PERSPECTIVES

DEVELOPMENT IS FREEDOM: DEVELOPMENT IDEAS AFTER 20 YEARS OF FREEDOM



Editorial | The Role of Speculation in the South African Foreign Exchange Market | Searching for Growth in Africa: Regulatory Implications for Banks | Evaluation the Charter Cities Concept in Stimulation Regional Economic Development | Estimating the Potential Impact of Capital Expenditure in Agriculture in the Eastern Cape | Jeffrey's Bay Community Savings and Lending Enterprise | Building Sustainable Competitiveness Under Low Technology Conditions | Benefits for Localizing Wind Energy Components | Managing Political Protest in South Africa | Dealing with a False Dichotomy between Basel III and Financial Inclusion | South Africa's Current Efforts to become a Developmental State: Prospects, Challenges or Wishful Thinking? | Opportunity for the Eastern Cape to Fly High | Mohair: The Eastern Cape's Wonder Product | Supply Chain Accounting and Employment Practices (Scap-Emp) Project | Reviving and Strengthening the Manufacturing Sector in South Africa | Why Nations Fail: The Origins of Power, Prosperity and Poverty

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EDITORIAL

This fifth issue of Perspectives covers a range of current and emerging initiatives within, and in selected cases, without the South African economic policy and society nexus. With the second decade of South Africa's post-apartheid democracy drawing to a close, it is appropriate to take stock of achievements and respond to new challenges and opportunities. It is this reflexive and historically nuanced approach to development policy that will stand South Africa in good stead in the years to come.

With heightened concern in national and certain international circles regarding South Africa's increased national debt, and the current performance of the rand on global markets, the opening article by Hamdan Ntare and Adbou Semiyou Raifiou is particularly topical. Focussing on the floating exchange rate period in South Africa, they explore the role of speculation in the South African Foreign Exchange Market, and engage with the enduring debate whether speculation in foreign exchange markets has a stabilizing (indicating that the foreign exchange market is efficient) or destabilizing effect. Their particular emphasis is to examine the play of destabilizing speculation within the South African foreign exchange

Their findings suggest that the South African foreign exchange market is inefficient, and that speculation is statistically significant. The foreign exchange market, appears to be conditioned by speculation, particularly of a short-term nature. The authors surmise that this could be a result of the role of destabilizing speculation in the global foreign exchange markets.

The authors emphasize that their findings cannot be seen as definitive. They were not able to carry out an investigation predicated on an extensive data set because of the current lack of high frequency data on the net open positions of speculators in South Africa. They outline possibilities for future research including an investigation into the role of speculation under different exchange rate regimes (fixed and floating).

The need for South African and African institutions to rethink and refine fiscal regimes within national economies and regionally is the theme of Njabulo Sithebe's article. He argues that the twin imperatives of growing real foreign investment and financial speculation in Africa, and South Africa's continued economic and financial expansion into Africa, have substantive implications for South African banks and African banks generally

For South African banks operating within African territories or thinking of expanding into the continent, good governance, Sithebe stresses, is non-negotiable. Also within the continent, more systematic and tighter regulatory measures need to be applied at bank, sector and regional level. These should be compliant with relevant international norms and practices as evinced in

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the Basel III guidelines. It is vital that cooperation among African regulators be followed by specific sets of interventions to establish effective arrangements for cross-border supervision of banks. It is also important to construct the requisite systems for effective information-sharing among African regulators and to create a user-friendly database to serve a regional banking system. For South African and African banks to take advantage of increasing international investment and involvement in African economies (national and regional) and to forge mutually beneficially partnership with international banking groups, the foundations need to be put in place swiftly and with precision. To not do so would disadvantage the South African and African banks and financial institutions vis-à-vis international organizations, and see a corresponding loss in emerging business opportunities.

Effective bank regulations should underpin financial sector reforms to promote efficiency and facilitate access to financial resources and thus improve the investment environment. Such steps will further stimulate regional cooperation and trade, and in time create the conditions for sustained high growth.

The question of finding more relevant models and practices for economic development enhancement in Africa is addressed in David Gate and Hendrick Lloyd's article on charter cities. They challenge the popular notion that heightened urbanization in Africa rather than improving the overall quality of life represents a shift from rural poverty to urban immiseration. They take their cue from neo-institutionalist writings in economics and economic geography, which emphasize weak institutions and the accompanying regulatory regime as inhibiting economic development in developing countries. More specifically, they use as touchstone the work of scholars who advocate establishing specific reform zones with improved rules and institutions, drawing inter alia on the Hong Kong model, as a means of addressing dysfunctional urban development. Romer terms such zones 'charter cities' With specific reference to Zimbabwe, the authors seek to assess the 'charter city' approach as a means of stimulating regional and local economic development in Africa. Following this model, Zimbabwe would establish a Special Reform Zone on uninhabited land and therein construct a charter city. It could then decide whether to have a partner country or coalition of partner countries (preferably other African countries to avoid seeing the venture as a neo-colonial intervention) to act a guarantors of the institutional integrity of the charter city to reassure and attract investors, and to provide a more open and transparent environment for economic activity.

Idriss Mouchili and Herman Azemtsa apply a regional Input-Output model to estimate the potential impact of the increased capital expenditure in the agricultural sector in the Eastern Cape on the economy of the Eastern Cape, the remainder of South Africa excluding the Eastern Cape, and the whole of South Africa. They argue that a thriving agricultural sector is crucial for the transformation of rural livelihoods and the reduction of inequalities by increasing incomes and employment opportunities for the poor, while adding to the beneficiation of natural resources. They maintain that there is a renewed sense from Provincial government that large-scale established agriculture has the potential to increase levels of employment and contribute to social stability and safety in rural areas. In this regard, the Eastern Cape has positioned itself to benefit from the Special Economic Zones (SEZs) bill initiated by the department of trade and industry (the dti) with two proposed agro-processing SEZs in the region - the Wild Coast and the Chris Hani SEZs.

Using Pierre Bourdieu's (1986) concept of cultural capital, both as a concept and a set of activities, processes and networks linked to other forms of capital construction, Richard Haines and Amy Shelver note its continued relevance and integral nature in the creation and maintenance of the knowledge economy in the 21st century. The authors show that there is significant scope for more

focussed studies on the nature and meaning of cultural capital and its articulation within the South African knowledge economy and the economy generally. Their paper is essentially three-fold. It provides a compact and exploratory contextual discussion of the changing discourse on cultural capital globally and the relationship between cultural capital formation and the expansion of knowledge economies. Secondly, a selective and provisional examination is provided of the use of the concept and policy applications of cultural capital within the South African economy. Finally, examples of its actual and potential deployment within the Eastern Cape regional economy (particularly the more advanced and knowledge-intensive components) are examined and selected policy applications discussed.

The question of using existing terrain-based resources to stimulate economic growth and development is of particular interest to Siphamandla Gumbi. He proposes looking more closely at latent tourism potential in three intersecting instances in the uThukela District Municipality in KwaZulu-Natal, as a means to promoting local economic development (LED). Using Toerien's (2005) analysis of how nations and/or municipalities can activate sustainable competitiveness in low technology contexts, Gumbi outlines how the uThukela District can use three key factors to drive tourism to the municipality and thereby create jobs and competitive economy activity. The three inherent district assets are the world-renowned Ladysmith Black Mambazo music group, the Drakensberg Mountains and the historic battlefields of the South African War and the Anglo-Zulu War of 1879. Gumbi argues that the talent found in the area, combined with the natural features and the historical interest of the area could be used to attract tourism, both local and international.

A recurrent theme in recent macro development policy documents at national and sub-national level is that of locating and diversifying the structures and practices of social economy and third sector agencies. Amanda van den Berg, Danai Tembo and Emma Hay provide a useful case study of the dynamics of one such agency, the Jeffrey's Bay Community Savings and Lending Enterprise, a project managed by the Nelson Mandela Metropolitan University (NMMU). The authors demonstrate how the Jeffrey's Bay project builds and improves upon traditional methods of mobilising low-income groups' resources to create an internal fund from which they lend each other money at an agreed-upon interest rate. They show how this methodology, without exception, has enabled low income earners to 1) eradicate their debt to money lenders, 2) improve their household asset base, 3) provide additional income streams to the household, and 4) increase the number of children they are able to send to school. The authors suggest that building institutional capacity and collaborative management of 'grassroots' autonomous schemes located within the social economy, can yield more profound development outcomes than traditional models of development investment.

Among the apparent preconditions for longer-term economic development are the entwined processes of social stability and social cohesion. Gavin Bradshaw and Ntsikelo Breakfast of the Department of Political and Conflict Studies of NMMU consider the conflict dynamics in South African society and state after the Marikana event of 2012. They contend that any response to the on-going strife in South Africa should consider the longer term and address the deeper issues. Long-standing problems which remained unresolved at the Codesa and multi-Party negotiations must be addressed and resolved. A central issue, they stress, is that corporate capital needs to develop a more caring side, and that the land question requires more creative and swift attention than at present. They also show that the formal solutions can be found with the emerging transdisciplinary area of Conflict Resolution studies.

In the final article, Vukani Nkasa considers the growing economic and industrial benefits in South Africa of renewable sources of energy with special reference to local and regional contexts. International agreements mean a significant change in the energy mix by 2030. This would include making provision for a significant increase in the promotion of wind energy firms and initiatives. Given that South Africa's wind turbine and manufacturing industry is in its early development stages, the bulk of the components and a good deal of the critical skills associated with the industry have to be imported. Nkasa argues that to accelerate development in the sector and to add value to the local economy, there is a need to move swiftly to localize production of key components of the plants and machinery such as tower structures and blades. These opportunities would inter alia be of benefit to the Eastern Cape given its raised profile as a region actively promoting green energy and industry.

DISCUSSION FORUM

The purpose of this section of the journal is to bring together shorter and informal articles in order to engender a lively debate on issues raised.

The Discussion Forum begins with Nkosana Mashiya, considers the implications of Basel III financial regulatory regime for BBBEE firms in the financial sector in South Africa. He argues with reference to empirical evidence that Basel III should not be seen as a structural impediment to BBBEE finance as has been popularly contended. He stresses that financial inclusion in South Africa improved because of and not despite a rigorous and prudent framework. South African banks and firms are in a healthier situation compared to those in many a developed and developing economy because of a strict and efficient regulatory framework.

Addressing the question of finding appropriate macro institutional forms for more sustained economic development, Msimelelo Febana and Samkelisiwe Hopa, interns in the CDC and Department of Health respectively, analyse efforts to construct a developmental state in South Africa. They see the formation of the National Planning Commission as a correct and strategic move, but emphasize the need to develop a more professional civil service and address high-level skill shortages and human capital development issues.

Eddy Russell and Motsi Leballo explore the seemingly under-appreciated value of the mohair industry in South Africa. They provide a compact development history of the industry and its locus of activities within the Eastern Cape Province. They outline the major achievements of the industry and current challenges and opportunities. Particular emphasis is placed on the latent potential of the industry in terms of beneficiation possibilities, such as linking with local and international design centres, and options for synergies with certain emerging initiatives in the Eastern Cape, especially within the sphere of 'green energy'. They call for a detailed analysis of the mohair value chain, and emphasize the opportunities for 'greening' the value chain in question.

In an exploratory discussion, Ed Richardson and Songezo Mdoda underline the logical extension of the Eastern Cape's automotive industry prowess into the unchartered potential of the aerospace industry. The authors note that with the necessary preconditions in place in the Eastern Cape – such as uncluttered airspace, favourable weather conditions, an established local market centred on the auto industry, an existing skills base, and a natural advantage – the aerospace industry is primed for take-off, should the necessary political will and championship be available to turn policy vision into reality. The authors show how the convergence of technologies and other emerging trends, such as those in the biofuels industry, create a strong business case for aerospace which can

also meet a series of policy mandates in the sector and beyond, particularly referencing South Africa's National Development Plan (NDP) of 2012 and the Department of Industry's Industrial Policy Action Plan (IPAP) 2012/13 – 2014/15. The argument moves towards identifying potential aerospace markets for the Eastern Cape and concludes that given the advantage of having companies already supplying the aerospace industry – and the skills and logistics chains – the Eastern Cape is a logical choice for the development and diversification of the province's industrial base into aerospace products and services.

Pauline Dibben, Associate Dean of Research at Sheffield University, outlines an emerging international study funded by the ESRC (English Social Research Council) and headed by the Sheffield University Management School. The three-year project which was launched recently, considers supply chain accounting and employment practices in two BRICS countries, namely, Brazil and South Africa. More specifically the project examines the current role, and future potential, of supply chain accounting in improving complementary HR practices and labour standards within the automotive and textile industries in Brazil and South Africa. Professor Dibben points out that in economies experiencing rapid growth, firms need to set their aims and ambitions high when managing accounting and employment practices down the supply chain. The findings of this research should have significant implications for the Eastern Cape, particularly the motor industry sectors, and for the DTI in its efforts to reinforce value within the automotive and textile supply chains. The research findings should also prove of interest to the executives of the IDZs and anticipated SEZs.

Lumkile Mondi and Jorge Maia of the IDC reflect on the impediments, challenges and opportunities for reviving and strengthening the manufacturing sector in South Africa. They note that strategy and policy interventions such as the Industrial Policy Action Plan (IPAP), the New Growth Path and the National Development Plan, with their differing time-frames, constitute efforts to improve the South African economy. They stress the importance of acknowledging achievements such as the protection and promotion of the local motor industry, and the survival of the textile and clothing industries. They underline as well the enactment of the Preferential Procurement Policy Framework (PPPFFA) as a means to ensure that existing and future governmental spending will support local industries.

However, shortcomings in co-operation and coordination between government departments and state-owned entities have adversely affected the development prospects of several industrial sectors. Opportunities for revising and reinforcing the South African manufacturing sector do not necessarily require new policies but rather the more effective utilization of existing policies. In addition, the selection of such interventions should coincide with government spending or core competencies, with automotive, pharmaceutical, rail engineering and equipment and renewal energy industries are being prioritized. In addition, emphasis should be placed on the future development of such sectors.

BOOK REVIEW

This issue is rounded off with Lindokuhle Ntanti and Nomzamo Kolo's insightful book review of Daron Acemoglu and James A. Robinson's 'Why Nations Fail: The Origins Of Power, Prosperity And Poverty' and their analysis of the authors' intellectual pursuit to explain why some nations manage to acquire and maintain prosperity and economic growth, while others grapple with abject poverty and disease. 'Why Nations Fail' deals with the differences in economic policies between nations, but also delves into the formation of modern nations driven by policy and politics and divergent approaches in the path of development and technology.

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INTRODUCTION

There is always debate whether speculation in foreign exchange markets has a stabilizing (indicating that the foreign exchange market is efficient) or destabilizing effect. In recent work¹ where cognizance was taken of noise trading, speculation was found to be destabilizing. But how can the effect of speculation be measured so that we can investigate and determine whether it stabilizes or destabilizes the foreign exchange market?

In Australia, where attempts have been made to investigate the role of speculation in foreign exchange markets, the commitments of traders² have been used as the proxy for speculation. These commitments are no different from traders' open positions because in both cases traders take a view on the future exchange rate movement. Based on their views, they commit themselves to selling or buying a particular currency (Canova 1991: 489). Unlike in hedging and arbitrage transactions, these positions are unhedged. The South African Reserve Bank (SARB) provides these positions as open positions.

As far as the effect of speculation in the foreign exchange market is concerned, Friedman (1953) claims that speculation is stabilizing because in the pursuit of profit speculators buy when the price is low (depreciated currency) and sell when the price is high (appreciated currency). Friedman adds that in doing so the exchange rate always returns to its fundamental value. Therefore, speculation ensures that the foreign exchange market is efficient (Johnson 1976: 101-102) and Isard (1995: 190).

However, Nurkse (1944) claims that speculation is destabilizing. This claim is supported by Stein (1961: 301) and De Long *et al.* (1990: 379). De Long *et al.* (1990: 380) say the following: "In the presence of positive feedback traders," rational speculation can be destabilizing ... informed rational speculators buy more today and so drive up prices today higher than fundamental news warrants Tomorrow, positive feedback traders buy in response to today's price increases and so keep prices above fundamentals even as rational speculators are selling out and stabilizing prices ... speculators may eventually stabilize prices but their net effect can be destabilizing if they make positive feedback traders sufficiently aggressive."

In South Africa, speculation has persisted (despite the Exchange Control Act prohibiting exchange rate traders from issuing foreign exchange not backed by virtual transactions in goods) for the following reasons. First, speculators avoid exchange control regulations through leads-and-lags events, where importers and exporters are at liberty not to take forward cover if they expect favourable exchange rate movements. Importers may, for example, prefer to pay earlier if they expect significant depreciation of the rand, whereas exporters will prefer delayed receipt for their exports. Second, exporters are exonerated from holding foreign currency receipts offshore for a period of 180 days before these receipts have to be converted into rands. Converting these proceeds will ultimately affect the liquidity of the foreign exchange market. Although they are eventually relaxed, these liquidity constraints will have subversive effects over the short term. Third, offshore dealings in rands are independent of exchange control regulations. Estimated at 30% of total turnover, these offshore dealings are implicitly speculative (Hodge 2005: 8).

The effect of speculation in the South African foreign exchange market may provide some insight into whether speculation is stabilizing or destabilizing in nature. Reviewed work in this paper suggests that the predominant academic view is that speculation is destabilizing. How trenchant is such a view?

The questions this study will investigate are the following:

- How do we obtain the best measure of speculation in foreign exchange in South Africa? How do participants in foreign exchange compile this measure?
- How does the measure of speculation affect the expected future spot (foreign exchange) rate?
- Is the finding of De Long *et al.* (1990) supported in the South African foreign exchange market?

The objective of this study was to determine the appropriate measure of speculation that applies to the South African foreign exchange market and to analyze the effect of speculation in this market.

This paper is divided into five sections. The introduction, research questions and hypotheses are presented in Section 1. Section 2 provides the literature review and presentation of the models. In Section 3, we discuss the Kalman filter method, while in Section 4 we report the findings from OLS and Kalman filter regressions. Lastly, Section 5 provides the conclusion.

LITERATURE REVIEW

Studies conducted in developed countries such as Australia, the USA and the United Kingdom on whether speculation is stabilizing or destabilizing have provided different conclusions. Some studies in the 1950s and 60s suggested that speculation is stabilizing⁴, whereas most studies between 1970 and 2008 suggest that speculation is destabilizing. In the following subsections, we present the findings of these studies as well as some previous research on the role of speculation in the foreign exchange market.

A)DOES SPECULATION IN THE FOREIGN EXCHANGE MARKET HAVE A STABILIZING EFFECT?

Friedman (1953) claims that speculation has a stabilizing effect because speculators, in the pursuit of profit, buy when the price is low (depreciated currency) and sell when the price is high (appreciated currency). He adds that in doing so, the exchange rate always returns to its fundamental value. Therefore, speculation ensures that the foreign exchange market is efficient.

According to Hart (1977: 579-580) and Rapping and Pulley (1985: 108), speculation has a stabilizing effect and is profitable. This is especially the case if speculators predict the future accurately. Speculators will then buy when prices are low and sell when prices are high. The nature of speculative activity will be evident when the exchange rate is fluctuating over time. As a result, speculation will dampen exchange rate fluctuations and in so doing ensure that the foreign exchange market is efficient.

The earliest researchers on the subject of stabilizing speculation, notably Baumol (1957), Farrel (1966) and Kemp (1963), admitted that profitable speculation may be stabilizing or destabilizing in nature (Hart (1977: 579) Baumol (1957: 263) suggests: "how often and to what extent speculation is stabilizing remains a matter of empirical enquiry." This is because Baumol (1957: 264) recognizes the presence of (at certain times) buying when the currency is appreciating and selling when the currency is depreciating. This activity may be profitable, but it is also destabilizing because it triggers price movements. On the other hand, it may also be stabilizing because sales occur at higher prices. The net effect of speculation will be determined by answering the question: which one predominates?

In fact, speculators who earn positive profits may be trading against the less rational investors who move prices away from fundamentals. Such speculators rationally minimize the deviations of prices from fundamentals and so stabilize prices. Because risk aversion keeps rational speculators from taking large arbitrage positions, noise traders affect prices. Nonetheless, the effect of rational speculators' trades is to move prices towards fundamentals. Rational speculators oppose noise-driven price movements and so dampen, but do not eliminate them (De Long et al. 1990: 379) and Stein (1961: 301).

⁴ A view pioneered by Stuart Mill (1921) and later shared among others by Friedman (1953, Baumol (1957, 1959), Kemp (1963), Farrel (1966),) and (Hart (1977: 579).

B) DOES SPECULATION IN THE FOREIGN EXCHANGE MARKET HAVE A DESTABILIZING EFFECT?

The validity of the assumption *speculation decreases exchange rate fluctuations* is questionable. This is particularly so in an economy where there are many uninformed traders and trading is characterized by 'movement trading.' In addition, short selling, if allowed, destabilizes the exchange rate more than it stabilizes it (Leeman 1949: 140) and Taylor (1995: 39).

Nurkse (1944) claims that speculation in the foreign exchange market is destabilizing. This claim is supported by Stein (1961: 301), Schadler (1977: 257) and De Long *et al.* (1990: 379). The inefficiency of the foreign exchange market is also largely attributed to irrational market behaviour such as speculation (Canova 1991: 496).

More recent models have taken cognizance of the presence of noise trading in the foreign exchange market. Because noise traders buy when prices rise (in anticipation of further increases in prices) or sell when the price falls, they have been termed 'positive feedback traders.' Their actions lead to inefficient foreign exchange markets. Consequently, the foreign exchange market will be inefficient even in the presence of traders whose trades are based on fundamental news concerning future movements in the exchange rate (De Long et al. 1990: 379).

At times, the absence of stabilizing speculation rather than destabilizing speculation in relatively small economies - for example, the South African foreign exchange market during the third and fourth quarter of 2001 - may destabilize the market. As a consequence of traders selling the rand, the effect of individual transactions was magnified considerably during the period referred to above as the odds pointed towards the rand depreciating. Stabilizing speculators wishing to take an opposing view avoided the market temporarily, and the rand depreciated in self-fulfilling fashion (Hodge 2005: 24).

C) PRESENTATION OF MODELS

The efficiency model⁵

In this paper we investigate the efficiency of the South African foreign exchange market.⁶ In particular, we use the unbiased forward rate hypothesis (UFRH) to investigate if the forward rate is an optimal predictor of the future spot rate.⁷

We assume that the spot-forward market possesses the following characteristics. First, the spot-forward market has many investors with sufficient funds to enable them utilize arbitrage opportunities as they occur. Second, there are no exchange controls, so funds can move freely. Third, transaction costs, if any, are negligible.

⁵ The analysis of this paper is based on the forward rate as an unbiased (efficient) forecaster of the future spot rate. The forward rate and the random walk model are often used as the benchmarks for evaluating the efficiency of the foreign exchange market (Moosa (2000: 134).

⁶ Market efficiency can be represented by unbiasedness or the random walk model (Copeland 1989: 272).

⁷ The analysis here is based on Copeland (1989: 281-297).

In addition, two assumptions are made with regard to applying the efficient markets hypothesis (EMH) to the forward market for foreign exchange.8 First, agents set the forward exchange rate, for maturity in period *t*+1, equal to the expected future spot rate for period *t*+1:

$$(1)^9 s^e = f_t^{t+1}$$

The assumption that speculators are risk neutral and that no limitations to arbitrage exist, such as transaction costs and speculation, will ensure that (1) holds continuously. Therefore (1) provides the market equilibrium relationship (MacDonald 1993: 178).

The second assumption related to efficiency hypothesis states that speculators are rational, so that

$$(2) S_{t+1} = S_t^e + u_{t+1}$$

In (2) above, S_{t}^{e} is equal to $E(S_{t}/I_{t-1})$, E is the mathematical expectational operator, I_{t-1} is the information set for period t-1, on which expectations are made and U_{t+1} is a white noise error term.

Combining (1) and (2), we obtain the market efficiency condition in (3) below.

(3)
$$S_{t+1} = f_t^{t+1} + u_{t+1}$$

Equation (3) above states that the spot rate in period *f+1* should be equal to the corresponding forward rate plus a random error.

$$(4)^{10} \quad S_{t+1} = a_0 + a_1 f_t^{t+1} + u_{t+1}$$

In (4) above, the expectational or forecast errors U_{t+1} are assumed to be serially uncorrelated (random) with zero means and the unbiasedness joint hypothesis $(a_1 = 1, a_0 = 0)$ holds¹¹. If the foreign exchange market is efficient, f_t^{t+1} should contain all relevant information¹² for forecasting the future spot rate, S_{t+1} .

⁸ Analysis in this section is based on MacDonald (1993: 178–203), Isard (1995: 81–83) and Moosa (2000: 134–149).

⁹ In this paper the logarithms of the spot and forward exchange rates rather than actual values are considered. In using logarithms, we are trying to avoid the *inequality paradox* (Jensen's inequality). This paradox states that the efficiency test based on the levels of spot and forward exchange rates would give two different answers depending on whether we used the domestic currency value of a unit of foreign exchange or the foreign currency value of a unit of domestic currency definition for our exchange rates (MacDonald (1993: 182) and Copeland (1989: 279). Therefore if we used levels data, the mathematical expectation of S_{t+1} would differ from that of $1/S_{t+1}$. Thus, through- out this paper we use $s_t = \ln S_t$, $f_t^{t+1} = \ln F_t^{t+1}$ etc.

¹⁰ In our specification, the error term U_{I+1} will be serially correlated if 1-month forward exchange rate contract is used with weekly data. This is because when the observations are more frequent than the maturity period the error term will not be independent of past forecast errors. For example, for a 1-month forward rate data, information available in weeks 1 and 4 will be correlated with information available for weeks 2 and 5 (MacDonald (1993: 182). That is why we have used monthly data in this research.

¹¹ Moosa (2000: 141) refers to this efficiency as simple efficiency and that general efficiency is obtained by relaxing the restriction, $a_0 = 0$ (risk neutrality), in which case, a_0 would represent the existence of a risk premium.

Because in an efficient market the forward rate at time \boldsymbol{t} incorporates all information available to the market, it should contain all information in the forward rates f_{r-1}^t , f_{r-2}^{t-1} etc. Hence, adding more lags should not improve the explanatory power, and the coefficients of these lags are expected to be zero (Frenkel and Johnson (1978: 12).

On the other hand, if agents are risk averse, a statistically significant constant term (a_0) may reflect a constant risk premium, and a significant deviation of a_1 from 1 could reflect a time-varying risk premium, irrationality or both (Hallwood and MacDonald 2000: 259).

The biasedness of the forward rate is often taken as evidence of the existence of a risk premium. However, if this were the case, the forward premium, which encompasses the risk premium, should explain the features of ex ante profits. Instead, fluctuations in realized profits are too large to be explained by a risk premium and suggest the possibility of irrational market behaviour. Although there is sufficient evidence supporting this observation, we cannot conclude that agents act irrationally. This is because the risk premium is not the only source of profits (Canova 1991: 496).

In addition, most empirical studies find that agents get the direction of the exchange rate change completely wrong. This is through obtaining the value of a_1 closer to -1 than +1 (Hallwood and MacDonald 2000: 261).

MacDonald and Marsh (1999: 12) suggest that although (4) has been estimated based on OLS levels in many past empirical studies and in the process failed to reject the implied joint null hypothesis of unbiasedness ($a_1 = 1$, $a_0 = 0$), the standard regression-based tests are not valid. This is because and are generally non-stationary I(1) processes. Thus, there is no guarantee that U_{t+1} will be a stationary white noise error term unless the spot and forward rates are cointegrated.

Other tests that tried to avoid the non-stationary problem used regressions based on (5) below.

(5)
$$S_{t+1} - S_t = f_t^{t+1} - S_t + u_{t+1}$$

(6)
$$S_{t+1} - S_t = a_0 + a_1 (f_t^{t+1} - S_t) + u_{t+1}$$

From equation (5), equation (6) is obtained and estimated with OLS and the Kalman filter technique. Subsequently, we apply least squares and the Kalman filter techniques to our nonlinear exchange rate data for comparison purposes. The Kalman filter technique, however, captures the exchange rate dynamics more accurately than OLS. The dependent variable $(S_{t+1} - S_t)$ in equation (6) is known to be stationary and the forward premium $(f_t^{t+1} - S_t)$ because it is a quasi-difference variable, is assumed to be stationary. Unbiasedness would imply $a_1 = 1$, $a_0 = 0$ (MacDonald and Marsh 1999: 12).

However, should we test the UFRH using level specification in (4) or the *percentage change* specification in (6)? According to Barnhart and Szakmary (1991: 247), most studies that have used the specification in (4) have failed to reject the UFRH, whereas studies based on (6) have rejected the UFRH. In addition, we are more interested in equation (6) because it captures the short-term¹³ behaviour of traders.

The speculation model

A speculator is an investor who exposes himself deliberately to the risk of uncertainty in future exchange prices. Based on his views regarding what price is likely to prevail, he trades in the expectation of making a profit (Canova

¹³ Most of foreign exchange trading happens in a space of minutes or hours. Trading in foreign exchange is mainly driven by information relevant in the short-term (Mosakowski and Srilata 1999: 402).

1991: 489). Certainly, speculation is believed to play a key role in explaining the behaviour of exchange rates (Duarte and Stockman 2001: 27).

Speculation in foreign exchange is boosted by the existence of forward exchange facilities, which enable speculators to take a longer view. They can operate whenever they expect a wide exchange movement without having any definite opinion of when it is likely to occur. This means an additional volume of speculative operations besides those undertaken when exchange movements are expected to take place within the next two days. Spot speculation is limited by the availability of credit facilities for that purpose (Einzig 1961: 97); Eaton and Turnovsky (1984: 50).

According to Beenstock (1979: 136) and Phaup (1981: 478), the speculative demand for forward exchange would depend on the difference between the expected spot rate (se) and the forward rate (F) since this difference is the expected profit on buying forward exchange with the intention of selling it at the prevailing spot rate on maturity. The speculator's excess demand schedule is written in linear form as $XD = \beta(s^e - F)$, $\beta > 0$ where β is the slope of the speculation schedule that is likely to vary inversely with the variance of the expected spot rate and the degree of risk aversion. Therefore, β is regarded as less than infinitely large to reflect the assumption of risk aversion. If exchange risk is high and investors are risk averse, β could be relatively small or even zero. Equilibrium among forward speculators occurs when $m{F}$ is equal to the expected spot rate, s^e . If s^e is greater than F, speculators will purchase foreign exchange forward at F with the intention of later selling it at s^e . The greater the extent to which the actual forward rate falls below the expected future rate, the greater will be the demand for the forward currency by speculators. Conversely, if the actual forward rate is above that expected by speculators to prevail their supply will be an increasing function of the current forward rate (MacDonald 1993: 32) and Sohmen (1969: 95). However, if $\beta = 0$ speculators would abandon the forward market.

The analysis of speculation can be extended to classification of speculators, namely, chartists (noise traders, technical analysts) and fundamentalists. Chartists use past movements of the exchange rates as indicators of market sentiments and extrapolate these into the future. Their behaviour therefore, adds 'positive feedback' into the model and is the source of instability in the foreign exchange rates. On the other hand, fundamentalists compute the equilibrium value of the exchange rate as given by the model and consider the exchange rate to be the one to which the market exchange rate will move. Thus, if the market rate exceeds this equilibrium value, fundamentalists expect it to decline in the future. The behaviour of the fundamentalists adds 'negative feedback' into the model and is therefore a source of stability (De Grauwe 1993: 73).

Another way of analyzing the concept of speculation in the foreign exchange market is by analyzing the net open positions taken by speculators in foreign exchange. This is the approach we use in this paper. Mussa (1990: 10) provides an equation that incorporates speculation into the efficiency equation, which relates the expected future spot rate, E[e(t+j)/t], the expected true economic fundamentals that influence the exchange rate, E[F(t+k)/t], the expected false fundamentals that influence the exchange rate, E[G(t+k)/t] and the rational speculative bubble, B(k/t). This equation is given as E[e(t+j)/t] = E[F(t+k)/t] + E[G(t+k)/t] + B(k/t)

However, Mussa suggests that the false fundamentals do not directly affect the exchange rate. In addition, we may regard the forward rate as one of the true fundamentals. Pentecost (1993: 84) defines speculative bubbles as exchange

rate movements that are inconsistent with the fundamentals and that are driven by non-economic variables such as the *belief* of speculators, independent of the fundamentals. In addition, Pentecost (1993: 84) suggests that a rational bubble occurs when market participants continue to buy a currency that is overvalued in terms of its fundamentals, in the expectation of making a short-run gain as the currency appreciates further, before falling back to the long-run equilibrium level determined by the fundamentals.

Though Mussa (1990: 10) approximates the above equation using the speculative bubble of speculators, obtaining data on the speculative bubble in South Africa is problematic. But because Schadler (1977: 257) suggests that speculation can be assumed as the deliberate assumption of a net open position in foreign currency reflecting a judgment on the part of the transactor as to the future exchange rate movements, we use data on the net open position of traders as a proxy for speculation in foreign exchange. Because the above model is too abstract, we modify it into an equation that can be empirically tested, given as

(7)
$$(s_{t+1} - s_t) = a_0 + a_1(f_t^{t+1} - s_t) + a_2 nop_t + u_{t+1}$$

KALMAN FILTER METHOD

Chatfield (2004: 203) provides the following discussion on the Kalman filter technique. The Kalman filter is an important general method of handling statespace models through signal processing, which provides optimal estimates of the current state of a dynamic system. It consists of a set of equations for recursively estimating the current state of a system and for finding variances of these estimates

Since the calculations are recursive, the current estimates are based on the whole past history of measurements and there is no need for an ever-expanding memory. Instead a new estimate of the signal is based entirely on the previous estimate and the latest observation. A second advantage of the Kalman filter is that it converges fairly quickly when there is a constant underlying model, and can also follow the movement of a system where the underlying model is evolving through time (Chatfield 2004: 212-213). Because the Kalman filter technique can capture the exchange rate dynamics more accurately than the OLS technique, OLS is used only for purposes of comparison by the interested reader.

In state-space modelling, the prime objective is usually to estimate the signal in the presence of noise. In other words, we want to estimate the $(m \times 1)$ state vector θ_t , which cannot usually be observed directly. The Kalman filter provides a general method for doing this. It consists of a set of equations that allow us to update the estimate of θ_t when a new observation becomes available. This updating procedure has two stages, namely, the prediction stage and the updating stage (Chatfield 2004: 211).

Using the analysis by Wang (2003: 124), we applied the Kalman filter model to our simple model in equation (7) above by using time-varying coefficients. The result is shown in equation (8) below.

(8)
$$(s_{t+1} - s_t) = a_0 + a_1(t) (f_t^{t+1} - s_t) + a_2(t) nop_t + u_{t+1}$$

Where
$$a_1(t) = a_1(t-1) + v_{1t}$$

 $a_2(t) = a_2(t-1) + v_{2t}$, and

nop_r are the speculators' net open positions. Following Radalj (2006: 1382), we lag speculators' open positions because they are taken a period in advance depending on which direction speculators perceive the future spot rate to go.

The first equation is the observation equation and the next two equations are the state/ transition equations. The coefficients $a_1(t)$ and $a_2(t)$ in this model follow a random walk.

The errors in the observation and transition equations are generally assumed to be serially uncorrelated and also to be uncorrelated with each other for all time periods. We may further assume that $U_{t+1} \sim N(0, \sigma_s^2)$.

The main feature of state-space models is that the observation equation involves a linear function of the state variables and yet does not restrict the model to be constant through time. Instead they allow local features such as trend and seasonality to be updated through time using the transition equation (Chatfield 2004: 205).

In this paper we assume that the destabilizing role of speculators and not a time-varying risk premium (a_0) , is the cause of the biasedness in the expected spot rate. Therefore, the risk premium is treated as constant in this paper to enable us to isolate the effects of speculation on the expected future spot rate.

The coefficient (a_0) is expected to be zero and $a_1(t)$ is expected to be equal to 1 if the market is efficient. In addition, $a_2(t)$ is expected to be negative and significant if speculation is destabilizing and positive if speculation is stabilizing.

EMPIRICAL ANALYSIS

A) DATA

Owing to the nature of this exercise, we used data for the period prior to the financial crisis to avoid the interference of new post crisis reforms. Monthly data obtained from I-Net Bridge for the R/\$ spot and the forward exchange rate were used. We also used data from the South African Reserve Bank (SARB) on the net open position of speculators (*nop*). Following Moosa (1990: 10) and Schadler (1977: 257), speculators' net open positions are used as a proxy for speculation in foreign exchange. Data on all variables is for the period 31/01/1994 – 29/02/2008. We have 170 observations in our data set for each of the variables mentioned above, except for the net open position of traders, where we have 138 observations from 31/01/1996 to 30/06/2007. Logarithm-transformed data for all variables is used.

B) UNIT ROOT AND COINTEGRATION TEST

Visual inspection of Figure 1 in the appendix suggests that both the spot and forward R/USD exchange rates are non-stationary. Indeed, ADF unit root tests in Table 1 (refer to the appendix) show that both spot and forward exchange rates are integrated or I(1), and are therefore non-stationary. However, Johansen co-integration test results (see Tables 2 and 3 in the appendix) show that the two series are co-integrated, and therefore we would not obtain spurious results with OLS. This is because, according to Clements and Hendry (1998: 120), co-integration is a relationship that may hold between integrated economic time series, and implies that some of the series have common unit-root components that cancel when we take appropriate linear combinations. We therefore proceeded with the regressions.

C) EFFICIENCY MODEL

We began by estimating a least squares regression equation relating the long-term forward rate to the long-term spot rate over the period 1994M1 to 2008M2 (refer to Table 4 below).

Table 4: OLS regression of equation: $s_{t+1} = a_0 + a_1 f_t^{t+1} + u_{t+1}$

Dependent Variable: S_{t+1}

Method: OLS

Newey-West HAC Standard Errors and Covariance

Period	$\boldsymbol{a}_{\scriptscriptstyle 0}$	$\boldsymbol{a}_{_1}$	AIC	Adj. R-sq
01/1994 – 02/2008	0.0432***	0.9851***	-3.8551	0.9870
S.E	0.0159	0.0087	DW	Log likel.
P-value	0.0075	0.0000	1.2806	327.7565

Source: Own

For tables 4 -11, * (**) [***] denotes significant at the 10 (5) and [1] percent significance levels, respectively.

The results of the ordinary last squares (OLS) estimation (see Table 4) can be interpreted as follows. The estimated coefficient of the forward rate is significant during the period 1994M1 to 2008M2. Therefore a long-term relationship exists between the forward rate and the expected future spot rate. Although the coefficients are both positive and close to the hypothesized values ($a_0 = 0$, $a_1 = 1$), the F-statistic suggests that the joint hypothesis required for efficiency is rejected.

On the other hand, least squares estimation of the regression equation relating the short-term forward rate to the short-term spot rate over the period 1994M1 to 2008M2 provided the results shown in Table 5 below.

Table 5: OLS regression of equation: $s_{t+1} - s_t = a_0 + a_1(f_t^{t+1} - s_t) + u_{t+1}$

Dependent Variable: $S_{t+1} - S_t$

Method: OLS

Newey-West HAC Standard Errors and Covariance

Period	a ₀	a ₁	AIC	Adj. R-sq
01/1994 – 02/2008	-0.0117***	-1.0027***	-7.7069	0.9795
S.E	0.0004	0.0112	DW	Log likel.
P-value	0.0000	0.0000	0.05316	653.2289

Source: Own

OLS results in Table 5 illustrate that the foreign exchange market is inefficient due to the negative signs on the $\boldsymbol{a_0}$ and $\boldsymbol{a_1}$ coefficients. In addition, the joint null hypothesis of spot-forward efficiency is rejected in the short-term specification. The F-statistic in this specification is 8040.992 with a probability value of 0.0000. We should note that the short-term specification is the most important specification in this paper due to its portrayal of the short-term behaviour in the market.

We further investigated the efficiency of the foreign exchange market using the Kalman filter technique. This technique is more powerful than OLS when one is working with non-linear data.

The Kalman filter results are presented in Tables 6 and 7.

Table 6: Kalman filter regression of equation: $s_{t+1} = a_0 + a_1(t) f_t^{t+1} + u_{t+1}$

Dependent Variable: S_{t+1} Method: Kalman Filter

Period	a ₀	a ₁	AIC	
01/1994 – 02/2008	0.0432***	0.9851***	-3.6962	
S.E	0.0149	0.0015	HQC	Log likel.
P-value	0.0037	0.0000	-3.6811	314.3257

Source: Owi

The results in Table 6 are comparable to those of OLS in Table 4 in terms of the magnitude and sign of the coefficients. The results of the Kalman filter estimation (above) show that the estimated coefficient of the forward rate is significant during the period 1994M1 to 2008M2. Therefore a long-term relationship exists between the forward rate and the expected future spot rate.

Table 7: Kalman filter regression of equation: $(s_{t+1} - s_t) = a_0 + a_1(t) (f_t^{t+1} - s_t) + u_{t+1}$ **Dependent Variable:** $S_{t+1} - S_t$

Method: Kalman Filter

Period	a ₀	a ₁	AIC	
01/1994 – 02/2008	-0.0117***	-1.0027***	-7.5707	
S.E	0.0004	0.0110	HQC	Log likel.
P-value	0.0000	0.0000	-7.5557	641.7238

Source: Own

As with the OLS results in Table 5, the Kalman filter results in Table 7 show that market players got the direction of the future spot rate wrong during the period 1994M1 to 2008M2. This could be due to irrational market behaviour. We investigated this behaviour using the speculation model.

D) SPECULATION MODEL

As in the efficiency model, the analysis in the speculation model was carried out using both OLS and Kalman filter techniques for comparison purposes. The results are shown in Tables 8 to 11 for the period 1994M1 to 2008M2.

Table 8: OLS regression of equation: $s_{t+1} = a_0 + a_1 f_t^{t+1} + a_2 nop_t + u_{t+1}^{14}$

Dependent Variable: S_{t+1}

Method: OLS

Newey-West HAC Standard Errors and Covariance

Period	a ₀	a ₁	a ₂	AIC	Adj. R-sq
01/1994 – 02/2008	0.1536***	0.9708***	-0.00676*	-3.6782	0.9717
S.E	0.0490	0.0154	0.0038	DW	Log likel.
P-value	0.0022	0.0000	0.0811	1.3580	225.5321

OLS regression findings in Table 8 contradict the most popular finding that identification of speculation in the foreign exchange market means the market is inefficient. In fact, whereas the OLS results in Table 4 suggested that the market is inefficient, Table 8 results suggest that speculation is significant and stabilizing over the long-term. This is due to a significant negative coefficient of the *nop* variable.

We extended our analysis to the role of speculation in the foreign exchange market over the short-term. The results for this exercise are presented in Table 9 below

¹⁴ For the incorporation of the role of speculation in the spot-forward relationship see Mussa (1990: 10)

Table 9: OLS regression of equation: $(s_{t+1}-s_t)=a_0+a_1(f_t^{t+1}-s_t)+a_2nop_t+u_{t+1}$

Dependent Variable: $S_{t+1} - S_{t}$

Method: OLS

Newey-West HAC Standard Errors and Covariance

Period	$a_{_{0}}$	$a_{_1}$	a ₂	AIC	Adj. R-sq
01/1994 – 02/2008	-0.0129**	-1.0035***	0.000117	-7.5979	0.9816
S.E	0.0065	0.0128	0.0005	DW	Log likel.
P-value	0.0495	0.0000	0.8277	0.0525	462.6702
Source: Own					

The results in Table 9 suggest that speculation does not play any role in the foreign exchange market, as shown in an insignificant a2 coefficient. We should note, however, that the OLS method may not capture the dynamics in the nonlinear exchange rate data adequately. Baumol (1957: 263) warns against using static analysis in empirical investigation concerning whether speculation is stabilizing or not because the properties of the exchange rate may not be adequately captured.

We therefore proceeded to investigate the role of speculation in the South African foreign exchange market using a more sophisticated dynamic technique. Unlike the OLS technique, the Kalman filter technique is adequate when one is working with non-linear exchange rate data (refer to Table 10).

Table 10: Kalman filter regression of equation: $s_{t+1} = a_0 + a_1(t) f_t^{t+1} + a_2(t) nop_t + u_{t+1}$

Dependent Variable: S_{t+1} Method: Kalman Filter

Period	a ₀	a ₁	a ₂	А	IC
01/1994 – 02/2008	0.1535***	0.9708***	-0.0068***	-3.2609	
S.E	0.0511	0.0141	0.0023	HQC	Log likel.
P-value	0.0027	0.0000	0.0029	-3.2422	199.2875

Source: Own

The results in Table 10 show that speculation plays a significant and stabilizing role in the South African foreign exchange market. This is because the speculation coefficient (a_2) is both significant and negative. However, we were more concerned with the role of speculation over the short term, since speculation is mainly encouraged by events over the short term. Results from the short-term equation are presented in Table 11 below.

Table 11: Kalman filter regression of equation: $(s_{t+1} - s_t) = a_0 + a_1(t) (f_t^{t+1} - s_t) + a_2(t) nop_t + u_{t+1}$

Dependent Variable: $S_{t+1} - S_t$ Method: Kalman Filter

Period	a ₀	a ₁	a ₂	A	ЛС
01/1994 – 02/2008	-0.0130*	-1.0035***	0.000118***	-7.1461	
S.E	0.0070	0.0124	4.35E-05	HQC	Log likel.
P-value	0.0610	0.0000	0.0068	-7.1273	434.3361

The findings in Table 11 illustrate that the time-varying coefficient of speculation (a_1) is statistically significant and positive. The positive sign on this variable indicates that destabilizing speculation explains short term movement in the future spot rate. In particular, our data shows positive feedback trading, which has been identified as one of the major causes of inefficiency in the foreign exchange market.

Therefore the above finding of market inefficiency may be a result of speculation in the foreign exchange market. The *nop* coefficient value of 0.000118 is positive, indicating that whenever speculators expect that the future spot rate will increase, they increase their positions in foreign exchange. Because speculators' actions indicate that they expect the exchange rate to increase even further, we can say that their actions are destabilizing. The exchange rate will therefore tend to deviate from its equilibrium value, more than rational speculation permits. Certainly, R-squared from all OLS results shows that the models used provide a good fit.

E) COMPARISON OF THE MODELS

In comparison with the OLS results, the Kalman filter model captured the dynamics in the exchange rate better. The speculation variable is insignificant in the short-term specification with OLS, whereas it is significant in the short-term specification with the Kalman filter. In fact, the Kalman filter model shows that the speculators' positions are not only significant but also destabilizing in the short term. This may be a result of high volatility in trading volumes over the short term, which is corrected over the long term. Thus, whereas Table 11 results indicate that speculation is destabilizing, Table 10 results indicate that speculation is stabilizing. These effects are captured by the Kalman filter technique. In addition, with non-linear time series data, the OLS model is inappropriate and the results of the coefficients are likely to be misleading.

CONCLUSION

This paper analyzed and investigated the effect of speculation in the South African foreign exchange market. In particular, we were interested in determining whether speculation, particularly of a destabilizing nature, is present in the South African foreign exchange market.

Our findings suggest that the South African foreign exchange market is inefficient. In addition, speculation was found to be statistically significant, indicating that the inefficiency of the foreign exchange market could be a result of the role of destabilizing speculation in the foreign exchange market. The finding of foreign exchange market inefficiency may be due to speculation, especially over the short term. As suggested by MacDonald and Taylor (1992: 28), under the hypothesis of market efficiency, it should be impossible for a trader to earn excess returns to speculation. We are assuming here that if speculators were losing money, they would embark on stabilizing speculation. Certainly, this indicates that positive feedback trading is rife in the South African foreign exchange market

Indeed, as suggested by De Long *et al.* (1990: 379), rational speculators may benefit from destabilizing the exchange rate by buying ahead of irrational (noise) traders and exiting the market before noise traders exit. Therefore, we still maintain that their actions are destabilizing because, as observed in many empirical findings, the behaviour of positive feedback trading which results in the correlation of asset returns, overreaction of prices to news, price bubbles and expectations, is the norm rather than the exception (De Long *et al.* 1990: 379).

This research has its limitations, however: for example, the investigation could not be carried out on a much bigger data set due to insufficiency of high frequency data on the net open positions of speculators in South Africa. Therefore future research on a much bigger data set will undoubtedly yield better results

Another challenge worth undertaking is the investigation of the role of speculation in different exchange rate regimes (fixed and floating). Our emphasis was on the floating exchange rate period in South Africa.

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APPENDIX

Figure 1: Line graph for spot and forward R/USD exchange rate

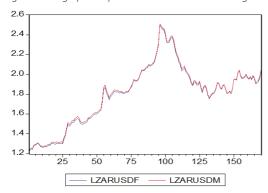


Figure 2: Volatility clustering

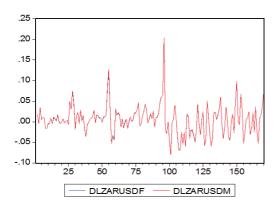


Figure 3: Line graph for the speculators' net open position in levels

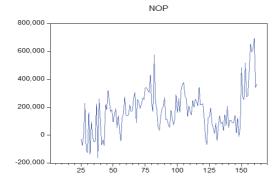
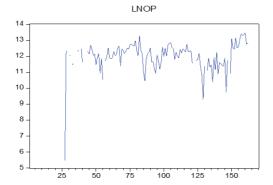


Figure 4: Line graph for the speculators' net open position in log



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Table 1: Augmented Dickey-Fuller test statistic

Null Hypothesis: has a unit root

Exogenous: Constant

Variables	t-Statistic	Prob.*
D(lzarusdm)	-8.6345	0.0000
D(lzarusdf_1)	-8.8351	0.0000
D(Inop_1)	-10.6982	0.0000

^{*}MacKinnon (1996) one-sided p-values.

Table 2: Johansen Cointegration test

Sample (adjusted): 7 170

Included observations: 164 after adjustments Trend assumption: Linear deterministic trend

Series: ZARUSDM ZARUSDF_1

Lags interval (in first differences): 1 to 2

	3					
Unrestricted Cointegration Rank Test (Trace)						
Hypothesized		Trace	0.05			
No. of CE(s)	Eigen value	Statistic	Critical Value	Prob.**		
None *	0.233698	34.98366	15.46471	0.0001		
At most 1	0.001979	0.243687	3.841466	0.6346		
Unrestri	cted Cointegra	ation Rank Test	(Maximum Eig	en value)		
Hypothesized		Max-Eigen	0.05			
No. of CE(s)	Eigen value	Statistic	Critical Value	Prob.**		
None *	0.343698	34.73997	14.28460	0.0000		
At most 1	0.001969	0.2434687	3.841466	0.6346		
T		()	0 = 1 1			

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

Max-Eigen value test indicates 1 cointegrating eqn(s) at the 0.05 level

Table 3: Johansen Cointegration test

Sample (adjusted): 7 170

Included observations: 164 after adjustments Trend assumption: Linear deterministic trend Series: ZARUSDM ZARUSDF_1 NOP_1

Series: ZARUSDM ZARUSDF_1 NOP_1 Lags interval (in first differences): 1 to 4

Unrestricted Cointegration Rank Test (Trace)						
Hypothesized		Trace	0.05			
No. of CE(s)	Eigen value	Statistic	Critical Value	Prob.**		
None *	0.185478	33.28932	28.79707	0.0243		
At most 1	0.059716	7.452731	15.48471	0.5362		
At most 2	0.002379	0.278430	3.847466	0.6023		
Unrestri	cted Cointegra	tion Rank Test	(Maximum Eige	en value)		
Hypothesized		Max-Eigen	0.05			
No. of CE(s)	Eigen value	Statistic	Critical Value	Prob.**		
None *	0.185478	24.82358	21.13162	0.0144		
At most 1	0.059716	7.193302	14.26460	0.4665		
At most 2	0.002379	0.278430				
3.847466	0.6023					

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

Max-eigen value test indicates 1 cointegrating eqn(s) at the 0.05 level

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

SEARCHING FOR GROWTH INAFRICA:

REGULATORY IMPLICATIONS FOR BANKS

Njabulo Sithebe • Independant Development Analyst

INTRODUCTION

South African banks are expected to continue to expand into the broader African market as the country remains committed to unlocking the potential of African financial markets. Reforms of the financial sector are meant to enhance the stability, depth, and efficiency of the financial system and expand access to finance, and trade, while contributing to higher competitiveness and productivity. A well functioning and efficient financial sector enhances the region's productive capacity and supports higher economic growth. Simultaneously, the high growth rates in emerging markets and the African region, in particular, have led to a re-alignment of the global strategies of major internationally active banks. This re-alignment has been influenced by a variety of factors, including rapidly rising capital inflows into the region.

According to the IMF (2012), the net private financial flows to Sub-Saharan Africa grew by 22.5 per cent in 2012, rising from USD 6.2 billion to USD 22.6 billion, and are projected to grow by 35 per cent in 2013 to reach USD 35.2 billion. This growth in net capital inflows has been driven in the main by loose monetary policy, particularly in developed countries, and higher growth rates in emerging market countries including Sub Saharan Africa, attracting capital mainly from developed countries in search of higher yield. However, the IMF notes that while the outlook is for broad stability in private capital flows to emerging economies, at close to \$1 trillion per year, this absolute magnitude is not what it once was.

SEARCHING FOR GROWTH IN AFRICA: REGULATORY IMPLICATIONS FOR BANKS

AFRICAN EXPANSION AS A KEY STRATEGY OF SOUTH AFRICAN BANKS

According to the South African Reserve Bank, South African banks have a footprint in 17 African countries, which represents about 58 per cent of the population in the continent and 52 per cent of the African GDP. Although trade finance and global markets have been the main asset classes of primary interest, South African banks' estimated R224 billion exposure in the continent spans all major asset classes.

In many instances, the expansion of South African banks into Africa is also driven by the strategies of the banks' corporate clients wishing to expand into Africa. International business is attracted by the significant growth driven by the boom in African natural resources, as well as the growing infrastructure needs of high-growth African countries. Many regional and international banks have sought to leverage partnerships with South African banks to meet an array of retail, commerce, trade finance and investment banking needs. Examples of these strategic partnerships with regional and/or international banks include Standard Bank / ICBC, Barclays / ABSA, and Nedbank / Ecobank. With growth in intra-African trade and rising net private financial flows to the region, it is fair to anticipate a prolonged period of growth in pan-African cross-border banking activity to finance and service such trade and financial flows.

These developments bring with them both opportunities and challenges and afford policy makers a rare opportunity to establish well-functioning arrangements for effective cross-border information sharing, supervision and cooperation.

REFORMING CROSS-BORDER REGULATORY AND SUPERVISORY STANDARDS

The growing need for Africa to host foreign banks, which are in many instances complex and internationally active, offers African policy makers an opportunity to align supervisory standards with those of the home jurisdictions when they are higher. Home jurisdictions would typically approve the establishment of foreign branches or subsidiaries on condition that home standards are applied on a consolidated basis, even though the branch or subsidiary concerned may be required to meet the standards of the host supervisor.

In line with the internationally agreed regulatory and supervisory standards to which South Africa subscribes, as of 1 January 2013, South Africa complies with the Basel III framework. South African banks are required to comply with these standards on a bank soloand bank consolidated, or bank group basis. South African branches and subsidiaries of foreign banks are also required to meet the South African prudential framework and regulatory standards, in addition to whatever standards they comply with in their home country. South Africa has 14 branches and 43 representatives of foreign banks. In each case South African supervisory standards are either equal to, or higher than the standards applied by the home country.

This alignment of home and host country regulatory and supervisory frameworks and requirements is important, for example, in the case of anti-money laundering and countering the financing of terrorism regulations across jurisdictions. The Financial Action Task Force (FATF) requires that all member countries pass laws and effectively implement regulations that meet their 40 principles.

Where home supervisors rely heavily on host supervisors to ensure compliance with the international standards, the existence and alignment of approved legislation and regulations is a very important starting point.

ENHANCING THE EFFECTIVENESS OF SUPERVISORY COLLEGES

Through supervisory colleges, home jurisdictions are given the opportunity to raise the supervisory standards to those of the home country when those are higher, even if initially they are applied to foreign branches and subsidiaries only. Many African jurisdictions apply the regulatory framework at, or close to Basel I while some are in the process of moving to Basel II. South African banks operating in any of these jurisdictions are expected to apply the higher standard, which will henceforth be the recently adopted Basel III framework.

In this regard, supervisory colleges need to assist bank supervisors in the African region to gain insights into the extent of preparation required in their own jurisdictions as they prepare to move to Basel II or higher. Supervisory colleges will also play a crucial role in data gathering for bank system information on a regional basis. This cross-border informational sharing and cooperation is important and necessary, as South Africa is the only African member of the Basel Committee on Bank Supervision (BCBS), the Financial Stability Board (FSB) and the G20. As such it is critical to have a deep understanding of the different financial systems in the African region.

Although forums exist for information sharing through African Central banks, no structure or mechanism exists for meaningful exchange of detailed information that could be used for cross-border supervision.

Taking into consideration the uneven supervisory and regulatory standards between what South Africa applies to its domestic banks and what is applied by some host jurisdictions, effective information sharing about the banks and the environment in which they operate becomes crucial for effective supervision of a bank. Consequently, the collection of data among African supervisors concerning respective banking systems is crucial in building an effective cross-border regulation framework.

As African countries continue to adopt international regulatory standards at different paces, trade and financial volumes through the intra-Africa corridors and across to other regions continue to increase. The availability of bank funding in international capital markets is still scarce. Foreign banks operating in South Africa rely more on local retail deposits to finance their growth in respective markets. The obligation to safeguard South Africa's domestic retail deposits is becoming more pronounced. The absence of deposit insurance schemes, or their inadequacy in those jurisdictions where they do exist, creates growing contingent liabilities on the state.

CRISES MANAGEMENT STRUCTURES

The 2007 financial crisis illuminated the complexities involved in bank-specific crisis management across the different jurisdictions in which the bank operates. Although supervisory colleges are not designed to deal with crisis issues, they nevertheless provide a useful building block for effective crisis management structures to deal with those banks suffering from severe financial stress.

Ideally, the bank's recovery and resolution plans should include details of all off-shore operations. Home and host supervisors should share these plans and together assess their practicality and address any impediments that may exist should the need arise to implement the plans. The FSB's Key Attributes of Effective Resolution Regimes states (2011: 5 – 6)

Jurisdictions should have in place a resolution regime that provides for the creation of a Resolution Authority. The Resolution Authority should have a broad range of powers and options to resolve a firm that is no longer viable and has no reasonable prospect of becoming so. The resolution regime should include:

SEARCHING FOR GROWTH IN AFRICA: REGULATORY IMPLICATIONS FOR BANKS

(i) stabilisation options that achieve continuity of systemically important functions by way of a sale or transfer of the shares in the firm, or of all or parts of the firm's business to a third party, either directly or through a bridge institution, and/or an officially mandated creditor-financed recapitalisation of the entity that continues providing the critical functions; and

(ii) liquidation options that provide for the orderly closure and wind-down of all or parts of the firm's business in a manner that protects insured depositors, insurance policy holders and other retail customers.

In order to facilitate the coordinated resolution of firms active in multiple countries, jurisdictions should seek convergence of their resolution regimes through the legislative changes needed to incorporate the tools and powers set out in these Key Attributes into their national regimes.

The existing memoranda of understanding between African regulators and supervisors may not be sufficient or adequate to deal with crisis management of an internationally active bank in distress. Therefore, additional arrangements ought to be made to enable both the home and host supervisors to invoke whatever legal avenues are available to help resolve a crisis promptly. During a crisis, supervisors tend to focus on the issues affecting their domestic interests and become prone to losing focus on the urgency of restoring financial institutions back to health as speedily as possible. Crisis management should therefore become a regular point of discussion between African regulators and supervisors.

CONCLUSION

Governance in the financial sector refers to the manner in which power is exercised in managing financial resources. Good governance is a strategic priority when expanding South African banks into other geographical territories, and regulatory rules need to be applied at bank, sector and regional levels. The need to improve cooperation among African regulators should be followed by concrete actions to establish effective arrangements for cross-border supervision of banks. There is also a need to establish a process for effective information-sharing among African regulators and to build a meaningful database on the regional banking system.

These are critical steps in deepening inclusive growth through creating the conditions for sustained high growth with expanded economic opportunities and broadened access to financial resources. To this end, effective bank regulation must continue to support financial sector reforms to boost efficiency and access to financial resources and improve the investment environment. This will help to promote regional cooperation and trade.

Stepping up financial sector support will foster the growth of financial markets through developing institutional capacity and improving the regulatory framework. Good governance must be prioritized in this pursuit. ADB will also continue to promote private sector operations, including expansion of its trade finance program.

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CHARTER CHARTER CITIES CONCEPT

IN STIMULATING REGIONAL ECONOMIC GROWTH

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INTRODUCTION

It has been argued that the continued urbanization and growth of cities in Africa represents a movement from rural poverty to urban misery, rather than positive economic development (Obeng-Odoom, 2010). This has led to policies that attempt to reverse the effects of urbanization and centralized economic development, such as building new cities in Egypt to limit Cairo's growth (Obeng-Odoom, 2009), and more extreme policies like Zimbabwe's 'Operation Murambatsvina', which the military used to clear out the informal sector and restore order in the cities (Potts, 2006).

Romer (2010) believes that weak institutions and rules are the major impediments to growing the economy of developing countries and thus suggests establishing special Hong Kong-like reform zones with better rules and institutions (which he calls charter cities) as a remedy to this problem. This paper seeks to evaluate the concept of charter cities as a stimulant to regional economic development in Africa, considering that cities, under the right conditions and given the right incentives, can be positively associated with economic development.

THE PROBLEM STATEMENT

The problem statement can be separated into two sub-problems as follows.

The first sub-problem is that of worsening conditions, high unemployment and

The second sub-problem is the resultant marginalization of rural communities and the under-development and poverty that characterize these rural areas, as development efforts are mainly targeted at already established urban settlements.

EVALUATING THE CHARTER CITIES CONCEPT IN STIMULATING REGIONAL ECONOMIC GROWTH

RESEARCH METHODOLOGY

Considering that the concept of charter cities is still in its infancy, case study research was particularly appropriate. Most of the analysis was based on Zimbabwe and some elements of the charter cities model were borrowed from Honduras.

Official sources of secondary data include the United Nations, World Bank, African Development Bank and National Statistics. Data gathered from economic journals and published academic sources on urban development, rural to urban migration and the concept of Charter Cities was also used.

Some of the primary quantitative techniques used to analyse the impact of cities on the development of countries are pooled ordinary least squares (OLS), correlation analysis and the generalized method of moments (GMM).

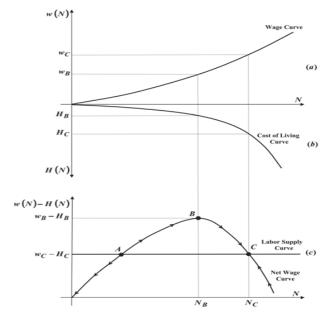
URBANIZATION AND CITIES - THEORETICAL BACKGROUND

The UN (2008) suggests that by the end of this century, total world population will likely stabilize at between 10 and 11 billion, and more than 70 percent of the world's population will be living in urban areas. This unprecedented rate of urbanization, particularly in developing countries, has not been matched by the accompanying development that has been observed in prior urbanizations by the developed countries. To understand this relationship, the following sections examine the development of cities, rural to urban migrations, the role of urbanization in development and the limitations to urban growth.

THEORETICAL FRAMEWORK AND MODEL FOR CITIES

One of the most prominent models of city development is Henderson's (1974) "3.5 model", which presented a simple diagrammatic model of a city in an urban system as follows:

Figure 2.1(a): A typical city (Graphical representation of the Henderson 3.5 model)



Source: Cities: Engines for growth and prosperity for developing countries? 2008:5

The model assumes that land, labour and capital are the three production factors, with land and capital being perfectly immobile and mobile, respectively. The wage curve represented in Figure 2.1(a) above is an inverse-demand for labour and it relates workers' wages to the size of the labour force in the urban system. It is assumed that the city wage (W) and the size of the labour force (N) are positively correlated due to urban agglomeration externalities and increasing returns.

In Figure 2.1(a), the cost of living in a city (H) increases with N due to urban crowding effects. The cost of living curve is drawn with a reversed Y-axis. The level of the cost of living curve depends on factors such as ease of access to and provision of public goods like transport networks. A further assumption of the model is that "agglomeration economies" dominate "crowding costs" for a small population, while the reverse holds for larger populations resulting in a bell-shaped net wage curve (shown in Figure 2.1(c)).

The model further assumes, for simplicity, that labour force participation is proportional to a city's population such that the labour supply can also be assumed to be a function of the population. Assuming perfect mobility of labour, the labour supply curve is flat as illustrated in Figure 2.1(c) and it shows the migration response of labour to the net wage in the city.

The equilibrium of this model can be derived, since the intersection between the labour supply and net wage curves where workers obtain the net wage they require to come to and stay in the city. The city shown in Figure 2.1(c) has two equilibriums at points A and C. Point A is not a stable equilibrium, as a small population shock would raise net wages until the city reaches point C or lower, until they fall to zero. A similar argument verifies that the equilibrium at C is stable.

THE BASIC HARRIS-TODARO (HT) MODEL 1

According to Stark et al (1991), the Todaro (1969) and Harris-Todaro (Todaro-Harris 1970) models have provided a widely accepted theoretical framework for explaining why cities continue to grow beyond the equilibrium point given as point C in the Henderson 3.5 model, even in the face of urban unemployment and poverty in many developing countries. The Todaro model assumes that individuals focus on the present value of expected earnings rather than current wage rates when deciding whether to migrate from rural to urban areas. The rate of rural-urban migration is thus considered to be a function of the difference between the discounted present values of expected urban earnings and expected rural earnings. Expected urban earnings are weighted by the probability of obtaining employment in the urban modern (UM) sector, where this probability is defined as the number of job openings divided by the total number of UM sector unemployed. This model also assumes that there is no rural unemployment: a probability of unity is therefore used when calculating expected rural earnings.

An economically rational migrant will move from a rural to an urban area if the expected UM sector earnings exceed the expected stream of rural earnings, although there might exist an urban pool of underemployed and unemployed labour. Many migrants who do not immediately obtain employment in the UM sector are temporarily absorbed in the urban surplus labour pool, known as the Urban Informal (UI) sector while they search for UM sector employment.

¹The material in this subsection is adapted from Todaro (1969), Harris and Todaro (1970) and Riadh (1998). For a more comprehensive and formal treatment of the Harris-Todaro model, see Riadh (1998) and Stark et al (1991).

EVALUATING THE CHARTER CITIES CONCEPT IN STIMULATING REGIONAL ECONOMIC GROWTH

The HT model predicts that increasing UM sector jobs will increase the employment probability and thus attract additional rural labourers. The urban labour force will keep on increasing until the original probability is restored (Riadh, 1998). This result will only hold if it is assumed that the urban wage rate is fixed, or the changes in the wage rate are negligible.

Therefore, one of the main issues raised in the Harris-Todaro model was that creating urban jobs may increase rather than decrease urban unemployment because of the induced negative effect on rural migration, which may outweigh the positive effect of creating jobs (Todaro, 1976). This is referred to as the Todaro paradox.

THE ROLE OF CITIES IN DEVELOPMENT

One of the assumptions of the Henderson 3.5 model, which has been supported by Todaro and Smith (2012), is that cities are largely formed due to the cost advantages they offer through what are known as "agglomeration economies", at least below a threshold city size. Agglomeration economies are the cost advantages to producers and consumers from clustering together in cities and towns due to economies of scale and network effects. An important question that has featured prominently in urban development literature has been whether the agglomeration economies in towns and cities affect the long-run rate of economic growth and development.

CITIES AND ECONOMIC GROWTH

INCREASING RETURNS AND THE COSTS OF MOVING GOODS

Glaeser (1998) states that efficiency--seeking firms choose to locate in cities as a way of limiting the costs of transporting both inputs and final output. Furthermore, such centers are often the hubs of transportation networks, which provide access to a larger market at a lower cost. However, transport costs have declined and continue to decline due to technology improvements (Smith, 1989) and these changes have weakened the powerful connection of cities and manufacturing industry growth.

The Costs of Moving People: The Division of Labour, Insurance and Bargaining Becker and Murphy (1992) argue that lower coordination costs in cities lead to a finer division of labour and more specialization, resulting in improved efficiency and growth in output. Krugman (1991) suggests "labour market pooling" as a second urban advantage towards economic growth. The idea is that thick labour markets insure both risk-averse and risk-neutral workers against firm- or industry-specific shocks by allowing them to move between low productivity and high productivity firms.

THE COSTS OF MOVING IDEAS AND LEARNING IN CITIES

Cities reduce the cost of moving ideas, and some scholars have linked cities with the production of ideas which lie behind economic growth (Jacobs, 1968; Lucas, 1988). However, these informational spillovers in cities may lead to two opposing influences. Firstly, if firms in the city can free ride on the innovations of other firms, this may reduce the incentive to invest in such research and development, leading to a slowdown in growth. Secondly, the existence of many firms in a city and the resulting competitive pressures may actually serve as an incentive for firms to innovate so that they obtain a competitive edge over rivals.

Glaeser (1998) argues that urban density speeds up the rate of interaction between people, and that when people learn through their interactions, human capital accumulation is faster. This learning leads to both economic growth and the population growth of cities, which in turn fuels further economic growth.

CITIES AND DEVELOPMENT

Todaro and Smith (2012) observe that urban informal sector incomes are persistently higher than those in rural areas. This may point to a reduction in absolute poverty of the migrant worker, Many rural workers remit money back to their rural origins leading to an elevation of their family's economic status. The further accumulation of human capital by workers in the urban areas, due to informational spillovers and learning in the city, helps in breaking the "vicious cycle of poverty." In many developing countries, urban dwellers have better access to education and health opportunities than comparable counterparts in the rural areas due to "urban bias".

However, cities often have higher unemployment rates and one of the reasons may be because they attract people who are prone to frequent unemployment, possibly due to the labour market pooling effects described above. Timmins (2006) finds that the cost of living increases with city size above a certain threshold: many developing country cities are already beyond this threshold point due to urban primacy and "giantism2".

In many developing countries, urbanisation has tended to increase spatial inequalities. Agglomeration economies create leading areas, characterised by economic dynamism and rising standards of living and usually those who are already better-off can take advantage of these new opportunities. Lagging areas are also created as a side effect of urbanisation: these are areas that have not experienced structural transformation where standards of living are stagnating or even declining (Dudwick et al, 2011). Ravallion, Chen and Sangraula (2007) point out that urbanisation in Sub-Saharan Africa has been associated with less poverty reduction and more urban inequality compared with other regions in the world.

Although urbanisation in Sub-Saharan Africa may be associated with some economic growth and has arguably resulted in a reduction in absolute poverty in some instances, it has also been negatively correlated with development, leading to an increase in relative poverty within the cities and between urban and rural areas.

LIMITATIONS OF URBAN AND RURAL DEVELOPMENT POLICIES

There are a number of problems associated with implementing a broad-ranging urban agenda to bolster economic growth. Firstly, a broad ranging agenda would include a wide array of policies and this may prove to be rather demanding for developing country governments. The second difficulty is that the political economy of a country can interfere with policy and the limited capacity of these governments can be a huge obstacle.

On the other hand, the Henderson 3.5 model makes it clear that cities operate in a sub-optimal environment riddled by market failures where fixing one problem may not result in any tangible benefits or may even lead to worsening

² A condition where an urban centre grows too large such that costs exceed agglomeration economies (Todaro & Smith, 2012)

EVALUATING THE CHARTER CITIES CONCEPT IN STIMULATING REGIONAL ECONOMIC GROWTH

conditions, as the HT model showed. The policy dilemma hits when trying to do everything at once is not possible and a step-by-step approach may not be effective (Duranton, 2008).

LIMITATIONS TO URBAN GROWTH

The discussion below focuses on some of the congestion costs that limit city growth.

Transport costs and the cost of living

In a study of cities in America, Glaeser (1998) confirmed that the observed cost of living rises dramatically with city size as assumed in the Henderson 3.5 model. This analysis can be extended to apply in developing countries where city housing and land is clearly more expensive than rural housing and land. The transportation networks in developing country cities have not been upgraded to meet the increased flows of motor vehicle traffic and this has led to traffic congestion problems and rising transport costs. However, improvements in building technology and traffic technologies that shift the cost of living curve downwards reduce the above mentioned limitations on urban growth.

Crime

It has been argued that criminals can also benefit from various agglomeration effects such as higher returns to crime in cities due to scale economies in stolen goods, and dense social networks that support the transmission of information about crime (Glaeser & Sacerdote, 1996). Furthermore, the probability of being arrested diminishes as city size increases, possibly because police work becomes more difficult as the number of criminals rises.

Environmental Costs

The UN's report on atmosphere and air pollution maintains that poor road networks and the growing number of second-hand cars in increasingly overpopulated cities have resulted in air pollution and fuel wastage (UNEP, 2012). Increasing urban density, where most of the residents are poor, is associated with high littering problems, old water and waste systems that result in free flowing sewage and contaminated water. These environmental impacts affect human health, materials and infrastructure as well as climate change, leading to a limit on the growth of city populations.

CHARTER CITIES IN THE DEVELOPING WORLD

Many people in developing countries are flocking to cities that do not have the capacity to accommodate them. For those who will eventually become part of the urban modern sector, the protections and opportunities available to them will be well below those offered in other places where they could rather live. If they have sufficient resources, many of these citizens will end up leaving their countries for "greener pastures" in search of better systems, opportunities and rules, further contributing to the "brain drain" problem of developing countries. Fuller and Romer (2012) argue that the wave of urbanization can be harnessed to dramatically reduce global poverty. What they propose is a new kind of reform zone which they call a 'Charter City'.

THE CONCEPT OF CHARTER CITIES 3

A charter city is a special reform zone that must be large enough to accommodate millions of workers and residents, reaching the scale at which the services and amenities of modern urban life become feasible, as predicted by the Henderson 3.5 model. The reforms must include all the *rules* needed to support exchange

³ This section is largely based on the recent pioneering work by Paul Romer and Brandon Fuller (Charter Cities, 2012). For a more complete treatment of the Charter Cities concept please see www.chartercities.org

in a modern market economy, and structure interactions in a well-run city. Fuller and Romer (2012) define rules to encompass "institutions" – the social norms and the formal laws and enforcement systems that determine how people interact. Many developing countries are plagued by weak or outdated rules that hold people back and limit the pace of development. The process of changing rules is a long and painful one and efforts to change them are often sluggish and frustrated by those who benefit from such rules. Many people then opt to move to regions and places that have better rules, but these regions will not let them in, or if they do, they limit the number of immigrants they will take (Clemens, 2011). Charter cities copy rules that work, and offer people the chance to move to places that start with better rules. These rules and the norms they encourage can differ markedly from the ones that prevail nearby. This was the case when William Penn took the critical step and wrote a charter that guaranteed freedom of conscience and a separation of church and state when the remainder of Europe and America were living under a different code (Fuller and Romer, 2012).

According to Charter Cities (2012), all charter cities share the following four elements:

- a) A vacant piece of land, large enough for an entire city.
- b) A charter that specifies in advance the broad rules that will apply there: A charter should outline general principles and describe the process whereby the detailed rules and regulations will be established and enforced in a city, providing a foundation for a legal system that will allow the city to grow and prosper.
- c) A commitment to choice, backed by both voluntary entry and free exit for all its residents, employers and investors: Only a country that wants to create a new charter city will contribute the land to build one, and any partner countries will help establish the new rules only if they choose to do so. Firms will choose to invest in the city or hire workers there. People will choose to move to the city, stay there or leave, based on their evaluation of the rules relative to those in competing cities.
- d) A commitment to the equal application of all rules to all residents.

THE STRUCTURE OF CHARTER CITIES

Romer (Charter Cities, 2012) identifies three distinct roles for participating nations:

- a) The **host** country provides the land.
- b) A **source** country supplies the people who move to the new city.
- c) A guarantor country ensures that the charter will be respected and enforced for decades into the future.

Each of these roles can be played by a single nation or by many different nations in partnership and hence there can potentially be many different charter city arrangements. Presented below are some cases, both hypothetical and real, to show some of the different possibilities

A single country could undertake all three roles. China did so when it established the special economic zone where the new city of Shenzhen emerged (Yeung et al, 2009). India is considering creating new cities and would also thus be assuming all three roles (Pathak, 2010; Charter Cities, 2012). Such a path would require that the central government can credibly commit to would-be residents and investors that the special rules in a new reform zone will be upheld (Charter Cities, 2012).

One country can serve as host and guarantor while another country acts as the primary source. For example, South Africa has long been faced with the problem of illegal immigrants from Zimbabwe who have put a strain on current public services and continue to cost the South African government in terms of policing and tighter immigration controls. South Africa could thus create, within its borders, an open city with a special legal structure and then invite Zimbabweans to be residents of this zone but not of South Africa as a whole

EVALUATING THE CHARTER CITIES CONCEPT IN STIMULATING REGIONAL ECONOMIC GROWTH

POLITICS AND POLITICAL RISK

Many critics of charter cities have tried to attack the system as a form of colonialism where rich nations impose their rules on weaker nations in the name of reform. However, this argument is without merit in a developmental context because colonialism implies coercion whereas charter cities are based on choice. A more weighty argument against charter cities is based on the uprisings that occurred in Daewoo, Madagascar, which had been targeted as a charter city. The uprisings appeared to demonstrate the explosive sensitivities surrounding sovereignty and land and suggest that land concessions still trigger such emotions, particularly in developing countries with colonial histories. This type of risk can be mitigated by a host country's choice of partner nations.

After a time, the residents of the charter city and the citizens of the host country might vote on whether to return the city to the control of the host government, where an agreement might stipulate whether the city's charter would remain in effect or not after the host government assumed control (Charter Cities, 2012).

URBANIZATION IN ZIMBABWE

METHODOLOGY

The variables used for this study are GDP per capita, the share of agriculture, services and industry in GDP, employment in the different sectors and the percentage of the population that is urban. Carbon dioxide damage and access to improved sanitation facilities are also used to measure environmental quality and costs. The data used in this study was obtained mainly from the World Bank's World Development Indicators 2012, the United Nations' Department for Economic and Social Affairs' (DESA) World Urbanization Prospects – the 2011 Revision, and the Zimbabwe Central Statistics Office's Zimbabwe Statistics Database – ZIMDAT 2011. This data was handled and compared using Microsoft Excel's data analysis tools.

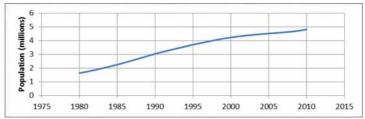
One major problem with reliability of the data is the absence of accurate and consistent official statistics for most African countries (Yeats, 1990). To compensate for this shortfall, this study made use of projections and estimates by DESA (2012).

EMPIRICAL RESULTS

Urban Population Growth in Zimbabwe

As Figure 3.1 shows, the urban population of Zimbabwe grew from about 1.6 million in 1980 (22.4 % of total population) to about 4.8 million in 2010 (38.3 % of total population).

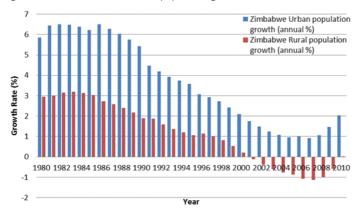
Figure 3.1: Zimbabwe urban population



Source: Data from World Urbanization Prospects, the 2011 Revision, DESA (2012)

The period just after independence in 1980 saw the largest increase in the urban population. Estimates from DESA show that the rate of urbanization in Zimbabwe averaged about 6.17% between 1980 and 1990, 3.3% from 1991 to 2000 and 1.3% from 2001 to 2010 (shown in Figure 3.2).

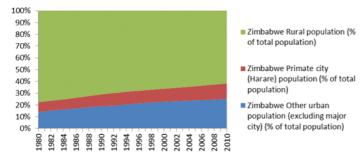
Figure 3.2: Zimbabwe rural vs. urban population growth



Source: Data from World Urbanization Prospects, the 2011 Revision, DESA (2012) and World Bank's World Development Indicators 2012.

Figure 3.2 shows that urban population in Zimbabwe has been growing faster than rural population since 1980. The figure also shows a decline in rural population from 2001 onwards. This trend can be explained in part by Zimbabwe's rural to urban migration in search of employment and better standards of living. However, the growth of the urban population had itself slowed, due to the harsh conditions in the cities and towns. This slowdown in the urban growth in Zimbabwe means that there are still currently more people in rural areas (61.7%) than in urban areas (38.3%) as shown in Figure 3.3 below.

Figure 3.3: Rural vs. urban share of population in Zimbabwe



Source: Data from the World Bank's World Development Indicators 2012

Figure 3.3 also shows that although urban population has been growing steadily, Zimbabwe's primate city, Harare, has been growing at a rate faster that all the other urban areas combined. Estimates from DESA show that Harare's population constitutes nearly a third (31.8%) of all the urban population; and the second largest city, Bulawayo, has a population less than half that of Harare. The urban primacy of Zimbabwe is supported by data from DESA (2012), which shows that the city of Harare has more than 12% of the entire population.

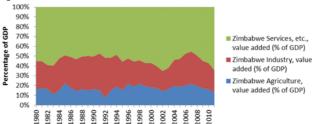
STRUCTURAL TRANSFORMATION

Figure 3.4 shows that Zimbabwe remains a largely services-based economy with the services sector's contribution to GDP having risen from 55.3% in 1980 to 64.3% in 2011. Industry's contribution to GDP has declined from a value of about 29% in 1980 to about 23% in 2011 and that of agriculture from 15.7% to 12.8%

EVALUATING THE CHARTER CITIES CONCEPT IN STIMULATING REGIONAL ECONOMIC GROWTH

during the same period. However, to obtain a clearer picture of the structural transformations that followed Zimbabwe's urbanisation,, simple regression and correlation plots of each sector's contribution to GDP versus the percentage urban population are given in Figure 3.5.

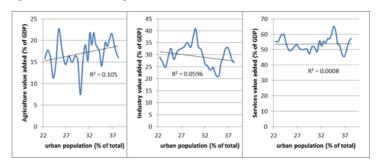
Figure 3.4: Sectoral value added to GDP



Source: Data from World Bank's World Development Indicators 2012 and ZIMDAT (2011)

Surprisingly, the time series in Figure 3.5 shows that urbanization in Zimbabwe is positively correlated with agriculture's value added to GDP and negatively correlated with industry's contribution. However, both these results are not significant ⁴ at the 95% level of significance with p-values of 0.075 and 0.186, respectively (see Appendix A).

Figure 3.5: Structural change with urbanization in Zimbabwe (1980 - 2010)



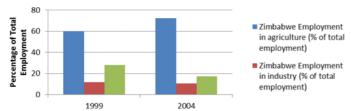
Source: Regression and correlation analysis using data from World Bank's World Development Indicators 2012

Likewise, the correlation plot shows that the contribution of the services sector remained relatively unchanged, but this result is also not statistically significant. What Figure 3.5 shows, however, is that urbanization in Zimbabwe has not clearly been accompanied by the structural changes that past urbanizations have exhibited and may in fact be a case of the abnormal urbanization that Obeng-Odoom (2010) tried to disprove.

The only data available on sectoral contributions to employment from the available sources was for the years 1999 and 2004. Figure 3.6 compares the sectoral contribution to employment for these two years, which shows rather surprising results at first glance.

 $^{^4}$ Statistical results are significant at a significance level of 95% if P < 0.05.

Figure 3.6: Sectoral employment



Source: Data from World Bank's World Development Indicators 2012

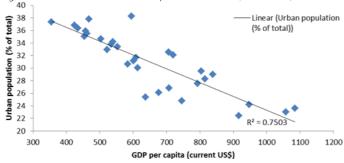
Agriculture, which is a predominantly rural sector in Zimbabwe and makes the least contribution to GDP according to Figure 3.4, contributed more to employment in Zimbabwe than both the industry and services sectors combined in both years. The rise in agriculture's percentage contribution to employment between 1999 and 2004 may be explained by the increased migration to towns and cities and the growing unemployment in the urban modern sectors. This explanation is consistent with one of the outcomes from the Harris-Todaro migration model, where the urban population is rising together with urban formal unemployment. According to the report of the UN's Office for Coordination of Humanitarian Affairs (in Mail & Guardian, 29 January 2009), Zimbabwe's official unemployment rate was 94% by the end of January 2009, and most of the labour force shed by the formal sector had been absorbed into the informal sector.

URBANIZATION AND ECONOMIC GROWTH

Figure 3.7 shows a negative correlation between the time series of observations on the percentage urbanization and GDP per capita in Zimbabwe. The relationship has a correlation coefficient of -0.866. A t-test at a significance level of 95% returned a p-value of 3.08E-10, suggesting that the result is statistically significant (i.e. p < 0.05). This statistical correlation is rather surprising considering that both urbanization and GDP per capita tend to rise over time. This 'anomaly' may be explained by the continued decline of Zimbabwe's GDP over the past two decades while urban population continued to grow.

Nonetheless, there is a real need for some prudence in interpreting Figure 3.7 because, although urbanization is negatively correlated with GDP per capita, the two do not always move in opposite directions.

Figure 3.7: Urbanization and GDP/Capita in Zimbabwe (1980 - 2010)

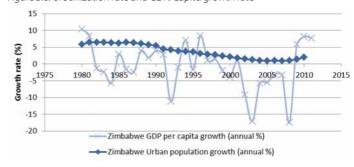


Source: Regression analysis using data from World Bank's World Development Indicators 2012

Figure 3.8 clearly shows that looking at the growth rates on a year-by-year basis reveals some periods when the GDP/capita growth rate was higher than the urbanization rate. Apart from the seven years 1980, 1981, 1994, 1996, 2009, 2010 and 2011, the rate of urbanization was higher than the per capita GDP growth in every year since 1980.

EVALUATING THE CHARTER CITIES CONCEPT IN STIMULATING REGIONAL ECONOMIC GROWTH

Figure 3.8: Urbanization rate and GDP/Capita growth rate



Source: Data from World Bank's World Development Indicators 2012

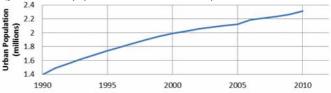
However, it is also important to note that the actual rate of GDP growth is higher than that recorded due to the existence of a large unrecorded informal sector in Zimbabwe. Figure 3.8 shows stable GDP growth averaging about 4.85% in the decade after independence in 1980. The average annual GDP growth fell to about 2.14% after the introduction of the failed Economic Structural Adjustment Programme (ESAP) in 1991. From 2000 to about 2008, the country's economic trends were mostly negative and averaged minus 5.33%. The declining level of formal economic activity means that activity in the informal sector was increasing, hence the figures shown in Figure 3.8 may be significantly understated.

Indeed, Makochekanwa (2010) shows that the informal sector in Zimbabwe grew from less than 10% of official GDP just after 1980 to about 70% in 2008 before starting to slowly decline to about 60% in 2009. Therefore, there is a possibility that the negative correlation between GDP/capita and urbanization may not be a true reflection of Zimbabwe's urbanization-development nexus.

URBANIZATION AND THE ENVIRONMENT

To analyze the environmental impacts of the increasing urbanization in Zimbabwe, Figure 3.9 shows the number of urban residents in Zimbabwe without access to improved sanitation facilities over time. The trend is upwards and shows worsening sanitation conditions for an increasing number of people in the urban areas (from 1.4 million people in 1990 to about 2.3 million people in 2010). This may indicate that the current urban settlements in Zimbabwe cannot provide improved services to, and sustain the increasing populations. This result seems to tally with the image of free-flowing sewage in many densely overpopulated urban settlements, not just in Zimbabwe but also in many developing African countries.

Figure 3.9: Urban population without access to improved sanitation

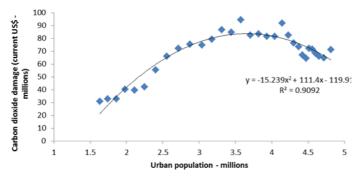


Source: Author's calculations using data from World Bank's World Development Indicators 2012 and ZIMDAT (2011)

A plot of carbon dioxide damage against urban population unearthed interesting insights. Figure 3.10 below shows the results from a plot of carbon dioxide damage against urban population. The best fit for the data was a quadratic polynomial with equation y=-15.239x²+111.4x-119.91 and correlation coefficient 0.9092. What this model shows is that carbon dioxide damages first go up and then start declining after a certain urban population size. This conclusion seems

to support the Henderson 3.5 model's prediction of multiple equilibria in some cases. From Figure 3.10 it can be seen that an urban population below about 3.7 million may be efficient but unstable, whereas a larger urban population above 3.7 million will result in declining carbon dioxide damages and a possibly more stable equilibrium. Although these figures are at best estimates, this may mean that Zimbabwe has space for more urbanization towards a second more stable equilibrium beyond the current urbanization levels.

Figure 3.10: Carbon dioxide damage vs. urban population



Source: Regression trend-line analysis using data from World Bank's World Development Indicators 2012

CHARTER CITIES IN ZIMBABWE⁵

Having shown that Zimbabwe has space for continued urbanisation, the Zimbabwean government, through Parliament and Senate, could pass legislation and define a new legal entity, which would in essence be a Special Development Region (SDR). This SDRcould be used to establish a new city-scale reform zone in the form of a charter city. This new reform zone would be based on providing good rules through the charter and would provide choices for both Zimbabwean citizens and leaders.

GOOD RULES - CHARTER

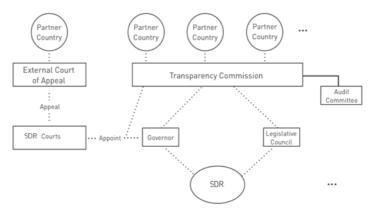
One proposal for the charter may provide constitutional provisions to anchor the governance of the Special Development Region on the two pillars, a Transparency Commission and an external court of appeal, as shown in Figure 3.11.

The President of Zimbabwe would appoint the first permanent members of the Transparency Commission, but after that the Commission itself fills its vacancies. This would provide investors and residents of the new charter city with an assurance that governance in the SDR will continue unimpeded even in the event of political unrest in the rest of the country comparable to what Zimbabwe experienced in 2008. However, to ensure that the Transparency Commission's conduct remains in check, there would also be a provision that states that the legislation that specifies the powers of the Transparency Commission can be changed only if there is two-thirds approval in both Senate and Parliament together with an approval by referendum among the residents of the SDR. This provision would make it difficult for political meddling in the SDR governance, and would ensure that the Transparency Commission is held accountable for its actions.

⁵The examples of models given in this section are derived largely from the model of Charter Cities that is being tested in Honduras. The comprehensive case study and updates on Honduras can be found on www.chartercities.org

EVALUATING THE CHARTER CITIES CONCEPT IN STIMULATING REGIONAL ECONOMIC GROWTH

Figure 3.11: SDR Governance Structure



Source: Adapted from Honduras Update December 2011, Charter Cities (2012)

The Transparency Commission would be the anchor for the executive and legislative functions in the SDR. One of the commission's immediate responsibilities would be to propose to the President (and establish) a procedure to suggest the boundaries of the SDR. It would also establish a transparent, competitive and corruption-free process for receiving development proposals from investors.

Two different routes could be taken in appointing a governor for the first SDR. First, the President could appoint a Zimbabwean citizen to serve as first governor, but the responsibility to replace the SDR Governor would, for a time after the initial appointment, rest with the Transparency Commission. Second, representatives appointed by Zimbabwe and each of the partner countries could decide by a simple majority who they appoint as the governor in this new city. As the newly established charter city grows and conditions of trust and safety emerge, the Transparency Commission would manage a transition to local democratic selection of the governor and local legislature.

Because the Transparency Commission would be setting initial norms and expectations in an area that will potentially grow to be an important hub city for Zimbabwe, its members must embody unquestioned integrity and very high standards of excellence. They should also collectively have leadership experience in a wide range of activities at the highest levels, including holding public office, researching and implementing sound policy, fighting crime and corruption and managing large organisations.

The Charter would also make provision for an Audit Committee to be established and this committee would be one of the key tools that the Transparency Commission could use to monitor the performance of the SDR government, including finances and individual government officials and agencies.

The SDR governor, in consultation with the Transparency Commission, would nominate judges for the independent court system in the SDR, subject to approval by the Zimbabwean Senate and Parliament. The charter would allow for nominees to be drawn from jurisdictions all over the world, allowing the SDR to tap into a deep international pool of judicial talent. The SDR governor would also have the power to cooperate with and possibly anchor the SDR courts in the successful judicial system of a partner country.

CHOICES FOR ZIMBABWEAN CITIZENS - UNINHABITED LAND

The concept of charter cities is predicated on the idea of giving more choices to people: this choice is built into the model if the city is built on uninhabited land. People can come and live under the new charter, but no one is forced to live under

it. According to the World Bank (2012), Zimbabwe has a land area of approximately 386,850 km2 and a population of about 12.75 million. Japan, which is slightly smaller with an area of 364,500 km2, has a population of 127.8 million people, ten times more than Zimbabwe's population. This is not to say that Zimbabwe should be as densely populated as Japan, but it shows that Zimbabwe has vast stretches of uninhabited land that can carry new charter cities.

CHOICES FOR LEADERS – PARTNERSHIPS BETWEEN NATIONS

The most likely structure of a charter city for Zimbabwe would be when Zimbabwe serves as both the host and the primary source. As both the host and source country, Zimbabwe would provide the land on which the charter city is built and the people would freely enter or exit the newly-formed charter city. The government of Zimbabwe would then decide whether to have one partner country or a coalition of partner countries to act as guarantors. For example, South Africa, Botswana and China could act as guarantors. By cooperating with these partners, Zimbabwe might be able to induce higher levels of investment and employment than it could achieve single-handedly.

South Africa could act as a guarantor for the judicial branch by agreeing to make its Supreme Court the court of final appeal for the judicial system in the new city. The use of an external court of appeal is just one of many innovative possibilities for cooperative governance. For example, the SDR might enlist an organization such as the South African Revenue Services (SARS) (which is considered one of the most advanced and efficient revenue collection agencies in the world) to manage customs or tax collection. The SDR may also enlist the services of a reputable international policing authority to train police officers and hold the police leadership accountable for fair and effective policing.

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

Zimbabwe, like the remainder of the developing world, continues to urbanise. However, the rate of urbanisation is not matched by the rate of economic growth and development. This has led to what many scholars have termed a movement from rural poverty to urban misery. This paper showed that many governments that have followed this school of thought have tried to implement policies that limit urban growth, or in extreme cases try to reverse it.

Two well-known models that could be used to analyze urbanisation and development; the Harris-Todaro migration model and the Henderson 3.5 model, were suggested. The Harris-Todaro model predicts that under certain conditions, people will move to urban areas even in the face of ballooning urban sector unemployment if they expect a wage improvement from the move. This phenomenon can explain the continued urbanization in some developing countries even when the urban economic structures cannot absorb the excess labour. The Henderson 3.5 model showed that the net wage in cities rises and then starts falling beyond a certain population threshold. This means that cities have an optimal size beyond which costs start rising. The different roles that cities play in stimulating economic development were explained and factors that may limit city growth were outlined.

Instead of being positively correlated with high economic growth and industrialization, urbanization in Zimbabwe has had opposite effects. The

EVALUATING THE CHARTER CITIES CONCEPT IN STIMULATING REGIONAL ECONOMIC GROWTH

real underlying problem to this abnormal urbanization is bad rules and governance institutions that limit and stifle growth by removing most of the incentives that encourage development. This was shown to have led to the disproportionate growth of Harare compared with the other urban centers. The Harris-Todaro model rightly predicts that rural to urban migration continues in the Zimbabwean context, even in the face of high unemployment in the urban settlements, as people try to escape the harsh conditions in rural areas, a result of the extensive urban bias. Zimbabwe is plagued by the problem of urban primacy and its urbanization has been negatively correlated with economic development. A model for charter cities was suggested, which Zimbabwe could adopt to reduce strain on Harare and lead the country on a path to urbanizationfuelled economic recovery. To manage the sensitivities and political risk which may be attached to such a model, the Zimbabwean government could choose to partner with other credible partner governments who would act as guarantors to the Charter City. Charter cities, as Special Development Regions, could meet the demands for both urban living and better governance and also help to curb the exodus of Zimbabwean human capital to other countries which offer better rules. The competitive forces that would arise from having more than one city trying to attract new members by implementing better rules can be a powerful stimulant for regional economic development.

RECOMMENDATIONS

The first step the Zimbabwean government could take towards establishing the first charter city is for Parliament and Senate to pass legislation that defines a Special Development Region (SDR) as a new legal entity. To ensure that this legal entity will be independent of the political leadership of the country and thus ensure its long-term viability in establishing a new city-scale reform zone, the legislation would need to explicitly state its independence and the legal processes and procedures that would apply.

The President of Zimbabwe would need to set up an independent Transparency Commission (or similar governing body) composed of influential leaders from different spheres of excellence: this body would be tasked with suggesting boundaries for the charter city and administering the newly developed SDR. This commission would also draft a detailed Charter for the new city which would have to be approved by Parliament and Senate. The Transparency Commission could choose to invite residents while they are setting up the structures for the SDR, or after all the legal structures and entities are in place. This call to interested residents must be open and ensure free entry and exit by those interested.

Concurrently, the Zimbabwean government could start looking into and setting up negotiations with potential partner governments who could serve as guarantors to the Charter that would govern the new city. The government could also start negotiations with potential domestic and international investors who may be interested in investing in the development of this new charter city. The negotiation and consultation process would help to shape the Charter that would govern this city, whose broad rules may be different from the rules that apply in the rest of the country and yet still safeguard Zimbabwe's sovereignty. The government of Zimbabwe should also set up a collaborative research institute or alternatively facilitate a network of researchers in and outside Zimbabwe to tackle the specific details of the charter city. The following section highlights some of the research questions that would need to be answered.

FUTURE RESEARCH

One question that remains to be answered is "What will it take to get started building the first charter city and scaling the model so that many more charter cities can be built?" This question opens up scope for further research into the

technical details of charter cities. An example of a research area in this regard would be on the charter provisions for the responsibilities and roles of different partner nations in n-way joint ventures. There is no precedent for such partnerships, but further research could illuminate insights on how to write such a charter. Another research question may be how to finance such a venture, including the police, the courts, and the education and health systems to make the charter cities more attractive to people and result in higher incomes, incidentally making the land more valuable. Many technical details still have to be worked out, including how to construct low cost and energy efficient housing to ensure that people who work at a first job can afford decent accommodation.

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APPENDIX A

PERCENTAGE URBAN VS. AGRICULTURAL SHARE OF GDP

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.324076
R Square	0.105025
Adjusted R Square	0.074164
Standard Error	3.05902
Observations	31

ANOVA

•	df	SS	MS	F	Significance F	_
Regression	1	31.8454	31.8454	3.403156	0.075308	
Residual	29	271.3706	9.357606			
Total	30	303.216				

Coefficients	Standard Er	rort Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	10.43592	3.66456	2.847797	0.008009	2.941056	17.93079	2.941056 17.93079
Urban population	0.215585	0.116863	1.844765	0.075308	-0.02343	0.454598	-0.02343 0.454598
(% of total)							

PERCENTAGE URBAN VS. INDUSTRY'S SHARE OF GDP

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.244142
R Square	0.059605
Adjusted R Square	0.027178
Standard Error	4.681623
Observations	31

ANOVA

	df	SS	MS	F	Significance F
Regression	1	40.28716	40.28716	1.83812	0.185636
Residual	29	635.6102	21.91759		
Total	30	675.8974			

Coefficients	Standard Eri	rort Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	36.6511	5.608361	6.535083	3.71E-07	25.18071	48.12149	25.18071 48.12149
Urban population (% of total)	-0.24248	0.178851	-1.35577	0.185636	-0.60827	0.12331	-0.60827 0.12331

PERCENTAGE URBAN VS. SERVICES' SHARE OF GDP

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.028029
R Square	0.000786
Adjusted R Square	-0.03367
Standard Error	4.662506
Observations	31

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.495677	0.495677	0.022801	0.88102
Residual	29	630.4299	21.73896		
Total	30	630.9256			

Coefficients	Standard Eri	ort Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	52.91298	5.585459	9.473344	2.22E-10	41.48943	64.33652	41.48943 64.33652
Urban population (% of total)	0.026896	0.178121	0.151001	0.88102	-0.3374	0.391195	-0.3374 0.391195

GDP PER CAPITA VS. PERCENTAGE URBAN

SUMMARY OUTPUT

 Regression Statistics

 Multiple R
 0.866179376

 R Square
 0.750266711

 Adjusted R Square
 0.741655218

 Standard Error
 2.429088612

 Observations
 31

ANOVA

	df	SS	MS	F	Significance F
Regression	1	514.072	514.072	87.12389	3.08E-10
Residual	29	171.1137	5.900471		
Total	30	685.1857			

Coefficients	Standard Errort Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	45.33505707 1.596219	28.40152	1.02E-22	42.07042	48.59969	42.07042 48.59969
GDP per capita	-0.022043073 0.002362	-9.33402	3.08E-10	-0.02687	-0.01721	-0.02687 -0.01721
(current US\$)						

ESTIMATING THE POTENTIAL IMPACT OF CAPITAL EXPENDITURE

IN AGRICULTURE IN THE EASTERN CAPE

Idriss Mouchili • Coega Development Corporation

Dr Herman Azemtsa • UNISA

INTRODUCTION

Agriculture is a substantive sector of the global economy with developed countries employing policies to protect and promote local production. Despite repeated commitments and ongoing negotiations at the World Trade Organisation (WTO), global agriculture remains a highly distorted market.

The major economic growth in developing countries over the past two decades has had a profound impact on agriculture. Most significantly, the combination of growing populations (UN estimates of 8.9 billion by 2050), high incomes, great weather variations, urbanisation, globalisation and financial markets has pushed commodity prices upwards. Global food insecurity remains a serious problem with more than 900 million people still hungry, and progress towards reaching the Millennium Development Goal (MDG) of halving the world's population of malnourished people off by a wide margin (IFPRI 2010). The agricultural sector remains vital, signified by its prominence in contributing to GDP in developing economies and its ability to aid pro-poor growth.

ESTIMATING THE POTENTIAL IMPACT OF CAPITAL EXPENDITURE IN AGRICULTURE IN THE EASTERN CAPE

Food deficit regions including Asia, the Middle East, and Africa, will exhibit the strongest growth in demand for agricultural imports due to increases in population and growing wealth in these regions. However, demand in China will continue to exert the greatest influence on global markets and will depend on increased domestic productivity to offset the demand for imports. On the supply side, the traditional agricultural powerhouses of the USA, EU, Canada, Australia and New Zealand will remain important players. However, emerging producers such as the countries of South America, Eastern Europe, and Central Asia will grow in importance.

Agriculture has always been an important component of South Africa's economy, although its contribution to GDP has steadily decreased from around 10 percent of GDP in the 1960s to a current contribution of around 3 percent. However, the sector's broader value is evidenced by the fact that it accounts for approximately 10 percent of formal employment (as well as a high proportion of informal jobs) and that its secondary offshoot, the agro-industrial sector, contributes about 12 percent of GDP (DAFF 2010 and 2013).

The Eastern Cape is vast and well-endowed with land and a diverse climate. The province is home to 6.8 million people and is characterised by a mostly rural population (60 percent of inhabitants occupy rural areas). Although the rate of urbanisation is accelerating, large numbers of people still, by circumstance or choice, remain in rural areas. A thriving agricultural sector is thus important to transform rural livelihoods, reduce inequalities by increasing incomes and employment opportunities for the poor, while nurturing the inheritance of natural resources. Furthermore, there is a renewed sense from Provincial government that large-scale established agriculture has the potential to sustain increased levels of employment and the welfare of farm workers, which in turn will contribute to social stability and safety in rural areas. In this regard, the Eastern Cape has positioned itself to benefit from the Special Economic Zones (SEZs) bill initiated by the department of trade and industry (the dti) with two proposed agro-processing SEZs in the region: the Wild Coast and the Chris Hani SEZs.

The purpose of this study is to estimate the potential impact of the increased capital expenditure in the agricultural sector in the Eastern Cape on the economy of the Eastern Cape and the whole of South Africa. It is assumed that R100 million (excluding land) is invested in agriculture and that the capital expenditure takes place according to historical spending patterns as per the Eastern Cape's economic structure. No provision for operational expenditures has been made.

METHODOLOGY

The estimates of the multiplier effects of the additional capital expenditure in the agricultural sector in the Eastern Cape are based on a detailed regional input-output analysis for the Eastern Cape and South Africa.

THE INPUT-OUTPUT MODEL

The input-output model developed by Leontief is based on the statistical input-output tables where the national accounting flows in the economy are represented in a matrix. The matrix captures the flow of transactions between industries and institutions in the economy. The inter-dependence of industries is captured within a so-called transaction matrix, which shows in its rows the output of the various industries and in its columns the use of commodities by the different industries. The rows in the input-output table therefore represent the

output of the industries and the columns the inputs. Intermediate inputs as well as value added components such as compensation of employees and the gross operating surplus are captured as inputs. Other inputs (or payments) captured include imports, other taxes and subsidies on production. In the rows output is divided into output to industries for intermediate use (for further value adding), and output to the final demand components such as household consumption, government consumption, gross fixed capital formation, and exports.

Input-output (IO) analysis is a valuable tool in estimating the effects of a major investment project, changes in government spending, or changes in income giving rise to changes in household spending. But it will evidently take time for a particular increase in final demand to work through all the sectors in the economy. What is more, an increase in the demand for a product will not be a once-off event, but will trigger secondary effects along the way. The following terms are generally used to describe the effects caused by a change in final demand:

Initial impact: This is the change in a final demand component which occurs or is assumed, for example a R1 billion capital investment in a project;

First round impact: These effects are the changes in business activity and production occurring as a direct consequence of a project. It includes the impact of sectors required to produce more to meet the demand from the project. For example, the constructing a building plant, will need brick, mortar, steel, machinery, etc., so the other sectors in the economy need to supply these materials:

Direct impact: The direct impact is the sum of the initial and first round impacts.

Indirect impact: Indirect effects result from changes in sales by suppliers to the directly-affected businesses, including trade and services at the retail, wholesale, and producer levels. The businesses needing to supply the project will also need to expand, which will affect other businesses/sectors (theoretically an infinite number of times, until the change becomes too small to measure).

Induced impact: Induced effects are further shifts in spending on food, clothing, shelter, and other consumer goods and services caused by a change in personal income of workers employed by the directly and indirectly affected businesses.

Economy-wide impact: This is the sum of the direct, indirect and induced effects.

Multipliers are used to estimate the impact of changes in final demand on output, GDP, remuneration, gross operating surplus, capital required, and employment. A range of existing regional input-output models exist in South Africa and use various methodologies for the production of regional input-output tables. No official regional input-output tables are compiled but private developers use non-survey-based methods for regional input-output table development that rely on the national level input-output tables published by Statistics South Africa (StatsSA). The key methodological issue facing any private developer is the limited data availability on specifically inter-regional trade flows to construct regional input-output tables.

Although multiplier analysis is a useful tool to analyse the economic contribution of the additional capital expenditure and output, it has some limitations, which need to be considered when interpreting the multipliers. Firstly, multipliers assume that the industries in the economy use inputs, and produce outputs in fixed proportions. Secondly, multipliers do not take induced changes in relative prices into account, and thirdly multipliers assume that labour and capital are available in unlimited quantities. The use of multipliers will tend to overstate

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the economic impact but at least provide an upper-bound of the potential impact. Finally, the basic assumption of the input-output model is that there is equilibrium in the commodities market and therefore demand (input) equals supply (output). Furthermore it is assumed that capacity in the economy is always fully utilised. This is frequently not the case which implies that the average required employment and capital multipliers overstates the employment and capital requirement case. These two multipliers therefore should be interpreted with caution. At most they state the number of jobs and capital stock utilised to produce the given final demand and do not in any way imply net new jobs and capital investment.

BASIC EQUATIONS¹

Given regions R (Eastern Cape) and N (the rest of South Africa excluding Eastern Cape), the two region table represents the complete intraregional (Z^{RR} and Z^{NN}) and interregional (Z^{NR} and Z^{RN}) intermediate data flows and can be represented as:

$$Z = \begin{bmatrix} Z^{RR} & \vdots & Z^{RN} \\ \dots & \vdots & \dots \\ Z^{NR} & \vdots & Z^{NN} \end{bmatrix}$$

$$(6)$$

where Z^{RR} and Z^{NN} represent intraregional trade and Z^{RN} represents interregional trade (exports) of region R to region N and Z^{NR} of region N to region R.

The intraregional input coefficients for regions $\it R$ and $\it N$ will be:

$$a_{ij}^{RR} = \frac{z_{ij}^{RR}}{X_j^R}$$
 and $a_{ij}^{NN} = \frac{z_{ij}^{NN}}{X_j^N}$

The interregional input coefficients for regions NR and RN will be: $a_{ij}^{NR} = \frac{z_{ij}^{NR}}{x_{ij}^{NR}}$ and $a_{ij}^{RN} = \frac{z_{ij}^{RN}}{x_{ij}^{NR}}$;

These equations can be compactly rewritten as two equations

$$(1-A^{RR})X^R - A^{RN}X^N = Y^R \tag{9}$$

$$-A^{NR}X^{R} + (I - A^{NN})X^{N} = Y^{N}$$
(10)

where Y^R is the final demand for region R goods and services and Y^N is the final demand for region N goods and services.

We can define the complete coefficient matrix for a two-region interregional model as consisting of the four sub-matrices

$$\mathbf{A} = \begin{bmatrix} A^{RR} & \vdots & A^{RN} \\ \dots & \vdots & \dots \\ A^{NR} & \vdots & A^{NN} \end{bmatrix} \tag{11}$$

The gross output vector will be made up from the two regions output vectors X^R and X^N and can be defined as

$$X = \begin{bmatrix} X^R \\ \dots \\ X^N \end{bmatrix} \tag{12}$$

The final demand vector will be made up from the two final demand vectors Y^R and Y^N and can be defined as

$$Y = \begin{bmatrix} Y^R \\ \dots \\ Y^N \end{bmatrix} \tag{13}$$

The complete two-region interregional input-output system can be represented by: (I-A)X=Y (14); and a solution will be given by: $X=(I-A)^{-1}Y$ (15)

¹ Breisinger C., Thomas M., and Thurlow J. 2009: SAM and Multiplier Analysis - An Introduction with Exercises

where $(I-A)^{-1}$ is the Leontief Inverse, or the total (initial, direct and indirect) requirements matrix. This can be expressed less compactly as

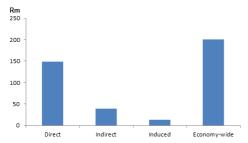
$$\begin{bmatrix} I & \vdots & 0 \\ \cdots & \vdots & \cdots \\ 0 & \vdots & I \end{bmatrix} - \begin{bmatrix} A^{RR} & \vdots & A^{RN} \\ \cdots & \vdots & \cdots \\ A^{NR} & \vdots & A^{NN} \end{bmatrix}^{-1} \begin{bmatrix} X^R \\ \cdots \\ X^N \end{bmatrix} = \begin{bmatrix} Y^R \\ \cdots \\ Y^N \end{bmatrix}$$

EMPIRICAL RESULTS

CAPITAL EXPENDITURE

The additional R100 million capital expenditure in the agricultural sector in the Eastern Cape, results in a direct and indirect output of R210.5 million in South Africa of which R187.7 million is in the Eastern Cape. When the induced effect of the wage income is included, the impact is R270.8 million in South Africa and R200.6 million in the Eastern Cape (this is the economy-wide effect). The increase in output in the Eastern Cape represents 0.04 percent of Eastern Cape output. Thus, for every R1 of additional capital expenditure in the agricultural sector in the Eastern Cape, R2.0 of output is generated Eastern Cape-wide.

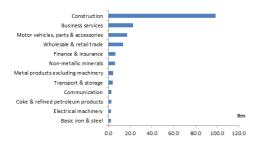
Figure 1: Total Output Impact in the Eastern Cape



Source: UNISA I-O 2011; Authors' calculation

For an additional R100 million capital expenditure in the agriculture sector, some industries stood to gain more than others. From the estimated R2 million total output, construction has the lion's share (R98.7 million or 49.2 percent) followed by Business services (R22.6 million or 11.3 percent). Construction include building, fencing, dams and irrigation schemes, storages facilities, equipment, etc .

Figure 2: Industries that Benefit the Most from Total Output Impact in the Eastern Cape (Rm)



Source: UNISA I-O 2011; Authors' calculation

Other sectors in which relatively large amounts of spending took place, included Motor vehicles, parts & accessories (R17.1 million), Wholesale & retail trade (Rm 13.5), and Finance & insurance (R6.4 million). In South Africa the same sectors benefitted the most. R94 million of output is generated by construction (34.8 percent of output), and R33.9 million (12.5 percent of output) by the Business services sector.

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The contribution to Gross Value Added (GVA) of the additional capital expenditure in the agricultural sector in the Eastern Cape represents 0.03 percent of Eastern Cape Value added (when considering the economy-wide impact). The additional capital expenditure contributes R28.1 million to labour remuneration and R82.4 million to fixed capital. The total contribution to gross value added is R66.1 million in the Eastern Cape and R100.5 million in South Africa.

An additional R100 million capital expenditure in the agricultural sector in the Eastern Cape results in 132 initial full-time equivalent jobs in the formal economy. The corresponding direct and indirect impact on the number of formal jobs supported is 264. If the informal jobs are added, the total direct and indirect number of jobs supported by the additional capital expenditure is 443. Economy-wide the total of formal and informal jobs 475 in the Eastern Cape and 511 in South Africa; this represents 0.037 percent of total employment in the Eastern Cape and 0.004 percent of total employment in South Africa. Therefore, for every job created by the additional capital expenditure in the agricultural sector in the Eastern Cape, 2.17 formal sector jobs are supported in the Eastern Cape and 3.4 jobs in South Africa

180.0 | 160.0 | 140.0 | 120.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0

Induced

Economy-wide

Figure 3: Employment Impact According to Skill Group in Eastern Cape (Number)

Source: UNISA I-O 2011; Authors' calculation

Indirect

Direct

The semi- and unskilled labour groups benefits relatively more from the impact of the additional capital expenditure in the agricultural sector in the Eastern Cape. When the economy-wide impact is considered 55.5 percent of all employment supported is semi- and unskilled labour in the Eastern Cape and 48.9 percent in South Africa.

The additional capital expenditure in the agricultural sector in the Eastern Cape leads to an increase in household income. In the Eastern Cape, household income increases by R19.94 million when the direct and indirect effects are included and by R23.45 million when the induced effects are also included. In South-Africa, economy-wide household income increases by R43.3 million.

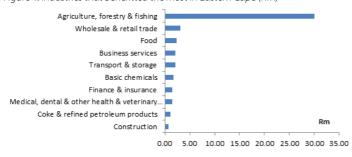
OPERATIONAL EXPENDITURES

It is estimated² that the additional capital expenditure in agriculture in the Eastern Cape will lead to an increase in annual operational expenditure in the agricultural sector of R30 million. The capital expenditure is a once-off injection into the economy, while the expected increase in operational expenditures should continue during the duration of the fixed investment good's life span to a more or lesser extent.

²The capital-output ratio in 2010 of the agricultural sector in the Eastern Cape was used to determine the expected increase in output.

When the direct and indirect impact of the additional operational expenditures is considered, output will increase with R18 million in the Eastern Cape and R24.5 million in South Africa. If the induced impact is also considered, output will increase with R21 million in the Eastern Cape and with R38 million in South Africa.

Figure 4: Industries that Benefitted the Most in Eastern Cape (Rm)



Source: UNISA I-O 2011; Authors' calculation

The agricultural sector in the Eastern Cape benefits the most from the increase in operational expenditures. R30 million additional output is generated in the agricultural industry representing 58.8 percent of the total. Other industries that benefited to some extent includes the Wholesale & retail trade (R3.1 million), Food (R2.4 million), business services industry (R2.1 million) and Transport & storage (R2.1 million).

The average annual operational expenditures associated with the capital expenditure in the agricultural sector in the Eastern Cape contributes R18.9 million to GVA in the Eastern Cape and R21.7 million if the direct and indirect effects are included. If the induced effects are also considered, the impact is R20.1 million in the Eastern Cape and R27.7 million in South Africa. This represents 0.01 percent of Eastern Cape GVA and 0.001 percent of South African GVA.

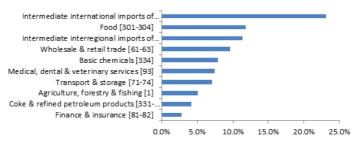
The operational expenditures generated from the initial investment, supports 389 initial full-time equivalent jobs. If the direct and indirect effects are included, 412 formal sector jobs and 94 informal jobs will be supported in the Eastern Cape. Including the induced effects, the total number of jobs supported in the Eastern Cape is 512 and 161 in South Africa this number is 161. This represents 0.04 percent of employment in the Eastern Cape and 0.02 percent of employment in South Africa.

SECTORAL LINKAGES

Agricultural production is important for rural livelihoods and has the potential to impact the economy through both backward and forward linkages. The sector feeds into the manufacturing sector through agro-processing and has an extensive value chain that will realise higher levels of employment, value added and earnings. Understanding these linkages is important to ensure that policies and strategies are effective in enhancing the potential of the agricultural sector. Figure 5 illustrates the commodities that the agriculture sector use as intermediate inputs in the Eastern Cape.

ESTIMATING THE POTENTIAL IMPACT OF CAPITAL EXPENDITURE IN AGRICULTURE IN THE EASTERN CAPE

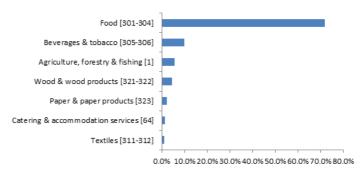
Figure 5: Cost element as a % of Intermediate inputs into Agriculture



Source: UNISA I-O 2011; Authors' calculation

The agricultural sector sources products from myriad industries. The five leading inputs are Intermediate international imports of goods & services (23.1 percent), Foods (11.8 percent), Intermediate interregional imports of goods & services (11.4 percent) and Wholesale & retail trade (9.6 percent). The transport and storage sectors remain a significant inputs cost in agriculture production (7.1 percent). Total agriculture is the share of the agriculture sector that is being reused as inputs (5.0 percent). A rise in agricultural activity and investment will have strong positive effects on the above sectors, as rising production will increase demand for inputs that come from these sectors. The agriculture sector is used reciprocally as intermediate inputs for production by other sectors in the Eastern Cape (Figure 6).

Figure 6: Percentage cost structure of the Eastern Cape agricultural sector



Source: UNISA I-O 2011; Authors' calculation

From Figure 6, it can be seen that the growth of the primary agricultural sector is important for agro-processing as it is a vital source of inputs. The majority of agricultural products are used as intermediary inputs in the food processing industry. The top three industry users of agricultural products in the Eastern Cape are Food (71.8 percent), Beverages and tobacco products (9.8 percent) and Agriculture & Forestry (5.7 percent). The interdependencies between sectors (depicted above) emphasize the importance of concurrently planning at both the primary and manufacturing level. While the growth and transformation of primary sector outputs brings value addition, it also contributes to spurring activities in other sectors by the effective supply of input material.

CONCLUSION

The Eastern Cape, like many parts of South Africa and emerging economies, has a prevalence of rural communities who are dependent on agricultural incomes. The challenge of agricultural activities is to harness the potential of small and large scale farming and transforming them into productive vectors of poverty alleviation. Transport and logistics costs are the biggest inputs costs in agricultural production including providing access to markets. A significant decrease in transport and logistics costs will lower the cost of agricultural products and increase the profitability of the sector.

This study showed case of the impact of an additional capital expenditure or R100 million in the agricultural sector in the Eastern Cape. The additional capita expenditure will lead to a once-off increase in output, employment, and so forth that will trail off once the capital expenditure has taken place.

Input-output analysis using regional input-output tables for the Eastern Cape and the Rest of South Africa is used to estimate the impact of the additional capital expenditure and output in the Eastern Cape and South Africa. The main findings are:

- There will be an output increase in the Eastern Cape by R187.7 million if the direct and indirect effects are included and by R200.6 million if the induced effects are also included. In South Africa the economy-wide impact is R270.8 million.
- The Gross Value Added (GVA) will increase by R60.9 million in the Eastern Cape
 if the direct and indirect effects are considered and by R66.1 million if the
 Eastern Cape-wide impact is considered. In South Africa the economy-wide
 impact is R100.5 million.
- Employment supported in the Eastern Cape will be 443 if the direct and indirect effects are considered. However, if the Eastern Cape-wide impact is considered the number increases to 475. This represents 0.035 percent of employment (formal and informal) in the Eastern Cape. In South Africa, the economy-wide number of jobs supported will be 511 and represents 0.02 percent of employment (formal and informal) in South Africa.

The additional capital expenditure in the agricultural sector in the Eastern Cape, in turn, is estimated to lead to an increase in operational expenditures in the agricultural sector of R30 million on average per annum. The additional operational expenditures will lead to a once-off shift in output, GVA, employment, income, tax revenue among others. This once-off shift should continue over the duration of the productive life of the fixed investments in the agricultural sector.

The main impacts of the additional operational expenditures are:

- When the direct and indirect impact is considered, output will increase by R48
 million in the Eastern Cape, and the induced impact will add another R3
 million. In South Africa output will increase by R68 million.
- GVA in the Eastern Cape will increase by R18.9 million if the direct and indirect
 effects are included, and by E If the induced effects are also included the
 impact is R20.1 million. In South Africa GVA will increase by R27.7 million.
- The total number of jobs (direct, indirect and induced) supported in the Eastern Cape is 512 and 198 in South Africa.

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CULTURAL CAPITAL AND THE KNOWLEDGE ECONOMY

IN THE 21ST CENTURY: IMPLICATIONS FOR ECONOMIC DEVELOPMENT IN THE EASTERN CAPE¹

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Amy Shelver • Nelson Mandela Metropolitan University

INTRODUCTION

Although the constitution and expansion of knowledge economy in South Africa has received increased attention in recent years, from both a scholarly and policy research perspective, the question of the social embeddedness and institutional underpinnings of such an economy have remained relatively unexplored. This paper focuses on a central dimension of the social and institutional layering of economic development, and a key aspect of the promotion of high-end and knowledge-intensive economic and industrial development, namely that of cultural capital. It also considers the overlapping and/or partial subsumption of the concept into the more prominent discourse on social capital. Finally, examples of its actual and potential deployment within the Eastern Cape regional economy (especially the more advanced and knowledge-intensive components) will be examined and selected policy applications discussed.

¹ This paper expands on an earlier presentation at the HRSC Scientific Workshop on Scientific Knowledge Economy and Community Renewal: Opportunities and Challenges for South Africa, East London, 7 March 2011, and is an edited version of a paper presented at the SA Development Studies Association Bi-annual Conference, 5-6 September 2013.

CULTURAL CAPITAL AND THE KNOWLEDGE ECONOMY IN THE 21ST CENTURY: IMPLICATIONS FOR ECONOMIC DEVELOPMENT IN THE EASTERN CAPE

The concept of cultural capital originates primarily from the writings of social theorist Pierre Bourdieu (1986) who, in conjunction with several academic colleagues, explored the meaning and value of the cultural capital stocks held by individuals who had acquired a range of cultural competencies, both from their location within particular social classes and through their interaction with educational systems and institutions. He sought to explain why economic impediments alone did not explain the differences in the educational experiences of children from differing class backgrounds.

Bourdieu contended that apart from economic factors, 'cultural habits' and 'dispositions' inherited from the family are central to success at school (Bourdieu and Passeron 1990; Bourdieu 1977). He argued that culture shared a number of characteristics with economic capital where cultural 'habits and dispositions', in fact, constituted a resource which could generate profits. It could be monopolised by individuals and groups, and, in certain circumstances could be passed on from generation to generation. Cultural capital was therefore not metaphoric; it was a particular form of capital, and could be converted to, but was not irreducible to economic capital (Bourdieu 1977; Bourdieu 1984; Bourdieu 1986; Weininger and Lareau 2006). Bourdieu tended not to expand significantly on the concept, preferring to contextualise it within empirically informed studies (Weininger and Lareau 2006).

Over time the concept has been supplemented and modified acquiring greater complexity in terms of its meaning(s) and applications. Newer emphases and interpretations consider, inter alia, the economic context in which the relations and processes of cultural production are deployed and embedded. Furthermore, both as a concept and a set of activities, processes and networks linked to other forms of capital construction, there is growing acknowledgement in scholarly writings and related policy productions that cultural capital is integral to creating and maintaining the knowledge economy in the 21st century.

The strange effect of the term 'cultural capital' among practitioners of cultural theory is largely a matter of its apparent capacity to bridge the constitutive divide between the humanities and the social sciences: at a stroke it seems to reintegrate economics with the study of culture (Beasley-Murray 2000: 2).

While work on the concept of cultural capital and associated concepts and discourses has become more inter-and trans-disciplinary over the years, two broad but interacting traditions in the appropriation of cultural capital can be identified; one emanating primarily from sociology and linked social theoretic discourses, and one centring on the epistemological expansion of late 20th and early 21st century mainstream economics.

TRADITIONS AND DISCOURSES

The reworking and extension of the notion of cultural capital within the social sciences, occurs both in terms of high theory and in a more applied form via usage in empirical studies and policy advocacy. In the South African case the HSRC Social Cohesion Group's policy study of the South African heritage sector (Deacon, Mngqolo and Prsoalendis, 2003) falls into this category. One strand has linked the concept to the identification/location and efforts to sustain locale-based knowledge and indigenous knowledge forms. Cultural capital is also increasingly invoked in the discourses on sustainable development and resilience (e.g. Dalziel et al 2009; Cochrane 2006), in part as a counterweight to

the ideology of competence associated with economic globalization and neoliberal economic approaches.

The question of heritage and new explorations in heritage capital is a further area adding to the richness and polyvalence of cultural capital (e.g. Fabian 2010; Graham 2002; Haines 2010). In part heritage can be conceptualized as meanings developed in the present about the past; it comprises, inter alia, knowledge generated within particular social, cultural and political terrains. Heritage is a form of knowledge that enables different economic and cultural uses; and, as a recent study of the relationship between cultural capital and urban development suggests, heritage can create 'the representations of place' in which the knowledge economy is embedded (Fabian 2010).

New critical theoretical work on the dynamics of cultural capital will need to take due cognizance of the writings of Raymond Williams (1977; 1980) who, working within a Marxian perspective, stressed that culture was best viewed as a process of production, 'a material social process of signification' (Williams 1977: 70). In other words, cultural production has to be viewed not as a superstructural activity but rather as part of the material base bound up with the complexity of economic processes and agency.

There is also a significant overlap between the growing literature and discourse on social capital, [particularly the strand conditioned by the writings of Thomas Putnam (e.g. Putnam 1993 et al. and Putnam 2002)] and that of cultural capital. Indeed, Martti Siisiäinen (2000) argues that Bourdieu's contribution to the notion of social capital predates that of Putnam, and that the differing approaches - one from a quasi-functionalist perspective (Putnam) and one from a constructivist and collective perspective (Bourdieu) - open up further avenues for explorations of non-economic capital formation. Siisiäinen emphasizes that economic, cultural and social capital constitute factors that define the locations and opportunities for various actors within a 'plurality of social fields' (Siisiäinen 2000: 11).

The second set of discourses is centred on the growing influence of the concept within economics, and the growing interest in scholarly research and associated new journals on the relationship between culture and economy. One early and substantive input was the development in the early 1970s of discourse on the economics of cultural enterprises which was institutionalized partly by the establishment in the USA of the Journal of Cultural Economics (c1973) and subsequently a specific association of economists working the field. Economists still tended to distinguish between three forms of capital, that is, physical, human and natural. In the late 1990s David Throsby argued for the deployment of a fourth kind, cultural capital (Throsby 1999). Throsby contrasted his usage of cultural capital with those in other discourses, in particular the sociological tradition spearheaded by Bourdieu. In economics, Throsby maintained, the relationship between culture and economic value would be formally explored. This in turn would illuminate and provide possible policy approaches to issues of economic growth, sustainability and investment appraisal.

There have been a range of other developments within the economic notion of cultural capital. Ecological economists, for example, have used the concept of cultural capital as a mediating factor or dynamic between development and the environment. A central theme is how local and regional groups and communities can draw on informal and formal repositories of knowledge (a diverse range of locale-intensive skills, activities, practices and expertise) to negotiate economic futures sensitive to the ecology in question (Patterson 2005).

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Apart from the explicit development and re-development of the notion of cultural capital, there are contiguous currents in economics – the interpenetration of which has contributed to the heightened awareness of the play of the cultural in contemporary economic life and planning. Furthermore, there has been significant dialogue with other socio-economic discourses, most especially those of economic, cultural and human geography, as well as in development studies. In this process, not dissimilar concepts such as the 'cultural economy', the 'creative economy' and 'cultural industries' have stimulated a range of new research within and without economics. In the process the temporal and spatial dimensions of cultural economic activity have assumed a higher import. Territorial space for economic activity, infused with cultural and other forms of knowledge past and present, is now seen as a more complex and dynamic phenomenon, posing new challenges to orthodox economics, and other intersecting discourses (Haines and Robino 2008).

THE KNOWLEDGE ECONOMY AND BEYOND

The knowledge economy is also an evolving concept and associated theoretical space. However, exploration of these dynamics is beyond this current paper. We need, however, to bear in mind the increased interpenetration during the past decade of terms and concepts such as the creative economy, the knowledge economy and cultural capital. The World Bank's criteria for a knowledge economy constitute a useful starting point (Chen and Dahlman 2005). The Bank sees a knowledge economy as comprising four key aspects, namely, high-level and functional education and training ensuring a supply of skilled workers fully able to create, share and utilize knowledge – a substantive information infrastructure ensuring rapid and effective communication, which helps disseminate and develop innovation. This includes the presence of an economic incentive and institutional regime to provide security and encouragement for entrepreneurs. Such a regime would have an advanced patent system and a fair and disinterested court system. This in turn would provide reassurance to entrepreneurs that they can benefit from the results and products of their innovations and inventions. This underpinning sense of security and patronage will incentivize the production of new technologies that will impact positively on society generally. The final aspect is that of innovation systems. While knowledge is still seen as intrinsically a public good, conventional economic theory assumes an under-investment in public goods. Thus market-friendly national economies need an innovation system (with a strong degree of state support) to help channel societal resources to enhance knowledge construction. This entails creating, expanding, articulating and maintaining a network of universities, research centers, think tanks, thought leaders, relevant media, industry associations, business chambers and relevant policy circle participants.

There is increased acknowledgement in academic and policy circles that creativity and innovation are the moving spirit of the global knowledge economy. Since the mid-20th century we have seen, in the advanced capitalist economies in particular, a series of progressive shifts from an industrial economy, where images of heavy smokestack industries predominate, to post-industrial forms, and then to the digital and knowledge economies. Indeed, for some scholars the knowledge economy is itself a somewhat dated form, with the creative economy growing more hegemonic (Araya and Peters 2010). Increasingly in the new knowledge and creative economy there are novel forms of value being created. While the industrial economy used mostly land, labour and capital, in the new economy the relevant industries produce meanings from the

world of ideas. This shift has been accompanied by new ideas of public space (both actual and cyberspace), more democratic forms of creativity, and new approaches to creativity in which copyright industries, patent-based industries, research and development, and other creative industries – based significantly on intellectual property – have been reinforced operationally and in growth terms by Information and Communications Technologies (ICTs). Knowledge production predicated on the commons and not solely or even primarily driven by a profit motive is a crucial factor in 21st century work, and entails rethinking notions of 'knowledge management' to questions about rapid innovation and design of new creative institutions and accompanying forms of work (Araya and Peter 2010). For both developed and high-performing developing national economies, work within cultural sectors will need to be linked strategically to new global, national and regional agendas for the creative and knowledge economy.

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While there is a burgeoning set of policy productions and interventions with regard to the knowledge economy, insufficient attention appears to have been paid to relevant international work on cultural capital and the creative economy, and associated discourses generally. Cultural capital has been invoked from time to time in policy documents but these have tended to be those associated primarily with the Department of Arts and Culture, and its previous incarnation (until 2002) the Department of Arts, Culture, Science and Technology, and the HSRC. Also, the concept has been somewhat narrowly defined and applied to date. For instance, in an HSRC study (Deacon, Mnggolo and Prosalendis 2003), cultural capital is used as a shorthand for revaluing and preserving heritage institutions. The wider implications of the concept in terms of new approaches to social and political organization, and ways of placing creativity to the forefront in encouraging and stimulating new cultural industries and networks, are not engaged with meaningfully. The fostering of a knowledge economy is one of the central concerns of the DST (Department of Science and Technology). For the Department, progress towards a knowledge-based economy will be driven by four elements:

- · Human capital development
- · Knowledge generation and exploitation (R&D)
- Knowledge infrastructure
- Enablers to address the "innovation chasm" between research results and socioeconomic outcomes (RSA Government 2008: 8).

The DST initiatives in terms of the knowledge economy do not invoke, as such, the concepts of cultural or social capital; and when considering the social and human dimensions of creative economic activity the Department tends to utilize the more traditional notion of human capital.

There are however growing and more specific policy highlights in terms of encouraging creative and cultural industries and enterprise. Most recently the Department of Art's and Culture's draft White Paper on Arts, Culture and Heritage (2013), which is circulating for public comment, notes that the vision for a new policy framework is to not only support arts and culture for social cohesion, but to focus on leveraging it for economic empowerment and skills development. While the new White Paper needs significant review and deeper consideration of the implementation of cultural economy development, it certainly is an advance on the 1996 White Paper in its recognition of global trends in that

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direction. Similarly, the past three incarnations of the Department of Trade and Industry's (the dti) Industrial Action Policy Programme (IPAP) have all given due cognisance to the importance of the knowledge economy in the long-term intensification of South Africa's industrialisation process as it moves towards a knowledge economy (IPAP 2013/14-15/16, 2013), as well as to the services sector. Moreover, the creative industries are noted as containing key economic growth potential in the country's New Growth Path (NGP), National Development Plan (2012) and Industrial Action Policy Programmes. The IPAP 2013/14-15/16 (2013: 113-117) highlights craft, music and film as key creative sectors for development in acknowledging the job creation and poverty alleviation possibilities therein. However, these are limited views of a much broader cultural industry, which if articulated collectively, could yield greater opportunities. More extensive views of the cultural economy also endorse 'cultural' value as symbolic, since it is mainly concerned with creating products whose value rests primarily on their symbolic content or the ways in which they stimulate the experiential reactions of consumers (Power and Scott, 2011).

Other South Africa initiatives focused on incorporating and harnessing the economic potential of the knowledge and creative economies include:

- The THRIP ventures of the DTI to help incubate and promote innovative ventures, especially of a high-tech start-up nature.
- · Efforts by the DSTI to develop knowledge economy indicators.
- Moves to establish science and knowledge parks within and/or in partnership with public South African universities.
- Persistence with development corridor and locale-specific innovation and high-end business clusters (e.g. the Blue IQ project in Gauteng), and the continuation of the SDI (Spatial Development Initiatives) and associated IDZs (Industrial Development Zones), and most recently the Special Economic Zone Bill (2014), which seems to collapse all previous regional and spatial programmes, though with more modest expectations than in the late 1990s (Davies, 2014).

Overall, however, these ventures and interventions are inadequately integrated on an inter-governmental level, and require improved networking and articulation, as well as more reflexivity in terms of implementation and evaluation. The preconditions for and demands of new knowledge and creative economies and sectors would seem to require more agility by the state and its partners, than is currently the case. And there remains a tendency to opt for more traditional even technicist approaches to economic and industrial development, contrary to what the policy-relevant scholarship would suggest.

In South Africa, although social capital has been invoked on occasions in economic development policy discourses since the later part of the 1990s, for the most part it has not been taken overly seriously either as a mode of analysis or as a set of potential policy prescriptions. The situation with regard to cultural capital is even more problematic. The creation of knowledge and creative capital requires deeper and more far-reaching changes in the organization of the economy, society and state in South Africa. The current emphasis by the tripartite government on a centralized developmental state would seem to be at odds with an increased use of the third sector, the deployment of innovative partnerships in the interface between the state and the market, and the encouragement of 'democratic creativity'. The associated problem is that there remains an over-reliance on what Fine and Rustomjee (1996) term the mineral-energy complex (MEC). While the current economy may not have quite the hegemony of the Gauteng region that the authors suggest, there remains a 1950s emphasis on centrality of heavy and extractive industry in economic and development scenarios and strategy. With such a mindset by national and selected local business and political elites, the establishment of an oil refinery

(Project Mthombo) and the associated industries in the Coega IDZ would appear to be a logical engine of growth in the Nelson Mandela Bay and Eastern Cape provincial economies. The question remains whether the creative industries, such as film, have been considered as viable service orientated diversifications of the industrial base of Nelson Mandela Bay, especially considering their job absorption capacity.

For South Africa to approximate other high performing developing economies with regard to growing knowledge and creative economies, we have to ensure that the pre-conditions for success are in place, and design and implement more innovative policies which will take due cognizance of the country's development history. A pre-eminent structural challenge lies in the field of education and encompasses all levels of the educational system - formal and informal. An exercise of this nature would need to take cognizance of cultural capital formation within families and households, particularly regarding poverty, nutrition, fragmentation and disease. There is also a need to expand the current involvement of the third sector in educational provision. In addition, the current under-funding of universities, particularly those in more peripheral regions, should be addressed with an increased recourse for strategic partnerships to supplement shortfalls in state funding of universities. The guestion of social order and its impact on economic development has been a recurrent theme over the years, but requires more focussed attention than is currently the case. Improved social order and increased public safety should in turn lead to the expansion of public space for creative economic work. Moreover, the question of improving the lifestyles of all citizens should help reduce the current rates of human capital exodus from the country. Increased incentives to promote intellectual property industries are essential, and should include a greater vigilance in terms of South African firms seeking to shift their holdings and IP offshore. Furthermore, public investment in infrastructure can also stimulate the parallel growth of the cultural economy as people choose to locate where there is appropriate infrastructure to live and work.

THE KNOWLEDGE ECONOMY AND CULTURAL CAPITAL IN THE EASTERN CAPE: SNAPSHOTS

The Eastern Cape provincial government has in recent years taken relatively seriously the issue of expanding and sustaining the knowledge economy within the provincial economy as part of its policy approach, with limited inroads to date on a number of programmes. The PGDP (Provincial Growth and Development Plan, 2004) and the subsequent economic strategy exercises have shown a growing awareness of the institutional undergirding of the regional and local economies in question compared with earlier strategy and policy documents of the late 1990s and early 2000s (Haines and Robino 2006). In addition, there have been a range of LED strategy exercises undertaken by various municipalities and district councils. Probably the most interesting of these interventions is the current multi-agency venture spearheaded by the Ndlambe Municipality to establish an agri-industrial cluster involving provincial and national departments and parastatals, and selected provincial universities. There was a small victory between 2013 and 2014 in terms of the provincial approach to cultural capital. In 2013 and before, the state-of-the-province addresses by the Eastern Cape premier, Noxolo Kiviet, had little or nothing to say with regard to efforts to promote knowledge and creative economic activity

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in the province, stressing rather orthodox investments and poverty-alleviation measures. However in 2014 the premier highlighted somewhat vaguely, but still importantly "support to primary co-operatives in the areas of agri-business, forestry and timber processing, construction, the automotive sector, metals processing, chemicals production, textiles and clothing; tourism and cultural industries" (RSA Government, 2014). She also noted – albeit in the context of tourism rather than a focus on regional creative economies – the support of tourism generating festivals by the provincial government.

Beyond 2010, government has continued to support a number of initiatives to harness the tourism potential of the province. These include the National Arts Festival, Buyelekhaya Jazz Festival, Wild Coast Cultural Festival, Iron Man, and Africa Open Golf Tournament. The overwhelming support for these initiatives confirms our rich cultural heritage, and that indeed we are a tourism destination of choice.

Yet with significant job losses in the province in recent years, including in the formal manufacturing sectors, there should be more recourse to creative and cultural economic activity to generate new forms of employment in the 21st century. Often then, policy enshrines best global practice, but at planning and implementation stages, the policy impetus is lost to the status quo and the complexity of real implementation.

It has been primarily at the level of the two major metropolitan local governments – the Nelson Mandela Bay Municipality (NMBM) and the Buffalo City Municipality - that efforts to stimulate a knowledge economy have had the requisite focus.

A 2009 paper on heritage capital in the NMBM stresses the importance of identifying and linking social and cultural capital networks and utilizing past conflicts for present broad-based opportunities (Haines 2009). This includes a suggestion that a multi-party committee look to running a large bi-centenary of the landing of the 1820 Settlers, focussing on the post-conflict and post-colonial solutions derived inter alia from resistance and democratic traditions of past times, including the link between frontier conflicts and modern-day African nationalism and the freedom of the press initiative of Pringle and Fairbairn. This in turn requires a rethink of the caricaturing of colonialism in post-apartheid South Africa and an appreciation of how high performing Asian economies, India and South Korea, in particular, have come to terms with and ultimately appropriated their colonial experiences and heritage and incorporated these into new productive forms. In India, a determination to access and master English has underpinned India's lead in the growing business process outsourcing industry with an increasing number of clients especially in the USA and UK. Recent developments with regard to scholarly work and debates in areas such as regional industrial districts, territoriality and development, new industrial growth theory, and social capital as process and analysis, have opened up the scope for a reworking of industrial and economic development in NMBM with a heightened role envisaged for the Coega Development Corporation (CDC). The first stage (framework) of an industrial strategy report for the Nelson Mandela Bay Business Chamber (NMBBC) argues that new industrial strategy should centre increasingly on new 'soft' interventions rather than traditional kinds of interventions (DDS & Development Partners 2009). These should include an emphasis on securing social cohesion and peace, improving policing and finding ways to enhance social capital. A key for economic and industrial growth in the city is seen in the develo

These would include the NMBM, the Mandela Bay Development Agency (MBDA) the CDC, NMBBC, TNPA (Transnet National Ports Authority), NAFCOC (National African Chamber of Commerce & Industry), as well as the local university and even selected civil society organizations.

However, while the elaboration of the guidelines and broad recommendations must await the second stage of the report, the following are but a few of the possible kinds of interventions. One key tactic would be to identify ways to reinforce institutional networks underpinning knowledge capital in the city, and implement such an exercise. This would surely include an initiative to create a medical school. A medical school would not only be a means of training much needed medical practitioners and paramedics, but would crucially add to the stock of high-tech human capital in the local economy, help diversify linkages around a medical service industry, and provide a further fillip to the city's effort to promote its quality of life as one of the attractions for new or relocating industries and firms. In turn this would impact strongly on efforts to turn Nelson Mandela Metropolitan University into a world-class institution. Apart from the economic spin-off for the metro by an expanded residential and international student body, the increased research and design capacity and added knowledge capital assets such a university would bring the city would be a considerable, and also strengthen and diversify social capital networks. This would link with a growing pharmaceutical industry in the NMBM region. An alternative or supplement to such an exercise is the development of a university park along the lines of such parks in the UAE. These parks look at attracting minicampuses from a range of universities and constitute a significant growth area with the increased international demand, the global recession notwithstanding, for higher education. By way of an example, in 2008 an Australian university sold 25% of its share in the Dubai University Park for a reported \$150m².

In addition, there would need to be more explicit efforts to deepen cultural capital stocks, ranging from heritage capital and heritage infrastructure through to improving the quality of life in a particular locale, or local economy. The future institutional structures undertaking strategic leadership of Nelson Mandela Bay would need to find ways to broaden and deepen the various networks that undertake cultural production. Obvious inputs would be to find ways of improving the subsidization of the popular and high arts, bearing in mind that there is a surprisingly strong correspondence between the arts and innovative and productive industrial districts, as the Northern Italian and Silicon Valley cases illustrate. While such interventions may seem a far cry from what a development corporation such as the CDC should do, there are a variety of examples of development corporations in the USA and EU countries undertaking such activities. Generally speaking, the actual costs of such activities for such agencies are not substantial, as they are able to exercise their local influence to leverage sponsorship and subsidies from various sources.

Locally the MBDA is undertaking sterling work in regenerating the inner city, upgrading infrastructure and environment, and looking at increasing public space for creative work through public sector investment and urban upgrade. However there are some disturbing (non)developments. One example is the declining funding over the years from provincial and local government for the marine and museum complex, Bayworld: despite a proclaimed proposed upgrade of the centre, little movement has occurred at this prime tourism/real estate/leisure/knowledge centre.

² Information supplied by CEO of Deloittes Financial Services, Dubai, 3 August 2008.

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Once a world-renowned tourist destination it is now on the verge of closing. Funding for cultural activities has also been a problem in recent years, with the local opera and symphony music infrastructure not receiving sufficient funding. In addition, there is a distinct under-appreciation of and unwillingness to cofund key independent ventures in the city economy. One strategic site has been the Uptown cinema complex in the Central district of the city, which for a short hiatus was restored, offering the city public a range of independent and art films. Income was supplemented by live acts, cabaret and theatre. However, the costs of running such a venture have proved too much for the businessperson in question and the complex has subsequently shut down, to the detriment of the inner city and cultural capital stocks and potentialities in the city's economy in general, particularly short, art and independent film. Had there been modest co-funding and/or subsidization of this venture, the city could have had a venue for a long-mooted NMB Film Festival, and a site for the reviewing of independent South African produced films (including the modest number produced by a fledgling local film industry, an approach endorsed in dti policy). This in turn would have reinforced the articulation of relevant creative production circles within the local economy. At the same time the MBDA has invested in refurbishing the Athenaeum complex, an inner city heritage building and home of the Athenaeum Club, a creative industry collective. Recently the MBDA released funding for a youth organisation to manage the building to drive transformation and the growth and support of the creative industries from the building – focusing on theatre, fashion, art, photography and design as well as other creative industry pursuits. It remains to be seen what the impact of this investment would be, and if the creative industry alone could support the venture.

The ability to identify and incentivize emerging creative and knowledge economy ventures is an under-valued policy tool at local, regional and national level. The structural shortcomings suggested by the above examples need to be addressed with urgency. Even more substantial interventions are required it seems, to address the dysfunctional nature of the schooling system, one of the building blocks for human and cultural capital formation. There needs to be a greater invocation and involvement of the third sector in future strategy and policy implementation and a deeper understanding at local, regional and national level of the importance of partnerships and the fostering of 'democratic creativity'. Constructing and expanding a knowledge economy is far more than a series of technically comprehensive strategy and policy interventions. Creative and cultural capital, while central to new knowledge economies, need open source public space, due incentives, and a greater appreciation of the dynamics of 'mind work'.

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CULTURAL CAPITAL AND THE KNOWLEDGE ECONOMY IN THE 21ST CENTURY: IMPLICATIONS FOR ECONOMIC DEVELOPMENT IN THE EASTERN CAPE

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SAVINGS & LENDING ENTERPRISE

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The objective of this article is to provide an exposition of an empirical case study to consider the structural and contingent reasons for the success and sustainability of a third sector Community Managed Savings and Lending scheme currently operating and expanding within the Eastern Cape of South Africa. This scheme is funded by the Kellogg Foundation, and project managed by the Department of Development Studies at Nelson Mandela Metropolitan University (NMMU). The importance of agency in effective and sustainable project management is argued while considering empirical primary research material and taking due cognisance of relevant existing theory. The various institutional imperatives which condition outcomes in such projects are thus outlined. The research has important policy implications; it provides useful generalizable detail and findings regarding the tensions between current and applicable national and provincial policy and incentives and elucidates the realities of project development on the ground. A self-conscious dialogue between the experience of the project and the more general prescriptions in current national development policy with regard to advancing the social economy is explored.

JEFFREY'S BAY COMMUNITY SAVINGS AND LENDING ENTERPRISE

INTRODUCTION

The scheme attests to an arena of the third sector that promotes autonomous community-led action employing a methodology that harmoniously integrates institutional project management with autonomous agency motivation and action. It is argued that the largely macroeconomic national and provincial development and poverty-reduction strategies in South Africa are inefficiently addressing the challenges involved in implementing their respective imperatives. The global and national theoretical and policy-based frameworks within which these orientations are contextualised, will be considered and reflections on sustainable practices that are gaining pace will be explored.

The innumerable issues and challenges for developing the overlapping concepts of social economy and the third sector contain synonymy for policy consideration. This paper provides a short overview of selected international discourses, trends, approaches and issues regarding the approaches to microfinance, with particular reference to Community Managed Saving and Lending (CMSL) and derivatives of such schemes. Institutional capacity building and collaborative management of 'grassroots' autonomous schemes located within the social economy - and their relationship to sustainable projects - form the basis of this discussion. The question of CMSL and associated action within the developmental arena is explored with reference to the role of agency and structural determinants. We argue that there is considerable scope for more informed and extensive application of third sector approaches and policies for developing successful CMSL functionality that meet some of the needs of poverty alleviation – moving beyond initial success or even longevity, and settling into evidenced sustainability with social and economic outcomes.

THE DEVELOPMENT AGENDA: HISTORICAL PERSPECTIVES AND IMPLICATIONS FOR THE THIRD SECTOR

South Africa's President Jacob Zuma (RSA, 2013) recently reiterated the government's support for the National Development Plan (NDP) as South Africa's long-term socio-economic development blueprint for eliminating poverty and reducing inequality in South Africa by 2030. Among other things, the plan identifies the key constraints to faster growth and presents a roadmap to a more inclusive economy that will address the country's socio-economic imbalances (RSA, 2013).

Within the global historical context, in the early days of concerted development assistance (the 1940s and 1950s), development was seen as a socially engineered investment project. Outside agencies could help finance the investments and supply expertise. Impoverished people were lacking a number of specific prerequisites: once this had been remedied they could break free from their poverty shackles, take control of their destinies, and achieve economic and social 'lift-off' to development (Ellerman, 2007). Advance forty years to the World Bank publication, *Investing in Development*, which indicated that development was still a large investment project. Notwithstanding an additional twenty years of experience, the United Nations Millennium Project published its report with the very same title, *Investing in Development (2005)*. One may conclude that the 'big push' (modernisation) stance of the 1940s and 1950s continued for another half a century, despite years of failure using this socio-structural engineering approach to development assistance.

Over the ages, many academics from varying disciplines have wrestled with the conundrum of helping social groups and individuals to 'self-help'in a meaningful way, given the paradoxical nature of assistance towards autonomy. When considering development policy, neo-classical economic approaches surmise that to ensure

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growth, all that is needed is the transfer of capital, which links inextricably to the function of providing financial support to third sector agencies in order to guarantee successful projects, and an inevitable 'top-down' approach to project management.

More modern approaches propose that development (as applied to the notion of social economy projects) is dependent upon movement in the direction of growth that is more attractive than the current situation. Although this may not be resource dependent, it will most likely be agency dependent, for instance in the form of skills. In this sense, a form of social engineering would offer solutions, as experts can impart knowledge and offer blueprints and then expect to see the replication of successful models as a result.

Moreover, recent theoretical insights contest that although institutions (and policy) may have the best of intentions when responding to underdevelopment and constituent apparels, improvements may be hindered by endogenous vicious circles in which 'low levels of market development result in high levels of information imperfection' (Hoff & Stiglitz, 2010). Implicit within such a conceptualization is the importance of knowledge and skill transmission, such as well informed and organised institutional imperatives and management agency intelligence.

However, development policy that emphasises either rational development or public choice is unlikely to account for what can lead to sustained change to alleviate poverty. Mounting evidence from development economists for example, Todaro and Smith (2010) and Nafziger (2012) - suggests that successful policies need a combination of broad consensus and psychological 'ownership', as well as government support. In other words, neither exogenous structural fundamentals (such as simply adopting a particular policy) nor the endogenous preferences based on the attractiveness of distributed development information alone create conditions for developmental change, but rather a combination and consideration of both (Hoff & Stiglitz, 2010).

THE STATE AND DEVELOPMENT POLICY

In recent years, national and provincial development policies in South Africa have increasingly looked at the social economy in line with the NDP, and by implication the third sector, as a means to address economic inequalities, particularly in rural and impoverished areas. Material incentives and resource support for this sector and its components have featured with growing prominence in South African policy (DTI, 2012). While there is distinct promise in current and emerging policy documents for the field and its agencies and actors, there are conceptual and structural weaknesses around the increased efficacy of such interventions.

The gap between policy formulation and implementation may render the capacity of development strategy as inert if the necessary managerial, financial, bureaucratic and technical resources are not available (Swanepoel, 2000). Third World bureaucracies have long been criticised as egocentric and self-serving entities of control administration that disregard the needs and wishes of the public at large - attributed, in part, to the of colonial legacy of the Third World State and associated dominance of Western bureaucracy (Ibid, 2000).

Ideally, the state supports rather than leads development, suggesting that development based decisions, planning and financing should be localised.

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In this model, the local communities lead development and the government facilitates with enabling policy. Within this ideal notion, institutions are required to structurally coordinate and organise the participation of ground level projects to be imitated by 'the people'.

DEVELOPMENT PLANNING AND PROJECT

The positive effects of planning for projects are well documented The distribution and use of resources, defined achievement goals with related sequence and time forecasts improve cooperation, give direction, create a vision for the future (positively affecting motivation) and facilitate proactive responses to change, thus reducing project vulnerability. These contributory factors to project survival may, however, be damaged by obstacles such as ineffective organisational systems, lack of systematic procedure and other human factors. Thus, project management that entails planning, organising, coordinating and directing of activities may greatly increase the chances of projects moving beyond planning and imitation into sustained implementation.

Traditional development economics focused on what markets and governments could do to alleviate poverty; however more modern approaches consider the role of organised civil society in development. The poor's lack of access to credit represents just one arena that neither market nor government seem to be able to provide solutions to: the result is an increasing awareness of civil society as a development agent. This is evidenced explicitly by the World Bank's interactions with thousands of Civil Society Organizations (CSOs) throughout the world at global, regional, and country level, and is demonstrated on a national level in South Africa by the recent 2012 DTI *Integrated Strategy on the Development and Promotion of Co-operatives*. The Strategy sets out an implementation framework for the Co-operatives Development Policy of 2004 and the Co-operatives Act, No. 14 of 2005, as amended, reflecting the government's commitment to the promotion of co-operatives over the next ten years; 2012 – 2022 (DTI, 2012).

CIVIL SOCIETY IMPERATIVES: MICROCREDIT, CMSLs AND THE DEVELOPING WORLD

The 21st century has seen an increased interest across disciplines in the shifting space between state and market. A central set of discourses in this regard is that of the 'third sector', or the associated notion of 'social economy'. Key components of the third sector and intertwined social economy fields are such entities as cooperatives and community managed savings and lending (CMSL) schemes and similar derivatives such as microfinance and microcredit.

Savings form the basis of many microcredit or microfinance organisations. Microcredit may be very broadly defined as the extension of very small loans (microloans) to impoverished borrowers who typically lack collateral, steady or predictable employment and a verifiable credit history. They are designed not only to support entrepreneurship and alleviate poverty, but also to empower women and uplift entire communities (Grameen Bank, 2008).

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Microfinance can be defined as 'the supply of financial services including savings, credits, insurance, and money transfers to microenterprises and poor households' (Pors, 2010). Savings and loans associations are one form of microfinance. Microcredit is essentially part of microfinance, which provides a wider range of financial services, particularly savings accounts, to the poor. Modern microcredit is generally considered to have originated with the Grameen Bank founded in Bangladesh in 1983 (Grameen Bank, 2008). Many traditional banks subsequently introduced microcredit and many developing countries have a range of formal and informal microcredit organisations. An important distinction to make when discussing these organisations, however, is between community and centrally managed schemes. Generally, microfinance is centrally managed; it is more formal in function, employs staff and invests interest rates on loans in the institution. In contrast, savings and loans associations are community managed and interest rates on loans are paid back to the members in a closed loop system

The historical context of modern CMSL schemes within South Africa may be traced to Stokvels, defined by the National Stokvel Association of South Africa (NASASA) as 'a type of credit union in which a group of people enter into an agreement to contribute a fixed amount of money to a common pool weekly, fortnightly or monthly' (Lukhele, 1990). Stokvels arguably contribute to community development in a number of different ways by creating employment and opportunities for beneficiaries to fund education and provide homes, and by providing financial support for micro-entrepreneurs. It is logical that informal savings schemes have transitioned from past to present in the collective consciousness of marginalised and low income earners and continue today as a popular form of savings among the poor. It is thus against the background of Stokvels in South Africa that the evolved form of informal savings and microcredit in the form of CMSL schemes may be understood along the continuum of voluntary savings.

AN INTERNATIONAL EXAMPLE OF SUSTAINABLE PRACTICE

By way of evidencing the cross-cultural sustainability of some microcredit functionality, one may consider the case of the small, remote, indigenous community village of Fancy, St. Vincent and the Grenadines, as a model of how a savings and loan scheme can function sustainably with enormous economic and social impact. The Fancy Help Group Loan Scheme (FHGL) was established in 2003 by the women of the community-based organization - the Fancy Community Help Group (FCHG) - as a strategic response to the impoverished economic realities in St. Vincent and the Grenadines (Soares *et al*, 2009).

In their efforts, they were guided, assisted, and funded by the Women and Development Unit (WAND) of the University of the West Indies. For community banking to be successfully introduced, WAND had worked with the women of the FCHG to establish and fund an income generating pig-rearing scheme, the proceeds of which provided the funds that became the core of the bank's operations.

WAND has been involved in community development in Fancy since 1997 and this income-generating project was guided and financed by the University of the West Indies as part of its community outreach programme and aforementioned mandate. Funding agencies and donor organizations were handled by WAND, who negotiated funds for the community development work in Fancy.

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In addition, WAND's head and community consultant, Christobel Ashton, made regular project visits to meet with members of the FCHG from 1997 until 2009. Moreover, training formed a significant component of the support. This training provided members with the basic skills to mobilize their savings and manage their own resources and affairs.

The intrinsic motivation of the agents involved coupled with the institutional support and experience that included continued and persistent reflexivity succeeded in delivering enormous economic and social impact. This economic independence gave beneficiaries more control over their resources, their lives and their destiny. It is noteworthy that this project recently won the Women's World Summit Foundation (WWSF) Creativity in Rural Life Award. (Soares et al, 2009).

COOPERATIVE FOR AMERICAN REMITTANCES TO EUROPE (CARE) METHODOLOGY: A REVISED APPROACH TO VOLUNTARY SAVINGS AND LOANS

Existing within the broad context of microfinance are further examples of innovative ways of reaching the most isolated impoverished communities within Africa. Started over twenty years ago, CARE's Voluntary Savings and Loan Associations (VSLA) flagship project, Mata Masu Dubara (*Women on the Move*) is reaching over 162,000 poor and illiterate women organized into 5,500 standalone groups in rural Niger, one of Africa's poorest countries (Allen, 2002).

The VSLA approach emphasises simplicity and is built on savings clubs traditional to many African societies, carrying various local names such as the commonly used Stokvel (Pors, 2011). Most microfinance institutions in Africa are fortunate to reach a few thousand borrowers and do not reach the remote rural areas that Mata Masu Dubara has (Allen, 2002). CARE's extraordinary success is reflected in the fact that over 90% of the three million dollars these groups have saved is on loan to members. CARE claims that repayment is reliable, with minimal attrition, and that virtually all the groups organized over a decade ago are still functioning. To date no other microfinance programme in Africa can claim results that remotely approach these figures.

The VSLA approach adopted by CARE is spreading; for example, Savings for Change by Oxfam and Savings and Internal Lending Communities by Catholic Relief Services (Allen, 2002). The approach is widespread in Africa. With training, a VSLA can be up and running in a very short time. The approach is simple and very efficient and design-wise: a VSLA has clear advantages in terms of cost-effectiveness and easy replication (Pors, 2011).

COMMUNITY MANAGED SAVINGS AND LENDING: A CASE STUDY

BACKGROUND, VISION & METHODOLOGY

The Community Managed Savings and Lending (CMSL) scheme operates in the Cacadu District of the Eastern Cape, South Africa, with its office based in Pellsrus, one of the township areas of Jeffrey's Bay. The formation of the scheme began in mid-2006 when a group from Jeffrey's Bay involved in community development and alleviating poverty formed an advisory group (Allen, 2002). Concurrent and valuable activities existed among community development groups to assist vulnerable families; however, the common thread of alleviating poverty highlighted the necessity of moving beyond such supportive mechanisms in an attempt to build the 'economic resilience of vulnerable families by helping them to help themselves' (Allen 2002) The advisory group felt that promoting CMSL groups would create a platform for individuals to gain respect as active participants in addressing their own needs and challenges rather than creating programmes that treat people as passive recipients of goodwill.

The project used the previously discussed VSLA methodology. The project builds and improves upon traditional methods of mobilising internal resources used by low income population groups. Group members mobilize their own savings to create an internal fund from which they lend each other money at an agreed-upon interest rate. The CARE methodology adds value to this traditional system by incorporating training in internal fund management and group dynamics and formulating a group constitution that guides the savings and lending process. Where this methodology has been introduced, it has - without exception - enabled low income earners to 1) eradicate their debt to money lenders, 2) improve their household asset base, 3) provide additional income streams to the household, and 4) increase the number of children they are able to send to school.

The CMSL scheme participants emphasise their 'enormous faith' in the ability of vulnerable communities to find their own answers and embrace the process of building community ownership of both problems and solutions. In their opinion, community managed systems are a more financially healthy alternative to standard microfinance practice, which can arguably create a reliance on externally managed credit provision (Allen, 2002).

The scheme's goals evolved during the initial years and ultimately centre on enhancing the economic resilience of low income households in the Kouga Municipal area. By generating income and building up savings, households may accumulate and protect their resources as well as plan for future crises, improve and maintain income flows, enhance the profitability of economic activities, and avoid selling productive assets which undermine future income earning capacity.

It was hoped that from the beginning of the project the group would be enabled to establish, register and incubate a community embedded organization that would scale-up operations throughout the Kouga municipal area. Subsequent objectives were devised including, inter alia, offering training (i.e. savings and business management), initial follow-up technical support to 700 CMSL group members in 100 Savings and Lending (S/L) groups, and building strategic alliances with other community organizations that focus on social, emotional and spiritual support. Field days and site visits were also hosted to share lessons learned about CMSL with other organizations in the Kouga Municipal area. Outcomes associated with such activities would thus enable participating households to diversify income sources, protect and accumulate savings and other assets, and send children to school and provide for their basic health needs.

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SAVINGS CMSL METHODOLOGY

The basic principle is that Training Officers (TOs) motivate individuals to voluntarily self-select a group to save. The money for savings and lending comes entirely from group members and reflects the focus on aiding individuals to help themselves. Money is neither given out nor taken. Generally, the group consists of six to 20 members and all members save through purchasing between one and five shares at each meeting. The value of a share is set by the group so that the poorest members can buy at least one share per meeting. Most groups chose R50 as the value of one share. This means that a group member can save between R50 and R250 at each meeting. The savings then become a loan fund from which members can borrow, repaying with interest. All transactions for members' shares and loans are recorded in individual savings books.

Group members attend training (consisting of 9 modules) during which they decide how often they will meet, the value of a share and the interest they will charge on loans. Members also decide who in their group can have a loan, how much the loan should be and when it must be paid. In general, the CMSL groups charge 10% interest per month.

IMPACT OF CMSL ON ENHANCING HOUSEHOLD ECONOMIC RESILIENCE: OUANTITATIVE AND OUALITATIVE FINDINGS

The CMSL project achieved its goal of strengthening the capacity of S/L group members to save. Average member savings for the year increased from R 522 in 2008 to R 633 in 2009 and R 1,342 in 2010. In addition, S/L groups' funds' performance improved from year to year - from 30.9% in 2008 to 53.9% in 2010. In the first three months of 2011, membership doubled from 442 members in 51 groups to over 900 in 96 groups with associated savings accumulated at well over R 300,000. Finally, three groups graduated and operated independently in 2009. In 2010, 21 groups graduated and became independent in 2011. In September 2012, the CMSL schemes had over 1,400 members organized into 126 groups who managed to save over R 2.8 million (\$355,000) in that year alone (Mpendulo Savings, 2010).

Since its inception and formation of groups in 2009, the CMSL project has expanded to Humansdorp, Hankey, Thornhill, St. Francis Bay and Loerie township areas in the Kouga Municipal area of the Cacadu District of the Eastern Cape Province.

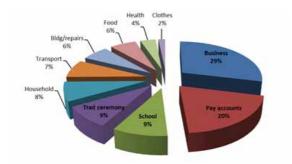
Focus group discussions and surveys were conducted in November 2010 to determine the effect of the project on the group members. The survey was administered to roughly 25% of the total members. It was found that households across the board were able to increase their sources of income. The source most closely attributable to membership in an S/L group is business, showing an increase of nearly 3.5% (Mpendulo Savings, 2010).

The survey also showed that during the period nearly 53% of members were able to purchase some type of household asset, most notably major appliances. Group members reduced their indebtedness on many fronts as well. For example, in 2008, 13.7% of members surveyed had loans outstanding with money lenders, 'Cash Loans' facilities and family or friends. This figure declined to 6.9% in 2010. During the same period, the number of credit accounts members had with various major department and furniture stores decreased by just over 20%. At the beginning of the period, nearly 15% of members had debts with spaza shops, taverns or other small neighbourhood businesses. At the end of 2009, only 3% still owed money to such establishments (Mpendulo Savings, 2010).

In summary, during Focus Group Discussions held in November 2010, members stated that the loans they took from their group fund during the year and the

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lump sums received at the end helped them to start up or expand microbusiness activities, pay off debts and avoid usurious money lenders as well as pay for school fees, clothing, books and other supplies for their children. The chart below, produced from the project's Management Information System, illustrates the proportion of funds used for the most commonly mentioned loan purposes. This quantitatively supports what group members expressed in focus group discussions.



MIS CMSL Trust Report April 2011

Most members stated that belonging to an S/L group was not only of monetary importance; rather it was about having access to a network for advice and moral support. In other words, CMSL membership holds significance in several important areas other than financial security.

Finally, qualitative data findings from interviews conducted at the end of 2010 with a random selection of group members concluded that most members interviewed (71%) felt worried or sad before joining their group; after joining, all reported feeling happy, proud or excited about themselves. A majority (79%) felt better or good about their role in the household and all business women interviewed reported better relationships with customers, improved profitability, opportunities to venture into new lines of business and an enhanced capacity to solve business problems. Regarding the impact of the project on their lives, one member's statement reflects the overriding ethos of the project for those involved: 'this money is guilt-free! I am not loaning it from someone, my husband didn't give it to me. It is mine and I get to use it any way I see fit.' (Mpendulo Annual Report, 2011).

LESSONS OF SUSTAINABLITILY: THE ROLE OF INSTITUTAIONAL IMPERATIVE AND AGENCY IN DEVELOPMENT

Sustaining the CMSL Trust has always been a primary focus of NMMU faculty and project staff from the project's inception. Notably however, the Trust's approach does not rest on seeking financial sustainability in the way most conventional microfinance institutions do. For example, NMMU neither provides external funds to capitalize on members' loan funds, nor plays the role of financial intermediary. Costs are not recovered through charging interest or extracting fees for the loans that S/L group members make to each other.

The project's focus for sustainability is based on reaching maximum institutional capacity on two levels; first at the project level and then at the community level.

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On the project level, three years of 'incubation' occurred under NMMU guidance between 2008 and 2010 when developing organizational competence was a priority. The governing conceptualization, however, was that the most important aspect of sustainability found at the community level is the ability of S/L groups to not only maintain their activities, but also expand them without the supervision of the Trust.

Reflecting on the necessity for grassroots agency and institutional imperative to conjoin with the proactive development of autonomy represents a holistic approach moving away from macro-style policy that presumes similarities across social groups within a country or across geographical expanses. The CMSL scheme began with an advisory group that needed the structural support of experienced individuals in the form of a Director, and institutional support from NMMU. The CARE VSAL methodology applied to CMSL predetermined the parameters and guidelines that were offered through the planning already completed, and thus provided the advisory group with the capacity to implement community driven motivation and facilitated the desired outcomes. The ongoing availability of reflexive training and access to a coordinated network of agencies continued this support. The graduation of S/L groups from the project's direct oversight epitomizes the approach of the scheme, that is, sustainable, autonomous development action.

The CMSL strategy reflects a shift from service delivery to meet specific needs to enhancing civil society capacity and strengthening advocacy interventions. The default theory of social learning is that the helpers in the 'centre' make policies and design programmes and then transmit the programmes to the doers on the 'periphery' for implementation. The standard approach treats government as centre and the remainder of society as periphery: central attempts to 'train' agencies at the periphery. Close attention to the successes of the examples discussed demonstrate that social learning can take place in a decentralized bottom-up manner with centralized coordination and capacity building. The opportunity for learning is primarily in discovered systems at the periphery, in this case with already formed advisory groups, and not in the nexus of official policies at the centre.

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BUILDING SUSTAINABLE COMPETITIVENESS

UNDER LOW TECHNOLOGY CONDITIONS

Siphamandla Gumbi • Independent Development Analyst

INTRODUCTION

South African Municipalities are legally bound to be the drivers of development in their areas of jurisdiction. The Constitution of South Africa, (RSA 1996), envisages a robust local government system, which can provide democratic and accountable governments for local communities, ensure the provision of services to communities in a sustainable manner, promote social and economic development; and a safe and healthy living environment, and encourage the involvement of communities and community organisations in the matters of local government.

The Constitution stipulates that the promotion of social and economic development is a specific objective of local government (article 152.1 c). These 'developmental duties' require that a municipality 'structure and manage its administration, and budgeting and planning processes to give priority to the basic needs of the local community and to promote its social and economic development.'

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Municipalities lacking access to technology (e.g. small rural towns) often struggle to implement local economic development strategies and sometimes try to emulate methods used in big cities, although these are not applicable to small town conditions. This paper attempts to demonstrate that small rural town municipalities may promote local economic development using methods relevant to their own environments. uThukela District Municipality (the District) is used to show how the world renowned Ladysmith Black Mambazo and the world famous battlefields of the South African War and the Anglo-Zulu War can be used to drive local competitiveness with the aim of promoting local economic development (LED).

UNDERSTANDING COMPETITIVENESS

Faurer and Chaharbaghi (1994) provide a conceptual framework that can be used to develop a definition for competitiveness. The assumptions employed by their framework are that i) for an organization to exist, there has to be a demand for its offerings; ii) the ultimate goal of an organization is to make a profit in order to satisfy its shareholders and achieve continuous profit growth while fulfilling the interests of other stakeholders, such as employees, and that iii) competition arises when several organizations strive to make a profit by satisfying the same demand.

The above considerations imply that the nature of competition is determined by both the way in which customers value the offerings and the way shareholders value the profit potential in relation to the competitors. As a result, the organization and its competitors will constantly strive to match and improve their capabilities, offerings and potential in order to increase the level of customer and shareholder values.

Bennett (1999) seals the above definition by explaining that as important as competitiveness is for organisations, so is sustainability. He explains sustainability as a measure which describes the potential of an organization to maintain or improve its competitive position in the eyes of its customers and shareholders while having the ability to act and react within a changing competitive environment. It is only if there is potential for being able to sustain competitiveness that one can achieve real competitive advantage.

Garelli (2002) looks at the definition of competitiveness from the perspective of the Organisation for Economic Co-operation and Development (OECD) nations: nations compete in order to 'increase their standard of living.' The OECD further defines competitiveness as 'the degree to which a country can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term.' This definition is in line with that of Porter (as quoted by Toerien 2005), who emphasises productivity. He argues that 'competitiveness is based on the capacity to innovate,' which automatically increases productivity.

Later this understanding of competitiveness will be linked to development that can be undertaken at uThukela to determine to what extent their initiatives may bring real competitiveness.

BUILDING SUSTAINABLE COMPETITIVENESS UNDER LOW TECHNOLOGY CONDITIONS

COMPETITIVENESS ACCORDING TO TOERIEN

In 'Taming Janus', Toerien (2005) acknowledges that 'competitiveness has become the central preoccupation of advanced and developing countries' who are all fighting for survival in an 'increasingly open and integrated world economy.' In other words, all countries, developed and developing, have accepted that in order to progress they need to be competitive.

It is obvious that in the wake of the industrial revolution the current revolution requires high technology and automation to succeed. However, developing countries that struggle to implement initiatives to improve the lives of the people are facing what Toerien calls the 'Janus Dilemma,' or 'the two faces of technology.' He explains that the good face of technology is its ability to release humans from engaging in routine work and make things easier for them. However, technology has a second negative face: when implementing technology, the unintended consequence is replacing humans with machines, leading to massive unemployment and invoking the militancy of the labour movement. The dilemma, therefore, for nations and/or municipalities is whether to follow the route of technology to be competitive and sacrifice jobs, or keep the jobs, knowing that such an economy is not sustainable and the jobs will eventually be lost.

In Toerien's opinion, firms must establish clear competitive positions with distinctive brand reputations in order to be and remain competitive. Activities in these corporations' value chain must become increasingly tailored to their 'unique strategy' aimed at bringing sustainable competitiveness. Instead of producing goods and then looking for markets, firms should rather focus on buyers' needs. This will help them to package their products/services in a way that suits the buyers while ensuring sustained brand loyalty. Toerien uses the Quad Tool to explain the two faces of technology (see Figure 1).

Figure 1: The Quad Tool showing strategic positioning (adapted from Toerien, 2005)



The Quad Tool developed by Toerien (2005) depicts four strategic positions (see Figure 1). Quad B is dedicated to corporations or countries using low technology/automation to aid in achieving competitiveness and competitive advantage. The purpose of the Quad Tool is to assist (especially) developing countries as they attempt to move from one Quadrant to the other. Porter defines strategic positioning as 'performing different activities from rivals or performing similar activities in different ways' (cited in Toerien 2005).

Below is a brief analysis of how uThukela District Municipality could work towards being competitive while operating in a low-tech environment.

STRATEGIC POSITIONING OF UTHUKELA DISTRICT MUNICIPALITY

Located in the north central area of KwaZulu-Natal, the uThukela District is largely rural with only 25% of its 715 000 population located in urban or periurban areas. According to Statistics South Africa (2011), uThukela and uMzinyathi Districts have some of the poorest and most underdeveloped areas in the Province, notably the uMsinga and Nquthu Municipalities. This District includes local municipalities in the towns of Bergville, Escourt, Ladysmith, Dundee, Vryheid, uMsinga, Wasbank, and Nquthu. The District is characterised by socioeconomic indicators such as low revenue base, poor infrastructure, limited access to services, low economic base, high levels of poverty, unemployment, skills shortage, lack of resources, low level of education, and under-developed land and settlement patterns that make it difficult to plan for effective service delivery. The District's economy is mainly agriculture, small scale mining and tourism. The District's IDP has identified certain potential to grow tourism and increase product beneficiation; however, there are no concrete plans to bring this to fruition.

uThukela, in conjunction with its neighbouring District, uMzinyathi, could build an international image around the world renowned Ladysmith Black Mambazo music group combined with the Drakensberg Mountains and the famous battlefields of the South African War and the Anglo-Zulu War of 1879. In this way the natural talent found in the area, combined with the natural features and the historical interest of the area could be used to attract tourism, both local and international visitors.

Ladysmith Black Mambazo formed in 1964. They rose to worldwide prominence as a result of collaborating with Paul Simon for his album, Graceland. They have won multiple awards, including four Grammy Awards, and have had 16 Grammy nominations (Wikipedia 2012). Having toured virtually all six continents, the group sold over a million copies in the UK alone. They recorded albums and collaborated with some of the biggest names in the music industry and compiled soundtracks for certain Hollywood films: they have sung for presidents, including our own Nelson Mandela, for the Queen of England and the Royal Family at the Royal Albert Hall in London, for Pope John Paul II, at the Olympics and at two Nobel Peace Prize ceremonies.

UThukela and uMzinyathi Districts are custodians of the Battlefields Region commemorating the wars fought between the Zulus and the English in the late 1800s, as well as certain significant battles of the South African War. Several examples can be sighted, for example, the outbreak of the Anglo-Boer War on 20th October 1899. The Vryheid Commando swung into action, led by General Lucas Meijer, who fought at the battle of Talana. Ladysmith made world headlines at the end of the 19th century when it was besieged for 118 days during the most crucial stage of the Anglo-Boer War. Vryheid was left relatively unscathed by the big battles fought against the British forces to the west, but smaller skirmishes with the Imperial forces occurred at Scheepersnek, as well as a major Boer attack on the British garrison stationed on Lancaster Hill just north of Vryheid. Isandlwana, located in Nguthu, the area where the Zulu army attacked and defeated a British regiment, is a well known tourist destination worldwide. Rorke's Drift is the site of one of the most famous battles of the Anglo-Zulu War where 11 Victoria Crosses were awarded, the most ever to be won in a single battle.

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Annual re-enactments of the Battle of Isandlwana on the Saturday closest to 22 January has become a tradition. Some 500 warriors and British re-enactors take part, and the event now attracts national and international coverage and attention. Dundee holds annual commemorations of the Anglo-Boer war with three full scale re-enactments of the Battle of Talana. Local volunteers act as British soldiers, Boers, nurses, and stretcher bearers. This concept has grown into an annual 'History in Action' Festival, featuring a weekend of 'Ghost Tours', Battlefield, cultural and game tours, battle re-enactments, displays, craft markets and entertainment.

The Drakensberg Mountain range is the highest in Southern Africa. Sections of the mountain have been declared wilderness areas or game reserves. One of these, the UKhahlamba / Drakensberg Park was listed in 2000 as a World Heritage site by UNESCO and it has been included in the List of Wetlands of International Importance (under the Ramsar Convention). The Drakenberg also contain the largest number of Bushmen paintings in the world – between 35,000 and 40,000 – which can be found in its many caves. The physical features of the Drakensberg and its geological history contribute towards the development of tourism in the area. A variety of hiking trails, hotels and resorts have been established

uMnambithi Municipality is establishing a **Mambazo Memorial** aimed at celebrating the group, and its founder, for their commitment to the town. The memorial could be used as a draw card for international and local tourists to learn more about what the town and the District have to offer

The battlefields region draws a niche tourist who is interested in history, and wars and battles fought in the past. A small but significant number are local, while others come mainly from the UK, the US, Australia and France.

The cultural experience. This project was motivated by the fact that there is an increasing demand for traditional curios, arts and crafts throughout the world, but especially the United Kingdom, Europe and specific regions of the USA. The export of locally produced goods, such as beadwork, baskets and carvings, is not a new activity for South African entrepreneurs, and there are several companies and organisations currently involved in the distribution of locally crafted articles overseas.

STRATEGIC POSITIONING OF UTHUKELA'S TOURISM INITIATIVE

Toerien argues that being in a low tech environment should not automatically mean doom for a corporation or nation. Upon studying some of the sustainable low tech businesses, Toerien concluded that their competitive advantage is based on the principles of i) 'outstanding human talent, ii) know-how that can be protected over time, and iii) a natural or man-made attraction.' Toerien explains that to be sustainable, differentiation of products/services should be through branding. To build strong brand name there must be a demand for products; there must be world class marketing/logistics operations to meet the demand; there must be a market; products/services must be of good quality; and there must be continuous innovation to keep ahead.

Having analysed the tourism potential of uThukela, it was found that they can match the above assertions by Toerien. The District is surely a low-tech/low automation environment. However, they have the potential to achieve sustained competitiveness as follows.

COMPETITIVENESS BUILT THROUGH OUTSTANDING HUMAN TALENT

As explained, Ladysmith Black Mambazo is a highly talented music group with an international reputation. Its fans could be targeted for tourism in the region In the process, they could visit the Drakensberg Mountains, and those who were interested could relive the battles fought in the Anglo-Zulu War and the Anglo Boer War at the end and beginning of the last century.

In addition, the history, the culture, the arts and the dress of the Zulu people could be linked to this tourism initiative.

THE WAY FORWARD

The combination of Mambazo's charm, the beauty and the historic-archaeological value of the Drakensberg, and the rich history of the local people alone may not build a competitive and sustainable tourism market for the uThukela District.

- Branding: the District has to brand itself as the tourist destination in SA. It
 must be remembered that mountain lovers may also visit Table Mountain in
 Cape Town and battle followers may also go to the Zululand region of Ulundi
 and Nongoma.
- World class marketing/logistics operation: the District must interact with
 the National Department of Tourism, the Marketing Association of SA
 and other relevant institutions, to ensure that their offerings are marketed so
 that international tourists will know what is on offer. Local tourists should be
 educated about the value of these destinations so that they may also be part
 of the experience.

Local tour operators and tour guides should be capacitated to meet internationa standards, thereby ensuring a sustainable tourism industry.

According to Toerien (2005), a combination of natural attractions, outstanding talent, valuable history and good branding, as well as sound logistical operations and marketing has the potential to ensure that competitive advantage – even in a low tech environment, can be sustained over time.

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CELEBRATING 20 YEARS OF MUNICIPAL SUCCESS

2014 is when SA celebrates 20 years of freedom. The Goldman Sachs Report (2013) confirmed what Stats-SA and other research houses have been repeating over the years: despite major challenges facing the country, good progress has been made to change the lives of the people of South Africa. The role played by municipalities has contributed to bringing about this positive change. More people now have access to services; average household income has doubled over time; primary health care facilities are within walking distance from most households.

However, more success often propels a greater demand for even better services. Municipalities continue to be under immense pressure to provide employment and play a role in reducing inequality and poverty as they are the cold face of government. LED is one of the tools available for Municipalities. There is no dedicated budget for LED in South African Municipalities. To be successful, they need to be competitive and innovative in their approach to LED.

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BENEFITS OF LOCALIZING WIND ENERGY

COMPONENTS

Vukani Nkasa • Coega Development Corporation

INTRODUCTION

Growing concern about climate changes, acidification and urban air pollution, and the need to secure affordable supplies of energy for economic and social development have renewed the attention given to developing and utilizing renewable sources of energy. As world population grows, world energy demand increases: if this growing energy demand is to be met with fossil fuels to any significant degree, carbon dioxide (CO₂) emissions will increase considerably. Given adequate support, renewable energy is believed to meet much of the growing demand for energy at a lower price.

The global energy crisis is a daunting challenge; however, the energy derived from the sun, the wind, the earth's heat, water and sea has the potential to meet the world's electricity needs. Globally, more than 80 percent of energy comes from fossil fuels (oil, gas and coal) and the remainder comes from nuclear and renewable energy sources (WWF, 2011). Fossil fuels have been a widely used source of energy since the Industrial Revolution. Despite their relatively easy-to generate energy, fossil fuels have an immense negative impact on the environment since their combustion leads to a great deal of air pollution.

Uncertainty about the future use of fossil fuels and their negative impact on the environment has increased the importance of renewable energy as an alternative source of energy. Energy price volatility, supply uncertainties and environmental concerns have led many countries to consider renewable energy sources to provide affordable energy services that enhance energy security and reliability (World Bank, 2005). Globally, countries plan to accelerate investment in renewable energy as a clean alternative source and aim to reach a 95 percent sustainably sourced energy supply by 2050. However, the renewable energy technologies that exist today remain a fundamental issue that needs to be addressed. An upgrade in the energy efficiency of buildings and an improved power grid are needed.

To address electricity challenges and environmental impact, South Africa developed an Integrated Resource Plan (IRP) in 2010 to secure supply while building local industry clusters. Wind energy is a significant feature of the IRP as a measured source of future energy which will contribute to local economic development, particularly in regions like the Eastern Cape that has abundant resources for the industry (RSA. 2011a).

CURRENT STATUS OF WIND ENERGY IN SOUTH AFRICA

More than 80 percent of South African households are connected to the electricity supply grid. More than 90 percent of electricity is produced from fossil fuels, while nuclear energy makes up most of the remainder. The wind industry is still in a developing stage in South Africa: however, this is expected to change significantly with the implementation of IRP. Currently, South Africa has a production capacity of approximately 10 megawatt (MW) of wind energy from the Darling wind farm (51.2 percent), the Klipheuwel wind farm (31.1 percent) and Electrawinds (17.7 percent) in the Coega Industrial Development Zone (IDZ). The Department of Energy (DoE) developed the IRP as a rollout plan towards energy mix in South Africa for the period 2010 to 2030. Wind energy forms a significant part of the renewables (17.8 GW) for the plan, and has been put forward as one of the factors to accelerate local industry (RSA, 2011a). Wind energy is planned to produce 8.4 GW (47.2 percent) of the total new capacity for the renewables over the period. However, the IRP is expected to be continuously revised and updated at least every two years necessitated by the changing environment. Figure 1 shows wind energy production capacity in South Africa between 1999 and 2012.

Figure 1: Wind Energy Production Capacity in South Africa



Source: The Wind Power

CHALLENGES TO PRODUCING WIND ENERGY IN SOUTH AFRICA

Wind energy in South Africa is faced with major challenges. Below are some of the key challenges facing the industry .

Cost to produce wind energy. The cost of establishing the industry is very high compared with leading countries in the world like China, the US, India, Germany and the UK. These countries have a competitive advantage over South Africa, since they are ahead in terms of manufacturing wind energy components. South Africa is at a competitive disadvantage, since most turbine components and the skills to run them will need to be imported. On the other hand, South Africa has the necessary skills and an abundance of coal to operate its coal-fired power stations.

Labour costs and productivity rate. South Africa is trading and competing with countries that are known to have lower labour costs and high productivity rates. The country's steady flow of above inflation wage deals has made South Africa's overall labour market less competitive. High labour costs have proved to have a negative impact on attracting foreign direct investment (FDI), and

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industrial export output is lower than for many other countries, for example, China, Brazil and India (OECD, 2000). The wind energy industry is no exception to this and the ability to attract investment into this sector will depend on the labour costs and availability of skilled labour.

Required skills for the industry. South Africa has an abundance of semi-skilled and unskilled labour, which is a major challenge, since the wind industry requires highly skilled labour (e.g. engineers and technicians). As a new South African industry wind energy will require a significant amount of investment for research and development (R&D). The industry is capital-intensive compared with conventional fossil fuel. The increasing demand for wind energy requires a stream of trained and qualified workers to manufacture, construct, operate, and maintain wind energy facilities. Globally, most wind energy sectors are in the early stages of their development.

Resources required to produce enough wind energy. Port Elizabeth and its surroundings and the Western Cape are earmarked as potential locations for the industry. These regions are known for their abundance of wind; however, it is uncertain whether these areas will be able to produce the amount of energy planned in the IRP. Furthermore, distribution costs will remain a challenge, particularly in the Eastern Cape where the electricity infrastructure has not yet penetrated deep into the rural areas.

PLANS TO LOCALIZE WIND COMPONENTS IN SOUTH AFRICA

Considering the demand for wind energy to meet the planned energy mix by 2030 and the South African government's level of commitment to developing this sector, the localization of wind energy components seems to be a viable option in the long term. Despite the recent decline in wind turbine prices, the costs t in South Africa remains high compared with those for developed countries. This is due to the high import tax on major wind turbine components, which is 60 percent of the cost of the total wind turbine installation. As part of a broader investment in renewable energy both domestically and for the remainder of Africa, South Africa plans to position itself in the production chain of key renewable technologies. Plans to produce towers and blades locally are at advanced stages, which will be an additional 26 percent of the engineering, procurement and construction costs to be considered for local content (RSA, 2011b). However, the market demand in the SADC region and the remainder of Africa can give greater impetus to the localization of wind energy components. The current plan for medium-low industrial content can be used as a test during the early stages of wind energy development in South Africa. Figure 2 shows four different scenarios for the localization of wind energy.

Figure 2: Scenarios for the Localization of Wind Energy Components

RIOS	1	2	3	4
SCENARIOS	Low-industrial Content	Medium-low industrial Content	Medium-high industrial Content	High industrial content
ASSUMPTIONS	Grid connection, civil works, other capital costs, fully imported wind turbines	Grid connection, civil works, other capital costs, tower locally made, rest of turbine imported	Grid connection, civil work, other capital costs, tower, blades, generator and nacelle made locally, rest imported	Grid connection, civil works, other capital costs, most of turbine made locally, except for specialised items such as gearbox, rotor bearings
VALUE	% value: 29 Local spend/MW: R5.22 M	% value: 47 Local spend/MW: R8.46 M	% value: 66 Local spend/MW: R11.88 M	% value: 87 Local spend/MW: R15.66 M

Scource: data from Department of Trade and Industry (DTI)

BENEFITS OF LOCALIZING WIND ENERGY COMPONENTS

According to the Renewable and Sustainable Energy Studies' report, for a successful wind power sector, South Africa will require the following number of staff to be trained each year, using the IRP 2010 wind capacity development scenario (2010 - 2030) as a basis:

- 668 engineers
- · 892 technicians
- 1 127 skilled workers
- 742 other staff (very diverse group).

IMPACT OF LOCALIZING WIND COMPONENTS IN SOUTH AFRICA

VALUE ADDED TO LOCAL INDUSTRY

Wind energy is regarded as a sustainable source of energy with an insignificant impact on the environment, economy, and socio-economic development. To localize some wind components will give South African companies opportunities to participate in the industry and boost local economy, while contributing to skills development. South Africa has various options in terms of local production of certain of the components for wind turbine (see the scenarios in Figure 2 above). These options show different significant amounts that can be spent locally per megawatt if some components are produced in South Africa.

Looking at cost breakdown, if more components are produced locally then more money will be spent on skills to sustain the industry. To further develop the wind energy sector and realize its economic impact, South Africa has advanced its plans to localize certain key components for the sector. According to the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), the Eastern Cape will be a major beneficiary of wind energy development, as the province stands to receive approximately 67 percent of the total wind energy capacity for approximately 1 and 2 of preferred bidders (NMBBC, 2012)

Table 1 (below) shows the cost breakdown per megawatt for wind turbine components based on the data provided by the Department of Energy for round 1 and 2 preferred bidders. This explains the expenditure per component which can add value to local business if turbine components are manufactured locally. Based on this cost breakdown, if South Africa were to manufacture tower and rotor blades, more than 37 percent of the total cost of wind turbine components could be spent locally. This would create jobs while adding value to the South African economy.

Table 1: Cost Breakdown for Wind Turbine Components/MW by Province (Round 1 & 2 Preferred Bidders)

	Share	Cost/MW	EC	WC	NC
	(%)	(R million)			
Grid connection	12.97	2.16	1 743.01	685.99	157.14
Civil works	9.73	1.62	1 307.26	514.50	117.86
Other capital costs	8.65	1.44	1 162.01	457.33	104.76
Tower	20.22	3.366	2 716.19	1069.01	244.88
Rotor blades	17.08	2.844	2 294.97	903.23	206.90
Rotor hub	1.08	0.18	145.25	57.17	13.10
Rotor bearings	0.93	0.155	125.08	49.23	11.28
Main shaft	1.47	0.245	197.70	77.81	17.82
Main frame	2.16	0.36	290.50	114.33	26.19
Gearbox	9.95	1.656	1 336.31	525.93	120.47
Generator	2.64	0.44	355.06	139.74	32.01
Yaw system	0.96	0.16	129.11	50.81	11.64
Pitch system	2.04	0.34	274.36	107.98	24.74
Power converter	3.85	0.641	517.25	203.58	46.63
Transformer	2.76	0.459	370.39	145.77	33.39
Brake system	1.00	0.167	134.76	53.04	12.15
Nacelle housing	0.97	0.162	130.73	51.45	11.79
Cables	0.73	0.122	98.45	38.75	8.88
Screws	0.80	0.133	107.32	42.24	9.68
Total	100	16.7	13 435.7	5 287.9	1 211.3

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SKILLS DEVELOPMENT IN THE FASTERN CAPE

Occupations in wind energy are separated into three phases - manufacturing, project development, and operational and maintenance. Occupations are not limited to one phase (US Bureau of Labour, 2010). Although many jobs in this industry require special skills unique to wind energy, in most cases skills can be acquired in other industries. However, a wind-specific training is conducted before starting the project.

To meet the future wind energy demand planned in the IRP, the Eastern Cape would have to budget in excess of R45 million for training and development per annum. Table 2 shows that the province will need to train an estimated 894 professionals in different fields.

Table 2: Estimate of trained professionals and costs to the Eastern Cape

	Skills required per year	Average training cost per skills type (ZAR'000)	Training costs per year (ZARmil)
Engineers	222	50	11.1
Technicians	297	40	11.9
Skilled workers	375	60	22.5
Total	894		45.5

Source: Own calculation based on unit cost as per general industry standards

JOBS TO BE CREATED IN THE EASTERN CAPE FOR ROUND 1 AND 2 WIND ENERGY ALLOCATION

This multiplier is based on the assumptions of the Industrial Development Corporation (IDC) and European Wind Energy Association (EWEA) studies, respectively. The table shows the number of jobs to be created in three different phases per MW of wind energy produced. According to the IDC study, for a MW of wind energy produced, 4.5 jobs, 1.5 jobs and 0.5 jobs will be created in manufacturing, construction, and operational and maintenance, respectively. EWEA assumptions are that for a MW of wind energy produced, 7.5 jobs and 0.33 jobs will be created in manufacturing and operational and maintenance, respectively.

Table 3 shows the total number of jobs to be created in the Eastern Cape based on the total allocation of wind energy for Round 1 and 2 considering the assumptions of two different studies (IDC and EWEA). Based on these assumptions, the total number of MWs of wind energy allocated to the Eastern Cape will create an average of 5 776 jobs with manufacturing representing more than 70 percent. This reflects that localizing the industry will add more value to the economy, socio-economy, skills development and other benefits.

Table 3: Estimated number of jobs to be created in the Eastern Cape for Round 1 and 2

	IDC Study	EWEA
	Number of Jobs	
Manufacturing	3 628	6 046
Construction	1 209	-
Operation and Maintenance	403	266
Total	5 240	6 312

Source: Own calculation based on IDC and EWEA studies

CONCLUSION

Since South Africa is committed to the energy mix by 2030 in response to the emission of CO2, more development for wind energy needs to be in place. With South Africa's wind turbine and component manufacturing industry still in its early development stages, the country is currently forced to import all major components and its critical skills. For further development in this sector and to add more value to the local economy, South Africa need to advance its plans to localize key components for the sector (for example, towers and blades). This will add more value in the Eastern Cape, particularly in Port Elizabeth and its surroundings. However, the sector will be forced to share the limited skills available in the country Furthermore, the sector might not develop as fast as it is required to meet the energy mix for 2030 due to the high capital investment required establish and sustain the industry in the short to medium terms. While the sector is in its early development stage, South Africa will be forced to import critical skills from regions that are well developed in wind energy. This might pose challenges because of the country's market size and its ability to attract critical skills.

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MANAGING POLITICAL PROTEST

IN SOUTH AFRICA

Gavin Bradshaw • Nelson Mandela Metropolitan University

Ntsikelelo Breakfast • Nelson Mandela Metropolitan University

INTRODUCTION

Many South Africans are justifiably concerned at the frequency of ongoing protest actions around the country, and at the tendency for such protest to turn violent, when vehicles, and even buildings are torched, or damaged in other ways. Police responses to these actions sometimes also turn violent, as occurred at Marikana in August 2012, and the police find themselves condemned if they overreact, and condemned if they withdraw, or take evasive action. There is a very fine line which they have to tread in this regard, and very little room for error. The levels of protest action are high and sustained: law enforcement statistics indicate that more than 3000 incidents occurred across the country in the four years preceding August 2012. The pace of protest is also quickening. Between November 2013 and January 2014, as many as 2 947 service delivery protests took place across South Africa (The Citizen, 2014). Reasons provided for the protests include a lack of service delivery, rampant corruption, high levels of crime, and even third force activity (Burger, 2009).

CONFLICT IN SOUTH AFRICA

Of course, conflict is a perfectly normal part of any society. It is the inevitable result of many people with different values, needs and interests living together. It cannot be avoided. Political systems, including democracy, recognise this and it is the function of any democracy to channel all the differences into different policy choices through the agency of political parties while using the mechanism of elections to arrive at the most popular options Conflict theorist, Chris Mitchell (1981), captures the inevitability of conflict when he states, 'social conflict is a likely guest wherever human beings set up forms of social organization. It would be difficult to conceive of an ongoing society where social conflict is absent. The society without conflict is a dead society.'

Unfortunately, periods of elections heighten various contradictions and emotions run high, particularly as people who feel unheard strive to make the government 'hear' them. The fact that people take to the streets as a means to 'make' their government hear them is a sign that the South African society is 'alive'.

Lewis Coser, an American sociologist from the 1950s, first made the point that conflict is an important and necessary part of society (Coser, 1956). For Coser, conflict with outsiders played the useful role of bringing group members closer together. Conflict also stimulates the search for allies, and forces learning upon us as we grapple with the consequences of conflict; in addition, it helps to define group boundaries. Conflict theorists distinguish between conflict that is destructive, and that which is constructive. More recent literature, originally associated with Morton Deutsch (1973), has emphasized the differences between constructive and destructive conflict. Constructive conflict is seen as that in which the more positively functional elements predominate. Meehan, for instance, sees it as '... conflict in which the benefits exceed the costs; it generates productive, mutually beneficial, shared decisions.' Meehan writes that 'individuals come together to redefine or strengthen their relationship for the greater good of the parties concerned (Meehan, no date).'

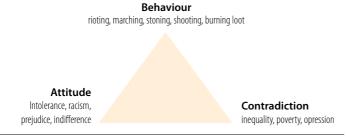
Destructive conflict, on the other hand, refers to conflict in which individuals involved become less compliant and assume that the other party must suffer defeat. Involved parties indulge in personal attacks, threats and a general tone of hostility. In this regard, Deutsch and Coleman (2000) note that '... serious problems are associated with competition when it does not occur in a cooperative context and if it is not regulated by fair rules. However, one has to be careful to avoid the implication that conflict involving the use of force, or violent conflict, is necessarily negative. Quite often violent conflict is functional, such as when it brings about political freedom or other positive goals. We should thus not be too concerned about conflict and confrontation in society,; even democratic society. It is normal, and can be healthy. Evidently, the amount or level of conflict, is important. Where conflict levels are too low, there is a tendency for organisations, and even countries, to stagnate. Where levels of conflict are too high, there is the risk of escalation. In between, there is what one might call a 'Goldilocks Zone' where the level of conflict is 'just right' (Kidd, et.al., 2012; Weitz, 2014).

There is a real danger that South Africa is on the wrong side of the 'Goldilocks Zone' with extremely high levels of conflict behaviour. In 2009, when levels of protest were lower than the current levels, Johan Burger of the Institute of Security Studies, indicated that although one could not yet speak of revolt, the protest actions were resulting in a certain 'instability', and sustained actions might well lead to a more serious political revolt. Notwithstanding, the protests continue and have attracted international repercussions. The Marikana incident

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drew massive negative attention to South Africa, and since the government of Somalia protested the killing of Somali nationals in South Africa (Powell, 2013), citing a deteriorating social fabric (Stanlib, 2012), the country's creditworthiness has been downgraded. Decreasing levels of foreign investment have put downward pressure on the currency, resulting in South Africans collectively becoming roughly thirty percent poorer over the past five years. Quite clearly, levels of conflict behaviour are far too high in South Africa.

To deal constructively with these levels of conflict, there are two important lessons to take from theory. In the first place, it is important to take a leaf out of conflict theorist Johan Galtung's book. Galtung (1996) makes the important point that although we associate conflict with various forms of behaviour, that behaviour is not the total extent of the conflict. He proposes a threefold model of conflict that sees conflict as comprising behaviour, attitudes and contradictions. Any analysis of conflict that examines only the behavioural elements of conflict is unlikely to be helpful. Although behaviour is the dramatic, eye-catching element of conflict, it is more accurate to think of it as a symptom rather than a cause. A focus on ending the discomforting behaviour associated with conflict is unlikely to be effective, especially in the longer term, unless the other elements are also addressed. Galtung is well-known for his so-called ABC triangular model of conflict, which is depicted as follows:



Adapted from Galtung (1996)

Currently in South Africa, conflict behaviour involves striking, marching, stoning and burning by the protestors and shooting with tear-gas, rubber bullets and live ammunition by the police. What needs to be addressed, however, are the underlying reasons behind this behaviour, which may include, on the part of parties such as the government or employers, the attitudinal factors of perceived indifference, prejudice and intolerance, and structural conditions, such as inequality, poverty and oppression.

The second factor that needs to be taken into account is that conflict in South Africa falls into a special category. It has long been regarded by scholars such as Burton (1990), Azar (1990) and Mitchell (1981) as an example of deep-rooted social conflict, implying that it is extremely resistant to attempts at resolution, particularly since it is largely based on the extensive frustration of basic human needs which cannot simply be compromised. In the final analysis, needs must be satisfied. Any attempts to resolve the conflict, therefore, must also take cognisance of these deeper elements of the South African conflict.

WHAT IS TO BE DONE?

The response to the ongoing strife in South Africa should consider the longer term and address the deeper issues. Long-standing problems which remained unresolved at the Codesa and multi-Party negotiations must be addressed and resolved. South Africa is plagued by poverty and high levels of inequality. Unfortunately, inequality has grown more extreme since the beginning of democracy twenty years ago, largely as a result of the neo-patrimonialist and neo-liberal policies instituted by government. Far more strenuous efforts need to be made to deal with these levels of inequality. Gurr (1970) has shown how relative deprivation is one of the prime drivers of violence. The more intense and prolonged the feelings of frustration that result from relative deprivation, the greater the probability of aggression (Gurr, 1970). Frankel's (2013) graphic account of the desperate conditions of the mineworkers at Marikana emphasizes the circumstances that fuelled the protest actions in that mining community. It is not only government that must address these conditions, but also the captains of industry; in this case mining capital which will have to present a more caring face.

Another primary problem is the question of land in South Africa, which should be the subject of a National Land Accord. Land is not simply a scarce resource; it is a symbol of continuing inequality, a source of jobs, and a cultural asset. In South Africa land takes on a deeper meaning for the chief protagonists in conflict. For example, Afrikaners have always claimed a special affinity with the land, reinforced by the symbolism of the Great Trek and Calvinistic, Old-testament-inspired notions of being God's 'Chosen People' in the wilderness. In this instance, land becomes more than simply a material means to make a living. It resonates powerfully with the human need for identity and security, which according to Burton (1990), cannot be compromised without damaging the psyche. Land, access to land, and the bond with the land, becomes a value that cannot be compromised in a negotiation process. In Africa, the land is where one's ancestors' cattle grazed, and where the ancestors are buried.

As such it is associated with values and basic human needs that are not amenable to negotiation. This position is supported by Walker (2007), who writes: 'Land continues to be linked to identity and citizenship in complex and shifting, situation-specific ways. Politically, it carries a sometimes latent, currently overt, yet always potent emotional and symbolic appeal in national debate about poverty and redress.' The land issue is tied to a record of wars, conquest and incidences of legislative dispossession that have a historicity that situates it deeply in a relationship of past conflicts. Longings for retribution mingle with a desire for vengeance on the one side, and on the other, a fear of retribution and loss of livelihood prevail. Substantive progress in settling the land issue would have a profoundly positive impact on a number of the causes of the unrest in South Africa

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DISCUSSION 101 FORUM

FALSE DICHOTOMY

BETWEEN BASEL III AND FINANCIAL INCLUSION

Nkosana Mashiya • South African Reserve Bank

Often in the public discourse on transformation in the financial sector, an inverse relationship is assumed to exist between financial regulation and access to financial services. To be more precise, prudential regulation is considered to be the main cause of inadequate financial inclusion, or of causing financial exclusion.

Association of Black Securities and Investment Professionals (ABSIP). The topic for discussion was "The Impact of Basle III on BEE finance." What is implicit in this topic is an inherent hypothesis that Basle III is intrinsically designed to have the undesirable effect of crowding out BEE financing, whether intentional or not. Soon after that, on September 2, 2012, the business supplement of the City Press published an article with the heading, "Banking System Security Trumps BEE." In this article, Mr. Ismail Momoniat, Head of Financial Sector Policy at the National Treasury, is quoted to have said that Basel III regulations will take precedence when it comes to dealing with BEE to safeguard South Africa's financial stability. Indeed, much of the narrative in this often emotional debate is based on the assumption that prudential regulation has a countervailing effect to financial inclusion.

I would like to argue that there is no tradeoff between these two public policy objectives. In fact, when correctly applied and adequately complied with, prudential regulation should enhance financial inclusion. Similarly, Basel III should have positive long-term spin-offs for BEE financing in South Africa.

Prudential regulation seeks to achieve three objectives: (1) to protect the public's deposits, especially those of the retail and unsophisticated members of the public, who save their hard-earned money with banks for safe-keeping rather than for investment, or wealth creation; (2) to ensure institutional soundness of every registered bank; and (3) to promote the stability of the banking system as a whole,

Basel III is an improvement compared with Basel II. It seeks to correct some of the weaknesses that the recent financial crises helped to identify regarding the amount and quality of the capital held by banks as well as the strength of their liquidity positions. Among others, capital in a bank is meant to enable it to absorb losses, both in normal times and in times of financial distress. Liquidity is meant to enable a bank to meet its liquidity obligations, such as the ability to meet withdrawals from the public at all times. To this end, Basle III requires banks to build financially sound balance sheets with enough resilience to sustain their services to the public even in times of severe domestic and international economic and financial crisis. Basel III compliant banking systems should progressively build adequate reserves through boom periods to be able to better absorb losses under the most severe economic slumps. Basel III will

DEALING WITH FALSE DICHOTOMY BETWEEN BASEL III AND FINANCIAL INCLUSION

also ensure that banks have adequate short and long-term funding from stable sources to meet their liquidity obligations. This is crucial to ensure that banks are resilient enough through economic cycles to continue their lending business in normal times and during periods of severe stress.

What happened in the US, and much of the developed nations, was a complete collapse of lending activities in general, but in particular in the areas of low-cost housing and SMEs. Even after huge fiscal and monetary support, the economies in those jurisdictions failed to produce any meaningful demand and therefore banking activity remained subdued despite government support.

The US did not adopt Basel II in 2008 when Australia, Canada and South Africa did. It is worth mentioning that these are the only three countries with developed financial systems that survived the worst effects of the financial crisis. The US was still implementing Basle I when the global financial crisis hit its banks in 2008. South Africa adopted Basle II.5 in 2011 and Basel III in 2013.

Despite the global financial crisis, credit extension remained positive in South Africa and the South African banks proved buoyant throughout the recent benign global economic climate. Even under the more rigorous Basel II and II.5 regulations and throughout the course of the global economic crises, South African banks continued their lending activities in general, including financing BEE transactions worth over R80 billion since 2007.

According to the Finscope (2002), only 39% of the adult South African population had access to basic financial services in 2002. Even while complying with the more rigorous requirements of Basel II since its adoption in 2008, the number of adult South Africans with access to banking services increased to 63% in 2011. South African banks extended over R175 billion for low-cost housing, developmental infrastructure, SMEs and black agriculture from 2004 right through the peak of the international crisis up until 2010.

It is only in South Africa that during times of worldwide financial circumspection, talk of asset bubbles developing in the banking system finds currency. With unsecured loans increasing at a rapid rate since 2009 to over R50 billion today, some have warned that this may lead to systemic instability, while others argue that it could result in the abuse of clients by leading them to unsustainable levels of over-indebtedness. Nevertheless, the problem South Africans face is not a lack of lending, or impairment to financial inclusion. The problem is the oversupply of credit to low-income people, this coming from a fairly healthy South African banking system.

Financial inclusion in South Africa did not improve despite a rigorous prudential framework. It improved because of it. South African banks are healthy because they had to operate under a strict prudential framework. We need only look at the events unfolding across the Atlantic to see the effects of a lax prudential framework to lending when it is needed the most.

Therefore Basel III is not the impediment to BEE finance it is made out to be. Basel III should indeed enhance financial inclusion and BEE finance. Empirical evidence in South Africa disproves the notion of a negative causal relationship between prudent financial regulation and financial inclusion. Evidence shows the opposite to be true.

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SOUTH AFRICA'S CURRENT EFFORTS TO BECOME A DEVELOPMENTAL STATE:

PROSPECTS, CHALLENGES OR WISHFUL THINKING?

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INTRODUCTION

Much has been written about South Africa's future pathways, though this conversation has been dictated by uncertainties. It is an essential conversation for any country aspiring to improve from where they are. Scenario planning is no guarantee of a smooth future, neither is it a promise of the demise of poverty in any country. Having a development plan is like a road map to a better, manageable and prosperous future. However, the future is mysterious and filled with key uncertainties. Hence, development planners are mindful of the fact that any of the predicted future pathways might not occur as planned; however, if they do occur as planned, it means taking advantage of the situation.

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DEVELOPMENTAL STATE IN THE SOUTH AFRICAN CONTEXT

Development is a broad phenomenon that stretches across many fields. Most importantly, development is central to the holistic functioning of any state, improving the general welfare and lifting up the poor out of the mire. South Africa's efforts to become a developmental state are simply a means of trying to create a better South Africa for the future. In this regard, the National Development Plan serves as a renewable road map to achieving South Africa's desired outcomes.

The African National Congress (ANC) has shown a clear interest in implementing a developmental state in South Africa. For example, 'Ready to Govern' (ANC 1992) and 'State, Poverty Relations and Social Transformation' (ANC 1998) clearly advocate this path.

Initially in the new democratic South Africa there was not enough political will to pursue the developmental state path. According to Netshitenzhe (2010), 'at the level of social outcomes there was in this period a growing recognition of the pedestrian nature of our rate of economic growth.'Though the process was slow, this apparently gave South Africa more reason to explore a developmental state. Weiss (2010:35) elaborates that South Africa has set itself the unusual and challenging goal of becoming a developmental state. In principle, this is a unique and noble enterprise: unique in so far as no state has ever self-consciously set out to become a developmental state; and noble in so far as such a project draws inspiration from the experience of certain countries that achieved growth with equity.

Theoretically, a developmental state should provide growth and improve the lives of its citizens by speeding up the rate at which the economy grows. The government should be instrumental in developing a shared vision.

Netshitenzhe (2010:4) clarifies that 'it was only in the post-2004 period that serious treatment of the concept of a developmental state started to find pride of place in ANC and government discourse.' This was some 10 years into democratic South Africa's development path. Therefore, progress over the next two decades would mean doing things differently (RSA 2011a). It was only in 2007, at the 52nd National Conference of the ANC that the South African ruling party publicly declared its commitment to building a developmental state (ANC 2008).

The renewed efforts for a developmental state in South Africa are evident in the New Growth Path and the National Development Plan (NDP). The aim of the NDP is clear and straightforward: as it 'aims to eliminate poverty and reduce inequality by 2030' (RSA 2012).

In the process of realising a developmental state, the policy framework of the country, and the policy legacy, should be borne in mind. Furthermore, the thinking of South Africa's ruling party, the ANC, and their tripartite alliance partners, — the South African Communist Party and the Congress of South African Trade Unions, — should be examined to determine whether their goals and ideologies are in line with the national agenda. 'Ideology and party factions make it hard for bureaucrats to undertake long-term planning based on rational calculations' (Qobo, 2013).

Qobo's statement draws attention to the complexities that arise when there is no consensus within a government. This could impede South Africa's progress, as from a government perspective cooperation and a unified effort is crucial. In its Economic Report on Africa, the United Nations Economic Commission for Africa warns that 'to become developmental States, African countries will have to build transformative institutions, and primarily a competent and professional bureaucracy' (UNECA 2011:108). This requires a government that is well coordinated in its efforts. For example, the many different voices coming from the tripartite alliance are a concern because they threaten the national agenda.

CENTRAL PLANNING INSTITUTIONS

The National Planning Commission (NPC) conducted massive consultative forums across South Africa in compiling the NDP. This feedback was vital in getting stakeholder buy-in; it also sought to make ordinary citizens an intrinsic part of the developmental process and unite the nation around a common vision.

Furthermore, the South African government created the NPC to coordinate national planning across all spheres of government and ensure that all government departments work towards achieving the same goal. The precedent was set by successful developmental states such as China and India which have long had central planning apparatuses. State interventions through central planning institutions in these countries have been integral to their respective economic growth.

Lack of coordination has always been an area of concern among South African government departments, and has had a negative impact on SA's long term planning. For example, the industrial policy spoke very little to the state enterprise's long term vision while the educational long term planning spoke very little to other departments' long term planning initiatives.

Public sector capacity needs to be enhanced to implement and support development. The National Treasury's review of the NDP acknowledges that 'service delivery in certain areas has fallen short of expectations due to lack of effective planning, inadequate state capacity and the absence of clear lines of responsibility' (RSA 2013a).

TRANSFORMING THE ECONOMY

A developmental state requires strong government led development, which plays an active role in the economy through supportive policies and infrastructure investment. The United Nations Development Report points out one of the major advantages in pursuing a developmental state approach is that 'governments can nurture industries that would not otherwise emerge due to incomplete market forces. It has enabled several countries of the South to turn industries previously derided as inefficient into early drivers of export success' (UNDP 2013:4).

Ivan Briscoe describes developmental states and their societies as having 'a persistent interest in social equity, and an ability to judge the right momen:

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to change economic models (from rudimentary industry to hi-tech)' (Briscoe 2009:6). Achieving social equity has always been an objective of the ANC led government and continues to be a central theme throughout the NDP. The NDP envisages an economy that is more inclusive and dynamic, one in which the fruits of growth are shared more equitably.

The ability of some nations' economies to transform from agrarian to technologically advanced is primarily due to their spatial planning, and investing in sector specific economies to nurture them. For example, one of the BRICS (Brazil Russia India China and South Africa) members - Russia - transformed itself into an advanced industrial state by using state planning committees.

The South African government realises those least represented in the economy and those who benefit least from the economy reside in the rural areas of the country which is marred by infrastructure backlog. With adequate investment and infrastructure development in rural communities the potential arises to improve economic growth in the country and simultaneously provide an opportunity to diversify the economy. A diverse economy can protect the country from harmful internal and external market forces.

The Department of Rural Development and Land Reform's strategic plan for 2011-2014 lists some of their objectives as providing and improving infrastructure, including Information and Communication Technology (ICT), effectively reducing spatial inequalities, and establishing village industries to create jobs and potentially find sources of untapped growth (RSA 2011). ICT's particular focus on rural communities played a significant role in India's economic growth. ICT has the potential to reduce the cost of education while increasing access to education, as well as to agricultural sector markets.

Local industries are able to prosper through the measures taken by a developmental state to grow a number of sectors' global competitiveness. This can be achieved through tax incentives, and by providing expertise and improving access to funding. Establishing niche economies allows for job creation as well as an exclusive share of the global market which it caters to. The United Nations report on Economic Development in Africa (2007: 6) supports the notion of utilising natural resources as a foundation for sustainable development:

Strengthening domestic resource mobilization offers many potential benefits to African economies. Firstly, it will reduce the dependency on external flows, thereby reducing one of the sources of damaging volatility in resource availability, Secondly, it will give African countries greater policy space, increasing their ownership of the development process as well as strengthening their State capacity.

The Special Economic Zones (SEZ) Programme was launched in 2012. According to Minister Pravin Gordhan's annual budget speech (RSA 2013b), the programme has already received funding to build world class industrial parks.

Transforming the economy requires a supportive policy framework to create an enabling environment for the intended outcomes to come to fruition. In order for South Africa to transcend its current level of development, state capacity should be vastly improved. The necessary skills need to be created to allow the country to be globally competitive.

TRADE

The National Treasury has acknowledged that growth in the economy has been slower than projected. GDP growth reached 2.5% in 2012 rising to 3.8% in 2013. The need to focus on South Africa's re-industrialisation is apparent: as exports grew by only 1.1% compared with imports which grew to 7.7% (RSA 2013a).

The NDC wishes to focus on specific areas to 'raise exports where South Africa already has the endowments and comparative advantage such as mining, construction, mid-skill manufacturing, agro-processing, tourism, green economy and business services' (RSA 2011a).

The Department of Trade and Industry's Industrial Policy Action Plan promotes initiatives to ensure local retailers commit themselves to local procurement (RSA 2013c). This is a strong catalyst in growing the economy, making sure that local products are supported locally.

PROSPECTS, CHALLENGES AND WISHFUL THINKING

Castells (1992) highlights one of the advantages of a developmental state: 'its ability to promote and sustain development through a centralized mechanism, helping eliminate redundancies and ensure cooperation and harmony'. The advantages of a developmental state are self-evident in the prosperity enjoyed by Japan, South Korea, Singapore and China.

Is South Africa a developmental state? The answer to this guestion is no, not yet. South Africa has a number of features that resemble a developmental state. However, it has many obstacles to overcome. South Africa is making efforts in the right direction: the National Development Plan of 2011 is testament to South Africa's endeavours

CONCLUSION

Forming the National Planning Commission was a step in the right direction on South Africa's path to becoming a developmental state. Its aim to unite the country to work towards a common vision will improve co-ordination and cooperation within the government, as well as between government departments, business and civil society.

Becoming a developmental state requires a committed attuned leadership in addition to a capacitated and able civil service. South Africa still faces a high number of skills shortages in key sectors. The challenge posed by globalisation is that the world can change in the blink of an eye. Being innovative in the 21st century is a prerequisite to becoming a developmental state and remaining globally competitive.

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EASTERN CAPE

TO FLY HIGH

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Clear and largely empty blue skies over the Eastern Cape represent valuable real estate that has the potential to help the province's aerospace industry to really take off.

The province is already home to at least two aircraft assemblers – the Mooney in Port Alfred and the RV series of the Aircraft Assembly and Upholstery Centre in Port Elizabeth. A third facility is ready to land: the Eastern Cape Development Corporation helped the Blue Crane Development Agency (BCDA) in the Cacadu District of the province to obtain funding to upgrade and expand the Somerset East Airport to Civil Aviation Authority (CAA) standards. Working in partnership with the aeronautical department of Wits University, a South African aircraft, the SkyWake, was designed as a platform to establish aircraft and aerospace manufacturing businesses in South Africa. Somerset East was also identified as the new home for the assembly of the Italian-designed Albasera Aircraft. In addition to its upgraded airport, the attraction of Somerset East is its largely uncluttered airspace and favourable weather conditions.

OPPORTUNITY FOR THE EASTERN CAPE TO FLY HIGH

These two factors also encourage nine flying schools in the province – two in East London, one in Port Alfred and six in Port Elizabeth. A new commercial flight training academy with flight simulators for wide-bodied aircraft is also due to open in the Port Elizabeth suburb of Richmond Hill. A peek into the hangars at most of the airports uncovers a thriving maintenance and refurbishment industry as well. East Cape Aviation, for example, a leading company in South Africa, maintains and sells Russian, Romanian and other aircraft. Zulu Aviation in Port Alfred is a service centre for Robinson helicopters and serves the entire province. There are many more companies providing upholstery, maintenance, refurbishment and other services, including the manufacture of replacement carbon fibre components. Over weekends the skies also drone with the sound of home-built, or experimental aircraft. In short, there is a local market, an existing skills base, and a natural advantage – three of the most important factors for a sector to be successful.

However, for a sector to be globally successful, there has to be a shared vision between the authorities and private enterprise. This vision needs to drive policy and investment promotion. In a sector as diverse as aerospace there also has to be focus. Like Icarus, there is always the temptation to fly too high – which inevitably results in a crash. Focus is vital because there is no limit to how high and far the aerospace industry can reach. It incorporates research and development, design, manufacture, support, maintenance, conversion and upgrade of rotary and fixed wing aircraft, satellites, satellite launch and tracking systems, air traffic control systems, unmanned aircraft, and weapons systems, as well as their relevant subsystems and components (Kraemer-Mabula, 2008) As can be seen, there are strong links between aerospace and the defence industry. Opportunities that bear exploring include the refurbishment of military aircraft (most African air forces are using dated equipment which needs to be refurbished and upgraded), testing of military aircraft and weapons systems, and manufacturing. Another of the Eastern Cape's strengths – the auto industry - comes into the equation when one starts exploring production. The lines between aerospace and automotive technologies are becoming increasingly blurred with the rapid uptake of information technology in vehicles and the move to carbon fibre and lighter metal compounds.

Systems once considered too expensive and too complex for anything on the road other than perhaps Nascar, Formula 1 or ultra-sophisticated (read "expensive") cars, are making their way into suburban runabouts. ABS brakes are an example. They were developed in 1929 for aircraft use by French designer Gabriel Voisin. More recently, Alex Heslop, Chief Programme Engineer for the new Range Rover, told American-based specialist publication Automotive Industries, 'we effectively used aerospace assembly techniques to make a body shell capable as a Range Rover needs to be, but 25kg lighter than the 3 Series BMW and 85kg lighter than Audi Q5. It has the world's largest aluminium body shell – one that is Land Rover capable, but lighter than CD segment cars'. What we are now seeing is a convergence of technologies in the bodywork and cabling within cars, airplanes and even satellites. Designers of all three are faced with the same challenges – shed weight, increase strength and reduce costs. Aluminium alloys, which have been used in aircraft since the 1930s, are working their way down from the high end to runabout bodies. They are, of course, already found under the hood in engine components. This convergence has historical roots - during the World War II years, automotive industries were called 'Automotive & Aviation Industries' (Richardson, nd)

In the Eastern Cape the often unrecognised strategic advantage that the motor industry brings to the province is the support infrastructure that sustains it. It is only thanks to the motor industry that the province has the skills to service

robots, to design production lines, to make or maintain tools, and to programme CNC machines. Most importantly, perhaps, the province has the logistics chains in place which source components from around the world and deliver them just on time, or just in sequence to the production line, and also to export value added components and the fully built up vehicles.

One should also not ignore the capabilities in the boat building and board crafting sectors in the province. Companies in East London, Port Alfred, Port Elizabeth and St Francis Bay all build sophisticated composite boats, surfboards, kayaks and other sea-going craft for the local and export markets.

The connection that transport on water and land have with air in the aerospace context is the move towards composites. Aluminium in both the auto and aero industries is facing increasingly stiff competition from carbon fibre. First used in aircraft manufacture in the 1940s, carbon fibre has since made its way through the aerospace, boating and sports car industries into automotive design and manufacturing. World polymer production overtook that of steel in the 1970s. Scientists are working hard to replace synthetic polymers with sustainable and renewable organic polymers. Growing your own body parts beats having to rely on fossil fuels as a base. The use of organic polymers in the auto and aerospace industries is, of course, well established – the rubber in the tyres, hoses and other fittings comes from trees.

For the Eastern Cape, the opportunity lies in bio-plastics and other plant-based components for vehicles as well as bio-fuels. Aircraft operators have to switch to biofuels to meet emission requirements. Studies have shown that the Eastern Cape can grow the soya beans that serve as the feedstock for jet fuel, or bio-kerosene (Blignaut & Taute, 2010)

It is a growing opportunity, to coin a phrase. The price of steel is going up, but the cost of composites, once high, is coming down. For instance, materials engineers have taken a new look at carbon-fibre composites common in aerospace and have achieved significant savings by introducing new material forms such as no-crimp fabrics (NCF), and intermixing high-cost carbon and less-expensive fiberglass fibres in the material. But, there are many other uses for natural fibres.

Due to their low density and cellular structure, natural fibres have very good acoustic and thermal insulation properties and thus many advantages over glass or rockwool fibre. Among natural fibres the bast fibres extracted from plant stems such as jute, kenaf, flax, ramie and hemp are widely accepted as the best candidates for reinforcements of composites due to their good mechanical properties. Hemp was shown to have very promising tensile properties for applications where mechanical properties are a requisite (Cristaldi, Latteri, Recca, & Cicala nd). Studies have shown that the Eastern Cape is a natural producer of hemp (Blouw, 2005). Combining aerospace and automotive market customers for natural fibre-based composites could well be the stimulus required to transform the many dormant irrigation schemes and hectares of uncultivated farmland back into productive entities.

Sectors develop and flourish when the authorities create a nurturing and supportive policy environment. In this regard the Eastern Cape's aerospace industry is set to take off. The argument for focusing on the aerospace sector is strengthened when one measures the huge potential that has been identified against the objectives of the National Development Plan (NDP), which are as follows (RSA 2012).

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PHASE 1

Emphasis will be on absorbing the unemployed, especially young people, into economic activity. The core aim is to expand the number of employed people from 11-million to 24-million by 2030.

If one takes the Coega Industrial Development Zone as an example of successful job creation, one sees that it is the agro-industrial investments which are supporting jobs, both in the Nelson Mandela Bay Metro and the rural areas. Thousands of relatively low-skilled workers are kept in gainful employment by Dynamic Commodities and the Coega Dairy. The same would be true of bioplastic and natural fibre composite clusters.

Doubling the annual expansion in high-skills supply and improving education throughput at primary and secondary levels. Skills are not developed in a vacuum. There has to be a market for the graduates. Eastern Cape schools and tertiary institutions can build on their existing competencies in order to support the aerospace industry. All the building blocks are in place – the universities have chemistry, pharmaceutical, engineering, computer science, botany and agricultural departments, while the FET colleges can provide the welders, plumbers, fitters and other skilled workers needed.

PHASE 2

The second phase of the plan (2018 to 2023) envisages South Africa focussing on diversifying its economic and industrial base. As has been explained above, the Eastern Cape is in a strong position to diversify by focusing on growing its aerospace sector. South Arica is among a handful of emerging economies that have managed to establish their own aerospace industries. The others are Taiwan, Indonesia, Brazil, and China (Kraemer-Mbula, 2008)This puts South Africa in a commanding position on the African continent, and in sub-Saharan Africa, in particular.

Further support is provided by the Department of Trade and Industry's Industrial Policy Action Plan 2012/13 - 2014/15, which identifies three sector clusters that are critical to the industrial development of the South African economy.

Cluster 1 - Qualitatively new areas of focus

- Metals fabrication, capital and transport equipment sectors, particularly arising from large public investments
- Upstream Oil and Gas
- · 'Green' and energy-saving industries;
- · Agro-processing, linked to food security and food pricing imperatives
- Boatbuilding.

Cluster 2 - Scaled-up and broadened interventions in existing IPAP sectors

- Automotive products and components, and medium and heavy commercial vehicles
- · Chemicals, cosmetics, pharmaceuticals and plastics
- Clothing, textiles, footwear and leather
- Biofuels
- · Forestry, paper, pulp and furniture
- Creative and cultural industries
- · Business process services.

Cluster 3 - Sectors with potential for developing long-term advanced capabilities

- Nuclear
- · Advanced materials
- · Aerospace, Defence
- Electro technical and ICT (Department of Trade and Industry)

Aerospace in the Eastern Cape could address elements of all three clusters. In Cluster1, aerospace would be interested in metals fabrication, green' and energy-saving industries, agro-processing and boat-building if one looks at the synergies in the fields of composites and electronics. In cluster 2, aerospace could foster automotive products and components, chemicals and plastics, and biofuels. For Cluster 3 the choices could be advanced materials, aerospace, defence, and electro technical and ICT. There are few other industries which have as broad a capacity to expand across the priority sectors identified by the Department of Trade and Industry (DTI).

The DTI goes further and provides incentives to facilitate the necessary lift for the aerospace industry to really take off. They include the Technology and Human Resources for Industry Programme (THRIP), the Incubation Support Programme (ISP), the Capital Projects Feasibility Programme (CPFP), the Manufacturing Competitiveness Enhancement Programme (MCEP), the Enterprise Investment Programme (EIP), the Foreign Investment Grant (FIG), the Sector-Specific Assistance Scheme (SSAS), the Support Programme for Industrial Innovation (SPII), the Seda Technology Programme (STP), and the Section 12I Tax Allowance Incentive (12I TAI) (RSA, 2013)

What has been established, therefore, is that the Eastern Cape has the capacity, and the natural physical advantages to make an aerospace industry soar. There are also crucial synergies that will help bolster other sectors, such as automotive, watercraft manufacturing, agriculture and information communication and technology (ICT).

The next challenge is to identify on which sectors of the vast aerospace market the Eastern Cape should focus. With many millions of offset funds from the arms procurement programme still not spent, an argument can be made to focus the province's sights on the defence sector. However, since the early 1990s, the international defence industry has been restructured significantly. The changes - and the challenges they pose for governments around the world were summed up over a decade ago by Jocelyn Mawdsley (2003) of the Bonn International Centre for Conversion: 'At the upper level of sub-systems supply, a confusing array of joint ventures, cross-shareholding and management companies masks an increasing concentration of ownership in the hands of relatively few companies as horizontal mergers increasingly give the impression of quasi monopoly provision'. However, Hayward (2000) argues that the need to insert leading-edge civilian technology into defence systems is also hastening the globalization process, as is the need to cut development time for new systems and the growing tendency for cheaper off-the-shelf procurement further down the supply chain. The revolution in military affairs has vastly increased the importance of civilian technology to defence platforms. The firms that supply these key components (such as embedded software) are frequently global suppliers, thus leaving prime contractors and governments reliant on global firms with little incentive to abide by restrictive defence contracting arrangements. Thus while governments or the European Commission may worry about losing control over key industrial assets (prime contractors and upper level subsystems suppliers) and thus core technology, they have de facto already chosen to lose control over the flow of defence technology because of these supply chain developments (Mawdsley, 2003).

The same argument can be made for the automotive industry in the Eastern Cape. Globalisation and the return of the major manufacturers which had disinvested during the 1980s have largely disempowered the local industry. Decisions on models, manufacturing systems and procurement are made centrally in far-distant boardrooms, with little attention to the region's needs and

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priorities. Research and development and intellectual capital have also moved offshore for the original equipment manufacturers (OEMs) and Tier 1 suppliers. Any expansion of the aerospace industry that leverages off the strengths of the Eastern Cape's automotive sector needs to focus on the Tier 2 and lower suppliers.

Another challenge is the rationalisation of the industry in South Africa – which mirrors global trends. According to Haines (2014), the 1990s witnessed a series of interlinked changes in the procurement relations between the defence companies and the state. Rather than being awarded cost plus contracts from defence ministries, there has been an increase in privatization and commercialization. With a shift to more competitive tendering and declining demand there followed closures and takeovers, with fewer or single suppliers in the relevant sectors (Haines, 2014).

Haines believes that South Africa is in a good position to serve the African market. 'It has been estimated that for 2012 sub-Saharan Africa spent \$22.7 billion on military expenditure and that the trend in such spending has been upwards since 1988 (Radebe, 2013). South Africa has both proximity and political advantage in exploiting this growing market. Current African markets yielding significant new potential opportunities for export are Nigeria, Kenya and Algeria (Radebe 2013). There is substantial existing penetration in Zambia, Angola and Kenya'(Haines, 2014)

It is necessary to drill down farther in order to identify the aerospace products and services on which the Eastern Cape should concentrate.

The global aerospace industry can be divided into five tiers.

- Tier 1: The complete system the entire aircraft with all the required sub systems already fully integrated, e.g., the Rooivalk helicopter.
- Tier 2: Major sub-systems. These sub-systems comprise a number of minor subsystems, e.g. main airframe sections (such as the wing), undercarriage and complete avionics system.
- Tier 3: Minor sub-systems. These are a defined assembly of components that
 are indivisible into other systems, e.g. aerodynamic control surfaces (flaps),
 gearboxes, navigation systems, weapons and ordinances and computer
 systems.
- Tier 4: Components. These are devices with a clear function that are of no use unless integrated into a Tier 3 system, e.g., electrical circuit boards, machined engine parts and valves and pumps.
- Tier 5: Parts. These are units that can be defined as a single monolithic part, e.g. un-machined castings, shafts, rivets and electrical components.

Globally, the Tier 1 producers have adopted a business model that designs sub-assemblies and manufactures components using an international network of risk-sharing partners. Under this (broker assembly type) model, top-tier producers concentrate on overall aircraft design, systems integration and sales and leave the responsibility (production and financial) for incorporating the latest technology and achieving performance benchmarks to lower-tier suppliers (partners). This change in production arrangements has forced the lower-tier suppliers to develop their own systems integration skills, and embrace greater financial responsibility and quality control management than previously, and more generally, raise their product competitiveness (Avionics Magazine, 2006). The demands of this new order are such that one can only hope to compete within a very narrow range of components and sub-assemblies.

The change has particular relevance for the South African aerospace and defence industries. Due to its economic isolation during the Apartheid policy

era, South Africa developed the capability to manufacture and design complete aircraft, so the Tier 1 type thinking has to be 'undone' (Haines, 2014)

As with the motor industry, the barriers to entry for new entrants are formidable. New entrants at all levels have to compete on quality, price and levels of performance. New entrant penetration into the aerospace and defence markets requires overcoming considerable 'outsider' disadvantage barriers, building up and retaining sufficient critical skills mass within the industry, and achieving low costs in production (Haines, 2014).

As we have seen, the Eastern Cape has the advantage of having companies already supplying the aerospace industry. There is, therefore, a base on which to build. It is only by strengthening this base that the province will be able to create opportunities for new entrants, which would mainly be from the lower tiers given the global consolidation of the industry. It is a highly competitive sector, with other emerging countries such as Brazil, India and China challenging for market share.

Local and provincial government have policies in place to support the industry. Since 1996, all government and state-owned enterprise purchases or lease contracts (goods, equipment or services) with an imported content equal to or exceeding US\$10-million have been subject to Industrial Participation (IP) obligations (RSA, 2007:5). For civilian contracts, the value of the offsets should comprise a minimum of 30% of a bid's imported components. For defence contracts, the offsets should comprise 50% of a bid's imported components (RSA, 1997).

All that is missing, therefore, is a clear vision and rollout plan driven by a provincial champion supported by the public and private sectors, the unions and civil society. As has been shown in this brief study, the potential benefits are huge. Uniquely, a high-flying aerospace industry built on the natural strengths of the Eastern Cape has the potential to create jobs and wealth in both the major cities and rural areas.

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MOHAIR: EASTERN CAPE'S

WONDER PRODUCT

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This article examines the history of the mohair industry in South Africa and outlines South Africa's dominant position in the global mohair industry. It further locates the geographic centre of the industry in the Eastern Cape Province and describes some of the industry's major achievements, challenges and opportunities. It particularly looks at latent potential in the mohair industry and opportunities for developing greater synergies with other emerging initiatives in the Eastern Cape, for example, the development of green energy that can create the conditions for taking advantage of the country's and province's dominant position in the global industry and realising the desired development goals and greater employment opportunities in a poor region.

A prominent sign in a shop at the airport in Nelson Mandela Bay Metropolitan area proclaims Port Elizabeth as the 'The mohair capital of the world'. This is a surprising, yet largely accurate statement. The city is the centre through which the lion's share of the global mohair trade passes. This has varied around the 90% mark. Despite a decreasing production rate between 2002 and 2010-2011, South Africa still produced approximately 54% (at 4 million kilograms) of global mohair in 2010 (RSA, 2011a).

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South Africa is recognised for the high quality of its mohair, which is generally preferred to that of other producers. Mohair production has varied widely over the last one-and-a-half decades, as have producer prices. In 2001 production was just over 1,500 tons, but jumped to over 4,500 tons the following year and then back down to just over 3,000 tons in 2003 (RSA, 2011a). In 2009, global production of mohair stood at approximately 5,000 tons, of which approximately 2,700 tons came from South Africa. This level was far below the production levels of the 1990s where global mohair production was of the order of 25,000 tons per annum. There are several reasons for these fluctuations that will be discussed below. Mohair producer prices, reflecting the balance between supply and demand, have also varied widely between more than R118/kg and as little as R 40/kg depending on the mohair's quality and the Rand exchange rate with the Euro and the US dollar. Mohair has contributed between R150 million and slightly over R250 million per annum to the South African economy over the last decade. In 2012, it amounted to R229 million (RSA, 2013). Prices during 2013 have been up approximately 10-12% on 2011. The Eastern Cape is the centre of the mohair industry in South Africa and 99% of the production and export of mohair in 2010 occurred in the province (RSA, 2013). The industry is therefore particularly important as it is centred in one of the poorest and least developed areas of South Africa in the harsh arid areas within and adjoining the Karoo, where job opportunities are scarce and livelihood options limited.

Mohair can be viewed as something of a 'wonder' product. It is an attractive fibre, lightweight, very warm, absorbs dye well, reflects a shining lustre, is crease resistant and does not matt into felt, like wool does. It is extremely durable and flame resistant and is often used in fibre blends. With all of these qualities, it is remarkable that it is not a much larger product of choice in the global market, especially as there has been a global return to natural fibres. It is most commonly used to make scarves, rugs, fashion apparel, upholstery, curtains and other décor items like carpets. However, new applications are emerging for this product, including in the industrial and medical fields. For example, mohair is very absorbent and is particularly appropriate for making specialised socks for diabetics and hikers. Its exceptionally high durability makes it appropriate for use in high density use areas like concourses and its insulating qualities makes it useful for noise and temperature control. However, mohair is not an inexpensive product and there are several challenges facing the industry. These will be discussed below.

The sustainable development of the Mohair Industry in the Eastern Cape needs to be viewed in the context of the South African Government's National Development Plan 2030 (NDP). Despite several misgivings concerning the NDP, it provides the government an official economic developmental policy framework. The NDP is a multi-dimensional framework that sees progress in certain sectors and areas serving to advance progress in other sectors. It specifically proposes to enhance human capital, improve productive capacity and infrastructure to raise exports, increase resources for investment and reduce reliance on capital inflows, and increase exports, focusing on those areas where South Africa already has endowments and comparative advantage, such as midskill manufacturing, agriculture and agro-processing, and tourism (RSA, 2011b). The proposals that are outlined below for the rejuvenation and expansion of the Mohair Industry through the use of 'green energy' for new production centres and involving considerable skills development, are very much in line with the less contentious elements of the NDP.

Angora goats were first introduced into South Africa in 1839. Since then the mohair industry has flourished. The goats are shorn twice a year which allows two seasons of sales by auction – one in summer and one in winter.

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There are now an estimated 910,000 Angora goats in the country (RSA, 2011a: 27). There are six main buyers, two auction ports, two brokers and more than twenty-six manufacturers. Willowmore, Aberdeen, Somerset East, Cradock, Jansenville, Port Elizabeth, Graaf-Reinet and Beaufort West are the main production areas for mohair. All of these towns, save Beaufort West in the Western Cape, are located in the dry, western parts of the Eastern Cape Province. Beaufort West only contributes approximately 7% of the total production, while Willowmore, Aberdeen, Somerset East and Cradock produce 18%, 17%, 16% and 14% of the total, respectively. While Jansenville is almost synonymous with the Mohair Industry (the latest International Mohair Summit was recently held there), it only contributes 13% of the total mohair production. Most of these towns, with the notable exception of Somerset East, have little industrial base and have not been growing economically. The Chris Hani District Municipality, predominantly around Oueenstown, has also produced small amounts of mohair.

Internationally, the United States ranks second in mohair production with 200,000 Angora goats, mostly reared from Texas. It is worth noting that Lesotho is also a producer, but the quality of the livestock has decreased and the mohair product from Lesotho is not very attractive on the world market. It is an area in which South Africa could use its expertise and its dominance in the market to assist its neighbour and contribute to regional economic development.

Italy, with approximately 38% of South African mohair imports, is the number one buyer of South African mohair globally. China has been growing in importance and now imports approximately 31% of South African mohair. The United Kingdom ranks third at approximately 16% (RSA, 2011a). This illustrates the importance of these three countries for the South African Mohair Industry with its total share of 85%. There are several other smaller purchasers, but in total they make up only 15% of mohair purchases from South Africa.

Much has been done to develop the Mohair Industry in South Africa. Mohair South Africa, a non-profit organisation, forms the executive arm of the industry and has been active in support of the industry as a whole. It has promoted and supported the International Mohair Summits; it provides market information and an industry review; it provides a link to manufacturers and retailers; it has assisted in establishing the Mohair Meander Tourism Route; it supports the Mohair Empowerment Trust for emerging farmers and it performs a host of other support activities and promotional events for the Mohair Industry. The South African Mohair Growers Association is the representative body for mohair farmers in South Africa. It was initially formed in 1896, but disbanded in 1904 and only re-established in 1941 (Grobler, 2012). It has played a major role in Black Economic Empowerment in the industry and was the main mover behind the Mohair Empowerment Trust that supports new entrants into the Mohair Industry (MET, 2011). The Mohair Trust is another separate institution that looks after the assets of the industry as a whole and whose establishment was supported by the South African Mohair Growers Association.

Many achievements have been realised in the South African Mohair Industry. The Mohair Meander, partly modelled on the Midlands Meander in KwaZulu/Natal, was established in 2009. The Mohair Meander initiative particularly seeks to diversify and grow the potential benefits of the Mohair Industry; however, it has been somewhat slow to take off. Several other initiatives like the establishment of the Mohair Museum, the Mohair Empowerment Trust and the International Mohair Summits have all been successes. Still, the feeling persists that the industry could be more successful and the Eastern Cape could derive greater benefit from its dominant position in the production of mohair.

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The Mohair Industry in South Africa faces a number of challenges. These occur all along the value chain and include:

- · Dropping production.
- Droughts and unseasonal weather events. Angora goats are very susceptible
 to sudden changes in temperature, particularly if this is accompanied by wet
 and windy weather. They require careful and reliable management or losses
 can be heavy.
- Theft of stock. Small stock theft in many parts of the Eastern Cape is eroding the profitability and viability of the mohair industry.
- Increasing land degradation and the spread of noxious plants like 'tylecodon', 'wallichii', or 'krimpsiekbos' is limiting production.
- Significant global price fluctuations, partly related to the fact that mohair, as it is
 currently used, is something of a luxury good and forms a part of discretionary
 spending for most buyers. It is also sold very largely through an auction process
 and hence subject to a supply versus anticipated future demand estimation. The
 demand for natural, as opposed to synthetic fibres is, like the choice of one natural
 versus another natural fibre, captive to swings in fashion. Seeking new applications
 and diversifying mohair products is one way of addressing this challenge.
- Limited global demand for the product. Demand can be stimulated through creative marketing and other approaches.
- Limited uses of the mohair product.
- The limited local beneficiation of the product. Most mohair is still exported as 'tops' and too little value is added within the Eastern Cape.

Despite the challenges, there are many interesting opportunities emerging from the industry. These include:

- · Developing new mohair products and applications.
- Establishing new mohair producer cooperatives using disadvantaged community members and emphasising women. This could serve to address the security challenge.
- Establishing a new production, processing, design and manufacturing centre
 that could serve to increase mohair production and add value to the product
 by initially processing, designing and manufacturing stylish products that can
 compete on the global stage and, indeed, lead global trends.
- Generating 'green energy' in the mohair growing region including wind (the Cookhouse Wind Farm) and waste-to-energy. If the whole mohair supply chain is then adapted to be as 'green' as possible, this would allow one to market mohair from the region as a 'green' product. The new production, processing, design and manufacturing centre could be run on 'green' (wind or waste-toenergy) power. This would hold significant marketing advantages on the global stage. The product readily lends itself to 'green' energy, as angora goats have considerably less of an impact on the environment than other similar stock units. 'Green marketing' is a relatively new, but very rapidly growing phenomenon. In a comprehensive report, 'Green Marketing: A Global Strategic Business Report' by Global Industry Analysts Inc. (2012), it is noted that 'the global market for Green Marketing is projected to reach \$3.5 trillion by 2017'. Making a product 'green' and marketing it as such does not always command a premium price, although this is guite frequently realised. However, it does provide better access to markets, as the product is generally preferred to the equivalent 'nongreen' product. 'Green marketing' should not be viewed as the panacea for marketing challenges that will transform the demand for a particular product, but it can certainly provide an additional incentive to buy and thus stimulate a significant degree of promotion for a product like mohair which is not really a basic product, but rather a 'discretionary spend' item. To further stimulate the industry and move it towards greater local beneficiation, the proposed new production, processing, design and manufacturing centre could be formed as a partnership with the French Development Agency, or with a grouping of young, emerging French high fashion clothing and textile designers. The product would immediately gain greater access to the markets of Europe

and the world, and would serve to powerfully promote mohair. With some innovative thinking on marketing, this could serve to grow the demand for mohair and create the opportunity for generating more jobs in the sector.

What is needed is a detailed analysis of the entire value chain of the Mohair Industry in South Africa. This will provide the information and options that can be used by industry stakeholders to ensure future growth and to realise the latent potential of the Mohair Industry. The government and industry stakeholders need to work together and systematically address all elements of the industry supply chain in a way that maximises the opportunities and addresses the challenges. This needs to be an holistic approach. There is not much benefit to be derived from additional production if the market demand for the product is limited. Market demand can be stimulated through creative and effective marketing approaches and strategic partnerships. By the same token, additional demand without a concomitant increase in supply is likely to see other producers simply moving in to take market share. The decline in levels of production is cause for concern. This has not vet had a significant impact upon South Africa's overall market share. If South Africa's share of global production falls, it will result in the country having less leverage to promote and grow the market further and use the growth to address development aims in the region.

The industry's Empowerment Trust is doing good work and there is still considerable scope to broaden participation at all stages of the supply chain. Angora goats are potentially a good cooperative community business. Start-up costs for angora goats are not high, particularly since herds can grow rapidly. If the community co-operative is well structured and community members are genuinely interested in the business and see their place in the overall supply chain, then the endeavour could prosper. Angora goats are not as robust as most goats.

They require committed and diligent management. Sudden cold weather, particularly if accompanied by rain, can result in heavy losses. They are also susceptible to noxious plants. Another challenge with small livestock farming in the Eastern Cape has been theft. Small livestock is easy to steal and transport. However, community members could organise their collective security and arrange a local security intelligence network that could greatly reduce stock losses. This would only succeed if the community in the farming areas genuinely perceives the collective benefit from the business. While not all members of a community can directly be involved in raising angora goats, many households could be involved in some element of the mohair supply chain.

For this to have any real local resonance in terms of jobs and economic development, the industry as a whole will need to be developed further. As with most products, the main value adding processes, and hence profitable aspects of production occur higher-up the mohair supply chain where the actual manufacturing takes place. This is potentially one of the areas of the supply chain that really provides the best opportunity. Processing the fibre is one thing, but turning it into fashionable, high-value garments and other unique products is where South Africa is not yet maximising the potential of the resource. Some wonderful products are available. A number of design students from Nelson Mandela Metropolitan University have produced high quality, creative mohair garments. The size of these operations is still small. Quality design for higher levels of production which target the markets in Europe, North America and the East is a challenge. The cost of high-fashion mohair suits and other apparel is very high and most of these products still flow from Italy. A strategic partnership with a company or development agency to match some young, recognised and emerging designers from France, for example, with young emerging South African designers within a 'processing, design and manufacturing centre' could generate a great deal of opportunity and provide the means to 'add value' in the Eastern Cape. If this is accompanied by an increase in the production of

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mohair and the 'growing' of the global mohair market, then all could gain. Italy, the biggest buyer of mohair 'tops' from South Africa, could still be supplied with the product and produce garments in Europe, but the Eastern Cape could enjoy some of the benefits through adding value at source of production. Such an arrangement could also, in itself, serve as a marketing exercise. It would increase the exposure of the French fashion design houses, and hence the market, to the advantages of mohair. The approach suggested above is but one example of how the industry could be developed further. Diversifying through developing new products is another aspect.

South Africa does not yet appear to be taking full advantage of its dominance of the Mohair Industry. More effort needs to be invested in growing the market, increasing production, addressing the challenges and adding more beneficiation locally. The synergies with niche market tourism such as historical and cultural tourism, 'green energy' and other prospects need to be further explored and developed. Efforts will need to be based upon firm evidence and then employ creativity and innovative partnerships.

Mohair is a relatively lightweight, high-value product; at least once it has been fashioned into garments and similar final products. Once the supply chain has been 'greened' there will be opportunities associated with the new airport at Somerset East that could see specialised mohair products directly linked to markets abroad and able to guarantee very swift delivery through transportation by air. Its lightweight quality also serves to limit the product's emissions footprint and provides an additional element to its 'green' credentials.

What is being proposed is a 'virtuous circle' of 'green' products emanating from the depressed western region of the Eastern Cape Province. Once the Mohair Industry has been revived and expanded, there is no reason why efforts could not be focused on other products that could be produced locally.

Nelson Mandela Metropolitan University has a dynamic design centre that has produced students who have made an important contribution to the mohair fashion industry. The University is well positioned to carry socio-economic research of the Mohair Industry in partnership with the government (provincial and local), Mohair South Africa and the South African Mohair Growers Association. The Mohair Industry holds too much potential importance and too many potential benefits for South Africa and for the Eastern Cape Province in particular, to ignore the opportunities for growing and diversifying the industry to the benefit of all.

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SUPPLY CHAIN ACCOUNTING AND EMPLOYMENT PRACTICES

(SCAP-EMP) PROJECT1

Pauline Dibben²

In economies experiencing rapid growth, companies need to 'aim high' when managing accounting and employment practices down the supply chain.

Forging relationships with value and meeting labour standards are essential for achieving competitiveness throughout the supply chain and both are the focus of a new ESRC-funded research project from Sheffield University Management School (ESRC Grant reference: ES/K006452/1)

The three-year project aims to explore the current role, and future potential of supply chain accounting in facilitating complementary HR practices and improved labour standards within the automotive and textile industries in Brazi and South Africa. Principal Investigator, Professor Pauline Dibben, Associate Dean for Research at Sheffield University Management School, explains: 'SCA: Emp [Supply Chain Accounting and Employment Practices] looks at the extent to which companies in the textile and automotive sectors consider employment practices in their accounting. But not just that – it's whether they work well with their supply chain and understand and engage with them.'

¹ Read more about SCA-Emp online: http://scaemp.group.shef.ac.uk

² Research team also includes: Debby Bonnin, John Cullen, Phil Johnson, Juliana Meira, Luiz Miranda, and Geoffrey Woo

SUPPLY CHAIN ACCOUNTING AND EMPLOYMENT PRACTICES (SCAP-Emp) PROJECT

'This research will be fascinating, especially since the formal economy is so important in South Africa and Brazil, where many workers do not have formal employment. It will be interesting to see the extent to which organisations keep careful account of social issues such as the number of women working and how much they are paid, how many disabled people they employ and how they manage people from different ethnic backgrounds.'

The two countries, South Africa and Brazil, were selected for study since they form part of the BRICS (Brazil, Russia, India, China and South Africa) group of emerging markets with a significant industrial base. In addition, both countries presently enjoy sustained growth, the global financial crisis notwithstanding, but have high levels of unemployment and insecure work. Both the automotive and textile sectors within Brazil and South Africa are highly globalised and were historically well protected.

The study has important academic implications, since it is expected to contribute toward the development of theory in three broad areas. Firstly, the social accounting literature has tended to focus on environmental and community sustainability rather than labour standards and employment relations, and has generally neglected inter-organisational relationships (Owen and Swift, 2001; Cullen, 2009). This study will explore the role and potential impact of supply chain accounting (SCA) tools on employment practices and relations. Secondly, over recent years, increasing academic attention has been paid to employment relations within national and international supply chains. An increasingly influential school of thought has been GCC (Global Commodity Chain) theory, which focuses on imbalances of power relations between the parties involved in the flow of commodities from the raw materials stage to the final marketable good, and the extent to which a dominant party - the core firm or end distributer/ retailer - impacts on subordinate supplier practices (Gereffi and Korzeniewicz, 1994). Thirdly, the study will advance debates on employment relations by highlighting the extent to which fair and equitable practices may be promoted through supplier networks and the use of different SCA techniques.

The investigating team includes an international spread of academics from different disciplines to ensure a comprehensive degree of coverage. Professor Dibben's co-investigators include Sheffield University Management School colleagues Professor John Cullen and Professor Phil Johnson, Professor Geoffrey Wood from the University of Warwick, Professor Luiz Miranda and Dr Juliana Meira from the Federal University of Pernambuco, Brazil, and Dr Debby Bonnin from the University of KwaZulu-Natal, South Africa. Two PhD students, Caroline Linhares and Gareth Crockett, complete the team. The team draws on expertise in employment relations, supply chain accounting, supply chain management, and research methods and has a strong record of collaboration in supply chain accounting (e.g. Meira, et.al., 2010) and employment relations in emerging economies (e.g. Bonnin et al, 2006; Dibben et al, 2011; Wood and Dibben, 2008; Wood et al, 2011).

The project team is supported by a strong advisory board boasting academics and practitioners from three countries whose knowledge and experience will be highly complementary to the international project. The advisory board includes members of the Chartered Institute for Personnel and Development (CIPD) and the Chartered Institute for Management Accountants (CIMA).

Promoting labour standards and influencing change are key aims of SCA-Emp, as well as formulating a project of high academic value and strong research impact. Professor Dibben adds: 'We want to establish a formula for best-practice – much of the project is about developing a supply chain accounting and employment practices toolkit. It will benefit a number of parties, including academics, since supply chain accounting and employment aren't brought together in research very often, and the project should therefore contribute

toward the development of supply chain accounting and global commodity chain theory. It's also exciting because we are focusing our research on South Africa and Brazil – two emerging economies. Accountants, CEOs, CFOs, HR specialists and other practitioners should be engaged in the progress and conclusions of SCA-Emp, as well as employment rights lawyers, politicians and practitioners in other emerging economies. However, the workers themselves are perhaps the most important stakeholders.'

The team is keen for the project to help organisations become more aware of what happens in their supply chain. Labour standards are a very topical issue and public awareness is growing due to news coverage of working conditions and fatal incidents in factories all over the world. Professor Dibben wants participating organisations to benefit from being involved in the project. She hopes that from the research they will learn where they could improve practice further. If readers wish to find out more about the project, and get involved in future activities, please refer to the SCA-Emp website: http://scaemp.group.shef. ac.uk. The website will be updated as the project progresses.

Sheffield University Management School's focus on impactful, socially-responsible research forms the ideal environment for this globally significant project. The Triple Crown accredited school is the largest department in the University of Sheffield's Faculty of Social Sciences and moved into modern new facilities in June 2013.

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REVIVING AND STRENGTHENING THE MANUFACTURING SECTOR

IN SOUTH AFRICA

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THE EVOLUTION OF THE SOUTH AFRICAN MANUFACTURING SECTOR

South Africa's industry has developed around its mining resources, supplying the products needed for those mines which resulted in the development of the steel industry, as well as downstream iron and steel products for the mining industry. The chemical industry developed through the abundance and utilization of coal as feedstock: the gasification of coal. Various initiatives over the past three decades have aimed at diversifying the industrial capacity of reducing reliance on primary mining commodities for export earnings as well as the imports of the final manufactured product. Success has been achieved in the motor vehicle industry, with the Motor Industry Development Programme resulting in the development of the motor-manufacturing value-chain which includes parts, tyres, leather upholstery, security technology and advanced assembly operations by many of the international vehicle manufacturers which manufacture specific models for the marketing world in South Africa.

INDUSTRIAL VISION APPROACHES

Our vision depends on the role of the manufacturing sector as defined by our country, especially our national government. Such choices would influence the ultimate approach and results:

- Turning the mineral-endowed comparative advantage into a competitive advantage by developing downstream industries, mainly for export markets (export-led growth);
- Focusing on employment creation and developing support for those industries which would rapidly absorb employment (domestic focussed growth);
- Utilising government's procurement and muscle to localise industries, transferring knowledge and skills so as to ensure that the industry could provide such products as required in the future, thereby reducing imports in due course; and;
- Manufacturing for the future by identifying key future technologies and potential niche markets, whilst developing South African skills and knowledge: whilst meanwhile preparing for manufacturing products based on evolving technologies.

None of these options are mutually exclusive; but in order for such resources to have a strong impact, the latter should not be spread too thinly throughout an overall range of objectives. Our focus should concentrate on specific objectives in order to achieve results. This does not imply, however, that other industries would not benefit: as for example, the fact producers of hi-tech printed circuit boards should use precious - as well as other - metals for optimal signal conduction.

FACTORS CRITICAL FOR THE REVIVAL AND STRENGTHENING OF THE SOUTH AFRICAN MANUFACTURING SECTOR

There are a number of factors which impact on the ability and competitiveness of South African manufacturers: not only within the local market, but also internationally. Some of these factors could be addressed within a short period of time; whilst others might need more time for change. Some of these challenges lie beyond South African control: whether South African, governmental or the private sector.

GOVERNMENT PROCUREMENT

The impact of government procurement on our South African economy is significant - whether through national, provincial and municipal governments, or as State Owned Entities: their impact is significant. Substantial governmental procurement efforts in the recent past did not provide the support which it should have had on our South African economy. Tendencies to search internationally for the lowest price have hampered the sustainability of South African industry: as, for example, the ability to manufacture railway tracks which have been decimated due to imports.

REVIVING AND STRENGTHENING THE MANUFACTURING SECTOR IN SOUTH AFRICA

The recently-announced awarding of the PRASA rolling stock renewal programme to Gibela Rail Transport Consortium (led by Alstorm and Actom), valued at R51bn is an example of utilising government procurement to revive an industry. Although Gibela will construct the rolling stock in a South African factory with 69% local content by 2015, the opportunity of resurrecting the entire rail-manufacturing industry cannot - and should not - be missed. The domestic steel industry could develop and/or expand the manufacturing of train wheels, train tracks and other engineering parts. Furthermore other industries should be expanded to supply material specific for coaches, such as upholstery, benches, electronics and electric motors amongst others. Education and/or training centres should be equipped to cultivate the required skills for the expanding industry (including locomotives). The focussed development of a rail industry would be able to supply the future needs of PRASA and Transnet; as well as the significant demands regarding railway development throughout the rest of the African continent - as well as the supply of locomotives and coaches associated therewith.

Another opportunity identified by government is the establishment of a manufacturing capacity which can produce active ingredients for HIV/Aids medication. This would represent an opportunity to develop and strengthen the pharmaceutical industry cluster, as well as indirectly representing the chemical industry which supplies fine chemicals used to derive the active ingredients. Once again, a full development of this cluster would require investment as regards the appropriate education and training facilities to meet the industry's needs.

The above-mentioned examples highlight the co-operation required between government and the manufacturing sector, so as to ensure that bottlenecks are pro-actively identified and addressed.

IMPORT PROTECTION

South African manufacturers face strong domestic competition vis-a-vis imported products. Some industries have competitive advantages which have been eroded by the lack of enforcement of existing policies and/or regulations. An example thereof is the importation of products that do not meet South African standards - which not only undermine domestic producers but also have to comply with standards, whilst meanwhile also potentially endangering the consumers of such products. The funding model of the South African Bureau of Standards (SABS) has resulted in significant certification fees which have impacted on the ability of South African manufacturers to continue operating: which in some instances have resulted in the closure of businesses.

The continued prevalence of illegal, mis-declared and under-invoiced imports are undermining the ability of South African manufacturers in competing: thus resulting in revenue losses for the fiscus. The efforts of customs authorities, whilst recognised, are still falling short of providing the level playing fields which are required. There should be an increased focus as regards eradicating our culture of accepting, if not condoning, such practices on the part of the South African consumer, as well as the industries which utilize these products as inputs.

ADMINISTRATIVE COMPLIANCE BURDEN

The competitiveness of the manufacturing sector could be improved by the adjustment of governmental policies and regulations, as well as by overall government functioning. Currently, South Africa is ranked by the World Bank, 39th out of 185 countries, as regards doing business. The areas in which South Africa is highly ranked (with the ranking in brackets) are as follows: the ability to obtain easy credit (joint 1st with Malaysia and the UK) and the protection of investors

(10th). Areas in which South Africa is constraining business development is in obtaining electricity (150th); trading across borders (115th); resolving insolvency (84th); enforcing contracts (82nd), and registering a property (79th); as well as starting a business (53rd). In Mauritius it takes five procedures and six days to register a company - whilst in South Africa this requires five procedures. The latter takes 19 days to be completed. With regard to obtaining electricity in South Africa, this takes 4 procedures and 229 days; whilst a business in Mauritius obtains electricity in 91 days - also through four procedures.

Reducing the regulatory red-tape and delays might encourage the establishment of new manufacturers, which would increase competition and development in the South African economy. Care should be taken that changes in the regulatory and policy environment do not result in misinterpreted consequences that might further hamper business development.

EDUCATION AND SKILLS DEVELOPMENT

Factors that impact on the competitiveness of South African manufacturers, as well as keeping unemployment at elevated levels, are the existing skill-set of our untapped workforce not being suitable for such industries in which South Africa is competitive. The continued mismatch between required and available skills cannot be resolved in a short period of time, but requires the educational system of the country to be aligned with the skills demand - not only their present demand - but also their anticipated future demand. Improved skills levels would benefit manufacturers as this would enhance employee productivity, justifying the current wage levels. The extent of research and development in South African industry is not enough to keep the manufacturing sector competitive, with the continued use of imported technology adapted to South African conditions. Technological improvements gained from strong research and development activities do not only result in improved production processes, but also allow for pricing premiums as regards products that are more advanced than those of competitors.

VALUE CHAIN AND CLUSTER DEVELOPMENT

The development of competitive industries is best achieved by developing either the value chain (chemicals for example) or the clusters of supporting/supplying industries. South Africa's experience with a broad approach to cluster development has proved to be very difficult. One of the most successful clusters developed in the South African economy is the motor industry through the MIDP. The buy-in and co-operation of all stakeholders has contributed greatly to the success achieved by the motor industry cluster.

REGIONAL INTEGRATION

Regional integration offers the opportunity to expand the clusters and value chains which serve a larger and ever-growing market. Careful consideration should be given to the strengths and opportunities that might benefit the value chain or cluster in terms of competitiveness. A consideration of regional integration would yield long-term benefits by reducing possible inter-country competition for attracting FDI.

FISCAL CONSTRAINTS

South African producers are met with both local and international markets with competition from countries that subsidise their production, either directly or indirectly. The extent of the subsidisation is difficult to quantify: for example, what is the value of government housing for factory employees? The South African government does not have the fiscal space to embark on incentivising South African producers to the same extent as its counterparts elsewhere in the world. Alternative methods are required to support industrial development,

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such as import tariffs. This could be supported by non-tariff barriers and even import licensing which could protect the domestic industry. However, even more value could be derived by utilising government procurement in order to "subsidise" industrial revival, skills transfer and local content development.

LABOUR REGULATIONS

In the World Bank's World Development Report, the impact of South Africa's bargaining councils vis-a-vis unemployment has already been explored, indicating that although the impact is negative, it does not explain the current excessive unemployment level. The impact of bargaining councils is estimated to contribute 1.5 percentage points to the overall unemployment rate of South Africa. This indicates that other factors - such as skills - play an important role in employment absorption, as well as the ability of South African manufacturers to compete.

The ability of companies to restructure their workforce in order to adapt to external changes is limited in South Africa due to our in robust labour-legislation being in place. The result is that employers are reluctant to employ workers whose business environment is uncertain. This effect can be seen in the years after 2008, as employment is still well below the peaks reached then; nevertheless, our economic activity has surpassed its previous peak.

STAKEHOLDER CO-OPERATION/CO-PETITION

An industry's sustainable competitiveness can be reliant on competitors working together to solve an industrial problem; or to procure contracts that a single entity cannot fulfil: such as obtaining increasing discounts through the bulk-buying of machinery, consumables, spare parts and raw materials. Such co-operation contributes to strengthening the industry's international competitiveness without reducing inter-company rivalry.

Companies are currently hesitant to co-operate with each other - in fear of being seen as colluding and falling foul of the Competition Act, with potentially significant penalties.

CONCLUSION

The challenges highlighted in this brief are not new, but have been emphasised for many years - and in some instances the latter have constrained growth. The lack of appropriate skills and the persistently high unemployment rate are cases in point. There have been various efforts to address constraints through the introduction of the Industrial Policy Action Plan (IPAP), and the development of the New Growth Path; as well as the National Development Plan 2030. Although these policy initiatives all have differing focus areas and time-frames, their overall aim is to develop the South African economy and improve the lives of all citizens.

Whilst some of these challenges are dire and need urgent attention, it is also important to acknowledge achievements to date. The development of the motor industry and the continued survival of the textile and clothing industries are some of our most noteworthy achievements. Recently government has enacted the Preferential Procurement Policy Framework Policy (PPPFA) in order to leverage both existing and future governmental spending, as well as supporting the development of local industries. The successes alluded to above indicate the significant contributions that could be made. However, the insufficient co-operation and co-ordination across various government

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departments and state-owned entities have limited several industries severely. For example, the continued uncertainty and difficulty regarding land-use rights and water licences has negatively impacted upon the forestry sector, prioritised in IPAP as part of the furniture value-chain.

Opportunities exist for the revival and/or strengthening of manufacturing subsectors through the prioritisation and full support of governmental interventions. These interventions do not necessarily require the development of new policies, but rather the effective implementation of existing policies. Such interventions should be focussed on a limited number of priorities in order to ensure that committed resources are utilised effectively and efficiently. The prioritisation of such interventions should be aligned with governmental spending or core competencies in South Africa; with automotive, pharmaceutical, rail engineering and equipment - as well as with other renewable energy industries meeting these criteria. It is vital that our attention should be focused more on the future developments of these industries: such as the production of electric vehicles which could support the electrical machinery industry.

This would complement the linkages which would be developed with the expanding renewable energy sector. Such ambitions should not be limited to the South African market but would also be expanded to supply the rapidly-growing regional market.

BOOK REVIEW

WHY NATIONS FAIL:

THE ORIGINS OF POWER, PROSPERITY AND POVERTY

Lindokuhle Nțanți • Coega Developmenț Corporațion **Nomzamo Kolo** • Coega Developmenț Corporațion

Daron Acemoglu and James A. Robinson's book, 'Why Nations Fail,' is a riveting contribution to the ongoing debate why some nations manage to acquire and maintain prosperity and economic growth, while others grapple with abject poverty and disease. The book provides a comprehensive look into the evolution of countries, and more precisely, into the economic and political spheres that have influenced their trajectories. This is achieved through a broad, but detailed, historical account of political and economic institutional developments. The book makes a sound and referenced case that prosperous countries have effective and inclusive institutions that have guided their growth and policy decisions towards their current state. It argues that in the absence of these kinds of institutions, extractive institutions have emerged that only seek to loot and exploit national resources for the benefit of elites. The existence of these extractive institutions has created the poverty stricken nations of today.

Daron Acemoglu is the Killian Professor of Economics at MIT. In 2005, he received the John Bates Clark Medal, which is awarded to economists under forty judged to have made the most significant contribution to economic thought and knowledge. James A. Robinson, a political scientist and economist, is the David Florence Professor of Government at Harvard University. A world-renowned expert on Latin America and Africa, he is currently conducting research in the Democratic Republic of the Congo, Sierra Leone, Haiti and Colombia.

In the first chapter, 'So close and yet so different', the authors provide a case study of two cities, Nogales Arizona and Nogales Sonora, which share the same geographic location, history and demographics, yet are completely different. One city is somewhat prosperous while the other is destitute. Acemoglu and Robinson assert that the 'differences arise from the fact that Arizona has the rule of law and the social safety net of the United States while Senora lacks some of the most basic social services in Mexico.'

The authors suggest that the two nations are different because of their policies. The United States utilises inclusive policies, while Mexico has historically used extracting policies. However, one cannot help but be intrigued by the reasons behind their choice of different political and economic paths. The authors detail how the two nations originally formed and how institutions would eventually shape their politics and economic policies.

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In the second chapter 'Theories that don't work', the authors look at the different theories that seek to provide a definitive answer, but have fail to provide a comprehensive and compelling one due to the inconsistencies in their reasoning. The three theories are: the Geography Hypothesis, the Cultural Hypothesis, and the Ignorance Hypothesis.

The Geography Hypothesis posits that the concentration of poverty stricken countries that lie between the Tropics of Capricorn and Cancer suggests that there is a geographical explanation for their situation. The concentration of more prosperous countries in the temperate latitudes gives popularity to the theory. However, the authors cite numerous examples of prosperous and hardworking countries in the designated poverty location, and vice versa. The authors, thus, conclude that it is closed minded to consider geography as a sole contributor to prosperity or poverty.

The Culture Hypothesis holds that different world cultures lend themselves to different sides of the poverty line. The authors counter the argument by asking why, in that case, North Korea is ten times poorer than South Korea, and why there is a visual difference in prosperity between the US side of Nogales City and the Mexican side when both cities share the same location and culture. The Ignorance Hypothesis partly explains why nations fail to eradicate poverty, and has its roots in the market economy theory, in which participants trade freely and competitively in a pluralistic market. According to the market economy concept, all participants have equal and fair access to information about the number of buyers and sellers, availability and prices of goods and services; therefore, there is no ignorance. However, in the real world ignorance exists and the economy is not always pluralistic or free and fair for all to participate in it. This leads to countries failing to provide inclusive economic institutions, and thus, extractive institutions that seek to monopolise gain a hold.

The third chapter, 'The making of prosperity and poverty', describes the Korean peninsula which, before World War II, was geographically, culturally, and politically the same. After World War II, it was divided into the Russian-backed North and the United States-backed South. South Korea ultimately adopted inclusive policies that include property rights and political involvement. The nation is flourishing and has one of the largest electronic industries in the world. North Korea, on the other hand, created an authoritative dictatorship where citizens have no rights and a few elites loot the land. North Korea's extractive policies have led to mass deprivation and the imprisonment of rebels. It is illustrated that these two identical countries quickly became different because one allowed the empowerment of its people.

The fourth chapter, 'Small differences and critical junctures: the weight of history', illustrates that it is at critical junctures in history that similar institutions choose to diverge. The authors substantiate that specific choices lead nations into different paths; some may lead to prosperity while others into poverty. The chapter cites examples of England's adoption of inclusive institutions during the Bubonic plague, which ultimately led to Industrial Revolution that changed the world, allowing some nations to prosper while others deteriorated.

In the fifth chapter, "I've seen the future and it works", the authors argue that extractive institutions rely on growth because they need something to extract; and therefore, they conclude that this growth is not sustainable.

The authors use the Soviet Union to illustrate their point. The Soviet Union experienced exceptional growth for decades until the economy stalled, leading to the country's collapse in 1991. The authors point out the inherent flaws in extractive institutions. They emphasise that extractive institutions allow a

privileged few to reap all the benefits while much of the remainder of the population lives in abject poverty. In the case of the Soviet Union, resources were moved to foster growth in the technology and military sectors. Because the government was extracting resources and reallocating them to specific sectors, there was a huge short term growth in these sectors. The authors argue that China's growth will eventually stagnate if the country does not instil political change: they explain that although China is pursuing a slightly different path from Russia, it supports extractive institutions that allocate resources.

Chapter six, 'Drifting apart', describes extractive policies, contrasting these with Venice's inclusive economic and political policies, which allowed upward mobility out of poverty. However, Venice's innovations also undermined the established political and economic class, which then developed extractive policies, creating barriers to innovation and political involvement. This secured their political and economic interests, but turned Venice backwards while Europe and other nations moved forward.

In the remaining chapters, the authors examine the role of institutions in the rise and fall of countries in history. They explore the creation of institutions in politics and economics that promote the inclusion of all participants in creating those democratic, free economy ideals that have come to define prosperous countries. While profiling countries like the US, Great Britain and Australia, the authors give an historical account of conflicts that have created concepts that are taken for granted today, such as democracy during a time when monarchies sought to hold onto political power and citizens had no comprehension of political participation.

In chapter thirteen, 'Why nations fail today', the authors conclude that institutions have proven to be the key to the outcome of countries in today's terms. The institutions most referred to are constitutional (law), political, and economical (such as the Reserve Bank, the banking system and the marketing institutions created to regulate and monitor the land's market economy). Chapter thirteen examines the African countries, Sierra Leone and Zimbabwe, where conflicts that could have assisted in creating inclusive economic and political institutions post-independence, were quashed, thereby allowing the creation of extractive institutions. Extractive political and economic institutions perform the sole function of assisting those in power to hold onto political power while extracting the economic resources of a country for their own benefit. These institutions have succeeded in bringing abject poverty to the people they were created to serve.

While reading this book, one may feel that herein lays a resounding warning to South Africa to learn from the fall of African and other nations. The authors warn that extractive economic and political institutions effect unchecked political power and abuse of power, unchecked economic riches, unchecked corruption. The authors emphasise that extractive institutions create an incentive for political infighting to change the beneficiaries of the self-enriching system. Furthermore, in African countries that have been consumed by these inequalities, revolutions and civil wars will not be fought to change failing political or economic institutions, but to capture power and enrich one group at the expense of the others.

'Why Nations Fail' doesn't just explain the differences in economic policies between nations. It provides a comprehensive in depth history of how modern nations were formed, why certain policies were accepted, and why some nations chose a different political path. More importantly, it explains why technological improvements and inclusive policies empower people. Acemoglu and Robinson illustrate how bad policies can infringe people's basic rights and instil a culture of complacency that can linger for generations. The book is written in a very engaging style and is highly recommended, as it illustrates the effectiveness of government policies in the economic development of a country.