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INVESTMENT IN THE SOUTH AFRICAN AGRO-FOOD AND FIBRE COMPLEX: PERCEPTIONS, EVIDENCE AND ANALYSIS

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Abstract

The question of investment in the South African agro-food and fibre complex is explored in this article. The analysis is based on empirical values and opinions/perceptions from ±400 agribusinesses operating in this complex. Investment in the agro-food and fibre complex has increased recently after having declined for a few years. Competitiveness ratings are also increasing. A correlation analysis between annual investment and the annual competitiveness rating in the agro-food industry indicted a correlation coefficient of 78%. Various factors, common to most sectors, were identified by the industry as constraints on future investment. A concerted effort through innovative measures and policies will now be required to promote sustainable agricultural activity in South Africa to stimulate further investment.

1. INTRODUCTION

A recurring theme in the South African agricultural business environment today is “what is the future of the sector or industry?” “Should we continue to invest?” etc. Answers are complex because a range of variables determines the investment activity in any economic sector of a country. These include the current and expected levels of economic activity; competitiveness and profitability; the cost and availability of capital; the cost of technology and of capital goods imports and also government policy and strategy. In addition investor confidence in the economic system, the investment environment and perceptions of risk or the chance factor are critical. These factors to a large extent determine the competitiveness of a specific industry or even country (Porter, 1990). In this article the question of investment in the South African agro-food and fibre complex will be explored. This sector includes natural resource intensive manufacturing and processing industries involved in the production of food, beverages and fibre. The analysis is based on empirical

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values and opinions/perceptions from ± 400 agribusinesses operating in this complex. Data were drawn from Van Rooyen & Esterhuizen, (2000).

2. TRENDS AND LEVELS OF INVESTMENT

In Table 1 the average annual growth rates (1990 constant prices) in Gross Domestic Fixed Investment (GDFI) of the sectors in the agro-food and fibre complex for the period 1990 to 1997 are indicated. The Paper products and Food sectors have experienced significant growth in GDFI during the first seven years of the 1990's, the Agriculture and Wood sectors a moderate growth rate and the Beverages and Tobacco sectors negative growth rates. Research has, however, shown that increasing investment in itself is less important for sustainable growth than is the quality, type and composition of investment (Department of Trade and Industry, 2000).

Table 1: Gross Domestic Fixed Investment average annual growth rates for the period 1990 to 1997 (1990 constant prices) and actual value of GDFI in 1997

Sector	GDFI growth rate (%)	GDFI in 1997 (R million)
Paper & paper products	16.1	2 190
Food	11.6	3 333
Agriculture, forestry & fishing	3.0	4 304
Wood & wood products	1.9	336
Beverages	-7.3	1 555
Tobacco	-22.2	8

Source: Department of Trade & Industry, 2000.

Figure 1 shows the change in foreign direct investment in South African agriculture, broken down into specific periods for which data are available from the Reserve Bank. According to Kirsten & Vink (1999) the data largely correspond with the major political events in South African over the past decade, and show the outflow of foreign investment in the turbulent period of the mid-1980s and the rapid build-up in foreign investment in the post 1990 period. A climate of uncertainty in the years immediately before the election in 1994 was probably the main reason for the slowdown in foreign investment in those years. Both domestic and foreign investment however increased after the election.

Figure 1: Foreign direct investment in agriculture, 1985 – 1997

3. THE RELATIONSHIP BETWEEN INVESTMENT AND COMPETITIVENESS

An industry that is not competitive will not attract investment and vice versa. This pattern is illustrated in Figure 2. A correlation analysis between annual investment and the annual competitiveness rating in the agro-food industry indicted a correlation coefficient of 78% (Esterhuizen & Van Rooyen, 2001), which confirms this phenomenon. As in the case of competitiveness, levels of investment have declined since the early 1980s. However, both the level of investment and of competitiveness has improved since 1993/94. Although investment levels seem to have temporally declined after 1996/97, they started to increase again in 2000.

Figure 2: The correlation between competitiveness and investment in the Agro-food industry, 1980 - 2000

4. THE NATURE OF INVESTMENT

The generally negative outlook on the agricultural industry's terms of trade, which shows a constant decline (National Department of Agriculture, 2002) as well as on production factor conditions, especially the high costs of production inputs, capital and new technology, must be noted (as described in section 6). The high cost of doing business, the result of factors such as high interest rates, labour regulations, crime, the high costs of rail and sea freight and of freight handling at harbours also seems to have constrained investment levels.

Sound investment opportunities in some sectors, notably the wine, maize, sugar, apple, groundnut, fruit juice and pineapple industries have, however, emerged due to the increased competitiveness of these industries (refer to Van Rooyen & Esterhuizen, 2000 for particulars). Aggregate competitive ratios for certain sectors in this complex are still increasing. Sectors for which new investment is likely include maize (food), orange, apple and grape (beverage)

industries. The paper and wood industry, with the exception of dissolving and chemical wood pulp and wood charcoal (Bethlehem, 1993) are under pressure, as are the meat industry and cotton.

Firms operating in this complex indicated that financial systems to support direct investment functioned well although the cost of capital remains a concern. Many firms are currently also using internal funding to expand their business (Table 2). This, however, may only provide a short-term solution. Firms indicated a degree of spare capacity related to plant and equipment.

Future growth will require expansion in capacity. Innovative financial support and risk management systems will, however, be necessary to facilitate the flow of financial investments to successful firms.

Table 2: Most important sources of finance for investment

Source	Most important (% of respondents)		2 nd most important (% of respondents)	
	Large firms	Small firms	Large firms	Small firms
Internal funds/retained earnings	51.2	43.1	23.3	22.4
Sale of shares in the firm	2.3	1.7	2.3	1.7
Sale of bonds or other long-term debt	0.0	0.0	0.0	0.0
Loans from SA banks/financial institutions	34.9	20.7	32.6	32.8
Loans from foreign banks/financial institutions	2.3	3.4	2.3	0.0
Loans from individuals	4.7	12.1	2.3	6.9
Leasing arrangements	2.3	10.3	20.9	8.6

5. THE QUALITY OF INVESTMENT (QI)

The “quality of investment” describes the link between investment and desired macro economic outputs of growth and employment (Department of Trade and Industry, 2000). Since 1993 there has been a relatively positive trend in real output in all the relevant food and fibre sectors. This can be attributed to opportunities created by the political changes, increased consumer demand for food due to lower food price inflation since 1994 and higher exports partly due to the decreased value of the Rand but also due to a positive export drive by partnerships between government and industry.

For the agricultural sector there is a large variance in real output every year because of dependence on the climate. The QI in agriculture is thus strongly

influenced by sporadic and uncontrollable factors. The relationship between investment and the resultant output (the Incremental Capital Output Ratio or ICOR⁴) shows that a relatively low return was recorded for the agribusiness sector (4.28 for 1996/97) (Van Rooyen & Esterhuizen, 2000). This can be attributed to the typical biological lag effect in these industries. This lag effect is also observed on the impact of research and development (R&D) in the agricultural production sector. The high rates of return for agricultural R&D of more than 44% p.a. indicate the importance of sustained investment in certain basic drivers of growth in output in this complex, such as technological development and market development (Thirtle *et al*, 1998). Technology, infrastructure (and maintenance), labour capacity, managerial capacity and market knowledge were identified by all firms as major drivers (Van Rooyen & Esterhuizen, 2000). Future investment, where possible in partnership with the public sector, should thus focus on these factors.

The relatively consistent upward trend in the capital-labour ratio for the complex (except for wood and agriculture) shows increasing capital intensity. Employment dropped for all skills groups in the agro-food sectors, with increases only in the wood and paper sectors (except for semi-skilled labour in the paper industry) (Van Rooyen & Esterhuizen, 2000).

The consistently increasing capital-labour ratio observed in agricultural industries is due to a reduction in employment and the recent drop in capital invested in the agro-food complex as a whole. The long-term trend in this context may change as capital is expected to become more expensive (i.e. high cost of technology and a declining Rand value). This assumes, however, that a more flexible labour dispensation could be organized which will allow increased employment. Technological innovation together with the reduction in employment, particularly among semi- and unskilled workers, resulted in an increase in labour productivity in all sectors, despite high capital costs. Technology investment was mainly funded through "own" funds.

6. DRIVERS AND OBSTACLES TO INVESTMENT

In addition to competitiveness, the two most important drivers of investment in both large and small firms as perceived by the sector are to raise market efficiency and to improve product quality through more up-to-date technology (Van Rooyen & Esterhuizen, 2000).

⁴ $ICOR = I(t-1)/(GDP_t - GDP(t-1))$

I=Investment in sector; *GDP* = Gross Domestic Product of Sector; *t* = time periods.

In Table 3 the major obstacles to future investment, as perceived by the respondents, are indicated. High and fluctuating interest rates, a poor long-term sales outlook, costly and cumbersome labour regulations, high crime levels and related social problems such as HIV/AIDS are currently the five most important obstacles to investment in the agro-food industry for large firms. The five most important obstacles for small firms are high interest rates, uncertainty over government economic policy, the application of labour regulations, uncertainty over future labour relations, and crime and related problems.

Table 3: The obstacles to investment

Obstacle	Average - Large firms	Average - Small firms
<i>Interest rates too high</i>	2.63	2.02
<i>Fluctuations in interest rates</i>	2.68	2.48
More attractive returns on alternative uses of funds	3.19	3.29
<i>Poor sales outlooks</i>	2.85	2.93
Level of exchange rates	2.92	2.89
Unstable exchange rates	3.05	2.82
<i>Labour regulations</i>	2.80	2.24
<i>Uncertainty over future labour relations</i>	2.95	2.27
Inability to penetrate export markets	3.21	3.33
Increased competition in SA markets	2.95	2.63
Lack of own finance	3.08	2.89
Lack of access to borrowed funds	3.47	3.20
High company income tax rates	3.10	2.48
Inadequate tax incentives for investment	2.97	2.45
Inadequate public infrastructure	3.63	3.47
<i>Uncertainty over government economic policy</i>	3.08	2.40
<i>Crime and related problems</i>	2.76	1.82
1 = insurmountable; 2 = severe; 3 = moderate; 4 = no impact		

7. HOW CAN INVESTMENT BE STIMULATED?

The increasing competitiveness of the sector indicates that economic fundamentals are improving in the right direction. Although this positive trend was initially not supported by an increase in agricultural investment, recent indications are more positive. A range of recommendations and policy

options that could further activate investment drivers and address constraints in order to further stimulate investment and to achieve growth include:

(i) **Increased competitiveness**

The firms in the agro-food and fibre complex will have to increase their competitiveness to survive in the global market and to attract new investments. The government together with industry/sector groupings can play an important supporting role in this regard. Although differences in this complex are apparent, solutions to the major constraints are of a common nature. In all sectors technological innovation, improved labour management systems, human capital development and innovative financial and other support arrangements are required. Industries are challenged to operate more competitively in a “global village”. Differentiated product strategies, collaborative actions through supply chain networks and partnerships within sectors/industries and with the public sector are urgently required to allow firms in this complex to operate at the competitive edge.

(ii) **Understanding the market – customers, partners and consumers**

The rapidly changing market requires a substantial shift in the current “business paradigm” to accommodate a customer/consumer focus, supply chain relationships, and community, public and private sector partnerships. A policy initiative to stimulate the paradigm change in this complex is required. This will lead to the redesign of support systems and the development of an understanding of stakeholders. Currently government initiatives are not well received by firms in the agro-food and fibre complex. Consultative workshops and joint studies facilitated by government and advocacy interest groups would promote a strong collaborative thrust to understand the market better. This will lead to better policies and useful support schemes. Innovative financial support schemes will be required to sustain factor investments.

(iii) **Fair trade in an unfair environment**

The international trade environment is by no means fair and equal. South Africa is a small player in this global environment. The big industrial country trade blocs are highly competitive, aggressive and subsidized. Industry together with government needs to develop focussed strategies in this context. Both export strategies and anti-dumping measures are important. A stronger “new

market” development thrust between industry and government is required. A “South African Identity” depicting South African firms as worthwhile and high quality business partners and the current “proudly South African” brand mark will support such a “globalisation impact” strategy.

(iv) **Cost of doing business in South Africa**

Most firms interviewed complained of the high cost of doing business in South Africa. Interest rates, labour administration, high input and transportation/freight costs, and crime were highlighted as high cost items. Benchmarking of best practice models would assist in driving down costs.

(v) **Productivity management and human capital development**

Capacity is required to manage sustained productivity. Supply chain management, improved labour relations, a reduction in the administration of labour regulations and training across a broad front needs to be highlighted. It will be important for each industry to develop a strategic plan within which Sector Education and Training Agencies (SETAS) could function. A clear demand statement by industries within the agro-food complex should be developed to guide human capital development funded by SETAS.

(vi) **Infrastructure development incentives**

Although South African infrastructure is considered to be a positive factor; concern was expressed about the future quality of infrastructure, particularly roads and harbour facilities. The government should consider incentives to interest the private sector to participate in the maintenance and creation of infrastructure. Sound cost benefit considerations should be applied to joint projects. Examples are the maintenance of the road system in high potential agricultural production areas by private sector users.

(vii) **Towards an agribusiness policy for South Africa**

The agro-food and fibre complex will increasingly operate as integrated business networks. Supply chain relationships will dominate business contracts. Industries within this complex will have to collaborate with the public sector, science councils and universities to promote and finance cutting edge R&D and technology development.

The Agricultural Business Chamber (ABC), representing a group of more than 70 agribusiness firms, recently accepted a brief by its members to promote an agribusiness policy framework for South Africa aiming at “creating competitive advantage for South African agribusinesses”. The following strategic programmes were identified (ABC, 2001):

- Market driven innovation focusing on consumer demands, locally and in the international market.
- Capacity development, which includes improved business intelligence systems, training, black empowerment initiatives, and network development.
- Rationalization of efforts to mobilize public sector support, and to stimulate R&D and technology development, etc.
- A strong and positive “South African Identity” in the international environment, promoting South African agribusiness as worthwhile, reliable and quality partners to do business with.

These proposals by the ABC accommodate most concerns of all sectors in the complex as determined by the CIC investment study (Van Rooyen & Esterhuizen, 2000). Collaborative efforts in this context should therefore strengthen the position of individual agribusiness firms considerably.

8. CONCLUSION

Investment trends in the agro-food and fibre complex are currently increasing after having declined for a few years. Competitiveness ratings are also increasing. Decisions to invest in the various sectors of the agro-food and fibre complex seems to be positive after a period of negativity. Further investment needs to be stimulated now. Various factors, common to most sectors, were identified by the industry as constraints to future investment. A concerted effort through innovative measures and policies will now be required to promote sustainable agricultural activity in South Africa.

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