THE IMPACT OF DEVELOPMENT FINANCE INSTITUTIONS ON SOCIO-ECONOMIC TRANSFORMATION: THE CASE OF SOUTH AFRICA

Anthony Barnard

Master of Management in Finance and Investment

Supervisor - Professor C. Malikane

Wits Business School

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Declaration of authorship

I confirm that this Master's thesis is my own work and I have documented all sources. This thesis was not previously presented to another examination board and has not been published.

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Abstract

DFIs play a very important role in economic development of most countries. In South Africa (SA), they have an additional role of addressing socio-economic development and transformation problems that were created by the previous Apartheid system. In particular, DFIs in SA address unemployment, redistribution of income, private sector development and manufacturing sector growth. However, it is not clear whether these DFI's are having a positive impact on the socio-economic transformation as they are expected to, given the amount of money that the government budget for them each year. The aim of this research is to investigate whether SA DFI's have significant impact on the country's socio-economic development and transformation.

DFI credit extension is found to have positive and significant impact on economic growth in in both South African and in emerging markets. Also, in both South Africa and in emerging markets, government consumption has negative impact on economic growth. An additional analysis further shows that DFI credit extension promotes increase in manufacturing-to-GDP in SA and in other emerging markets. DFI has significantly positive impact on HDI in South Africa but not in emerging markets. There is a positive (albeit not significant) impact of DFI credit extension on poverty in South Africa, worse still, the relationship is significantly negative in other emerging countries.

The results show that the government should bolster the DFI funding as these DFIs play a significant role in the economic development of the country.

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CHAPTER 1

1.1   INTRODUCTION

The current chapter introduces the thesis by presenting the research problem and the research objectives. The chapter is organised as follows: Section 1.2 presents the background to the study. Section 1.2 presents the research problem. Section 1.3 discusses the objectives. Section 1.4 highlights the significance of the study. Section 1.5 presents the structure of the thesis and chapter summary concludes the chapter.

1.2   BACKGROUND TO THE STUDY.

Different economies of the world strive for economic development. The definition of economic development has evolved over time. For example, Kindleberger and Herrick (1958) state that economic development includes improvements in material welfare especially for persons with the lowest incomes, the eradication of mass poverty with its correlates of illiteracy, disease and early death, changes in the composition of inputs and inputs and outputs that generally includes shift in the underlying structure of production. Meirer (1964) defines economic development as a process where an economy's real national income increases over a long period of time. Seers (1972) defines economic development in terms of what has happened to poverty, unemployment and inequality over time. Thus, a decline in these three elements constitutes economic development. In the 1980s, the World Bank defined economic development as an improvement in the quality of life. In the 1990s, United Nations Human Development report (1994) indicated that the purpose of development is to create an environment in which all people can expand their capabilities and opportunities can be enlarged for present and future generation. Although there are different definitions of economic development, the theme that emerges from all of them is that it entails betterment of humankind.

From the different definitions above, it is clear that economic development is multidimensional in nature and therefore there are different ways of measuring it. Per capita income is still a widely used measure but composite indices such as HDI (Human Development Index) and GDI (Gender Development Index) have become very common.

While countries aim at maximizing economic development, other countries like South Africa have to also address challenging issue of socio-economic development where economic development has to be accompanied by social development and inclusion of Black people into the main economy as they were previously excluded by the previous apartheid regime. As with other governments that have gone through the same types of transition such as USA and Malaysia, the government of South Africa has used various policies to ensure socio economic development including the implementation of Black economic Empowerment (BEE) policy of 2003. BEE policy requires (but not obligate) that South African companies (mostly owned by White South Africans) contribute to the socio-economic development of the country by allowing Black people to have share ownership in their companies, make sure that Blacks are promoted to management levels, ensuring that Blacks attain necessary skills through training, ensuring that Black-owned businesses provide of goods and services to established white owned companies. Theoretically, it is expected that economic development in all its definitions will be achieved if the BEE policy is implemented successfully.

The BEE policy is designed in such a way that it promotes entrepreneurial activity in a country as entrepreneurship is considered to be an important mechanism of economic development through employment, innovation and welfare effects (Acs and Autretch, 1988; Baumol, 2002). Acs and Varga (2005) found that opportunistic entrepreneurship has positive significant effect on economic development. However, the major challenge for most entrepreneurs is the lack of access to credit. Access to credit finance is important in leveraging economic empowerment and enhancing per capita economic growth (King and Levine, 1993; Levine et al., 1999).

While there are different ways used to ensure access to finance and enhance economic development in South Africa, one of the ways has been through the use of state owned development finance institutes (DFIs). DFIs leverage economic empowerment by providing finance where the private sector would not (Sutton and Jenkins, 2007). DFIs have themselves proven that it is possible to operate profitably while providing necessary capital to stimulate industrialisation, job creation, transfer of technology and business skills and socio-economic growth (Sims, 2008). State financial institutions can play a useful role in

supporting credit growth during a financial crisis under certain conditions as evidenced by the success of counter cyclical lending in Brazil by BDNES (Brazil Development Bank) during the financial crisis (Rudolph, 2010 ; Democracia, 2014).

The government of South Africa recognizes that meaningful empowerment will only be achieved if Blacks entrepreneurs have access to finance. The government has therefore established and improved some DFIs that are hoped to ensure the advancement of socio-economic development in the country. The three big DFIs in SA and these include: Land Bank, The Development Bank of Southern Africa (DBSA) and the Industrial development corporation (IDC). Land Bank is a specialist agricultural DFI mandated to promote economic development through the provision of financial services in the form of loans, deposits, guarantees and mortgages to the farmers in the commercial farming and agri-business sectors. DBSA improves the quality of life of South Africans by funding physical, social and economic infrastructure with an aim of creating an economically integrated region focused on alleviating poverty. IDC funds and promotes industrial and economic development. The small Enterprise Funding Agency (SEFA) was launched uder IDC with the sole aim of funding small businesses (Oji and Mokoaleli-Mokoteli, 2012). The common denominator to these DFIs and others not mentioned is to maximize socio-economic development and empowerment of the citizen of the country. The question that therefore follows is: Are the DFIs successful in empowering SA citizens and thereby promoting economic growth?

1.3   RESEARCH PROBLEM

The creation of a number of Development Finance Institutions (DFIs) in South Africa was necessitated by sanctions imposed on the apartheid government as a means of economic sustenance and Afrikaner economic empowerment. DFIs were used to mobilise private sector funds to stimulate manufacturing and entrepreneurship programs that enabled self-sufficiency of the apartheid government (ANC, 2012; Gumede, 2011). The mandate of DFIs has changed gradually since the new dispensation came to power. The 'new' objective generally is to support projects whose benefit exceed their commercial ones including lending and guaranteeing to risky ventures, new manufacturing technology and new and small borrowers who lack collateral (Thorne and du Toit, 2008). DFIs in South Africa have

a role to address unemployment, redistribution of income, private sector development, manufacturing sector growth as well as both market and government failure in finance (Kritzinger-Van Niekerk, 1995).

The problem is that despite the existence of re-engineered roles of DFIs, it is still not clear whether these DFIs positively impact on socio-economic transformation in South Africa, given the significant amount of money that's allocated to these DFIs by the government and that socio-economic development has progressed very slowly in South Africa. Thus, the reduction of inequality and the elimination of poverty through sustainable economic growth has continued to be a challenge for the government (SONA, 2011, 2012 and 2015; Kirsten *et. al*, 2006). ANC (2012) acknowledges that the policies governing DFIs and SOEs needs to be adjusted to suit the post-apartheid era in order to achieve better financial inclusion.

In other emerging markets, like Brazil DFIs have led growth and socio-economic transformation through the BDNES which propagated counter-cyclical lending during the 2008 economic crisis (Democracia, 2014). DFI investments have proven to lead manufacturing development, human capital development and percapita growth in the economy it is imperative therefore to prove this notion within the South african context but again it is not clear how effective South African DFI's are compared to other emerging market counterpats.

The previous literature on economic development and empowerment have concentrated on the impact of the BEE deal announcements on share performances (see, Acemoglu et al 2007, Jackson et al 2005, Sartorius and Wolmarans 2009, Ward and Muller 2010 Mokoaleli-Mokoteli and Ojah, 2013) but we are not aware of any study that has looked at whether funding provided by FDIs has contributed to the economic development.

1.4   RESEARCH OBJECTIVES
The objectives for this research are stated as follows:
- To establish the extent to which South African DFI's have contributed to the economic development of South Africa.
- To investigate the extent to which South African DFI's have contributed to socio-economic development.

- To establish whether credit extension by DFIs have similar impact among emerging market economies?

1.5 GAP AND SIGNIFICANCE IN THE LITERATURE

The government of South Africa has used, among other methods, DFI's to advance economic development and empower the citizens (mainly Blacks) of the country. The idea is that DFIs should mobilise financial resources for developmental purposes through investing in markets deemed too risky for the private sector to enter alone, but which are essential for the growth of the broader economy (see, for example, Smallridge & De Olloqui, 2011). Thus, FDIs initiate sustainable development by supporting opportunities that are not addressed by the market, and by providing risk capital to companies and individuals in partnership with the private sector (Khadiagala, 2011). However, currently the discussion about the tangible impact of DFI is only at policy level with no comprehensive and empirical analysis to establish whether FDIs are indeed promoting economic growth. For instance, the work by Gumede et al, (2011), Gumede, (2008) and ANC (2010 and 2012) have centred largely on policy and regulation structuring while Thorne and du Toit, (2008) looked at the framework enhancing successful development financial institutions. Kritzinger-Van Niekerk, (1995) looks at Development Finance Institutions transitional issues. It is, therefore, necessary to investigate quantitatively the role DFIs in stimulating economic growth in South Africa.

1.6 STRUCTURE OF THE RESEARCH REPORT

The thesis is organised as follows: chapter two reviews the literature related to the research topic. Chapter three presents the research methodology including the data used and research design. Chapter 4 presents the results from the analysis. Chapter 5 discusses and concludes the research.

CHAPTER SUMMARY

This chapter introduces the thesis by providing the background to the study, identifying the research problem, enumerating the research objectives as well as indicating the significance of the study. The next chapter focuses on the literature pertaining history of and meaningful economic transformation through Credit Extension.

CHAPTER 2

LITERATURE REVIEW

2.1   Introduction

This chapter reviews previous literature related to the current research topic. The chapter is organized as follows: Section 2.2 presents the literature on the factors that influence economic development. Section 2.3 discusses literature on access to finance and its impact on socio economic transformation. Section 2.4 presents literature on the role of DFI's in facilitating socio- transformation. Section 2.5 developed the hypothesis to be tested from the literature. Chapter summary concludes the paper.

2.2   Factors that influence economic development

Extant literature posits that there are various factors that influence economic growth. Entrepreneurship is considered to be an important mechanism for economic development through employment, innovation and welfare effects (Schumpeter 1934; Acs and Audretsch 1988; Wennekers and Thurik 1999; Baumol 2002). The dynamics of entrepreneurship can be vastly different depending on institutional context and level of economic development. There are considerable differences across countries in the orientation of entrepreneurial activities (Autio 2007). The nature and structure of entrepreneurial activities varies across countries as reflected by, for example, the relative volumes of necessity and opportunity entrepreneurship. Acs and Varga (2005) studied 11 countries and found that opportunity entrepreneurship has a positive significant effect on economic development, whereas necessity entrepreneurship has no effect. Stel and Thurik (2005a) found that entrepreneurial activity by nascent entrepreneurs and owners/managers of young businesses affect economic growth but this effect depends upon the level of per capital income. Stel and Thurik (2005b) further show that   a 'natural rate' of nascent entrepreneurship is governed by 'laws' related to the level of economic development. Thus, developed nations, the policy should be aimed at improving incentive structures for business start-ups and promote the commercial exploitation of scientific findings whereas on developing countries, the policy should pursue the exploitation of scale economies, fostering foreign direct investments and promoting management education.

Carree et al. (2002) examined the relationship between economic development and business ownership for OECD countries, and reaffirmed the existence of a U-shaped relationship. Wennekers et al. (2005) for the first time regressed Global Entrepreneurship Monitor (GEM) data for nascent entrepreneurship on the level of economic development. They also found support for the U-shaped relationship between countries at different stages of development.

Other previous studies attest to the effect of financial development on economic development. Levine (1997) demonstrates that there is a first order relationship between financial development and economic growth. He also provides evidence that the level of financial development is a good predictor of future rates of economic growth, capital accumulation and technological change. Demetriades and Hussein (1996) conclude that the development of real economy induces increased demand for financial services, which in turn generate the introduction of new financial institutions and markets to satisfy that increased demand for financial services. Further, financial deepening gradually induces economic growth and this, in turn, causes feedback and induces further financial deepening.

King and Levine (1993) use different measures of bank development for several countries, find that banking sector development can spur economic growth in the long run. Boyd and Prescott (1986) and Stiglitz (1985) argue that banking sector development can play an important role in promoting economic growth, as banks are better than stock markets when it comes to resource allocation.

Arestis et al. (2001) show that while both banks and stock markets play an important role in the growth process, the banking sector development effect on economic growth in the long run is much higher than the stock market development one. More recently, the emphasis has increasingly shifted to stock market indicators and the effect of stock markets on economic development. Stock market development has been the subject of intensive theoretical and empirical studies (see Demirguc-Kunt and Levine (1995), Levine and Zervos (1993, 1995, 1998)). In principle a well-developed stock market should increase saving and efficiently allocate capital to productive investments, which leads to an increase in the rate of economic growth. Stock markets contribute to the mobilisation of domestic savings by enhancing the

set of financial instruments available to savers to diversify their portfolios. In doing so they provide an important source of investment capital at relatively low cost (Dailami and Aktin (1990). Enisan and Ulufisayo (2009) examine the long run and causal relationship between stock market development and economic growth for seven countries in sub-Saharan Africa and find that the stock market is cointegrated with economic growth in Egypt and South Africa, suggesting that stock market development has a significant positive long-run impact on economic growth concluding that stock markets could help promote growth in Africa. However, to achieve this goal, African stock markets need to be further developed through appropriate regulatory and macroeconomic policies.

Another group of researchers have also established that foreign direct investments also influence country's economic growth. FDI is described as investment made so as to acquire a lasting management interest and at least 10% of equity shares in an enterprise operating in another country other than that of the investor's country (Mwillima, 2003). Caves (1996) observe that the rationale for increased efforts to attract more FDI stems from the belief that FDI has several positive effects. Among these are productivity gain, technology transfers, and the introduction of new processes, managerial skills and know-how in the domestic market, employee training, international production networks, and access to markets. Carkovic and Levine (2002) notes that the economic rationale for offering special incentives to attract FDI frequently derives from the belief that foreign investment produces externalities in the form of technology transfers and spill-over. According to Althukorala (2003), FDI provides much needed resources to developing countries such as capital, technology, managerial skills, entrepreneurial ability, brand and access to markets which are essential for developing countries to industrialize, develop, create jobs and attack the poverty situation in their countries.

Dritsaki et al (2004) applies a cointegration and causality approach in which they find a positive long-run equilibrium relationship between FDI and economic growth and a-one-way causality between FDI and economic growth, running from FDI to growth.

Tang et.al (2008) explores the causal link between FDI, domestic investment and economic growth in China between 1988 – 2003 and found that there is a bi-directional causality

between domestic investment and economic growth, while there is a single directional causality from FDI to domestic investment and economic growth. Ogbekor (2005) examines the role of exports and FDI on the growth of Namibian economy from 1991 to 2001. Using a combination of bivariate and multivariate variable models, the study concludes that FDI and export aids economic growth potential. Athukorala (2003)'s study on the impact of foreign direct investment on economic growth in Sri Lanka between 1959 – 2002, agrees that the regression results do not provide much support for the view of robust link between FDI and growth in Sri Lanka. He posits that the situation is due to lack of improved investment climate such as good governance, accountability, political instability and disturbance, bureaucratic inertia, among other reasons.

Kumar and Pradham (2002) analyze the relationship between FDI, growth and domestic investment for a sample of 107 developing countries for the periods 1980 – 99. Their model uses flow of output as the dependent variable and domestic and foreign owned capital stock, labour, human skills, capital stock and total factor productivity as their independent variables. Their results show that panel data estimations in a production function framework suggest a positive effect of FDI on growth, although FDI appears to crowd out domestic investments in net terms, in general, some countries have had favourable effects of FDI on domestic investments in net terms, suggesting a role for host country policies

2.3   Access to finance and its impact of socio-economic transformation

Access to finance significantly and positively affects economic growth, as indicated by growing evidence over the years. The theoretical roots of this relationship lies in the neo classical production function which states that, growth is realised through investment, human capital development and total-factor productivity (Papaioannou, 2007). In their contribution to the neo classical theory Galor and Zeira (1993) argue that, access to finance can increase growth and eventually reduce inequality, frictions between income inequality and credit extension impede growth. Further, Levine (1997) details that, economic development, relies on; reduction or removal of information asymmetry and transactional/information costs to mobilize savings, allocate resources, exert corporate control, facilitate risk management, ease trading and enhance channels to growth (capital

accumulation, technological innovation). A strong link exists between access to finance and long run economic growth (Beck et al., 2000). In a similar vein Levine (2005), states that financial access exerts a 'first-order' influence on economic growth.

Massa, (2011) found that, financial access through investments by multilateral DFIs financial institutions, play a positive and significant role in fostering economic growth and with the impact being stronger in low to medium income countries than in higher income countries. In this attitude it will therefore be important to research the impact thereof of access to finance in the South African Economy as a guide to inferences to other medium income emerging markets.

Financial investment is important in growing the productive innovation function. This growth in manufacturing turns to a profit resulting in the demand for more labour and land which increase savings and investments hence expanding the macro economy (Schumpeter, 1911). King and Levine (1993) explored Schumpeter's theory empirically, they concluded that access to finance leads to production led growth through "creative destruction", the destruction of old factors of production replacing them with newer efficient ones which then build "new" capital for future innovation. Further to Schumpeter's findings, King and Levine included the role of financial institutions in facilitation and growth of productive innovation. Kerr and Nanda (2009) states that access to finance is a driver of growth in manufacturing and economic empowerment. Inadequate credit access is a hindrance in the growth of entrepreneurial activities particularly in development of export related production (Black and Strahan, 2002; Kuzilwa, 2005).

Access to finance is a central determinant of economic growth and reduction of inequality through the impact it has on individual welfare and enterprise growth (Beck and Demirgüç-Kunt, 2008). This argument is based on Hicks, (1969)'s proposal that, the process of economic asset redistribution can be archived through credit and investment. Investment and credit leads to employment and demand for goods and services, increases the savings and consumption (Ali, 2007).

2.4   The role of DFI's in facilitating economic socio-economic transformation

Traditionally DFIs provide development finance to address market failures and so complements both government resources and market financing. However, DFI's are now generally expected to address broader development policy objectives – not only limited to addressing market failures, such as private sector development, employment creation, income redistribution, import substitution, the development of poor groups or regions, as well as developing new industrial sectors or boosting weak ones (UN, 2005). In fact, the role of DFIs in developing countries has gone beyond addressing market failure to, more broadly, addressing development failure (See Gumede, 2008; 2011).

In addition to the above, Scott (2008) states that development finance's role is to invest in sustainable private sector projects, economic sectors and/or parts of the population not served by the financial markets with the objective of spurring development especially in critical areas identified by the government. The definition in an emerging market context, are quasi-governmental organisations created to rejuvenate and/or develop important industries in an economy (Francisco, et. al 2008; Kane, 1975).

Gabriel (2013) clarifies that the Asian Development Bank (ADB) and the International Financial Corporation (IFC) were amongst the first multilateral Development Banks to invest in Emerging Markets Private Equity funds since the 1980s. After decades other multilateral development Banks started investing in Private Equity Funds. DFIs use different financing instruments for instance, by way of offering direct loans to the private sectors in developing countries. The other way is by equity, which is by purchasing firm stocks (Kwakkenbos, and Romero, 2013).

Development Financial Institutions (DFIs) are largely regarded as the primary source of long term debt financing (Bhandari et al, 2003). Dickson clarifies that Development Finance Institutions (DFIs) act as an intermediary between public aid and private investment facilitating capital flows. Kwakkenbos and Romero (2013) describes DFIs as the ones which are either government owned or the government is the majority shareholder. The mandate of DFIs is generally on engaging in high risk investments in sections or societies with limited access to capital markets.

In Brazil the state finances industrialisation through the Banco Nacional de Desenvolvimento Econômico e Social (BNDES) which historically was formed by the sanctioned military regime of the past, this is similar to the way the apartheid regime in South Africa had created the IDC (Maia et al, 2005). The sustainability of the BNDES is due to its ability to respond to the socio economic landscape without compromising its rigorous controls and financial stability (Mais, 2014). Mais further states that, "financing at BNDES is closely linked to their strategic view of the economy and identified industrial development goals, including growth of the capital equipment" and this is archived through close policy formulation with central government.

Brazilian Development Bank (BNDES) used countercyclical lending to overcome the impact of the 2008-2009 Global Financial Crisis and to turn around the economy. Countercyclical lending creates new occupations, grows infrastructure, sustains current employment and creates industries. Shortage of private sector finance did not affect Brazilian industrialists during the crisis as they depended on low interest, readily available finance from BNDES. The role of the Brazilian DFIs goes beyond financing, they continually identify opportunities for long term industrial growth. In the case of the BNDES it does so by doing research and development in strategic economic sectors like energy (BNDES, 2010).

The Asian Development Bank (ADB) also applied countercyclical lending in the midst of the Global Financial Crisis, which affected Asia because of its dependence on exports (ADB, 2009). Countercyclical lending by the ADB led to higher spending in Korea sustaining economic growth whilst also overcoming the financial crisis.

To ensure the sustainability of strategic industries the Korea Development Bank (KDB) and Industrial Bank of Korea (IBK) along with the government provide policy loans were loans are issued at low interest and restrictions are set on import of certain products. This is particularly done in industries of strategic importance to reduce unemployment and spurn growth (Ali, 2007)

Upon gaining independence in 1947 the Indian reserve bank (RBI) set up development finance institutions to regularise savings and broaden term finance facilities, this was

coupled with the nationalisation of banks in the 60s to increase credit to areas needing development assistance (Bell, 2000). Agrawal (2007), states that this rise in financing non-market efficient, but socially crucial sectors and regions, had adverse consequences on the banking sector through increases in non-performing loans. This forced a review of the banking and financial policies, resulting in decentralisation of India's interwoven development finance and banking system.

Development finance institutions were forced to raise funding at market related rates as low cost funding had stopped resulting in DFIs being seen as inefficient in resource allocation for industrialisation with government in 2002 turning them into commercial banks (Rajeev, 2010). Despite the restructuring of the Indian banking sector DFIs like the Industrial Development Bank of India Limited have been identifying long-term industrial development opportunities particularly through ICT acceleration with view to increase their GDP contribution (CUT, 2014)

Emerging markets' economic growth has largely been stimulated by finance that is targeted at industrial development and exports. The Chinese government is an example where the involvement of DFIs increasing lending to specific sectors to stimulate growth and this worked magnificently (Downs, 2011). Nationally China has set four DFI banks also known as the big four to strategically cover the main economic pillars i.e. agriculture, finance, infrastructure and industry. The banks being; the Bank of China (BOC), the Agriculture Bank of China (ABC), the Construction Bank of China (CBC), and the Industrial and Commercial Bank of China (ICBC).

Internationally China has been concentrating more on DFIs which protect its national interests in other regions outside its borders through DFIs like the EXIM (Export Import) Bank of the Republic of China and the China Development Bank (CDB), which seek to secure strategic foothold in natural resources (Lin and Zhang, 2008). Through the DFI financial leverage China has been influencing the economic policies of countries to which they have extended credit.

In South Africa, Development Finance Institutions (DFIs) were formed as a counter mechanism to avert an economic crisis from sanctions imposed on the apartheid government

as well as for Afrikaner economic empowerment. DFIs were used to mobilise private sector funds to stimulate manufacturing and entrepreneurship programs that enabled self-sufficiency of the apartheid government. Thorne and Du Toit (2009) state that the mandate of DFIs has changed (post-apartheid) gradually to support projects whose benefit exceed their commercial ones including lending and guaranteeing to risky ventures, new manufacturing technology and new and small borrowers who lack collateral.

The purpose of the Development Bank of Southern Africa (DBSA) is to accelerate sustainable socio-economic development by funding physical, social and economic infrastructure. The DBSA role is to address market failure in meeting the development needs of society through giving access to finance (Gumede, 2008). In more recent times Development Bank of Southern Africa (DBSA) has funded major infrastructural development projects that promote the development of small to medium enterprises in support of Black Economic Empowerment. Edigheji (2010), observes that, while DBSA was formed with mandate to expand growth in manufacturing it seems to contribute to importation of manufactured goods.

Established in 2006 by the DTI South African Microfinance Apex Fund (SAMAF) is tasked to facilitate the provision of affordable access to wholesale finance by micro, small and survivalist business for the purpose of growing their own income and asset base. The primary purpose of SAMAF is to reduce poverty and unemployment and also to extend financial services to reach deeper and broader into the rural and peri-urban areas. Ojah and Mokoaleli-Mokoteli (2010) observed that SAMAF targets the "second economy" which includes the working poor and the enterprising.

Formed in 1940 the Industrial Development Corporation (IDC) was created as a self-financing, state-owned national DFI that provided financing to entrepreneurs and businesses engaged in competitive industries (ANC, 2012). The setting up of state companies Sasol, Foskor and Soekor was propagated by the IDC as apartheid government policy, firstly to supply goods that were unavailable because of World War II and later to hedge against the sanctions South Africa faced.

Despite a host of DFIs South Africa has experienced low growth with high and growing levels of unemployment which have led to high levels of poverty and unequal distribution of wealth. To cut unemployment and poverty by half that South Africa needs a growth rate of 5 % annually (Knight, 2006). It is therefore imperative that the state in South Africa should reorganise and equip DFIs so that they take a lead in financing socially desirable projects which the market is not keen to implement (Edigheji, 2010).

The effectiveness of the DFIs in South Africa is facilitated by the Black Economic Empowerment (BEE) policy in that DFIs have to also finance projects that promote socio-economic transition by ensuring that Black people, who were excluded from the main economy are now included.

The BEE policy is designed in such a way that it promotes entrepreneurial activity in a country as entrepreneurship is considered to be an important mechanism of economic development through employment, innovation and welfare effects (Acs and Autretch, 1988; Baumol, 2002). Acs and Varga (2005) found that opportunistic entrepreneurship has positive significant effect on economic development. However, the major challenge for most entrepreneurs is the lack of access to credit. Access to credit finance is important in leveraging economic empowerment and enhancing per capita economic growth (King and Levine, 1993; Levine et al., 1999).

2.5   HYPOTHESIS DEVELOPMENT

In light of the turnaround of the South African nation from apartheid to a government of the ANC voted in by the majority of the people. Many would believe with developmental projects and massive government investments post-apartheid there has been a significant improvement in the livelihoods and ownership of drivers of economic growth in business by previously disadvantaged society in South Africa. This study seeks to evaluate the impact and significance of the Credit Extension by DFIs to the majority of the populace which was previously disadvantaged.

The research tests these hypotheses

Hypothesis 1

H_0 : *BEE type credit extension by DFIs has a positive impact on socio-economic transformation*

H_1 : *BEE type credit extension by DFIs does not have a positive impact on socio-economic transformation*

Chapter Summary

This chapter reviewed the previous literature related to the topic of research including regarding to access to finance and its importance to socio-economic transformation, History of DFIs, Performances of DFIs, South African DFIs, in response to Economic Transformation were discussed. It is clear from the discussion of the literature above that funding black economic transformation from the markets through balance sheets tend to limit the extent of transformation and fiscal funding creates a moral hazard in the management of DFIs and tends to be constrained when fiscal policy is non expansionary. A testable research hypothesis was developed from the literature and presented. Chapter 3 explores the research methodology to be used in analysing the impact of DFIs on socio-economic transformation in South Africa.

CHAPTER 3

DATA AND METHODOLOGY

3.1   Introduction

The purpose of this chapter is to present the research methods and methodologies used in this research. The chapter is organised as follows: Section 3.1 presents data and data sources. Section 3.2 discusses the research design while the chapter summary concludes the chapter.

3.2   Data and data sources

The aim of this research is to assess the impact of development finance institutions (DFIs) credit extension on socio-economic transformation of South Africa in comparison to other emerging markets. The data used for economic transformation includes rising economic growth per capita (to capture the growth rate effect); rising share of manufacturing to GDP (to capture the economic transformation effect); reduced inequality (measured by the Gini to capture social transformation); poverty reduction (measured by the poverty rate to capture social transformation) and increased human development index (measures social transformation more comprehensively). Economic data including credit extension from DFI, foreign direct investment (FDI), trade openness, government consumption, inflation and trade openness is used to measure the extent to which they influence SA's social and economic transformation.

The initial sample selection consists of all BRICS countries between the years 1994 to 2013 whose data is available in *World Bank database*. Russian Federation and India were deleted from the sample because they did not have inequality and HDI data for first ten years. In order to maintain the observations in emerging markets we include Malaysia. The final sample is separated into two sub-samples of emerging markets (Brazil, China, Malaysia and South Africa. South Africa is isolated from other emerging countries so that the impact of the explanatory variables above can be observed and compared to emerging markets countries. There is notable missing data on social development (e.g., GINI, Human Development Index and Poverty) in World Bank database and World Bank states that that the reason for this could be that respective governments did not report these statistics. These missing data, however, is unlikely to affect the results as it is missing for less than two years

in most cases. The final sample is comprises of 20 country-years for the South African sub-sample and 60 country-years for the emerging market sub-sample.

DFIs investment data for credit extension is sourced from the *SARB* (South African Reserve Bank) annual reports as well as from the *Department of Trade and Investments* (DTI). Macroeconomic and social development variables data are collected from the South African Reserve Bank (SARB), Statistics South Africa, World Bank (World Development Indicators), UNDP (Human Development Reports), the International Monetary Fund as well as from market research houses like McGregor BFO, Bloomberg and Bureau of Economic Research.

3.3   RESEARCH DESIGN

Generalized Methods of Moments (GMM) for panel data analysis proposed by Arellano and Bond (1991), further enhanced by Arellano and Bover, (1995); Blundel and Bond (1998) is used to examine impact of development finance institutions on socio-economic transformation. GMM has been used by other researchers including Levine et al., (2000) and Massa (2011). This method is preferred because it allows a researcher to control for endogeneity in the estimations (Massa, 2011) and it can also extract the exogenous component of the dependent variable which is DFIs credit extension.

As in Massa (2011), the research regression model is stated as follows:

$$Y_{it} = \gamma Y_{it-1} + \beta DFI_{it} + \eta \chi_{it} + u_i + \varepsilon_{it} \qquad (1)$$

Where

Y_{it} = *the log of real dependent variables which measure socio-economic transformation of country i at time t*

χ_{it} = *independent variables used on determinants of economic growth used in the past studies*

DFI_{it} = *the main explanatory variable of interest which is the BEE related DFI credit extension over the years.*

Y_{it-1} = *the lagged value of per capita income growth rate consistent with literature*

$$u_i \quad = represents\ the\ unobserved\ country\ specific\ effects$$

$$\varepsilon_{it} \quad = the\ error\ term$$

Credit extension from DFI, foreign direct investment (FDI), trade openness as well as government consumption are normalised by gross domestic product (GDP). All the explanatory variables are expressed in logs in order to get rid of the country specific effects of which we difference equation (1) which will then be rewritten as follows (Massa, 2011);

$$\Delta\gamma Y_{it} = \gamma\Delta Y_{it-1} + \beta\Delta DFI_{it} + \eta\Delta\chi_{it} + \Delta u_i + \Delta\rho_{it} \qquad (2)$$

Where $\Delta\rho_{it} = \Delta u_i + \Delta\varepsilon_{it} = (u_i - u_i) + (\varepsilon_{it} - \varepsilon_{it-1}) = \varepsilon_{it} - \varepsilon_{it-1} = \Delta\varepsilon_{it}$

Taking note of instruments from the previous observations of our explanatory variables, we relax the assumption of strict exogeneity and treat the model as weakly exogenous (Massa 2011). Under the assumptions that the error terms ε_{it} are independent and identically distributed *(iid)* over *i* and *t* and that ΔY_{it-2} would be a valid instrument for ΔY_{it-1} , the GMM difference estimator would use the following moments conditions as in Massa 2011:

DFIs are expected to play an important and leading role in fostering economic development (Massa, 2011). The objective of most DFIs is to provide finance for private investment with the purpose of maximizing impact on economic growth and development while at the same time remaining financially viable (Massa, 2011). South African DFI, however, have an added responsibility of economically and socially transforming the South African economic landscape by empowering previously disadvantaged black South Africans society through private sector. The analysis in this research focuses primarily on DFI credit extension by SA's BEE aligned DFIs. DFI investment commitments are usually realised after one or more years after the credit extension facility is provided – thus, the socio-economic effects are expected to become visual after one or more years after formal commitments (Massa, 2011).

Vector *X* in equation 1 includes the following additional predictor variables usually seen and applied in literature (Massa 2011)

- FDI (FDI_{it}) - FDI enhances economic growth by providing direct capital financing and creating positive externalities through foreign management expertise and technology transfers

- Inflation (INF_{it}) - Inflation is commonly used as the measure of macroeconomic stability. Low inflation levels represent higher macroeconomic stability whilst high levels of inflation represent lower levels of macroeconomic stability of a country.

- Government Consumption (GOV_i) - Government consumption is usually used as a proxy for government size. Government spending is usually growth enhancing in developing nations (Massa, 2011)

- Trade Openness (TRA_i) - a control variable often referred to as the engine for economic growth since a country can be able to concentrate and specialise in its comparative advantage and benefit immensely from international exchange of goods.

Empirical evidence is used to assess the significance of meaningful economic transformation in South Africa (Breisinger and Diao, 2008). Based on the developmental economics, the focus is on growth rate of black ownership of shares on the JSE from 2003 to 2014. Credit extension empirical evidence would also be used to assess the effectiveness of the transformation policies as in (Breisinger and Diao, 2008). The economic gap between blacks and whites measured by median incomes, income inequality and access of financial services among the black population are empirically reviewed.

3.4 HYPOTHESIS TESTING

The government of South Africa has intervened using policy and other means to economically empower and socially include previously disadvantaged majority South African population into the country's main economy. Policies such as BEE policy were developed and implemented. The government also used DFI's to expedite empowerment and social transformation through the private sector. Over the last 20 years, DFIs such as IDC, Land Bank, NEF and Southern African Development Bank have provided finance where the private sector could not (Sutton and Jenkins, 2007). It is expected that given SA government's massive investment in DFIs, by now there should be a meaningful and significant improvement in the livelihoods and ownership of drivers of economic growth in

business by previously disadvantaged society in South Africa. This study seeks to evaluate the impact and significance of the credit extension by DFIs in socio-economic transformation of South Africa.

The research tests the following hypotheses:

Hypothesis 1

H_0 : *BEE type credit extension by DFIs has a positive and significant impact on SA socio-economic transformation.*

H_1 : *BEE type credit extension by DFIs does not have a positive and significant impact on SA socio-economic transformation.*

Chapter Summary

This chapter explored on how to assess the meaningful economic transformation through credit extension by laying out the data and data sources as well as the research design and the hypothesis testing. The next chapter presents the results from GMM model.

CHAPTER 4

PRESENTATION OF RESULTS

4.1 INTRODUCTION

This chapter presents the results in observing the effects of BEE type credit extension on socio-economic transformation. The chapter arranged as follows: Section 4.2 presents descriptive statistics. Section 4.3 presents the results of the regression models and chapter summary concludes the chapter.

4.2 DESCRIPTIVE STATISTICS

Table 1 below reports the descriptive statistics of the variables used in the regression models. Panel 1 presents the South African cross sectional sample with an average of 20 observations over the sample period. Panel 2 presents the results for the emerging markets sample with an average of 60 country-year observations over the sample period. The emerging market sample consists of Brazil, China and Malaysia. All the variables have been logged in order to make the trends in the data more observable, all variables except growth rate per capita is also geometrically normalised.

Table 1

Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Observations
Panel 1: Characteristics of South Africa's measures						
DFI Credit to BEE	2.435	2.512	3.185	0.670	0.621	20
FDI	1.590	1.077	6.136	0.239	1.457	20
Government consumption	2.975	2.956	3.102	2.899	0.065	20
Inflation	1.993	2.040	2.375	1.494	0.226	20
Growth rate of GDP per capita	1.424	1.612	4.225	-2.824	1.785	20
Trade openness	4.012	4.014	4.315	3.737	0.144	20
Gini	4.025	4.070	4.211	3.108	0.269	8
Human Development Index	4.141	4.138	4.186	4.108	0.023	15
Manufacturing to GDP	2.852	2.932	3.055	2.448	0.182	20
Poverty rate	3.689	3.668	4.047	3.434	0.205	13
Panel 2: Characteristics of emerging market sample countries						
DFI Credit	1.569	2.078	3.214	-7.249	1.748	60

FDI	1.115	1.277	1.799	-2.870	0.728	60
Government consumption	2.714	2.645	3.090	2.279	0.232	60
Inflation	1.495	1.781	7.719	-3.940	1.521	60
Growth rate of GDP per capita	1.331	1.480	2.608	-1.854	0.911	60
Trade openness	4.019	3.741	5.395	2.704	0.942	60
Gini	3.870	3.882	4.096	3.529	0.181	24
Human Development Index	4.230	4.243	4.348	3.915	0.085	41
Manufacturing to GDP	3.203	3.316	3.516	2.561	0.295	60
Poverty rate	2.167	1.808	3.216	0.531	0.736	43

Panel 1 shows that the variable of interest which is DFI credit extension indicates that on average DFI credit is higher in South Africa (mean = 2.435) than in other emerging economies (mean =1.569). A considerably higher flow of FDI is observable in South Africa in comparison to emerging markets counterparts. Although significantly large in both samples government consumption is higher in South Africa (mean = 2.975) than in emerging economies (mean= 2.714). Inflation on average in higher in South Africa (mean=1.993) compared to that in emerging markets (1.495). Economic growth is on average higher in South Africa although the difference with emerging economies is minimal.

The Gini coefficient and poverty rate are higher in South Africa suggesting that the population in other emerging markets are on average better off than their South African counterparts. The human development index also reflect that social transformation has trickled down better in other emerging economies (mean = 4.230) than in South Africa (4.141). Manufacturing to GDP shows higher industrialisation in emerging markets than in South Africa. Lastly, the mean trade openness for emerging markets and for South Africa are nearly similar. The level of per capita growth and trade openness indicate that the two samples are within the same grouping of economies.

Table 2 below presents the correlation matrices for the South Africa and emerging economy samples respectively.

Table 2

Correlation Matrices

Panel 1: South Africa

	DFICRDT	FDI	GINI	GOVCONS	HDI	INFLATION	MANUFACT	PERCAPITA	POVERTY	TRA
DFI Credit	1.000									
FDI	-0.402	1.000								
GINI	-0.619	0.350	1.000							
GOV Consumption	-0.800	0.338	0.910	1.000						
HDI	-0.782	0.586	0.817	0.826	1.000					
Inflation	0.303	0.421	-0.566	-0.593	-0.442	1.000				
Manufacturing	0.778	-0.476	-0.935	-0.914	-0.963	0.540	1.000			
GDP per capita	-0.346	0.188	0.046	0.291	0.368	-0.234	-0.220	1.000		
Poverty	-0.901	0.517	0.594	0.750	0.902	-0.357	-0.829	0.416	1.000	
Trade Openness	-0.476	0.836	0.358	0.426	0.732	0.065	-0.585	0.298	0.752	1.00

Panel 2: Emerging Markets

	DFICRDT	FDI	GOVCONS	GINI	HDI	INFLATION	MANUFACT	PERCAPITA	POVERTY	TR
DFI Credit	1.000									
FDI	0.433	1.000								
GINI	-0.595	-0.458	1.000							
GOV Consumption	-0.675	-0.474	0.768	1.000						
HDI	0.130	0.353	0.188	0.066	1.000					
Inflation	-0.151	-0.823	0.279	0.413	-0.273	1.000				
Manufacturing	0.658	0.218	-0.872	-0.858	-0.354	-0.052	1.000			
GDP per capita	0.773	0.282	-0.756	-0.821	-0.115	-0.139	0.856	1.000		
Poverty	-0.663	-0.453	0.844	0.965	0.110	0.375	-0.864	-0.833	1.000	
Trade Openness	0.517	0.479	-0.934	-0.715	-0.044	-0.421	0.718	0.693	-0.812	1.0

The correlation matrices for South Africa and emerging markets both show that there is positive correlation between per capita growth and DFI credit extension and foreign direct investment, while the same per capita growth is negatively correlated to inflation and government consumption. FDI is positively correlated to the predictor variable DFI credit extension, while inflation and trade openness are negatively correlated to DFI credit extension in South Africa. In emerging economies FDI and trade openness are positively correlated to the predictor variable DFI, while government consumption and inflation are negatively correlated to DFI credit extension. As expected poverty is highly correlated to Gini and inflation for both South Africa and Emerging markets.

4.3   THE IMPACT OF DFI CREDIT EXTENSION ON ECONOMIC GROWTH

Generalised method of moments (GMM) model is used to observe how BEE type DFI credit extension impacts socio-economic transformation. GMM model is used because it takes into account heteroskedasticity, serial correlation (Gujarati, 2012) as well as endogeniety. The columns 1 to 4 of each table below show the effects of the main independent variable (BEE type DFI credit extension) on socio-economic transformation using different model specifications.

4.3.1   IMPACT OF DFI EXTENSION ON ECONOMIC GROWTH

The impact of DFI credit extension on economic growth as measured by GDP per capita is presented on table 3 below using 4 model specifications as shown below.

Table 3 – The effect of DFI credit extension of economic growth

This table presents coefficients and t-statistics (in brackets) from the regressions 1 up to 4 for the main sample South Africa. The beta coefficients' significance is represented as follows; * at 10% level, ** at 5% level and *** at 1% level with the p value on a two-tailed test.

Panel (a): DFI Investment on economic growth in SA				
Variable	Model 1	Model 2	Model 3	Model 4
Growth rate of GDP per capita $it-1$	-0.005	0.118	0.142	0.099
	(-0.030)	(0.872)	(1.477)	(0.764)
Trade openness$_{it}$	3.500	2.301	2.011	1.126
	(1.512)	(0.946)	(1.006)	(0.525)
FDI$_{it}$	-0.338**	-0.327**	-0.318***	
	(-2.679)	(-2.577)	(-2.624)	
Government consumption$_{it}$	-5.761***	-1.732***		
	(-1.043)	(-0.431)		
Inflation$_{it}$	-1.678			
	(-1.232)			
DFI Credit to BEE$_{it-2}$	0.514*	0.365	0.460**	0.257
	(2.152)	(1.296)	(3.282)	(1.673)
Observations	15	15	15	15

Adjusted R-Squared	0.332	0.284	0.341	-0.065
Panel (b): DFI Investment on economic growth in emerging markets				
Growth rate of GDP per capita$_{it-1}$	0.137*	0.136*	0.199***	0.212***
	(1.854)	(1.867)	(3.097)	(3.286)
Trade openness$_{it}$	-0.336**	-0.333**	-0.112	-0.099
	(-2.184)	(-2.197)	(-1.397)	(-1.233)
FDI$_{it}$	0.040	0.044	0.275	
	(0.166)	(0.186)	(1.3660	
Government consumption$_{it}$	-1.192	-1.197*		
	(-1.675)	(-1.702)		
Inflationit	-0.014			
	(-0.339)			
DFI Credit$_{it-2}$	0.191***	0.193***	0.194***	0.207***
	(2.860)	(2.922)	(2.871)	(3.065)
Observations	44	44	44	44
Adjusted R-Squared	0.546	0.557	0.535	0.525

Table 3, Panel (a) shows the effects of DFI credit extension to BEE on SA's economic growth. The findings reflect that higher government spending leads to a retraction in the growth of the economy. Thus, government consumption in two model specifications has a negatively high and significant coefficient (β= -5.761, t = -1.043) and (β= -1.732, t = -0.431). FDI also has a negative and significant role in macroeconomic growth, meaning that more foreign investment inflows are leading to negative economic growth in South Africa. FDI coefficients is within the same range for three specifications observed for this variable (β= -0.338, β= -0.327, β= -0.318). Trade openness and inflation are not significantly related to economic growth in South Africa. The variable of interest DFI credit to BEE is found to have positive and significant (at 5% conventional level) impact on economic growth in model specifications 1 and 3. This result shows that, in South African, DFI credit financing for BEE is imperative for growth of the South African economy as it finances black owned businesses that are not adequately catered for by the conventional financial institutions.

Table 3, Panel (b) presents the results for emerging market economies. Trade openness is negatively and significantly impacting on economic growth in these markets. This means that an increase in trade openness leads to a negative effect on economic growth. As with

South African sample, government consumption has a negative and significant impact on growth of the economy (β= -1.192, β= -1.197). Foreign direct inflows and inflation are not significant.

The variable of interest, credit extension is significant and is the only one that contributes positively to economic growth. As in Massa (2011), the DFI credit coefficient is consistent in all specifications (β = 0.191 to β = 0.207) this shows that DFIs credit extension consistently enhances economic growth in emerging market regardless of model specification. The level of significance of DFI credit in other emerging markets is higher than in South Africa.

4.3.2 *IMPACT OF DFI EXTENSION ON ECONOMIC TRANSFORMATION*

An additional analysis was carried out to determine the impact of other factors, including manufacturing to GDP on economic growth of South Africa and emerging markets. This analysis is important because it shows the other factors that the governments and policy makers should concentrate on to stimulate economic growth and socio-economic transformation.

Table 4 below presents the effect of DFIs investment on the manufacturing to GDP ratio using 4 model specifications.

Table 4

Manufacturing to GDP South Africa

This table outlines coefficients and t-statistics (in brackets) from the regressions 1 up to 4 for the South African sample. The number of observations n = 18 has been reduced due to the use of lags. The beta coefficients' significance is represented as follows; * at 10% level, ** at 5% level and *** at 1% level with the p value on a two-tailed test.

Panel (a): The effect of manufacturing on economic growth in SA				
Variable	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Growth rate of GDP per capita$_{it-1}$	1.664	1.521	2.053*	2.260**
	(0.021)	(0.018)	(0.035)	(0.034)
Trade openness$_{it}$	-6.066	-4.490***	-4.048***	-4.025***
	(-0.579)	(-0.536)	(-0.859)	(-0.881)
FDI$_{it}$	-1.558	-1.621	-0.305	
	(-0.013)	(0.000)	(-0.007)	
Government consumption$_{it}$	-6.178	-6.123		
	(-1.834)	(-1.926)		
Inflation$_{it}$	0.797			
	(0.079)			
DFI Credit$_{it-2}$	0.824	1.539	2.745**	2.856**
	(0.030)	(0.043)	(0.131)	(0.127)
Observations	18.00	18.00	18.00	18.00
Adjusted R-Squared	0.885	0.889	0.465	0.500
Panel (b): The effect of manufacturing on economic growth in emerging markets				
Growth rate of GDP per capita$_{it-1}$	3.044***	2.930***	5.397	5.491
	(0.067)	(0.069)	(0.156)	(0.162)
Trade openness$_{it}$	-4.915	-4.319	3.167***	2.924***
	(-0.215)	(-0.201)	(0.100)	(0.094)
FDI$_{it}$	-0.112	-0.214	1.819*	
	(-0.003)	(-0.006)	(0.064)	
Government consumption$_{it}$	-7.788	-7.316		
	(-1.413)	(-1.422)		
Inflation$_{it}$	-2.853***			
	(-0.037)			
DFI Credit$_{it-2}$	3.516***	3.312***	2.374**	2.380**
	(0.042)	(0.042)	(0.043)	(0.044)
Observations	54.000	54.000	54.000	54.000
Adjusted R-Squared	0.864	0.844	0.676	0.661

Table 4 shows the economic transformation effect by measuring the impact of DFI credit extension on manufacturing-to-GDP in South Africa. Panel (a) shows that Trade openness is significantly negative to manufacturing-to-GDP meaning that an increase in trade openness leads reduce manufacturing growth (β= -4.490, β= -4.048, β=-4.025). Foreign direct inflows, government consumption and inflation are not significant. DFI credit extension is significant (see Specifications 3 and 4 at β= 2.745 and β= 2.856) and is the only variable that contributes positively to economic growth. This finding shows that DFIs credit extension to BEE consistently enhances manufacturing growth after dropping the government consumption variable.

Panel (b) provides a summary of manufacturing results for the sub-sample of emerging market economies. Unlike in South Africa trade openness is positively significant to manufacturing in emerging markets. Also observed is that inflation has a negative and significant impact on manufacturing (β= -2.853). Foreign direct inflows and government consumption are not significant. As seen in South Africa, DFI credit extension is significant and contributes positively to manufacturing confirming that DFIs credit extension consistently enhances manufacturing. However, upon dropping government consumption the level of significance falls from 1% to 5% suggesting that emerging economies depend on government consumption to observe higher growth in economic transformation.

4.4   THE IMPACT OF DFI CREDIT EXTENSION ON SOCIAL TRANSFORMATION

In measuring the impact of DFI credit extension on social transformation, the Gini coefficient measure was dropped due to the lack of sufficient data on the variable and its high correlation with poverty rate which is a sign of possible multicollinearity. Human development index and Poverty are used as social transformation measures.

4.4.1   IMPACT OF DFI EXTENSION ON HUMAN DEVELOPMENT INDEX

Table 5 presents the results of the impact of DFI extension on social transformation as measured by Human development Index (HDI) in both SA and emerging markets.

Table 5

Impact of FDI extension on HDI in South Africa

This table outlines coefficients and t-statistics (in brackets) from the regressions 1 up to 4 for the South African sample. The beta coefficients' significance is represented as follows; * at 10% level, ** at 5% level and *** at 1% level with the p value on a two-tailed test.

Variable	Model 1	Model 2	Model 3	Model 4
Panel (a): The effect of DFI extension on SA's Human Development Index				
Growth rate of GDP per capita$_{it-1}$	-2.877**	-2.884**	-5.294***	-5.403***
	(-0.008)	(-0.007)	(-0.008)	(-0.008)
Trade openness$_{it}$	2.188*	1.823	3.225**	3.452***
	(0.081)	(0.064)	(0.081)	(0.084)
FDI$_{it}$	0.888	1.108	1.388	
	(0.001)	(0.001)	(0.001)	
Government consumption$_{it}$	0.249	0.888		
	(0.023)	(0.065)		
Inflation$_{it}$	-0.617			
	(-0.014)			
DFI Credit$_{it-2}$	-3.795***	-4.505***	-14.757***	-15.625***
	(-0.021)	(-0.022)	(-0.025)	(-0.025)
Observations	14	14	14	14
Adjusted R-Squared	0.846	0.858	0.852	0.852
Panel (b): The effect of DFI extension on emerging markets' Human Development Index				
Growth rate of GDP per capita$_{it-1}$	-0.058	-0.019	-1.658	-1.656
	(-0.001)	(0.000)	(-0.020)	(-0.020)
Trade openness$_{it}$	4.350***	4.213***	0.625*	0.679*
	(0.110)	(0.103)	(0.009)	(0.009)
FDI$_{it}$	2.349**	2.243**	0.682	
	(0.049)	(0.047)	(0.017)	
Government consumption$_{it}$	4.432	4.319***		
	(0.445)	(0.431)		
Inflation$_{it}$	1.062			

	(0.007)			
DFI Credit$_{it-2}$	1.554	1.548	1.248	1.240
	(0.009)	(0.009)	(0.009)	(0.009)
Observations	36	36	36	36
Adjusted R-Squared	0.388	0.386	0.036	0.052

Table 5, Panel (a) provides the results of the social transformation effect of DFI credit extension in South Africa by measuring the impact it has on the Human Development Index (HDI). Trade openness has a positive and significant relationship with HDI. Thus, an increase in trade openness increases human development in South Africa as shown by the beta coefficient of 0.009. FDI, government consumption, and inflation do not have a significant relationship with HDI in South Africa. A key independent variable of the study-DFI Credit has a negative and significant relationship with HDI throughout all the four model specifications suggesting that an increase in credit extension leads to a decrease in human development.

Panel (b) summarises results for the sub-sample of emerging market economies. As in South Africa trade openness is positively significant to HDI in emerging markets. Also observed is that FDI (β= 2.349, β= 2.243) and government consumption (β= 4.319) have positive and significant bearing on HDI. Inflation and DFI credit extension are not significantly related to HDI.

4.4.1 IMPACT OF DFI EXTENSION ON POVERTY

Table 6 below presents the results of the impact of DFI credit extension on poverty in South Africa and other emerging markets.

Table 6

Poverty in South Africa

This table outlines coefficients and t-statistics (in brackets) from the regressions 1 up to 4 for the South African sample. The number of observations n = 12 has been reduced due to the use of lags. The beta coefficients' significance is represented as follows; * at 10% level, ** at 5% level and *** at 1% level with the p value on a two-tailed test.

Variable	Model 1	Model 2	Model 3	Model 4
Panel (a): The effect of FDI extension on poverty in SA				
Growth rate of GDP per capita$_{it-1}$	0.631	0.909	0.348	0.083
	(0.018)	(0.022)	(0.009)	(0.002)
Trade openness$_{it}$	4.916***	5.946***	4.180***	3.186**
	(1.257)	(1.225)	(1.300)	(1.165)
FDI$_{it}$	-1.168	-1.460	-0.901	
	(-0.076)	(-0.076)	(-0.048)	
Government consumption$_{it}$	3.064**	3.064**		
	(1.522)	(1.522)		
Inflation$_{it}$	-0.887			
	(-0.172)			
DFI Credit$_{it-2}$	1.927	1.723	0.843	-0.048
	(0.153)	(0.144)	(0.064)	(-0.004)
Observations	12	12	12	12
Adjusted R-Squared	0.728	0.751	0.497	0.523
Panel (a): The effect of FDI extension on poverty in emerging markets				
Growth rate of GDP per capita$_{it-1}$	-2.689**	-2.383**	-2.987***	-3.128***
	(-0.223)	(-0.204)	(-0.223)	(-0.230)
Trade openness$_{it}$	-1.859*	-1.899*	-4.673	-4.673
	(-0.352)	(-0.373)	(-0.453)	(-0.444)
FDI$_{it}$	-0.538	-0.371	-0.621	
	(0.037)	(-0.037)	(-0.056)	
Government consumption$_{it}$	-0.005	0.471		
	(-0.004)	(0.389)		
Inflation$_{it}$	1.945			
	(0.132)			
DFI Credit$_{it-2}$	-2.270**	-1.986*	-2.103**	-2.139**
	(-0.103)	(-0.093)	(-0.096)	(-0.097)

Observations	12	12	12	12
Adjusted R-Squared	0.724	0.702	0.708	0.713

Table 6, Panel (a) shows there is a significantly positive relationship between poverty and trade openness as well poverty and government consumption. Thus, the increase in trade openness and consumption by the government lead to an increase in poverty in South Africa. Interestingly, there is a significantly negative relationship between DFI credit extension and poverty. This finding means that an increase in DFI credit extension results in poverty reduction in South Africa. Panel B also shows that DFI credit extension leads to the reduction in poverty in emerging markets.

CHAPTER SUMMARY

This chapter presented the descriptive data statistics for the SA and emerging markets samples as well the results of the effect of DFI credit extension on economic growth and on other measures in South Africa and on emerging markets. Chapter five presents discussion, conclusions and recommendations for further study of the research from the presented results.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 INTRODUCTION

This is the last chapter of this thesis. The aim is to discuss the findings in Chapter 4 and to conclude the study. The chapter is arranged as follows: Section 5.2 discusses the findings. Section 5.3 concludes the study and section 5.4 presents limitations and recommendations for future research.

5.2 DISCUSSION

The aim of this research was to investigate the extent to which South African DFI's have contributed to the socio-economic development of SA as well as in emerging markets. The null hypothesis tested is that BEE type of credit extension by DFIs has a positive impact on socio-economic transformation.

The results show that DFI credit extension is found to have positive and significant impact on economic growth in in both South African and in emerging markets. Also, in both South Africa and in emerging markets, government consumption has negative impact on economic growth. An additional analysis further shows that DFI credit extension promotes increase in manufacturing-to-GDP in SA and in other emerging markets. DFI has significantly positive impact on HDI in South Africa but not in emerging markets. There is a positive (albeit not significant) impact of DFI credit extension on poverty in South Africa, worse still, the relationship is significantly negative in other emerging countries.

The finding that DFI credit extension promotes economic growth in South Africa is crucial as the government allocates billions of Rands to DFIs such as IDC to try and effect economic and social transformation in South Africa. The DFIs are expected to lend the money to entrepreneurs who in turn would invest the money in those projects that will improve employment rate, innovation and have welfare effect (see, for example, Wennekers and Thurik, 1999 and Baumol, 2002). The results may be an indication that there is some level of opportunity entrepreneurship in South Africa (Acs and Varga (2005). What is even more important in South Africa is that most back owned business cannot get financing

through formal banking system as a result the role of DFI in providing credit is even magnified and corroborate the findings of Galor and Zeira, 1993; Ojah & Mokoaleli-Mokoteli, 2010 and Massa 2011 that access to finance can increase growth, and eventually reduce inequality. The finding that DFI extension has a positive impact on manufacturing-to-GDP support Kerr and Nanda (2009) who states that access to finance is a driver of growth in manufacturing and economic empowerment.

The finding that government spending has negative impact on economic growth is in line with other research including Deravajan et al, 1996 and Lin, 1994.

5.3   CONCLUSION AND FURTHER RESEARCH

The objectives of this study is: one, to establish the extent to which South African DFI's have contributed to the economic development of SA; two, to investigate the extent to which South African DFI's have contributed to socio-economic development and lastly, to establish whether credit extension by DFI's have similar impact among emerging market economies. The Generalized Methods of Moments (GMM) for panel data analysis proposed by Arellano and Bond (1991), further enhanced by Arellano and Bover, (1995); Blundel and Bond (1998) is used to examine impact of development finance institutions on socio-economic transformation. GMM has been used by other researchers including Levine et al., (2000) and Massa (2011). The null hypothesis tested is that BEE type of credit extension by DFIs has a positive impact on socio-economic transformation.

The result show that in South African, DFI credit financing for BEE is imperative for growth of the South African economy as it finances black owned businesses that are not adequately catered for by the conventional financial institutions. The results further show that DFIs credit extension consistently enhances economic growth in emerging market regardless of model specification. The level of significance of DFI credit in other emerging markets is higher than in South Africa. Additional tests show that DFI Credit extension enhances economic growth and reduces poverty while on the other hand it reduces human development.

In conclusion, the results show that the government should bolster their funding of DFIs as they play a major role on economic development. In support of Gumede (2011), DFIs

should be aligned with broader economic policy, there should be effective coordination of different DFIs for better synergy, and government should ensure greater coordination between DFIs and SOEs and should boost their capacity to enhance development impact and upscale counter-cyclical funding.

Further studies could investigate whether sectorial DFI credit commitments have an impact on economic growth in different industries so that the policy makers could concentrate on them. Furthermore, a comprehensive analysis of government spending on economic growth need to be investigated.

REFERENCES

Aderibigbe, J. O. (2001). The role of the financial sector in poverty reduction. CBN Economic and Financial Review, 39(4), 135-158.

Aghion, P., & Bolton, P. (1997). A theory of trickle-down growth and development. The Review of Economic Studies, 64(2), 151-172.

Agrawal, S. (2007). Emerging Donors in International Development Assistance: The India Case. IDRC.

Ali, I. (2007). Inequality and the Imperative for Inclusive Growth in Asia. Asian Development Review. 24. (2). Asian Development Bank (ADB). Manila.

Aliber, M., Kirsten, M., Maharajh, R., Nhlapo-Hlope, J., and Nkoane, O. (2006). Overcoming underdevelopment in South Africa's second economy. Development Southern Africa, 23(01), 45-61.

Baumol, W. J. (1996). Entrepreneurship: Productive, unproductive, and destructive. Journal of Business Venturing, 11(1), 3-22.

Basnett, Y., Engel, J., Kennan, J., Kingombe, C., Massa, I., and te Velde, D. W. (2012). Increasing the effectiveness of Aid for Trade: the circumstances under which it works

Beck, T., and Demirgüç-Kunt, A. (2008). Access to finance: An unfinished agenda. The World Bank Economic Review, 22(3), 383-396.

Beck, T., Levine, R., & Loayza, N. (2000). Finance and the Sources of Growth. Journal of Financial Economics, 58(1), 261-300.

Bernanke, B.S., 2006, "Community Development Financial Institutions: Promoting Economic Growth and Opportunity," remarks at the Opportunity Finance Network's Annual Conference, Washington, November

Black, P. A. (2002). On the case for "Black Economic Empowerment" In South Africa**. South African Journal of Economics, 70(8), 1148-1162.

Black, S. E., and Strahan, P. E. (2002). Entrepreneurship and bank credit availability. The Journal of Finance, 57(6), 2807-2833.

Bhandari, L., Dasgupta, S., and Gangopadhyay, S. (2003). Development financial institutions, financial constraints and growth: evidence from the Indian corporate sector. Journal of Emerging Market Finance, 2(1), 83-121.

BNDES (Brazilian Development Bank), (2010). Consolidation in the ethanol sector. www.bndes.gov.br/SiteBNDES/bndes/bndes_en/Institucional/Press/ Comunicados/2010/20100219_ETHBrenco.html

Breisinger, C., and Diao, X. (2008). Economic transformation in theory and practice: What are the messages for Africa?. Washington, DC: International Food Policy Research Institute.

Brooks, C. (2014). Introductory econometrics for finance: Cambridge university press.

Boúúaert, M., and Bank, I. (2008). A Billion to Gain?: A Study on Global Financial Institutions and Microfinance: Next Phase: ING Microfinance Support.

Calice, P (2013), African Development Finance Institutions: Unlocking the Potential, Working Paper Series N° 174 African Development Bank, Tunis, Tunisia

Calvo, G. A., and Frenkel, J. A. (1991). Credit markets, credibility, and economic transformation. The Journal of Economic Perspectives, 139-148.

Caprio, G. (2000). "Government Failure In Finance" Presented in World Bank Conference on Transforming Public Sector Banks.

Chopra, M., Lawn, J. E., Sanders, D., Barron, P., Karim, S. S. A., Bradshaw, D., and Coovadia, H. (2009). Achieving the health Millennium Development Goals for South Africa: challenges and priorities. The Lancet, 374(9694), 1023-1031.

Clive Bell, P. L. (2000). Post-Independence India: A Case of Finance-led Industrialization. Nashville: Vanderbilt University.

Dalberg Global Development Advisors, (2010):The Growing Role of the Development Finance Institutions in International Development Policy, Published by Dalberg Global Development Advsiors- Copenhagen

Dickinson, T. (2008). Development Finance Institutions: Profitability Promoting Development. Organization for Economic Cooperation and Development.

Downs, E, (2011). Panel on New Interest Groups in Chinese Foreign Policy. United States-China Economic and Security Review Commission, 13 April.

Easterly, W., and Easterly, W. R. (2006). The white man's burden: why the West's efforts to aid the rest have done so much ill and so little good: Penguin.

EDFI(2010),The growing role of DFIs in International Development Policy https://www.deginvest.de/DEG-Documents-in-English/Download-Center/EDFI

Edigheji, O. (2010). Constructing a democratic develop mental state in South Africa: Potentials and chal lenges. Constructing a democratic developmental state in South Africa. Cape Town: Human Sciences Research Council, 1-33.

Esser, I. M., and Dekker, A. (2008). Dynamics of Corporate Governance in South Africa: Broad Based Black Economic Empowerment and the Enhancement of Good Corporate Governance Principles. J. Int'l Com. L. and Tech., *3*, 157.

Francisco, M. (2008). Measuring the performance and achievement of social objectives of development finance institutions (Vol. 4506). World Bank Publications.

Mais, D. (2014). A Review of the Environmental and Social Policies of National Development Banks in Brazil, China, and India. Friends of the Earth

Gabriel, A.S. (2013) Development Financial Institutions and their role in supporting Emerging Markets Private Equity Funds. editorial board, 126.

Galor, O., & Zeira, J. (1993). Income distribution and macroeconomics. The review of economic studies, 60(1), 35-52.

Garang, J. A. (2014). The financial sector and inclusive development in Africa: essays on access to finance for small and medium-sized enterprises in South Sudan and Kenya.

George, G., and Prabhu, G. N. (2003). Developmental financial institutions as technology policy instruments: Implications for innovation and entrepreneurship in emerging economies. Research Policy, *32*(1), 89-108.

Gradl, C., and Jenkins, B. (2011). Tackling Barriers to Scale.

Gries, T., and Naudé, W. (2010). Entrepreneurship and structural economic transformation. Small Business Economics, 34(1), 13-29. doi: 10.1007/s11187-009-9192-8

Gujarati, D. N. (2012). Basic econometrics: Tata McGraw-Hill Education.

Gumede, W., Govender, M and Motshidi, K (2011) . The role of South Africa,s State Owned development finance institutions in buileding a democratic state, Development Planning Division Working Paper Series No . 29 DBSA

Hart, S. L., and London, T. (2005). Developing native capability. Stanford Social Innovation Review, 3(2), 28-33.

Hicks, J. R. (1969). A theory of economic history. OUP Catalogue.

Hoffman, K., West, C., Westley, K., and Jarvis, S. (2005). Enterprise solutions to poverty. Shell Foundation

Jenkins, B. (2007). Expanding Economic Opportunity. Havard Economic Opportunity Series.

Jenkins, B., and Fries, L. (2012). PROJECT NURTURE: Partnering for Business Opportunity and Development Impact.

Johannesburg Stock Exchange (2010), JSE Presents Findings on Black Owenership on the JSE

Johannesburg Stock Exchange (2012) Black Shareholders hold far greater percentage of the publicly shares on the JSE than people think

Kane, J. A. (1975). Development banking: an economic appraisal. Lexington Books.

Kerr, W., and Nanda, R. (2009). Financing constraints and entrepreneurship (No. w15498). National Bureau of Economic Research.

King, R. G., and Levine, R. (1993). Finance, entrepreneurship and growth. Journal of Monetary economics, 32(3), 513-542.

Kingombe, C., Massa, I., and te Velde, D. W. (2011). Comparing Development Finance Institutions. Literature review. Overseas Development Institute, London.

Knight, R. (2006). South Africa 2006: Challenges for the future. Retrieved April, 30, 2007.

Krüger, L. P. (2011). The impact of black economic empowerment (BEE) on South African businesses: Focusing on ten dimensions of business performance. Southern African Business Review, 15(3), 207-233.

Kuzilwa, J. A. (2005). The Role of Credit for Small Business Success A Study of the National Entrepreneurship Development Fund in Tanzania. Journal of entrepreneurship, 14(2), 131-161.

Kwakkenbos, J., Romero, M. J. (2013). Engaging the private sector for development: The role of Development Finance Institutions? "Private Sector Development –, Wien, pp. 25 - 30

Lachler, U. (1985). Debt versus Equity in Development Finance. Kiel Institute of World Economics: Working Paper.

La Porta, R., Lopez-de-Silanes, F., and Shleifer, A. (2002). Government ownership of banks. The Journal of Finance, 57(1), 265-301.

Levine, R. (1997). Financial development and economic growth: views and agenda. Journal of economic literature, 688-726.

Levine, R., Loayza, N., and Beck, T. (1999). Financial intermediation and growth: causality and causes (Vol. 310): World Bank Publications

Levine, R., & Zervos, S. (1996). Stock market development and long-run growth. The World Bank Economic Review, 10(2), 323-339.

Levine, R. (2005). Finance and growth: theory and evidence. Handbook of economic growth, 1, 865-934.

Lin, X. and Zhang, Y. (2008) Bank ownership reform and bank performance in China. Journal of Banking and Finance

London, T. (2007). A base-of-the-pyramid perspective on poverty alleviation. Ann Arbor: The William Davidson Institute-University of Michigan-, Working Paper.

M Rajeev, H. P. (2010). Banking Sector Reforms and NPA: A Study of Indian Commercial Banks. Bangalore: Institutue for Social and Economic Change.

Maia, J., Mondi, L., & Roberts, S. (2005). Industrial development and industrial finance in Brazil and South Africa: Comparative assessment. In Annual Forum.

Mashigo, P. (2008). Transforming the South African Credit Market through Group Lending Mechanisms. Journal of Case Research in Business and Economics, pp. 1 -16

Mashigo, P., and Schoeman, C. (2011). Micro credit and the transforming of uncertainty since 1976: international lessons for South Africa.

Mason, N., Tucker, J., Kingombe, C., and Kooy, M. (2011). Progress-linked finance: A study of the feasibility and practicality of a proposed WASH financing approach.

Massa, I. (2011). 'Impact of Multilateral Development Finance Institutions on Economic Growth'. London: ODI.

Meier, G. M., & Seers, D. (Eds.). (1984). Pioneers in development (Vol. 375). New York: Oxford University Press.

Naidoo, S., Hilton, A. and Melzer, I. (2006). Access to finance for women entrepreneurs in South Africa: challenges and opportunities, available on http://www.finmarktrust.org.za

Nawaz, A. (2010). Performance of microfinance: the role of subsidies. Savings and Development, 97-138.

Nell, M., & Rust, K. (2002). Rural Housing Loan Fund: Towards a strategy for incremental housing. A report prepared for the Rural Housing Loan Fund. Johannesburg: RHLF.

Nelson, J. (2007). Building linkages for competitive and responsible entrepreneurship. Innovative partnerships to foster small enterprise, promote economic growth, and reduce poverty in developing countries. Vienna: UNIDO and Harvard University.

Nhlapo, T. S. (2008). Black Economic Empowerment Funding Efficiency: A South African Perspective (Doctoral dissertation, North West University.

Ojah, K., & Mokoaleli-Mokoteli, T. (2010). Possible effective financing models for entrepreneurship in South Africa: Guides from microfinance and venture capital finance. African Finance Journal, 12(1), 1-26.

Papaioannou, E. (2007). Finance and growth: a macroeconomic assessment of the evidence from a European angle.

Porteous, D., & Hazelhurst, E. (2004). Banking on Change: Democratizing Finance in South Africa 1994-2004 and Beyond: Cape Town: Double Storey.

Ponte, S., Roberts, S., and Van Sittert, L. (2007). 'Black Economic Empowerment', business and the state in South Africa. Development and Change, 38(5), 933-955.

Rajan, R. G., and Zingales, L. (1996). Financial dependence and growth (No. w5758). National bureau of economic research.

Rangan, V. K., Quelch, J. A., Herrero, G., and Barton, B. (2007). Business solutions for the global poor: Creating social and economic valu*e*: John Wiley and Sons.

Reitzes, M. 2009. The Impact of Democracy on Development: The Case of South Africa.Centre for Policy Studies. Johannesburg

Rudolph, H. P. (2010a). State Financial Institutions. Journal "Crisis Response, The World Bank Group, 1(8).

Rudolph, H. P. (2010). State financial institutions: Can they be relied on to kick-start lending?

Schumpeter, J. A. (1969). The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle. London and Oxford: Oxford University Press, 1969. Translated by Redvers Opie. Translated by Redvers Opie.

Scott, T, (2008). The DBSA and the developmental state. Discussion paper. DBSA, Midrand.

Shefiu, R. (2013). Business and Investment Opportunities i mbibing an entreprenuerial culture. Continental Journal of Social Sciences, 6(1).

Sutton, C. N., and Jenkins, B. (2007). The role of the financial services sector in expanding economic opportunity. Harvard University.

Townsend, R. and Yaron, J. 2001. "The Credit-Risk-Contingency System of an Asian Development Bank." Federal Reserve Bank of Chicago

Yaron, J. (2005) 'State - owned Development Finance Institutions (SDFI): Background, Political Economy and Performance Assessment'. Rural Finance Research Conference, Rome, 19 - 21 March.

World Bank Journal on Access to Finance for Women Entrepreneurs in South Africa , Challenges and Opportunities

www.edfi.be/component/downloads/downloads/19.html

www.gcis.gov.za/sites/default/files/docs/resourcecentre/.../issues.p

www.nepad.org/.../1e%20**political**%20economy%20theme%201%20Eng

Beck, T., Levine, R., & Loayza, N. (2000). Finance and the Sources of Growth. Journal of Financial Economics, 5*8*(1), 261-300.

Edigheji, O. (2010). Constructing a democratic develop mental state in South Africa: Potentials and chal lenges. Constructing a democratic developmental state in South Africa. Cape Town: Human Sciences Research Council, 1-33.

Galor, O., & Zeira, J. (1993). Income distribution and macroeconomics. The review of economic studies, 60(1), 35-52.

King, R. G., & Levine, R. (1993). Finance, entrepreneurship and growth. Journal of Monetary economics, 32(3), 513-542.

Levine, R. (1997). Financial development and economic growth: views and agenda. Journal of economic literature, 688-726.

Levine, R. (2005). Finance and growth: theory and evidence. Handbook of economic growth, 1, 865-934.

Levine, R., Loayza, N., & Beck, T. (1999). Financial intermediation and growth: causality and causes (Vol. 310): World Bank Publications.

Nell, M., & Rust, K. (2002). Rural Housing Loan Fund: Towards a strategy for incremental housing. A report prepared for the Rural Housing Loan Fund. Johannesburg: RHLF.

Ojah, K., & Mokoaleli-Mokoteli, T. (2010). Possible effective financing models for entrepreneurship in South Africa: Guides from microfinance and venture capital finance. African Finance Journal, 12(1), 1-26.

Papaioannou, E. (2007). Finance and growth: a macroeconomic assessment of the evidence from a European angle.

Porteous, D., & Hazelhurst, E. (2004). Banking on Change: Democratizing Finance in South Africa 1994-2004 and Beyond: Cape Town: Double Storey.