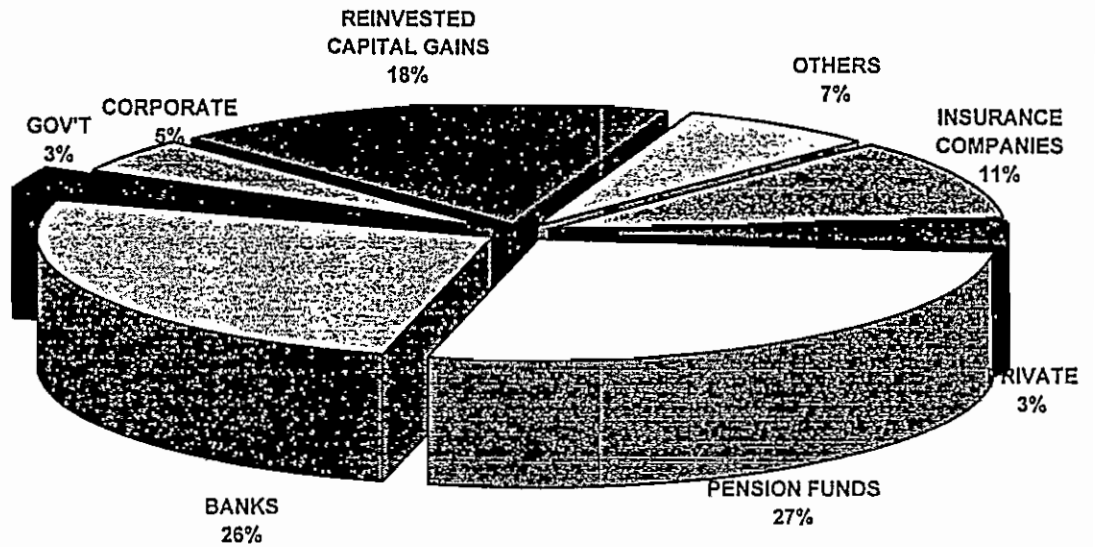


Figure 4: Source distribution of Venture Capital Funding: United States of America (1995)

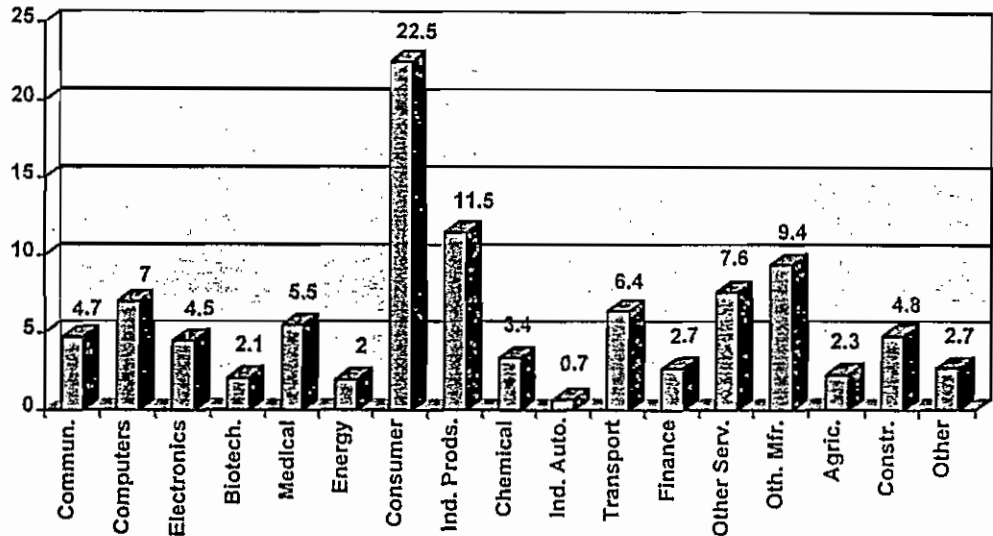
Taken from: National Venture Capital Association - Annual Report 1995

Figure 5: SOURCE DISTRIBUTION OF VENTURE CAPITAL FUNDING: EUROPE (1995)



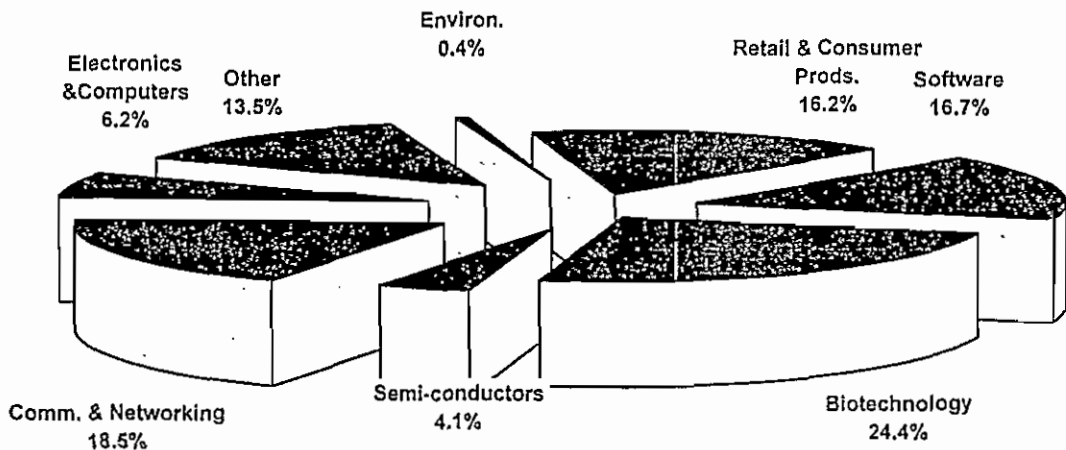
Taken from: Economic Impact of Venture Capital in Europe - European Venture Capital Association

Figure 6: DISTRIBUTION OF INVESTEE COMPANIES: EUROPE 1995 (%)



Taken from: Economic Impact of Venture Capital in Europe - European Venture Capital Association

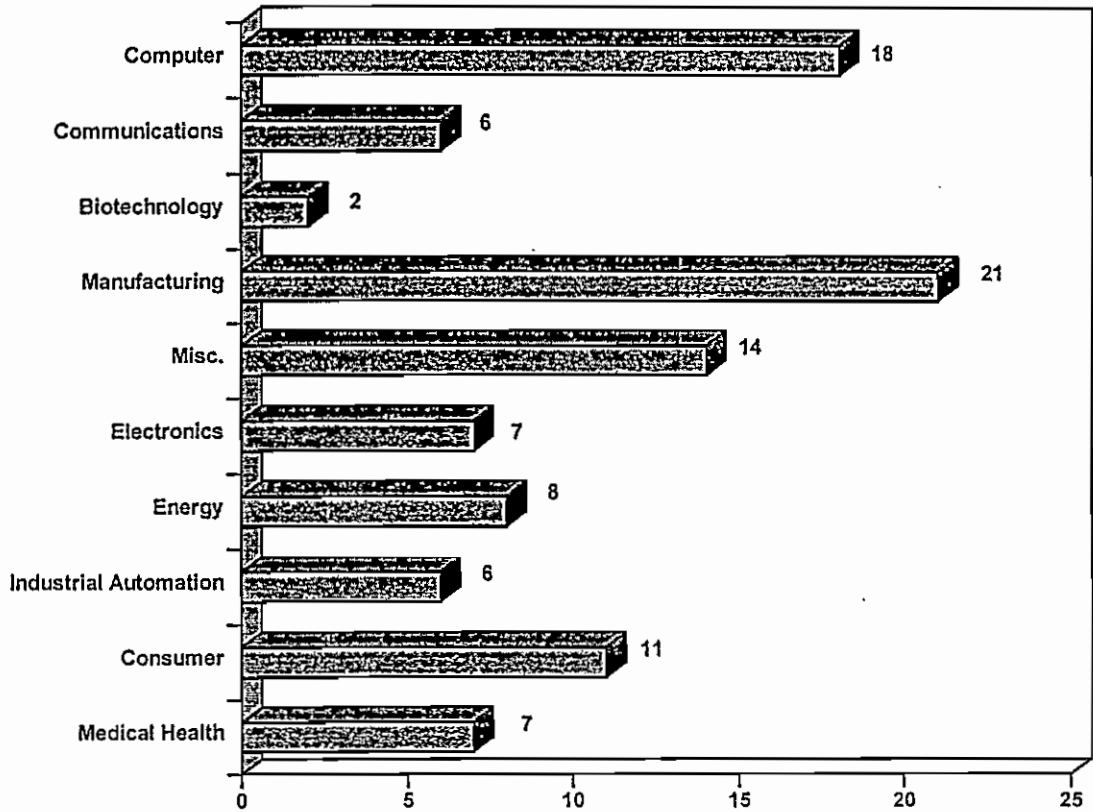
Figure 7: DISTRIBUTION OF INVESTEE COMPANIES:
United States of America (1995)



Source: Annual Report 1995, National Venture Capital Association.

DISTRIBUTION OF INVESTEE COMPANIES:

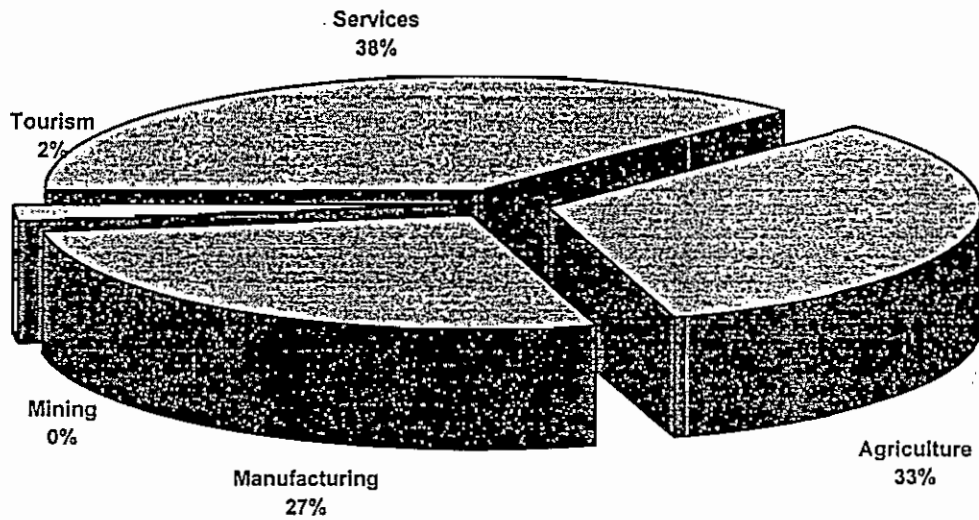
Figure 8: Canada (1993)
In percentage



Source: Economic Impact of Venture Capital Investments in Canada

DISTRIBUTION OF INVESTEE COMPANIES:

Figure 9: Jamaica (1993)



Source: "Venture Capital as a Tool for Growth and Development in Jamaica with Special Reference to Development Financing" - Hugh L. Graham, July 15, 1994 (unpublished).

Table 5: ECONOMIC IMPACT OF VENTURE CAPITAL

| | United States | Canada | Europe |
|---|--|--|---|
| <i>Average Age of companies surveyed</i> | 4.5 years | Under 5 years: 47% Under 10 years : 79% | Under 5 years: 48% Under 10 years : 75% |
| <i>Level of financing provided by venture capitalists</i> | 69% | 35% | 46% |
| <i>Job creation</i> | Between 1990 - 1994: <i>Venture-backed companies <u>created</u> jobs at an average rate of 20% p.a.</i> <i>Fortune 500 companies <u>eliminated</u> jobs at a rate of 1% p.a.</i> | Between 1988 - 1993: <i>Venture-backed companies <u>created</u> jobs at an annual compounded rate of 42% p.a.</i> <i>CB 100 companies <u>created</u> jobs at a rate of 7% p.a.</i> | Between 1991 - 1995: <i>Venture-backed companies <u>created</u> jobs at an average rate of 15% p.a.</i> <i>FT-EXTEL Top 500 European companies <u>created</u> jobs at a rate of 2% p.a.</i> |
| <i>Contribution to GDP</i> | Between 1990 - 1994: Revenues at venture-backed companies grew at a rate of 35% Fortune 500's sales grew at an average rate of 2.1% | Between 1988 - 1993: Sales at venture-backed companies grew by 55% annual compounded rate p.a. | Between 1991 - 1995: Sales at venture-backed companies grew by an annual average rate of 35% Sales at <i>Top 500 European</i> companies grew at an annual average rate of 14% |
| <i>Export Sales Growth</i> | Rate of export sales of the average survey company grew exponentially: 1990/91 : 0% 1991/92 : 11% 1992/93 : 23% 1993/94 : 57% | Export sales at venture capital backed companies have increased at an annual average compound rate of 70% between 1988-1993. | Export sales at venture capital backed companies have increased at an annual average compound rate of 30% between 1991-1995. |

| | United States | Canada | Europe |
|--|---|---|--|
| <i>Capital Investment and Research & Development (R & D)</i> | During the 1990-1994 period, venture capital backed survey companies increased their annual investment in plant, property and equipment as well as R & D more than 3 times faster than Fortune 500 companies. | From 1988 to 1993, investment in plant, property and equipment grew by a 57% annual compounded rate at the survey companies. R & D spending by venture capital backed companies grew at an annual compounded rate of 44%. | Investments in plant, property and capital equipment grew by an average rate of 25% p.a. In 1995, R & D expenditure represented on average 8.6% of total sales, vis-a-vis 1.3% for the top European companies. |

Source:

“Sixth Annual Economic Impact of Venture Capital Study” - National Venture Capital Association, Coopers & Lybrand LLP, VentureOne.

“Economic Impact of Venture Capital Investments in Canada, Second Annual Survey” - Federal Business Development Bank.

“The Economic Impact of Venture Capital in Europe” - Coopers & Lybrand Corporate Finance, European Venture Capital Association.

Table 6: Ingredients of Success in Developing and Structuring Venture Capital Funds

External

- growing, open economy large enough to support adequate deal flow (fund should not be too large compared to expected deal flow)
- stable enough macroeconomic environment to attract foreign investors and domestic savers with medium - long-term return horizons
- existence of an active stock market, as an exit route
- deal flow stimuli: culture of innovation; acceptance of failure; new/small company access to markets; existence of entrepreneurs
- high deal flow and low acceptance ratio
- adequate regulatory environment both for new and small companies and VC fund
- institutional investors willing to invest in VC fund
- existence of complementary financing, including other VC funds – but difficulty of competing with subsidised funds

Fund Management and Structure

- two-tiered management structure; separate fund management company
- a limited life (typically 10 years) focuses management attention on investing and divesting within a defined period
- high caliber managers with both industrial and financial skills; willing to be closely involved in investee companies; tough enough to fire entrepreneurs or to pull out where necessary
- if technical partners are used, they should have a significant stake
- appropriate incentive structure with profit sharing
- ability to structure investments with exit arrangements at point of entry
- close physical proximity to investee companies
- fund policies requiring disclosure and resolution of possible conflicts of interest
- willingness to adhere to fund's policies to company and sector exposure
- phased disbursements of committed investments by investors

Table 6 (Cont'd) : Ingredients of Success in Developing and Structuring Venture Capital Funds

Fund Investors

- commonality of investor interest: all seeking high, long-term capital gains (ancillary goals, such as privileged access to new product ideas, or a focus on current income rather than capital gain, are likely to detract from fund performance)
- willingness to meet financial commitments and remain involved
- willingness to give decision-making authority to manager
- relatively few shareholders, ideally with one dedicated investor holding a significant stake
- little or no government or government-owned institution involvement (often associated with the introduction of ancillary goals and interference in manager discretion)
- well designed fund policies for managers: exposure limits; requiring disclosure of possible conflicts of interest; board approval for major policy changes

Characteristics of Investee Companies

- willingness to accept third-party equity and board participation
- dedicated, business-hungry environment
- mixture of expansions (mainly) and start-ups (fewer)
- number of investees small enough to permit adequate supervision
- flexibility about sector focus – deal flow may be constrained if too limited

Source: "Investment Funds in Emerging Markets" - Lessons of Experience, Series 2, International Finance Corporation, July 1996

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