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Economic Growth, Entrepreneurship and Venture Capital in South Africa

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Abstract

South Africa is host to a dual economy, one which is developed and produces the bulk of South Africa's wealth and the second being disconnected from the first, as well as the world economy, hosting much of South Africa's urban and rural poor. As a consequence issues relating to economic growth and development and their implications on employment and political stability remain critical to policy formulation and academic research.

Economic growth theory has progressed through various iterations and viewpoints. Initially academic research was primarily concerned with the production input factors of capital and labour, however more recently the focus has shifted toward the viewpoint that the successful facilitation of entrepreneurship is the source of sustainable long term growth.

Although entrepreneurship is not limited to small businesses and start-ups, with so called 'intra-preneurship' occurring within existing companies, small to medium enterprises (SME's) are seen as excellent vehicles to foster economic growth and development as entrepreneurs deliver new goods and services to the market.

However, SMEs have a number of factors hindering their development with managerial inexperience and access to finance being recurring themes and partly to blame for the 75% failure rate of SMEs in South Africa (Finmark Trust, 2006).

The private equity industry adds impetus to economic growth by not only providing finance but also access to networks, markets, training and managerial expertise (World Economic Forum, 2010). Within the private equity spectrum of investment stages, venture capital and early stage investments are heralded as critical where it has been shown that an increase in private equity early-stage investments of 0.1% of GDP is associated with an increase in real economic growth of 0.96% (Meyer, 2010).

This dissertation suggests that within the South African private equity industry fund managers are preoccupied with competing for later stage investments. The study also proposes that the early stage private equity spectrum is severely under-represented in South Africa. Even though there is a healthy distribution between investors as well as the stage of investment they prefer within venture capital, the study suggests that the lack of total funds committed to early stage investments could be a limiting factor for job creation and economic growth.

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Chapter 1 - Introduction

Economic growth and its social and political benefits remain a key issue in both policy formulation and academic research. However, interest in the topic has been cyclical. After the Second World War, when high growth rates were reported in most countries that are members of the Organisation for Economic Co-operation and Development (OECD), academic and political interest was focused more on income equality and demand management rather than on exploring the sources of long-term economic development.

In the 1960s and 1970s, academics focused on the neo-classical growth theory, explaining growth as a function of the accumulation of production factors, such as capital and labour, and as a function of efficiency improvements as a result of technological change. However, mainstream economics did not attempt to substantiate the source of this long-term factor accumulation or technological development.

With so-called stagflation (i.e. stagnation plus inflation) and widespread unemployment in the 1980s, academics turned their attention to the supply side of the economic growth function (Wennekers & Thurik 1999). Economic growth theory increasingly focused on the role of economic agents in the form of entrepreneurs at the micro-level and their long-term economic impact at the macro-level.

Entrepreneurship is not limited to start-ups as established firms, large and small, continually strive to innovate in a quest for survival. However, small businesses are seen as an important vehicle through which entrepreneurs can introduce new products and services to the market (Aghion and Howitt, 1998). Even though it is recognised that Small and Medium Enterprises (SMEs) are stimulating entrepreneurship and accelerating growth and job creation numerous factors are inhibiting their development, the principal of which is a lack of access to finance (Beck et al, 2006).

Venture capital is a sub-sector of the larger private equity industry and is seen to play a key role in SME development. Rapidly growing entrepreneurial enterprises are naturally viewed as important sources of innovation, employment and productivity growth, and they hence benefit from access to finance during their early stages of development. Many countries have subsequently started to implement policies to promote the supply of venture capital in an effort to stimulate growth.

Given that SMEs tend to lack collateral, venture capital fills a definite 'niche' need, in that it allocates capital to uncertain ideas and innovations that might not receive funding from formal sources, such as banks. Venture firms moreover provide added benefits in the form of training and expertise during the 'incubation period', when funds cannot be obtained from informal sources, such as friends and family, who fulfil the role of 'angel' investors.

This dissertation aims to answer the following research question, 'whether the South African venture capital industry is sufficiently capitalised to provide the necessary support for SME development?'. The dissertation hopes to achieve this by reviewing the following research issues:

- 1) Whether SMEs and entrepreneurship is critical to South Africa's economic development?
- 2) Whether financial support is a principal factor in hindering SME growth in South Africa?; and
- 3) Whether the local venture capital industry is fulfilling its niche role as a financier and source of expertise in promoting SME sustainability?

The dissertation initiates by reviewing the research issues in an international context. In the following chapter the dissertation explores the importance of entrepreneurship as a source of economic growth, reviewing evidence from international studies. In chapter 4 the dissertation turns its attention to the importance of SMEs as a vehicle which fosters entrepreneurship, as well as the common obstacles (specifically access to finance) that inhibit their formation and growth. Chapter 5 continues by reviewing the role of private equity and venture capital in providing support for SME growth and development.

The remainder of the dissertation has a local focus concerning entrepreneurship and SME development in South Africa in chapter 6 and 7 respectively. Chapter 8 conducts an analysis of the South African private equity industry with the review of the local venture capital industry in chapter 9 exploring whether the venture capital industry is providing the necessary support for SME development.

The dissertation wraps up by presenting the conclusions that can be drawn from the observations in the preceding chapters, and suggests areas for future research to shed further light on the subject.

Chapter 2 – Economic Growth Theory

2.1 Introduction

Over the past 60 years, economic growth theories were developed to explain the obvious differences in the development of productive capacities in different countries around the world, as well as the improvement in the standard of living experienced by such countries.

A number of theories were developed arguing the importance of the various economic and non-economic determinants of national development. Although there is no single model, economists can agree that national development is a multidimensional phenomenon, viz. the result of a combination of social, cultural, political and economic factors.

The results of various studies have highlighted two primary models to explain economic growth. These models build on the work of two noted economists, namely Adam Smith (1776) and David Ricardo (1821).

Smith began his study of the concept of economic growth in an effort to understand wealth creation. Smith (1776) proposed that, “as the market grew, entrepreneurship would lead to innovation, which would stimulate an increase in the division of labour and hence increase productivity”. This would later be formalised in the concept of Total Factor Productivity (TFP). TFP proclaims that efficiency gains account for increases in total economic output, not increases in measured inputs.

Ricardo had a different point of view and believed that an increase in output was the result of increased input of land, labour and capital. Ricardo and his contemporary Malthus (1798) distilled economics to a dreary science, in contradiction to Smith’s view of ever-increasing wealth, entrepreneurship and innovation.

Where Smith believed that economic growth was virtually unlimited and a result of the division of labour, Ricardo believed economic output was limited by the availability of economic input factors.

Today, Smith’s view of economic growth forms the basis of modern economic growth theory (Wennekers & Thurik, 1999). However, given that Ricardo’s approach offers measurable means of forecasting growth by using definable inputs, the economic profession has adhered to Ricardo’s view more closely in developing economic growth theories.

More recently there has been an increasing emphasis on the importance of entrepreneurship as a driver of economic development (Wennekers & Thurik, 1999), with some commentators including entrepreneurship as a fourth production factor along with capital, labour and technological change

(Audretsch and Keilbach, 2004). Consequently, entrepreneurship is seen as the factor that stimulates output by combining the existing production factors in new ways.

2.2 Economic Growth Theory

2.2.1 Basic Economic Growth Model

According to Perkins et al (2001), the primary factors of economic development under the basic Ricardian model include:

- capital stock - roads, bridges, factories, land, etc, and
- labour - economically active population.

Consequently, growth is a linear function of capital and labour. The national aggregate production function can be represented by the formula $Y = F(K, L)$, where Y is the output, K is the capital and L is the labour supply through population growth.

The capital available is a function of savings, and is calculated by multiplying the average savings rate for the country by the national output. The labour supply is based on the demographics of the country in question. The model proposes that, as capital and labour increase, so too does economic output and hence growth.

2.2.2 Exogenous Growth Models

Harrod-Domar Growth Model

The Harrod-Domar growth theory was developed by Sir Roy Harrod (1939) and Evsey Domar (1946). They developed their models independently of each other, but their assumptions and subsequent results were synonymous. Their model was initially developed to explain the business cycle, but was later adopted to explain economic growth.

Their model suggested that an economy's rate of growth depended on the level of savings and labour supply as well as by the capital output ratio (a fixed co-efficient, which assumes that capital and labour are used in a constant ratio to each other) to determine total output.

Concluded that economic growth depended on the amount of labour and capital available to the economy, the economic growth and development of less developed countries, with an abundant supply of labour, was being held back by a lack of physical capital. They also concluded that an

increase in physical capital stimulated economic growth as investment generated greater output as well as income. Finally, they found that higher levels of income allowed for higher levels of saving.

Although the Harrod-Domar model is simple and requires a relatively small data set, it requires the full deployment of both labour and capital stock and cause inaccurate long-term predictions. The model also fails to account for technological change or productivity gains not explained by measured inputs, which are considered critical to long-term growth and development (Solow, 1956).

Neoclassical (Solow) Growth Model

In the 1950s, Robert Solow, an MIT economist, attempted to address the shortcomings of the Harrod-Domar model. Solow's (1956) model owes its popularity to its elegance and simplicity, allowing the substitution between the factors of production rather than the fixed ratios required by Harrod (1939) and Domar (1946). The production function is curved, allowing for flexibility in using different combinations of capital and labour.

Solow (1956) envisioned production output as a function of capital, labour and time:

$$Y_t = F(K_t, L_t, t)$$

Where Y_t is output, F is the function of output relating to K_t (capital) and L_t (labour). With the inclusion of the time factor, Solow (1956) recognised the importance of technological change and initiated discussions surrounding total factor productivity (TFP). Solow (1956) also proposed that over time technology adoption was a significant contributor to the cause of cross-country differences in production for the same inputs. He suggests that technological change improves the labour function through increased efficiency attributed to the mechanisation of the production process or to an improvement in skill, which could be attributed to education.

A defining assumption of the model is that production output exhibits decreasing returns with incremental inputs in respect of capital, i.e. for every unit of investment, the marginal increase in additional output slows.

The Solow (1956) model effectively accounts for the effects of Y , K and L ; however, modelling the effect of t and the technological improvements associated with time was more problematic. Having a measurable output Y and being able to quantify L by considering per capita income, K and t remain unsolved. The implication of the model was, firstly, that capital accumulation was the dominant source of growth, as one could boost Y by simply increasing K . Secondly, the model implied that the source of growth would taper off over time, as the marginal increase in output per

unit of capital input decreased. This formulated the rule of convergence, “Over time economies with lower per capita income should grow faster than those with higher per capita income, so that incomes will gradually converge” (Solow, 1956).

Up to this point in history, economic theorists tended to follow the Ricardian model, which proclaims that output can better be increased by increasing factor inputs. Robert Lucas (1998) took a different approach, proclaiming that the key might be labour and not capital. Lucas (1998) postulates “that a higher population density may result in a finer division of labour and that the human capital of one person may make another more effective”. Subsequently, Lucas (1998) began transforming the Ricardian framework towards the Smithian view of economic development by suggesting that the focus should be less on the quantities of the input factors but more on the processes that combine them to produce output.

2.2.3 Endogenous or New Growth Theory

The effort to increase the precision of economic growth models gave rise to a new wave of growth theory in the 1980s. A seminal contribution to the new theory was made by Romer (1990).

Romer (1990) was the first to propose that “growth could be modelled with a factor having increasing returns, and that the returns do not need to converge over time”. Romer (1998) focused on human capital and argued that investment in research and development (R&D) could promote greater economic growth.

Romer (1990) suggested that deliberate actions taken by private agents and entrepreneurs who responded to market incentives drove technological progress and hence economic growth. Romer (1998) proposed that innovation causes productivity growth by developing new, but not necessarily improved, varieties of products, rather than a singular solution to a market demand. However, like the earlier Solow (1956) model, Romer’s (1998) viewpoint focuses on economic inputs rather than the process which delivers the output.

The secondary version of innovation-based growth was dubbed the ‘Schumpeterian’ theory. Developed by Aghion and Howitt (1992), as well as Grossman and Helpman (1991), the theory focused on improved innovation, as opposed to simply being different as proposed by Romer (1998). By means of the process, which Schumpeter (1942) called creative destruction, the theory proposes that aggregate output increases as a series of innovations render old products obsolete. Schumpeter (1934) proclaimed that “entrepreneurial insights lay the foundation for additional insights, which drive economic growth” (Schumpeter, 1934).

Consequently, New Growth Theory proclaimed that economic growth could be better achieved, not by saving a large amount of output, but by devoting a large fraction of output to education, research and development to stimulate innovation. This innovation would boost the efficiency with which inputs are utilised, attributing growth to TFP.

The neoclassical framework proposes that, within the production function where inputs are combined to produce an output, the most straightforward method of facilitating or ensuring technological change is to produce said technological advances. R&D can be undertaken by combining the various input functions to produce technological change, but R&D alone does not produce new goods or services. This is the role of entrepreneurs and individuals, as they exercise their ability to recognise, evaluate and exploit opportunities in order to identify profit incentives (Foss and Klein, 2012; Knight, 1921; Mises, 1949).

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Chapter 3 - Entrepreneurship, Small Business and Growth

3.1 Entrepreneurship and Growth

Economists have identified a variety of implications for entrepreneurship including profit, self-employment, the establishment of businesses as well as economic development and growth (Kirzner, 1979). Despite the logical and positive implications of entrepreneurial advancement, economists have until recently disregarded the debate around modelling the entrepreneurial efforts as a primer of growth (Aghion and Howitt, 1998). The main cause of this neglect has been the dominance of the production function since the 1950's (Foss and Klein, 2012).

Historically, there has been a divide between those who have built on either the Ricardian model of accumulating either human or physical capital (Jorgenson and Griliches, 1967; Lucas, 1988) and technological resources (Solow, 1956, 1957), and those who support the Smithian model of economic development, stressing the factors not directly linked to the accumulation of economic resources (Aghion and Howitt, 1998; Hulten, 2001). The latter group proposes that economic growth is fundamentally one of improvements in TFP.

Since the identification of various inexplicable drivers of growth that cannot be measured as a consequence of inputs (Solow, 1956), a significant proportion of research has been devoted to the effects of R&D and technological change on growth (Coe and Helpman, 1995; Romer, 1990). However, R&D alone does not stimulate TFP and hence growth, but the innovations as a result of R&D do (Acs et al, 2008). These innovations in turn are delivered to the market by entrepreneurs and their firms (Baumol, 1993; Ireland et al, 2003; Kuratko and Audretsch, 2009; Schumpeter, 1939).

In addition, innovations are not the solely the product of R&D but can also be produced by recombining the factor inputs in a new way in the uncertain pursuit of profit (Barney, 1991; Rosenberg, 1992; Schumpeter, 1942). The on-going evolution of industrial dynamics in the form of mergers, divestments, new firm formations and spin-offs is evidence of such experimentation (Fagerberg, 1987). Consequently, the optimal combination of resources changes, as technology and knowledge are adopted and scarcities develop in economic resources due to competition (Hayek, 2000). The aggregate result of implementing the innovations and improving the use of resources increases TFP, and is thus considered to be entrepreneurial (Baumol, 1993; Foss and Klein, 2012).

With the more recent support for the Smithian view of growth as a function of factors not directly related to economic inputs, economist have provided evidence that wealth and productivity across

nations is driven by TFP. This is evident from the studies of Rodriguez-Clare (1997), Hall and Jones (1999), and Parente and Prescott (2005), who concluded that cross-country differences in output per employee are driven by differences in TFP.

3.2 Drivers of Entrepreneurship

Increased TFP is the result of entrepreneurship delivering new products and services to the market by new and established firms (intrapreneurship) (Bjornskov and Foss, 2012). New and existing institutions affect the supply, quality and allocation of economic resources and subsequently entrepreneurial efforts (Baumol, 1990).

The number of issues that affect entrepreneurship is very large indeed (Bjornskov and Foss, 2012), and includes: regulatory regimes, intellectual and normal property rights, labour laws, law enforcement, and the availability of finance and capital. Investing in R&D alone does not promote entrepreneurship; R&D may provide new technological advances and innovations, but it does not deliver the result in the form of a product or service to the market (Kirzner, 1997).

This is extremely important to remember when one reviews policy implications (Holcombe, 1998). Reviewing the development of centrally planned economies in the 20th century, it emerges that these economies placed considerable emphasis on developing physical and human capital and technological advances. The collapse of some of these economies by the end of the century proved that it is not only an increase in production factors that encouraged economic growth but rather it is important to promote an environment which facilitate the advances in technological change. (Holcombe, 1998).

Grilo and Thurik (2004) published a series of papers, in which they built what they termed an 'eclectic framework', citing the major determinants of entrepreneurship as being population demography, government intervention, unemployment levels and the risk-reward profile of self-employment versus other types of employment.

Kirzner (1997) proclaimed that "the centrally planned economies of the 20th century failed because central planning excludes entrepreneurship, which is necessarily decentralised in nature. The market system produces this setting, which supports entrepreneurship, as innovations create profit opportunities that are subsequently seized by entrepreneurs, and those entrepreneurial opportunities in turn create more profit opportunities".

An important factor in the support of entrepreneurship is the vehicle through which entrepreneurial activities can be conducted. Entrepreneurship is not limited to small business, as individuals in larger

firms can also undertake entrepreneurial activities. They are known as so called 'intrapreneurs'. According to Drucker (1985), larger businesses cannot survive "unless they acquire entrepreneurial competence".

However, a significant portion of the literature in economics has stressed the importance of entrepreneurship at the micro-level to achieve economic growth at the macro-level (e.g., Glaeser et al, 2004; North et al, 2000; Rosenberg and Birdzell, 1986). Consequently, the small firm has been touted as an outstanding vehicle through which the entrepreneur can channel his or her entrepreneurial ambitions, as the firm is seen as an extension of the individual who is in charge (Lumpkin and Dess, 1996).

3.3 Entrepreneurship and Small Business

Small business is not the only vehicle through which entrepreneurship can manifest, but the two are certainly related. Given that entrepreneurship is a phenomenon concentrating on behaviour, rather than resources (Stevenson and Gumpert, 1991), the phenomenon can occur in both small and large businesses.

Small businesses are seen as an important vehicle for both Schumpeterian entrepreneurs who introduce new products that affect industries, as well as the self-employed who simply run their own business for a living (Wennekers and Thurik, 1999). The latter group includes many franchisees and shopkeepers who run their business as their profession. Both groups of small business owners belong to what Kirchoff (1994) calls the economic core.

Given the wealth of growth theories, the hypothesis that entrepreneurship and small business matter is not new. During the post-war era, small businesses were both a vehicle of entrepreneurship and a source of income and employment for a large portion of the economically active population. However, scholars such as Schumpeter (1942), Galbraith (1967) and Chandler (1977) convinced policy makers that future growth would be attributed to large corporations, as small businesses would fall victim to their own inefficiencies.

In the wake of the major trend of globalisation, Audrestch and Thurik (1999) proposed a shift from managed to entrepreneurial organisational economies. Audrestch and Thurik (1999) argued that the twin forces of telecommunications and computer innovations had shifted routine tasks from high-cost countries to low-cost countries. Audrestch and Thurik (1999) suggestion for counteracting this trend and supplementing growth was to establish knowledge as the main contributor to competitive advantage within an entrepreneurial organisational economy.

Small business and in particular start-ups have been observed to be an excellent vehicle for entrepreneurship, because they contribute to economic growth, employment and social and political stability (Wennekers and Thurik, 1999). With a wealth of evidence to prove that economic activity has shifted from larger corporations to smaller firms during the 1970s and 80s, the most cited and impressive example of this is the observation that the share of employment by the Fortune 500 companies has dropped from 20% in 1970 to 8.5% in 1996 (Carlson, 1999). Confronted with this evidence as well as rising concerns regarding unemployment, job creation and economic growth, policy makers have responded by mandating and promoting new business creation and entrepreneurship (Reynolds, 2000).

3.4 Constraints to SME Development

Even with the recognition that SMEs are vital to stimulating entrepreneurship and therefore economic growth, a number of obstacles inhibit SMEs from realising their full potential. According to a number of authors (Anheier and Seibel, 1987; Aryeetey et al, 1994; Gockel and Akoena, 2002; Steel and Webster, 1991), the most prominent factors affecting SME development include a lack of access to managerial skills, finance, equipment and technology, regulatory issues and international markets.

The regulatory environment too plays a critical role in the establishment and operation of a small business. According to Kirzner (1985), the public regulatory environment is critical to explaining the prevalence of entrepreneurial activity. Kirzner (1985) argued that regulations can both help and hinder entrepreneurs. Kirzner (1985) proposed that entrepreneurs needed clear rules, which had to be predictably enforced. Kirzner (1985) also argued, however, that over-regulation would impose burdens on all firms and that it could thus be viewed as a prohibitive start-up cost.

Similarly, managerial competencies are fundamental to SME development. Martin and Staines (2008) proposed that a lack of managerial competency is the main reasons that new firms fail. The lack of support services or their relatively higher unit cost was also found to hamper SMEs' efforts to improve their management. This is because consulting firms are often not equipped with appropriate cost-effective management solutions for SMEs. This was supported by the evidence provided by Kayanula and Quartey (2000) who found that, despite numerous institutions providing training and advisory services, there is still a skills gap in the SME sector as a whole due to the inability of many entrepreneurs to afford such services.

Networking has also been established as a critical component to SME development as can boost performance as well as increase access to capital and finance (Okten and Osili, 2004). Shane and Cable (2002) concluded that networking reduce information asymmetry regarding negotiations with creditor/debtors and other financiers. Ngoc et al (2009) point out that, “in the absence of effective market institutions, networks play an important role in spreading knowledge about a firm's existence and its practices”.

Investment in up-to-date technology is increasingly important to all firms, not only start-ups and SMEs. Technology helps the entrepreneur to implement their strategy by maximising business opportunities (Philips and Wade, 2008). However, the use of technology also involves costs, where new or even established SMEs experience difficulty in purchasing the necessary technology this may hamper their growth and sustainability (Smallbone et al, 2003).

One important problem that SMEs often face, as indicated previously, is access to capital (Lader, 1996), and such lack of access or availability can be a practical constraint on business growth (Cassar, 2004). Cook and Nixon (2000) concluded that, “notwithstanding the recognition of the role of SMEs in the development process in many developing countries, SME development is always constrained by the limited availability of financial resources to meet a variety of operational and investment needs”.

Chapter 4 – Business Development and Funding

4.1 SMEs and Finance

According to Garwe (2010) “new SMEs can be financed from the founders’ own wealth and/or by accessing external sources of finance, whether from ‘informal’ sources, such as family and friends, or from ‘formal’, market-based sources, such as banks, venture capitalists and private equity firms”. A number of studies have shown that SMEs are financially more constrained than their larger counterparts (Beck et al, 2006) and that obtaining financial backing is a principal obstacle in SME creation (Garwe, 2010).

As previously discussed, it is important that policies should create a business environment that is conducive to the success all firms, large and small. However, a data survey across 80 countries (Ayyagari et al, 2005) found that from a wide range of obstacles, lack of finance, prevalence of crime and lack of political stability were the only obstacles that had a direct impact on firm growth. Moreover, the survey revealed that access to finance was the most robust and thus the strongest amongst these factors.

In a discussion regarding SME development, Beck et al (2006), along with a host of other authors (Djankov et al, 2004; Johnson et al, 2002; Cull and Xu, 2005) suggest the importance of creating a competitive business environment, emphasising the importance of access to finance as a means of lowering the barrier to forming a start-up company and subsequently initiating the entrepreneurial creative destruction process proposed by Schumpeter (1942). The existing evidence therefore suggests the importance of access to finance in the overall business environment and its potentially constraining influence on both firm entry and growth.

In developing countries, SME have been hailed as forming the base for private sector growth (Hallberg, 2001). However, in both developed and developing nations, SMEs have been found to have less access to finance, which subsequently constrained their operation and growth (Berger et al, 1998; Galindo et al, 2003). This was reiterated by the World Business Environment Survey (WBES, 2000), which surveyed 10,000 firms in 80 countries around the world.

From the WBES (2000), Schiffer and Weder (2001) conclude that smaller firms face greater growth obstacles than their more developed competitors. Beck (2006) also pointed out that size, age and ownership type of smaller firms were the most reliable predictors of financing obstacles. WBES (2000) revealed that in a world with fixed transaction costs and information asymmetries, smaller firms required smaller loans, though they had higher transaction costs and premiums, with limited transparency and less collateral to offer. Beck (2005) found further that the greater obstacle to

access finance faced by smaller firms resulted in slower growth. Therefore, not only did smaller firms face greater obstacles, but these obstacles were more detrimental to their growth than was the case with more developed firms.

4.2 Private Equity and Venture Capital

Various authors, politicians and analysts as well as bureaucrats have widely proposed the importance of venture capital as a stimulant for growth, not only in particular regions, such as Silicon Valley in the United States, but as a country as a whole (Botazzi and Da Rin, 2002). Rapidly growing entrepreneurial enterprises are viewed as important sources of innovation, employment and productivity growth, and they are thus more likely to benefit from access to finance in the form of investment. Several governments, including those of Canada, Chile, Israel and Germany, have promoted increases in their supply of venture capital in order to stimulate economic growth (Cumming and MacIntosh, 2007).

Venture capital is a subsector of the larger private equity investment sphere. Private equity can be loosely defined as investing in non-listed companies or business ventures. Private equity investments can occur during various stages of a business's life cycle as indicated in Figure 1 below. The business life cycle is often referred to as the 'J' curve (Meyer, 2008). The name refers to the shape of the net cumulative cash position of a business throughout its ideal life cycle.

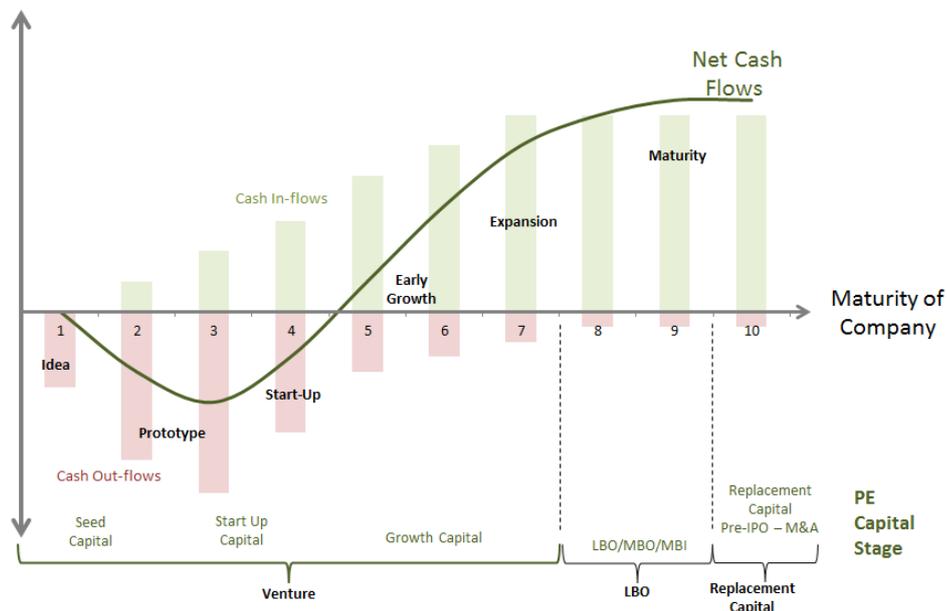


Figure 1 - J Curve and Private Equity Funding

Private equity and venture capital firms have evolved towards a common organisational structure (Samila and Sorenson, 2011). Each firm has a number of investors, called limited partners, which include wealthy individuals or family offices, college endowment funds, institutional investors, pension funds and insurance companies. The venture firm is known as the general partner, and it actively manages the funds of the limited partners, looking for attractive investments to maximise returns. In exchange for their services, the firm charges a management fee as a percentage of the funds under management, as well as a share in the profits above a certain threshold return. The general partner therefore has strong incentives to invest wisely and grow the business.

The impact of the private equity industry on business and economic growth has been the subject of extensive debate and academic studies over the past decade. Studies have revealed some interesting facts regarding the socio-economic impacts of private equity investments and the industry as a whole. The most complete review of the global industry has come in the form of a series of working papers sponsored by the World Economic Forum since 2007 (WEF, 2010). These papers have reviewed scholarly articles and examined the impact of private equity investments across 20 industries in 26 major nations between 1991 and 2007.

These studies have revealed the following on a global scale:

- ✓ Industries with private equity influence have higher growth rates of production and value add, with an average annual growth rate that is 0.906% higher than non-private-equity industries (WEF, 2010).
- ✓ Private equity industries are less sensitive to industry shocks. Hence, a swing from +5% to -5% (10% total difference) in aggregate growth rates translates into a swing from 5.6% to -2.4% (8% total difference) in the growth rates for private equity industries (WEF, 2010).
- ✓ An increase in private equity investments of 0.1% of GDP is associated with an increase in real economic growth of 0.2% for buy-outs, 0.3% for venture capital and more-so 0.96% for early-stage investments (Meyer, 2010).
- ✓ Private equity aids industry entry in otherwise stubborn high R&D industries, accelerating growth and development (Popov, 2009).

Consistent with these findings is the fact that companies backed by venture capital enjoy a higher level of employment and sales growth than the average start-up (Jain and Kini, 2005; Engel &

Keilbach, 2007), and consequently an expansion in the availability of venture capital stimulates macro-economic growth (Greenwood and Jovanovic, 1990; Keuschnigg, 2004).

However, even with the evidence supporting an increase in venture capital, some propose that companies who receive venture capital would receive funding from other sources in its absence. Evans and Jovanovic (1989) and Blanchflower and Oswald (1998) argue that start-ups receiving venture capital do not have collateral to obtain other forms of backing or formal financing, with the odds of becoming an entrepreneur rising with household wealth. Therefore, a lack in early stage business financing may prevent many from starting their own businesses, which in turn hinders growth, as good ideas do not receive the necessary financial support (Keuschnigg, 2004).

Secondary to the support of new businesses, venture capital can create valuable spin-offs in at least two ways (Samila and Sorenson, 2011). The first is the demonstration effect: entrepreneurs confessed in interviews that they were encouraged to start their own venture upon seeing someone else do it (Sorenson and Audia, 2000). The second is that, due to the experience gained from being an employee within a venture capital backed firm, future entrepreneurs absorb the knowledge on how to design and manage their own firms.

Samila and Sorenson (2011) found empirical evidence of these effects, as they concluded that an increase in the supply of venture capital stimulates the development of new firms. Samila and Sorenson (2011) proposed that would-be entrepreneurs incorporate the availability of funds in their calculations, when they contemplate starting their own business. Samila and Sorenson (2011) also found that an increase in venture capital in a region raised the employment level as well as aggregate income.

The empirical findings of Samila and Sorenson (2011) were synonymous with theoretical discussions to the effect that an increase in financial intermediation improves the efficiency with which capital is allocated, and hence stimulates growth (Greenwood and Jovanovic, 1990). An important outcome of Samila and Sorenson's (2011) empirical study was that venture capital fills a definite 'niche' need, in that it allocates capital to uncertain ideas and innovations, which might not be funded from formal sources, such as banks. Moreover, Samila and Sorenson (2011) concluded that venture firms provide added benefits in the form of training and expertise during the 'incubation period', which cannot be sourced from informal funding sources, such as 'angel' investors.

Chapter 5 – Summary of Research Issues and Global Evidence

As is evident from chapter 2, economic growth is a multidimensional phenomenon, i.e. the result of a combination of social, cultural, political and economic factors. Section 2.2.3 also illustrated how popular theory has shifted from the Ricardian view of economic growth as a function of measurable inputs to the Smithian view, which places greater emphasis on economic agents and the delivery of new products to the market as a response to economic incentives.

Chapter 3 revealed how the entrepreneur as an economic agent is gaining increasing importance as the provider of profit and employment and ultimately increasing economic growth and development. The connection between small business and entrepreneurship was also discussed in section 3.3 with the SME being identified as an excellent vehicle through which the entrepreneur introduces their products and services to the market. However, as is evident from the global evidence reviewed in section 3.4 a number of obstacles inhibit SME growth and development.

Chapter 4 expands on the issues of access to finance as one of the principal elements that hinder small business development. Section 4.2 provides global evidence that venture capital has the ability to fulfil a niche funding need where formal sources of finance are not available to entrepreneurs starting their own businesses. The evidence given in section 4.2 reveals that venture capital also improves the chances of survival of start-ups by providing access to markets, networks and expertise that are not available from informal funders, such as family and friends.

The remainder of the dissertation reviews the relevant research issues within a South African context in an attempt to answer the question at hand, viz. whether the South African venture capital industry is sufficiently capitalised to provide the necessary support for SME development.

The next chapter (chapter 6) will initiate by examining economic development in South Africa. Chapter 7 will continue by reviewing the role of SMEs and entrepreneurship in a local context, followed by a detailed review of the local private equity and venture capital industry in chapters 8 and 9. Comparisons will be made with similar industries in both developed and developing economies in order to arrive at relevant conclusions.

Chapter 6 – South Africa and Economic Development

In a review of the drivers of sustainable growth in South Africa, Fedderke (2010) makes explicit mention of the dual economies of South Africa. This concept gained attention after former President Thabo Mbeki's address to the National Council of Provinces in 2003, when he said, "The first economy is modern, produces the bulk of our country's wealth, and is integrated within the global economy. The second economy is characterised by underdevelopment, contributes little to the GDP, contains a big percentage of our population, incorporates the poorest of our rural and urban poor, is structurally disconnected from both the first and the global economy, and is incapable of self-generated growth and development."

According to Fedderke (2010) "the structure of the South African economy has arguably come to resemble the distribution of economic activity of industrialized nations more than that of emerging markets or developing countries". This is because the primary producing sectors have been in decline, with economic growth stemming primarily from service industries, which is a characteristic that is synonymous with more developed and industrialised countries.

Figure 2 below illustrates the decline in contribution by the primary commodity producing sectors to the South African gross domestic product (GDP). Data up to 2008 was reviewed to remove distortions caused by the global economic crisis. The loss in economic output from the primary producing sectors was initially supplemented by the manufacturing sector. However, this sector peaked in the 1980s, with a combination of agriculture, forestry and fishing as well as mining declining from 22,05% to 7,42% by the 2004 – 2008 period.

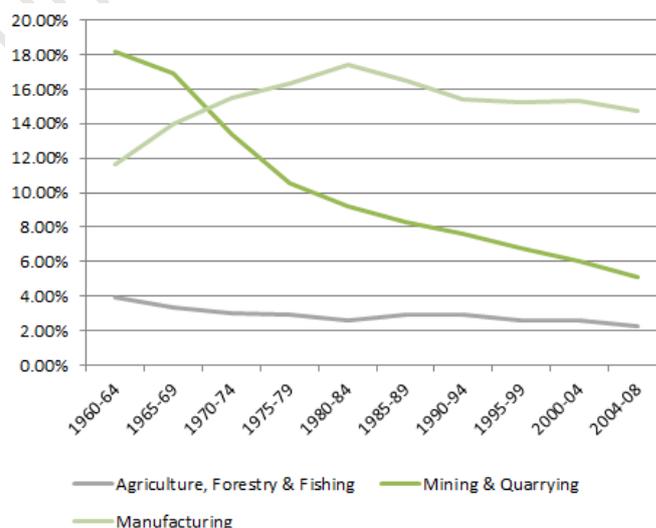


Figure 2 – GDP Sector Contribution – SA Reserve Bank, 2012

Consequently, the private sector service industries became the source of economic growth, and continued its growth path in the 1990s and into the new millennium (see figure 3 below).

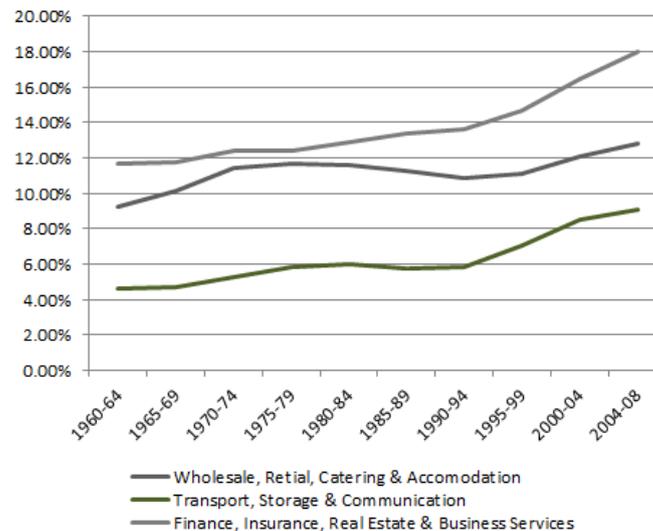


Figure 3 - GDP Sector Contribution - SA Reserve Bank, 2012

When considering employment creation in South Africa these trends are reinforced. This is evident when considering that by 2008 30% of total employment in the non-agricultural sectors was within the financial services sector. Therefore whilst emerging BRIC countries are industrialising, South Africa's economy seems to have the characteristics of a high-income (industrialised) country (Du Plessis & Smit, 2009).

This structure of South Africa's economy has also had an effect on the country's growth. Over the past number of decades South Africa's growth has been attributed to increased output due to efficiency gains (as measured by total factor productivity) rather than factor accumulation (increased output due to greater inputs in terms of labour and capital) synonymous with developing countries (Fedderke and Simkins, 2009).

The viewpoint is that South Africa is maintaining a formal sector of the economy that resembles that of industrial nations whilst pairing this with a second informal economy, which hosts South Africa's urban and rural poor and excludes these individuals from the benefits of their formal counterpart (Fedderke, 2010).

Evidence of this viewpoint is the facts that South Africa's birth, fertility and urbanization rates (see table 1) align the country more with emerging countries than with their industrialised and developed counterparts. South Africa's income inequality, as measured by the Gini Index (see table 1), reflect

the income disparities at hand, even in comparison to emerging Latin American countries with similar development issues. From these lifestyle indicators, one can infer that much of SA's population has not had access to returns from the formal economy.

Table 1 - World Development Indicators - World Bank, 2012

Country	Birth Rate	Fertility	Urban Population	Gini Index
	Per 1000 People	Births per Woman	% of Total	
Brazil	20	2.3	83	58
China	13	1.9	38	47
India	25	2.9	28	37
Russia	10	1.3	73	43
South Africa	25	2.8	58	58
Countries by Income Group				
Low Income	30	3.7	29	
Middle Income	17	2.1	52	
High Income	12	1.7	77	

Of greater concern than the indicators, as serious as they are in their own right, is the fact that policy interventions designed to bridge the gap have had little or no effect. In an effort to stimulate growth through efficiency gains, the total factor productivity (TFP) policy has expended considerable efforts on human capital creation.

The table below illustrates that South Africa's proportion of GDP spent on education is greater than that of Russia and Brazil and is only marginally behind that of high income countries. When considering the expenditure as a proportion of total government expenditure, the comparison is more troublesome.

Table 2 - Government Expenditure - World Bank, 2012

Country	Spend on Education	
	% of GDP	% of Govt Exp
Brazil	4.22	11.38
China	-	-
India	4.03	11.73
Russia	3.39	11.26
South Africa	5.32	19.08
Countries by Income Group		
Low Income	3.09	-
Middle Income	4.3	14.62
High Income	5.57	12.95

Even with these considerable government intervention initiatives to stimulate growth, there has been limited success (Fedderke, 2006).

This is perhaps best portrayed by the fact that South Africa's competency in Mathematics and Science amongst 8th graders, as measured by the Trend in Mathematics and Science Study (TIMMS, 2011), has declined consistently over the 1995-2003 period.

With policy geared towards human capital accumulation, the decline in the overall growth rate of real output (see below) has been associated with the observed decline in the importance of capital formation as a factor of growth (Fedderke, 2005). What is more concerning is that, should this trend continue and South Africa's newly educated population enter the developed economy, a lack of investment in job creation may leave many of these graduates unemployed.

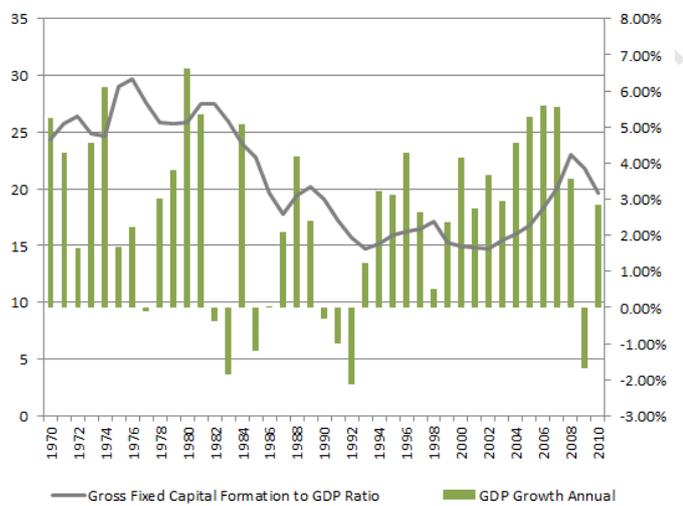


Figure 4- GDP and Physical Capital Comparison - SA Reserve Bank, 2012

Chapter 7 – South Africa, SMEs and Entrepreneurship

Within South Africa, the defining criteria of SMEs are illustrated in the schedule of size standards tabulated below in table 3.

Table 3 - SME Qualification - Stats SA, 2012

Type of Firm	Employees	Turnover	Balance Sheet
Small	1-49	Max R13m	Max R5m
Medium	51-200	Max R51m	Max R19m

The creation of new SMEs is seen as a significant factor in solving South Africa's development issues. Empirical studies have shown that SMEs contribute to over 55% of GDP and over 65% of total employment in high-income countries. SMEs and informal enterprises account for over 60% of GDP and over 70% of total employment in low-income countries, while they contribute about 70% of GDP and 95% of total employment in middle-income countries (Ayyagari, 2005). Within the South African economy, by comparison, SMEs are responsible for 52% to 56% of the national GDP, constituting 56% of private sector employment (Stats SA, 2012).

Table 4: GDP and Physical Capital Comparison - SA Reserve Bank

Country	Contribution to	
	Employment	GDP
South Africa	52%	56%
Australia	50%	23%
Germany	70%	43%
Netherlands	59%	50%
France	63%	62%
Turkey	61%	28%
US	53%	48%
UK	56%	51%

However, South Africa is also plagued by a 75% failure rate among SMEs, which is one of the highest failure rates in the world (Dickinson, 2007). Abor and Quartey (2010) attribute the high failure rate to a number of obstacles including "finance, lack of managerial skills, equipment and technology, regulatory issues, and access to international markets".

In a country that suffers from an official estimate of 25% unemployment (Stats SA, 2012) amongst the economically active population, job creation remains a principal concern for government in its pursuit to encourage economic growth. One of the best ways of addressing unemployment is to leverage the employment creation potential of small businesses and to promote small business development (Finmark Trust, 2006). However, according to the Global Entrepreneurship Monitor

(GEM, 2011) survey, South Africa lags behind its counterparts in early stage entrepreneurship activity.

In 2010, South Africa ranked 27th out of 59 countries, with its total early-stage entrepreneurial activity (TEA) rate of 8.9%, which is below the average (11.9%) of all participating countries (GEM, 2011). In all the previous GEM surveys, South Africa’s performance in terms of relative position has consistently been below the median. Nonetheless, South Africa’s 2010 TEA rate of 8.9% is a significant improvement on the 2009 TEA rate of 5.9%; however, it is still below the average for all efficiency-driven economies (11.7%), as well as significantly below the average for all middle- to low-income countries (15.6%).

According to the GEM (2011) data which compares the entrepreneurial activities of participating countries, a country at South Africa’s stage of economic development would be expected to have a TEA rate in the order of 15%, over 60% more than South Africa’s actual rate of 8.9% as illustrated below.

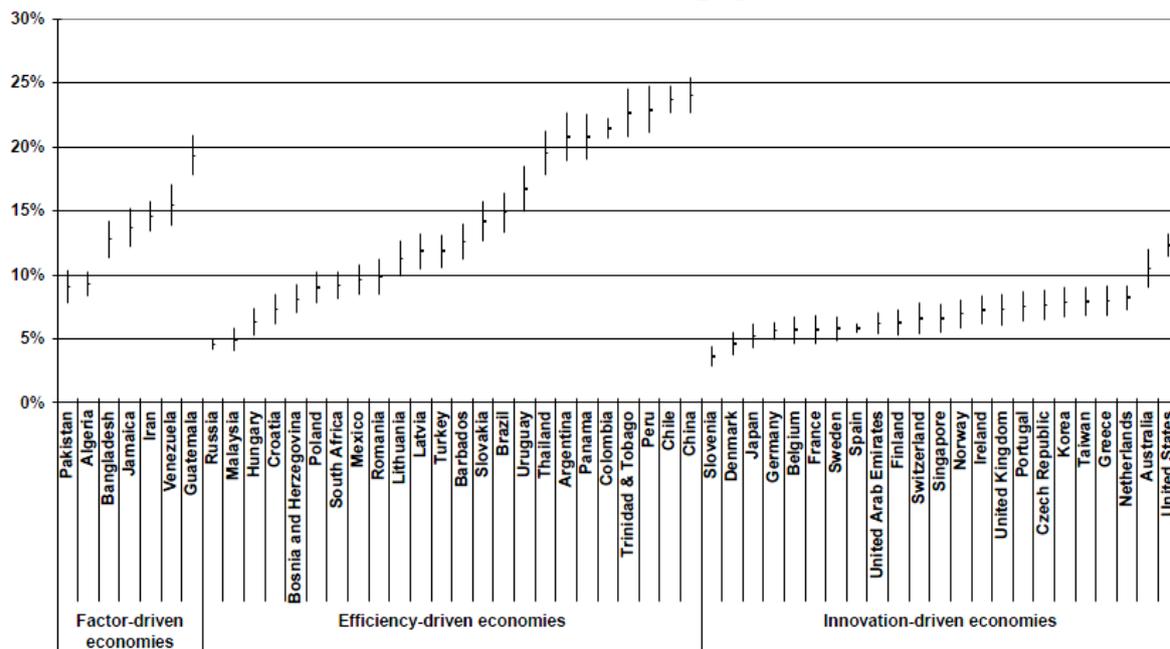


Figure 5- Total Entrepreneurial Activity - GEM, 2011

With the high failure rate amongst SMEs, Gree and Thurnik (2003) argued that, merely to sustain the SME sector as well as its contribution to the national economy, new companies have to be created at the same rate as they are dissolved. Intuitively, it makes sense that, in order to harness the contributions of SMEs to promote economic growth, rather than just sustaining current output,

policies should be promoting the establishment and growth of the SME sector (Von Broembsen et al, 2005).

However, even with the observed contributions of new SMEs to economic development, South Africa has one of the highest failure rates in the world. About 75% of new SMEs in South Africa do not become established firms; the probability of a new SME surviving beyond 42 months is less likely in South Africa than in any other GEM sampled country (Von Broembsen et al, 2005).

An advantage of SMEs is that unlike their larger counterparts they have the ability to quickly adapt to new market conditions. Should they survive the critical early business development stages, they are also more able to withstand adverse economic conditions because of their flexible nature (Kayanula and Quartey, 2000).

Due to their regional dispersion and their labour intensity, it is furthermore argued that small-scale production units can promote a more equitable distribution of income than large firms can. They can also improve the efficiency of domestic markets and make productive use of scarce resources, thus facilitating long-term economic growth (Kayanula and Quartey, 2000).

SMEs are considered to be more labour intensive than their larger counterparts resulting in lower capital costs associated with job creation (Anheier and Seibel, 1987; Liedholm and Mead, 1987; Schmitz, 1995). Accordingly, SME are critical to promoting employment, income stability and ultimately growth. Consequently, the development of new SMEs is critical to the prosperity of South Africa. Should South Africa be unable to successfully promote SME development, the country risks economic stagnation and even higher levels of unemployment (Herrington, 2006).

A recurring obstacles inhibiting SME development is access to capital (Lader, 1996), where a lack of access or availability can constrain business growth (Cassar, 2004; Cook and Nixson 2000). FinMark Trust (2006) finds that only 2% of new SMEs in South Africa are able to obtain bank loans. For instance, Foxcroft et al. (2002) find that 75% of applications for bank credit by new SMEs in South Africa are rejected. Stiglitz and Weiss (1981) termed the lack of finance the 'finance gap', pointing to the fact that banks are unable to finance early stage companies because of the banking business model.

This banking business model is one of providing debt finance based on securitised assets or cash flows. Consequently, given the lack of physical assets and positive cash flows on the part of early

stage companies and SMEs – as well as the volatile nature of these cash flows – banks are unable to provide finance for them. Hence, in order to attain the necessary asset base and cash flows, SMEs require an upfront capital injection in the form of equity (Garwe, 2010).

Dickinson (2007) proposes that private equity may serve a useful role in filling the gap between self-financing and conventional capital market activity for Africa's dynamic and growing private enterprises. Dickinson (2007) argues that companies in Africa still have great difficulty raising capital at competitive rates through conventional channels, such as borrowing from banks or issuing public securities.

Private equity, through its investment in local firms and enterprise, can perhaps play a catalytic role and to do so more efficiently than other forms of foreign investment, where knowledge spill-overs are not guaranteed (Dickinson, 2007). The impact of private equity on business development extends beyond mere financial backing to contributing business expertise, training and access to networks, as well as a direct transfer of skills – thereby raising the efficiency of the sectors that they enter (Dickinson, 2007).

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Chapter 8 – Private Equity in South Africa

Optimistically, it would seem that South Africa is amongst the leading nations regarding private equity investment, measured by investment activity as a percentage of GDP (see Figure 6 below). One would assume that this would have a resounding impact on the future growth path of South Africa. On closer inspection, however, worrisome trends become evident.

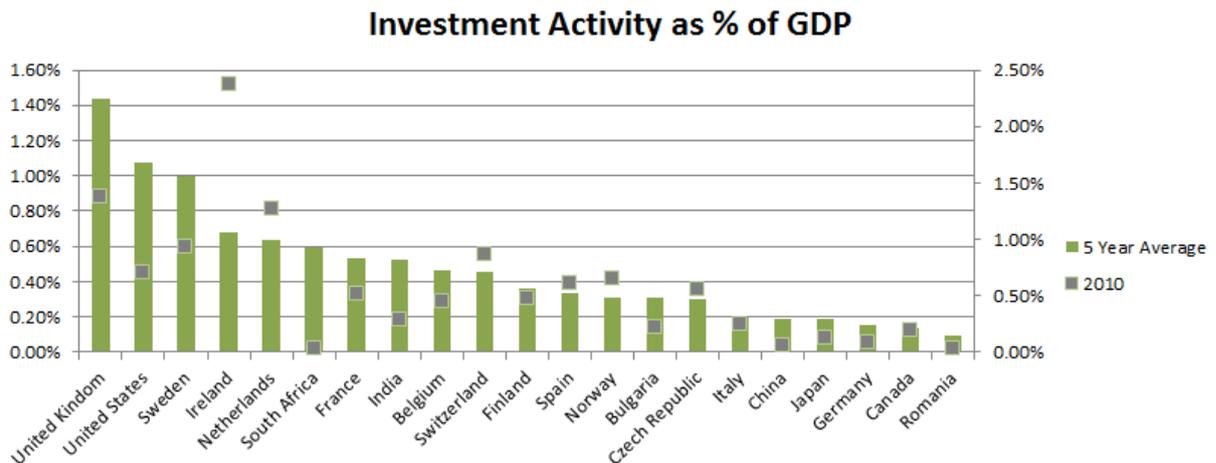


Figure 6 - Investment Activity - SAVCA, 2011

Figure 7 reveals that the majority of funds under management are employed in later stage investments, with only R3 billion, less than 4% of total funds, being utilised for early stage investments.



Figure 7 - Funds Under Management - SAVCA, 2011

The proportion of funds under management is a direct consequence of the particular fundraising activity with fund managers earmarking the funds for later stage investments from the outset, as illustrated below. Once more, of the R3 billion invested in early stage ventures, R2.1 billion was the result of a single year - 2008.

Fundraising Activity (R Billion)

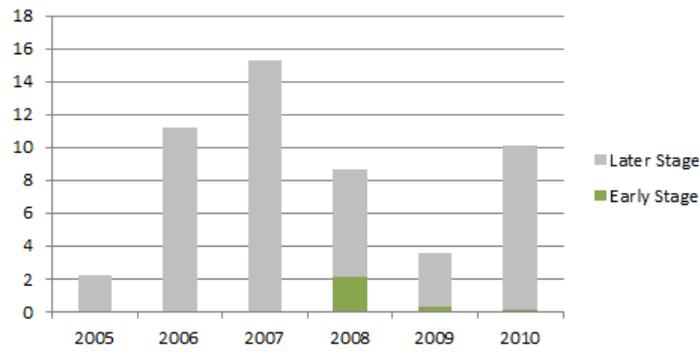


Figure 8 - Fundraising - SAVCA, 2011

A more focused review of the two stages illustrated above reveals that the majority of funds are being applied as expansion and development capital (Figure 9), translating in SMEs having to find early stage funding elsewhere.

Investment Activity by Stage

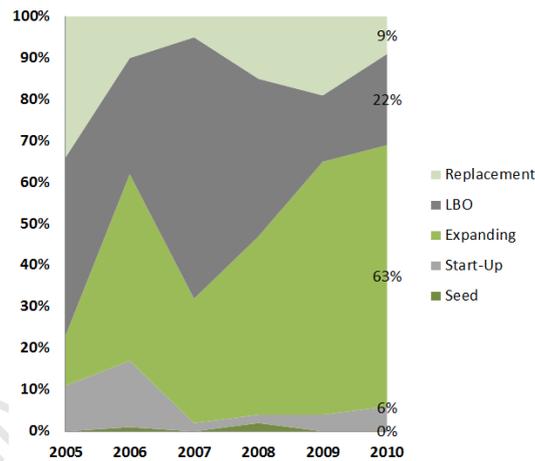


Figure 9 - Investment Activity by Stage - SAVCA, 2011

An interview conducted by Hendrik Snyman (2012) with JP Fourie from the the South African Venture Capital Association (SAVCA) revealed, however, that the investments apportioned to development were predominantly geared towards later stage expansion investments, representing stage 7 and higher on the J-curve (Chapter 4, Figure 1). Evidence of this hypothesis is the average size of the deals, viz. increasing from R60.8 mil in 2009 to R67.9 mil in 2010; these figures are not representative of typically smaller developmental capital investments (JP Fourie, SAVCA). These later stage investments require the companies to have survived the initial stages of the business lifecycle on their own, with little or no support, as is evident from the lack of early stage funding.

As illustrated by figure 10 seed capital enjoys almost no interest, with limited activity within the start-up stage. This means that private equity investment into the SME sector, which contributes 56% to the national GDP and 50% to employment, dissapointingly constitutes less than R400 mil – or 0.014% of South Africa’s GDP in 2010.

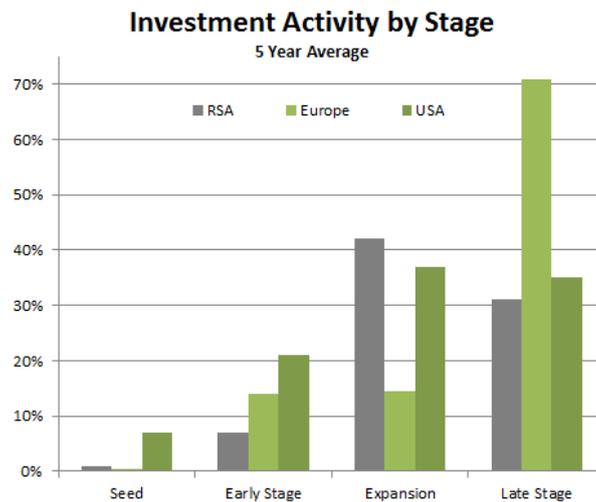


Figure 10 - Investment Comparison - SAVCA, 2011; NVCA, 2011; EVCA, 2011

In comparison both the European and American private equity industries commit a greater portion of funds to early stage investments. The significant portion of seed capital committed by the US private equity industry is allocated to developing internet start-up industries (NVCA).

As a result of the overwhelming interest of South African fund managers to invest in the later stage of the private equity spectrum, competition for suitable deals is fierce. Consequently, given both the increased level of competition as well as the uncertain economic climate, fund managers have been struggling to invest their funds in suitable enterprises. This is evident from the increasing proportion of undrawn commitments, funds which have been raised but not yet invested, within the later development stages of enterprises, as illustrated in figure 11.

This is placing pressure on fund managers to achieve higher returns and overcome the ‘cash drag’¹, to counteract the lower return on cash, and to attain a suitable threshold return that enables fund managers to make a profit.

¹ Used to describe the need for greater returns to counteract the lost interest or return not achieved whilst the money was not invested.

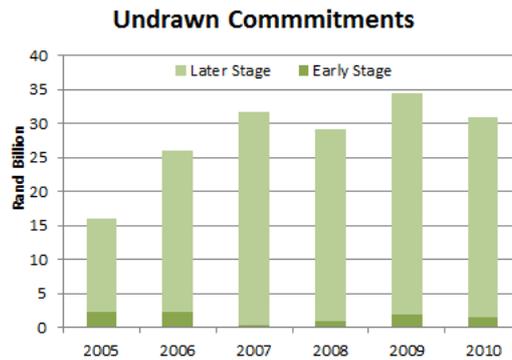


Figure 11 - Uninvested Funds - SAVCA, 2011

With the earlier review of the economic importance as well as return benefits associated with early stage investments, “An increase in private equity investments of 0.1% of GDP is associated with an increase in real economic growth of 0.2% for buy-outs, 0.3% for Venture Capital and 0.96% for Early-Stage investment” (Meyer, 2010).

It would seem evident that the South African private equity industry is neglecting the early stage investment space and is not providing the necessary bridge for the ‘funding gap’.

The bias towards later stage funding may be the result of the source of the funds. Figure 12 shows that a major portion of foreign funding is sourced from the European Union, a region which, according to figure 10 already has a lower threshold for early stage investments.

As a result, fund managers may be unable to convince the foreign investors of their ability to successfully screen start-up ventures as well as the respective entrepreneurs in what may be perceived as a somewhat risky emerging market.

Geographic Source of 3rd Party Funds

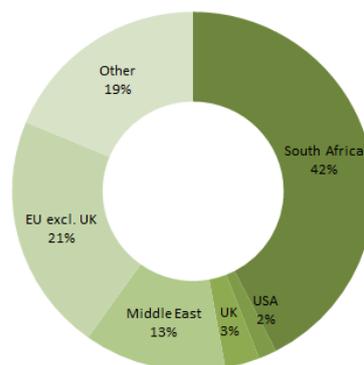


Figure 12 - Sources of Funds - SAVCA, 2011

In 2010, the largest portion of third party funds (37%) was raised from government, aid agencies and direct foreign investments (DFIs). All the monies raised from banks, insurance companies and funds of funds were raised locally, although they represent the minority of investments (see figure 13 below).

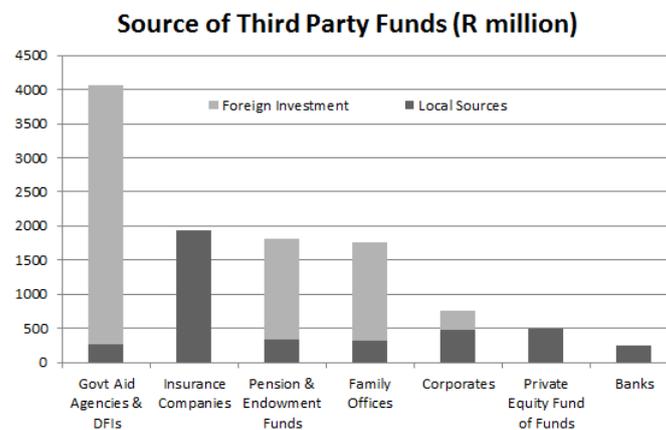


Figure 13 - Source of Funds - SAVCA, 2011

South African regulations governing pension funds, which are the primary source of asset management funds, traditionally limited their participation in private equity assets. As a result, asset managers failed to acquire the necessary skill set to screen private equity funds and opportunities. Consequently, South Africa has been lagging behind its competitors with regard to fundraising activity, except in Latin America, as illustrated below in figure 14 below. However fundraising may increase over the coming years with the amendment of the Pension Funds Act (Regulation 28) permitting greater participation by pension funds in the private equity asset class.

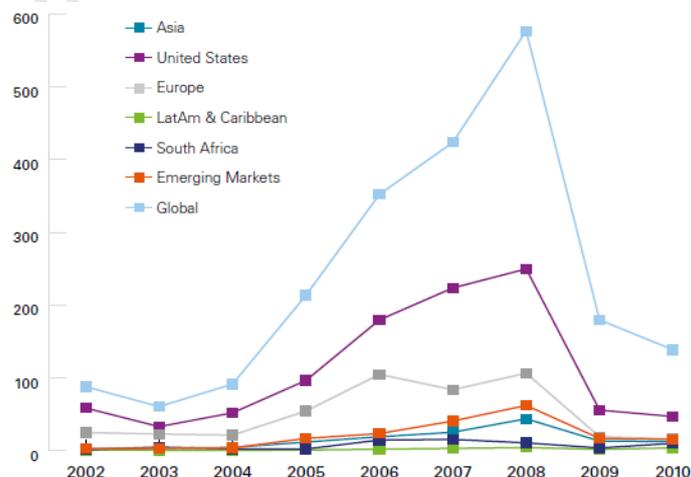


Figure 14 - Fundraising Comparison - SAVCA, 2011, pg 31

The revised regulations came into effect on the 1st of July 2011; they outline the investment limitations as a percentage of the aggregate fair value of the pension fund’s assets (see table 5). In terms of these regulations, the allocation to the combination of hedge funds and private equity asset classes is limited to 15%.

Table 5- Reg 28 Investment Limits - Government Gazette

Hedge Funds & Private Equity Funds		Limits
		15%
Hedge Funds		10%
Fund of Hedge Funds		5% per fund of hedge funds
Hedge Funds		2.5% per hedge fund
Private Equity Funds		10%
Fund of Private Equity Funds		5% per fund of private equity funds
Private Equity Funds		2.5% per private equity funds

According to SAVCA’s Annual Report 2011:

“This is very important, as when international investors consider investments into private equity funds, a key consideration for them is the amount of local participation by investors into the industry and into the specific funds that they may look to invest into”. (SAVCA, 2011, pg 30)

Chapter 9 - Venture Capital in South Africa

The SAVCA (2010) Venture Capital survey defines the operators within the South African venture capital industry as:

- **Angel investors:** Private investors, often with entrepreneurial experience, who invest some of their own money and experience in small entrepreneurial ventures.
- **Independents:** An independent firm that raises and manages venture capital funds from a number of third party investors and capital sources.
- **Captive (government):** An investment firm/operation tied to a single fund/capital source, raising (or drawing) its funding from National Treasury or the public sector.
- **Captive (family office):** An investment firm tied to a single fund/capital source, raising (or drawing) its funding from a private family.
- **Captive (corporate venturing):** The process by which a large company (private or public) invests in new business opportunities (start-ups or small businesses) for strategic reasons.
- **Captive (single sponsored fund):** An investment firm/operation tied to a single fund/capital source.

Prior to 2000, South Africa experienced an upswing in venture capital transactions in accordance with the infamous dot.com boom. With the subsequent burst of the bubble, venture capital investment in the country remained stagnant until 2004/2005, when there was increased involvement from the public sector as well as from third party funds.

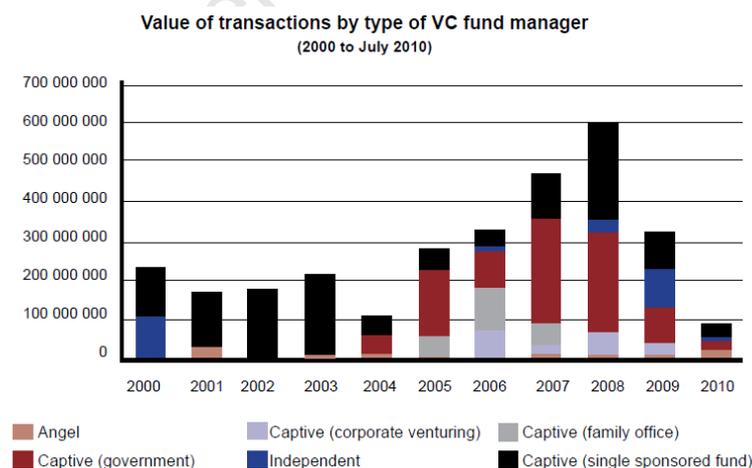


Figure 15 - VC Investment - SAVCA, 2010, pg 15

Angel investors are seen as a critical component to early stage funding in SA, having contributed 5% in terms of value to venture capital between 2000 and 2010 (see figure 16). Non-government related

venture capital fund managers concluded the majority of transactions between 2000 and the first half of 2010 (71% of total investment value and 56% of total number of transactions).

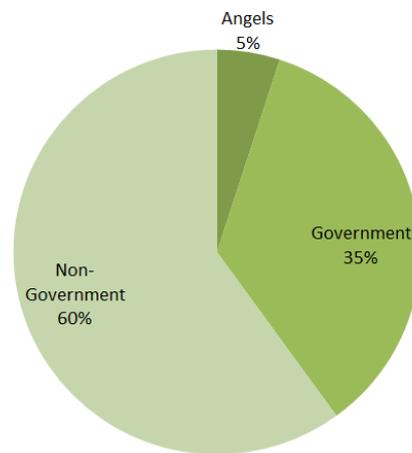


Figure 16 - VC Sources - SAVCA, 2010

Proportionally, government related venture capital fund managers and angel investors account for a larger share of deal flow when considering the number of transactions as illustrated in Figure 17, compared to the value of the transactions. This conforms to expectations with angel investors and public-funded venture capital fund managers normally interested in, or mandated to invest in early stage ventures, where the size of investment is typically smaller than later stage venture capital transactions.

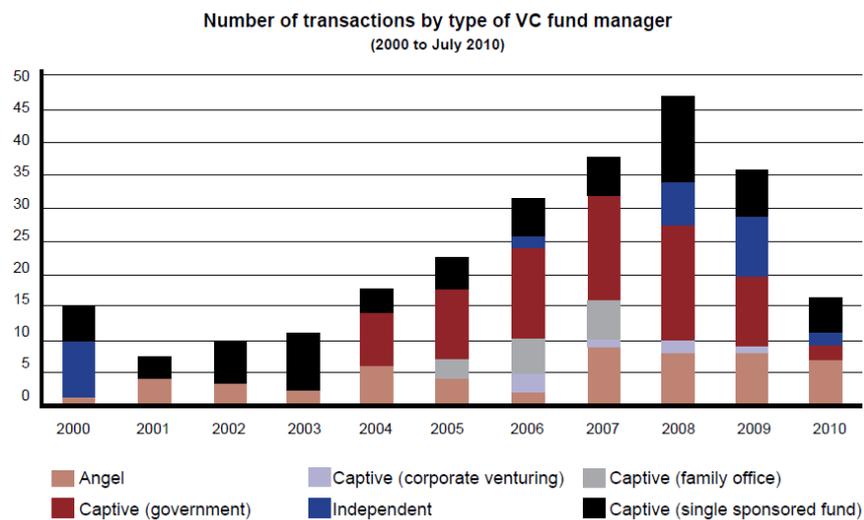


Figure 17 - Investment Transactions - SAVCA, 2010

Government's activity in early stage venture capital is reassuring to economic development. However, its total value of R639 million, invested between 2000 and 2010, equates to only R64 million per year, which is a small amount, considering the role of SMEs in enabling employment and fostering economic growth.

When reviewing investment activity by stage of investment (see figure 18 below), it is evident that fund managers, who target the venture capital stage, favour providing start-up capital. This may be viewed as a valid contribution to helping businesses survive the income deficit years of the business lifecycle. What is worrying, however, is that this 50% of the R3 billion under management in the early stage investment space attributed to start-up capital equates to less than 2% of funds committed to later stage investments.

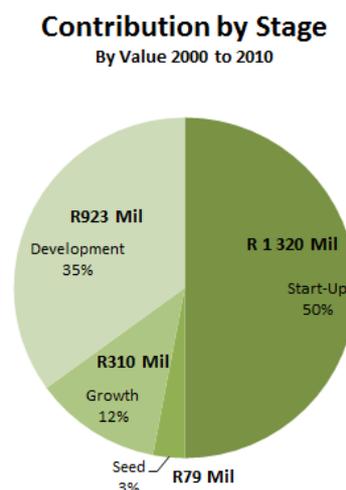


Figure 18 - VC Preferences - SAVCA, 2010

Even though there is a healthy distribution between the types of investors according to the stages of investment they prefer within venture capital, a limiting factor for job creation and economic growth is the lack of total funds committed to early stage investments. As with the international private equity industries, the sector has had a profound and measurable impact on the social and economic well-being of South Africans through the companies in which they invest.

These were the findings of a survey conducted by the Development Bank of South Africa in conjunction with SAVCA (SAVCA, 2009). "A total number of 327 businesses that have received private equity backing responded to the survey; overall, the findings indicate a significant and positive impact" (SAVCA, 2009). According to the survey the social benefit of private equity investment is clearly identifiable. Of the portfolio companies who responded, 54% claimed that the introduction of BEE was only viable due to the private investment. Figure 19 adds impetus to the

argument that private equity investments through BEE plays an important role in bridging the social divide within South Africa.

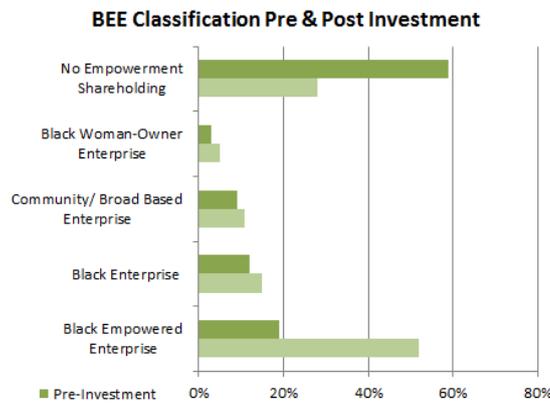


Figure 19 - BEE Empowerment - SAVCA, 2009

Within the themes of business growth and sustainability, important factors in the development of SMEs, as previously discussed, respondents reported that private equity had made a positive contribution to their business. The majority (64%) of respondents felt that these investment(s) facilitated accelerated business growth; 54% believed the investments allowed black economic empowerment, and 47% believed they would not have survived without private equity financing (see figure 20 below).

Private Equity Contribution

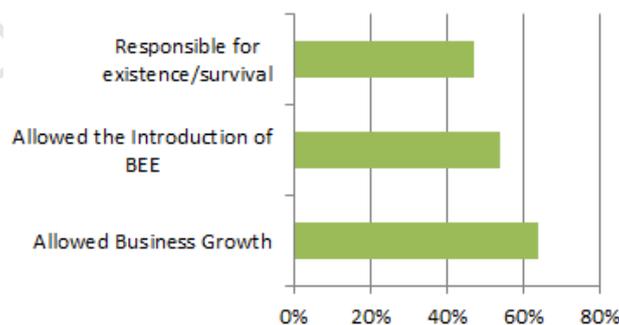


Figure 20 - PE Contribution - SAVCA, 2009

It was evident within the international sphere that private equity allows businesses to enter research intensive industries, thereby boosting technological advancement and innovation. This was also evident locally, with 69% of businesses who had received private equity backing introducing new products and/or services to the market in the last two years. These companies have also shown

steady growth in a number of business areas; the most important of these include exports, sales, EBITDA [earnings before depreciation, amortization, interest and tax], employment and capital expenditure as illustrated in Fig 24.

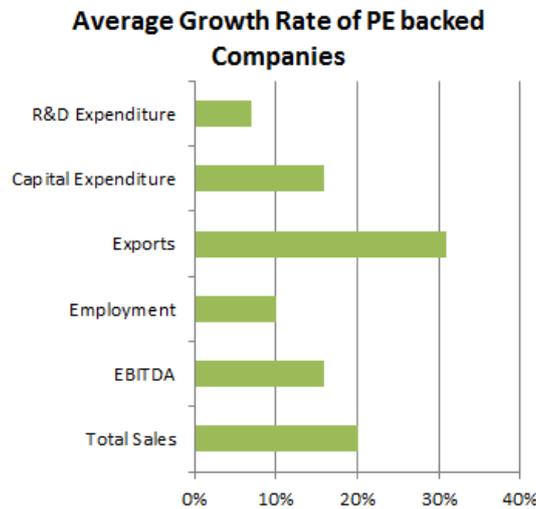


Figure 21 - Growth Rates - SAVCA, 2009

Companies who received seed and early staged backing showed even greater growth in most categories, albeit from a low base. Exports grew by 102%, more than doubling in each year over the period under consideration. EBITDA grew by 32%, whilst capital expenditure and total sales on average grew by over 20%.

In comparison to its peers of listed companies on the Johannesburg Stock Exchange SAVCA (2009) found that “the growth rates achieved in sales, profit and employment by private equity backed businesses were ahead of those recorded for the public market. It was only in investment growth that the public market out-performed private equity backed businesses”.

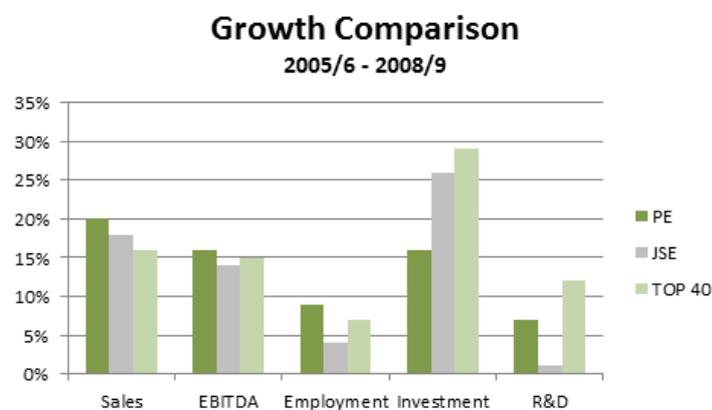


Figure 22 - Growth Comparison - SAVCA, 2009

| It is evident from the data that private equity has had a discernible impact on the growth and wellbeing of the companies that they have backed, even more so than is the case with its corporate counterparts. This phenomenon is similar to that experienced in the developed world, where private equity investments have been highlighted as a critical components of economic development.

Chapter 10 - Conclusion and Recommendations

As was evident from chapter 6 South Africa is host to dual economies which has created a divide between the rich and poor. In order to address these living standard disparities a greater proportion of the population has to be absorbed within the formal economy. With gross unemployment as newly educated generations enter the formal job market, job creation through investment in new and existing businesses should remain a top priority.

Reviewing the research issue 'whether SMEs and entrepreneurship is critical to South Africa's economic development', it is evident from chapter 7 that SMEs already play an integral role in the South African economy, contributing heavily to production and employment. However, with a 75% failure rate (Finmark Trust, 2006), job creation is not outweighing job losses.

In regards to the second research issues, 'whether financial support is a principal factor in hindering SME growth in South Africa', chapter 7 concluded similarly to Garwe (2010) that South African SME development has a number of obstacles to overcome including "lack of managerial skills, equipment and technology, regulatory issues, and access to international markets with access to finance being the defining obstacle".

Private equity companies through their long term investment horizon, business acumen and networks address many of the issues being faced by small and developing companies. Evidence from section 4.2 has shown that the private equity industry has had a discernible impact in the growth and social well-being of developed nations and has also been observed to positively affect businesses in South Africa (chapter 9).

Within the South African PE industry in response to the final research issue, 'whether the local venture capital industry is fulfilling its niche role as a financier and source of expertise in promoting SME sustainability, it is evident from chapter 8 that fund managers are pre-occupied with competing for later stage investments. Consequently fund managers have had to return funds to investors which they were unable to apply to business ventures.

In answer to the encompassing research question, 'whether the South African venture capital industry is sufficiently capitalised to provide the necessary support for SME development' it was concluded in chapter 9 that the early stage private equity spectrum is severely under-represented in South Africa. Even though there is a healthy distribution between investors as well as the stage of investment they prefer within venture capital, a limiting factor for job creation and economic growth is the lack of total funds committed to early stage investments.

The South African private equity sector requires local fund raising support, as a key consideration for international investors is the level of participation by local investors into the industry and the specific funding stage local fund managers support.

With the development of new funding mechanisms such as invoice discounting and peer-to-peer lending, not related to the traditional banking businesses model requiring collateral, future academic research should consider how these funding sources facilitate and promote entrepreneurship and SME development.

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Glossary

PE – Private Equity

SME – Small to Medium Enterprise

TFP – Total factor productivity – the concept whereby efficiency gains and not traditional input is the source of increased economic output

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