THE ROLE OF FOREIGN DIRECT INVESTMENT IN SOUTH AFRICAN AGRICULTURE

By E. Iahsardi, P.C. Cloete & Prof. H.D. van Schalkwyk

1. Background

1.1 Introduction

Globalisation and integration has led to ever increasing international capital flows, including to developing nations. Therefore, the role of Foreign Direct Investment (FDI) as an international expansion strategy to acquire interest in a foreign enterprise has increased significantly. Foreign Direct Investment (FDI) may be a way to create profits for Multinational Enterprises (MNE’s) but additionally it can create jobs, capital and it may provide access to knowhow, technologies and lucrative export markets for host nations (Hunter et al, 2003). Although there is no general consensus on the positive relationship between FDI and overall economic growth, an increasing number of studies stipulate a positive relationship (see: Findlay, 1978; Borensztein et al, 1998; Klein et al, 2001).

Former president Nelson Mandela highlighted the importance of creating capacity to re-attract foreign investment as tool to support the national development strategy in South Africa (SA), in the perspective of foreign investors rejecting South Africa during the apartheid eras. There are many reasons why SA would appeal to foreign investors, as the country is the economic powerhouse of the African continent with a comparatively open economy (World Economic Forum, 2007). In addition, the country’s first world transport and telecommunication infrastructure, its abundance of mineral deposits, its diverse natural resource base and its well-developed

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2 FDI is the category of international investment made by an entity resident on one economy (direct investor) to acquire a lasting interest in an enterprise operating in another economy. The lasting interest is deemed to exist if the direct investor acquires at least 10 percent of the voting power of the direct investment enterprise (Eurostat). Apart from portfolio investment, Greenfield investment, mergers and acquisitions are also regarded as FDI.
manufacturing industry all contribute to the country’s favourable investment prospects. Furthermore, a study amongst 81 European companies investigating the reasons why they invested in the Southern African Development Cooperation (SADC) region revealed that about 84 percent distinguished the size of the local market to be an incentive, 40 percent indicated the availability of raw materials and 21 percent had strategic reasons (Econews, 2003).

Although foreign capital inflows have risen rapidly since 1994, to date SA has not received the high levels of FDI it expected or needs. In comparison, the total inflow of FDI in South Africa was twice as low as Nigeria’s, six times as low as Brazil’s, and four times as low as India’s and Australia’s inflows in 2007 (UNCTAD, 2008). Although, apart from Nigeria, all these economies are larger, the ratio of inflows to GDP of 2 percent still makes SA a poor performer. Furthermore, South Africa attracted about 11 percent of total African FDI inflows in 2007, as where it attracted 80 percent of total FDI inflows in Southern Africa. The UN Conference on Trade and Development (UNCTAD) measures FDI performance and the inward FDI potential for 141 economies. South Africa is classified as an underperformer indicating a low FDI performance and a low FDI potential. For the period 2005 – 2007 the country is ranked 112th globally for FDI performance and 74th for FDI potential. The raw data for South Africa reveals that the underperformance is mainly due to (UNCTAD, 2009):

- low GDP per capita,
- low share of exports in GDP
- low amount if telephone mainlines per 100 inhabitants,
- low global share in imports of parts of electronics and cars
- low global share exports of services

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3 The FDI performance index is the ratio of a country’s share in global FDI inflows to its share in global GDP.
4 The inward FDI potential index captures several factors expected to affect an economy’s attractiveness for foreign investors.
1.2 FDI in South Africa

Apart from the poor performance of SA in attracting global FDI, the inflows are fairly skew distributed over the various economic sectors. Of the total FDI inflows about 44 percent is directed to the mining sector and 26 percent to the manufacturing sector as where agriculture only received 0.11 percent in 2007 (SARB, 2008). In Figure 1 a depiction is given of the contribution of each sector to GDP, GDP growth per sector as well as the share of total FDI inflows in the period 2005 to 2007. From the figure it becomes clear that the size of industry does not necessarily impact the amount of FDI inflows in that sector. Thus the sectoral investment attractiveness is influenced by other factors than simply its economic size.

Figure 1: Contribution to GDP, GDP growth and share in total FDI inflows per economic sector for the period 2005 - 2007

Source: SARB, 2009

The sources of FDI are also fairly skew distributed as becomes evident from Figure 2. Europe is by far the largest foreign investor in South Africa, with the United Kingdom (UK) as main source, accountable for almost 71% of all foreign investments
in the period 2005 to 2007. Germany, the USA and The Netherlands are other important sources of direct investments in South Africa.

![Pie chart showing sources of FDI inflow for the period 2005-2007.](image)

**Figure 2: Sources of FDI inflow for the period 2005 - 2007**

*Source: SARB, 2009*

In Figure 3 the GDP of the UK, South Africa’s most important source of FDI, is plotted against its FDI flow to South Africa. The relationship between economic growth in the donor country and its FDI flow to the host country is not very strong as becomes evident from this Figure.
Figure 3: Trends in UK’s GDP and FDI flow to South Africa for the period 1996 to 2007

Note: The GDP of the UK is plotted on the secondary vertical axis

Source: SARB, 2009

The trends in South Africa’s total FDI inflows and FDI in agriculture is shown in Figure 4. The average yearly growth of total FDI inflows in the depicted period was 36 percent as where the average yearly growth for agricultural FDI inflows was 10 percent.

Figure 4: Trends in South Africa’s total and agricultural FDI inflows between 1994 and 2007

Note: Total FDI inflows are plotted on the secondary vertical axis

Source: SARB, 2009
Despite its relatively small size, agriculture plays an important role in the local economy, contributing towards national food security, improving the socio-economic environment and assisting in achieving national economic development goals. In 2006, the primary agricultural sector contributed 2.7 percent towards GDP, however, when forward and backward linkages of the sector were taken into consideration, it’s estimated that its contribution increases to a notable 20 to 30 percent of total national GDP (OECD, 2006). Moreover, investment in agriculture from national government has been comparatively diminutive, increasing from 0.33 percent of the total budget expenditure in 2003/04 to 0.55 percent in 2006/07 (Treasury, 2008). In addition, private investment in agriculture reflected by Gross Fixed Capital Formation (GFCF) has remained stable in absolute terms over the last decade (ABC, 2008). However, the share of agriculture in the national GFCF has decreased significantly to 3.7 percent in 2005.

It is viewed that if an industry does not have competitive advantages it will not attract investment. The competitiveness of the agricultural sector is measured by the Relative Trade Advantage (RTA). The relationship of the RTA and FDI in the agro sector is plotted in Figure 5 for the period 1994 to 2007. An RTA of more than 1 is classified as ‘competitive’ and a RTA between -1 and 1, as is the case for the depicted period, can be classified as ‘marginal competitive’. The competitiveness shows a downward trend since 2002. A clear pattern of the causal relationship between FDI and RTA is not apparent from the figure.
Figure 5: Relationship between FDI inflows in agriculture and agricultural competitiveness

*Source: SARB, Agricultural Business Chamber (2009)*

### 2. Objectives

Against this background, attracting more capital inflows of FDI into the agriculture and food industry could be a workable strategy to develop and enhance the overall sector. Studies conducted in Brazil (Farina et al, 2003), Vietnam (Binh, 2004) and in East Asia (Sattaphon, 2006) showed beneficial impacts of FDI on the food sector in terms of: promoting exports and creating an export base, increased land use and production capacity, introduction of advanced technologies and job creation.

Although many aggregate econometric studies have been conducted (see Root et al 1979 & Wheeler et al, 1985 & Lucas, 1993), a broad consensus on the major determinants of FDI has been elusive. This lack of consensus can be partly attributed to the lack of reliable and accurate data on FDI flows and its potential determinants, particularly at the sectoral level, and the fact that most empirical work has analyzed FDI determinants by pooling a group of countries that may be structurally diverse.

The framework for attracting foreign capital to the South African agricultural sector needs to be favourable. Apart from a general overview of FDI and FDI in agriculture,
this study will attempt to characterise the determinants of FDI flows into the agricultural sector. In order to analyse the FDI environment in SA the study contains a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis based on literature review. This will ultimately form the basis for a sector broad strategy towards attracting more FDI inflows.

3. Methodology

The low degree of freedom (4) due to the small amount of observations (only 13 due to limited data availability\(^5\)), prohibits the application of regression analysis to test for significant relationships between the explanatory variables and FDI inflows. Therefore correlation analysis will be performed to analyse the direction of linear association of the factors that influence the inflow of FDI in agriculture.

The dependent variable will consist of time series data on the amount of private foreign liabilities of the South African agricultural sector\(^6\) as a ratio of agricultural GDP for the period 1994 – 2006. Foreign liabilities of South Africa value consists of equity capital, reinvested earnings and long- en short term capital. The dependant variable will be deflated into real values and made stationary to correct for time trend.

\(^5\) The South African Reserve Bank has no records on pre 1994 FDI inflows at a sectoral level.

\(^6\) Agricultural sector as defined under the ISIC classification, including agri-processing, forestry and fishing activities
The explanatory variables hypothesised to influence FDI are depicted in Table 1.

Table 1: Explanatory variables (observations from 1994 to 2007)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure / proxy</th>
<th>Expected sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Domestic Product (GDP)</td>
<td>market size</td>
<td>+</td>
</tr>
<tr>
<td>GDP growth</td>
<td>market attractiveness</td>
<td>+</td>
</tr>
<tr>
<td>Agricultural GDP</td>
<td>size of the agricultural sector</td>
<td>+</td>
</tr>
<tr>
<td>Growth of agricultural GDP</td>
<td>sectoral performance</td>
<td>+</td>
</tr>
<tr>
<td>Real Effective Exchange Rate (REER)</td>
<td>favourable incentive for foreign investment</td>
<td>-</td>
</tr>
<tr>
<td>Agricultural trade openness</td>
<td>ratio of total agricultural trade to agricultural GDP</td>
<td>+</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>economic stability</td>
<td>-</td>
</tr>
<tr>
<td>Government expenditure on agriculture as share of agricultural GDP</td>
<td>importance of agriculture in the national policy framework</td>
<td>+</td>
</tr>
<tr>
<td>Agricultural trade linkages with the EU</td>
<td>relationship of trade flows and FDI with SA’s most important agricultural trade partner</td>
<td>+</td>
</tr>
<tr>
<td>Agricultural Competitiveness Status (RTA)</td>
<td>measurement of global competitiveness of the agricultural sector</td>
<td>+</td>
</tr>
</tbody>
</table>

4. Results and conclusions

4.1 Correlation analysis

In Table 2 the results of the correlation analysis are shown. Due to the limited amount of available data, the analysis is constrained to the signs of the correlation coefficients. Most signs are as expected (see Table 1), however it seems remarkable that the growth of Agricultural GDP has no correlation with FDI inflows. This may be explained by the fact that some years showed large negative growth.

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7 Various studies have examined the determinants of total FDI inflows, see: Gastanga et al, 1998; De Mello, 1997; Aseidu, 2002; Lim, 2001; Holland et al, 1998

8 More observations are needed to make reliable conclusions on significance and strength of the various correlations coefficients. Correlation cannot be validly used to infer a causal relationship.
The size of the sector reflected by Agricultural GDP also has a negative impact on FDI inflows, implying that the size of economic sector does not imply a positive attractiveness for FDI. Furthermore, the exchange rate shows a positive relationship with FDI inflows which may imply that considerations of exchange rate play a marginal role in investment decisions. Remarkably, the agricultural trade linkages with the EU have no correlation with FDI inflows. It seems there’s no link with the amount of agricultural trade with the EU and the amount of FDI inflows. The same is the case for agricultural competitiveness.

Table 2: Results of correlation analysis

<table>
<thead>
<tr>
<th>Factor</th>
<th>Direction of correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total real GDP</td>
<td>+</td>
</tr>
<tr>
<td>GDP growth</td>
<td>+</td>
</tr>
<tr>
<td>Real agricultural GDP</td>
<td>-</td>
</tr>
<tr>
<td>Agricultural GDP growth</td>
<td>+ / -</td>
</tr>
<tr>
<td>REER</td>
<td>+</td>
</tr>
<tr>
<td>Agricultural trade openness</td>
<td>+</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>-</td>
</tr>
<tr>
<td>Agricultural trade linkages with EU</td>
<td>+ / -</td>
</tr>
<tr>
<td>Government spending on agriculture as share of agri cultural GDP</td>
<td>+</td>
</tr>
<tr>
<td>Agricultural Competitiveness Status</td>
<td>+ / -</td>
</tr>
</tbody>
</table>

As data limitations prohibit the establishment of a comprehensive FDI model for agriculture, lessons learned from other sectors need to be interpreted. Predicting investment flows, particular in agricultural, however remains a difficult exercise as many exogenous factors play a role. Further survey research in this field is needed to establish consensus on why and how foreign businesses invest in the South African agricultural and foods sector.
4.2 FDI environment

A SWOT analysis is applied to identify the internal and external factors that need to be addressed in a sector broad FDI strategy (Gelb et al, 2000; Clark, 2003; Esterhuizen et al, 2000).

**Strengths:**

- Well-established agricultural sector
- Sound macro-economic policies
- Political stability
- Good infrastructure
- Most FDI is market-seeking
- Factor market above average for developing country
- Most critical resources locally sourced
- Most foreign entrants have met their expectations
- Tax treaties in place with most partners
- An open economy
- Monetary policies to attract FDI

**Weaknesses:**

- Little Greenfield investments
- Official environment is a constraint
- Poor administrative environment
- South Africa not yet deeply integrated in global production processes
- Low worker productivity
o Agro-food sector is marginally competitive
o High cost of doing business
o High transport cost
o No comprehensive agri-business policy
o Government capacity is very limited
o Low agricultural R&D output

**Opportunities:**

o Most critical resources locally sourced
o Large labour base
o Proposed creation of a one-stop FDI facilitation centre
o Privatization of state enterprises
o More focus on capital intensive FDI
o International promotion of South African agriculture as an attractive investment opportunity
o Creating a South African identity in the international business environment
o Social and environmental responsible production
o Induced and market driven innovation

**Threats:**

o Uncertainty around land-reform and Black Economic Empowerment
o Too much focus on labour intensive FDI
o Uncertainties about the new presidency
o Strength of labour unions and its alliance with the ANC

o High crime rate

o Limited availability of qualified black managers (BEE)

o Historical legacy of the country

o FDI targeted at resource extraction and cheap labour will not enhance development

o Large carbon footprint of exports

o Financial and economic crisis

5. Recommendations

Most of the investigated determinants of FDI inflows in agriculture are macro-economic and institutional in nature and therefore difficult to be influenced by industry. However, they form an incentive for both sector and government to develop a strategy to attract more foreign capital when these factors are more favourable.

The sector broad strategy needs to encompass the weaknesses and threats of the SWOT analysis and enhance the identified strengths and opportunities. Furthermore, it should be based on further research on why international businesses do, or do not, invest in South African Agriculture.

The process of developing a strategic plan for agricultural FDI needs to be inclusive and owned by the industry with the government as facilitator. The stakeholders involved should include: National Department of Agriculture, Department of Trade and Industry, Department of Economic Affairs, Producer Organisations, Agribusiness Chamber, Farmer’s Unions and Banks.
6. References


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