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International Management

Is there a link between Competitiveness and FDI?

Individual Assignment

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Declaration

Hereby I, Alexander Markowski, declare that this work is my own original work and that all sources have been accurately reported and acknowledged, and that this document has not previously in its entirety or in part been submitted at any university in order to obtain an academic qualification.

Bellville, 2002-12-03

Executive Summary

The struggle for development is getting more and more tense for countries in Africa. What is the best way to go about it? Certainly not the absence of development strategies and merely promoting openness of the country.

In an article of Fontyn (2002) it is suggested that South Africa should concentrate more on growth through exports and increasing competitiveness instead of focussing on Foreign Direct Investment (FDI). The argument is, that exports and competitiveness are not heavily affected by unforeseen events like 09/11 or the moods of investors.

Is this issue really that simple? Is it one or the other? Is it possible for South Africa to grow on its own and concentrate merely on competitiveness and exports?

This report will show the relationship between competitiveness and FDI by concentrating on Africa's most competitive countries. Within the limitations of global reports, competitiveness and FDI will be discussed.

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Introduction

1.1 Overview

What is now called international trade has existed for thousands of years-long before there were nations with specific boundaries. Speaking in strictly economic terms, international trade today is not between nations. It is between producers and consumers or between sets of producers in different parts of the world. Nations do not trade; only economic units do. Agriculture, industry, and service enterprises are economic units; nations are political units (Encyclopædia Britannica 2002).

According to Fontyn (2002), South Africa would be better off, if it concentrates on increasing competitiveness and generating growth through exports. The reliance on foreign direct investment (FDI) for future growth is not entirely satisfying, since the future prospects for this kind of source are somewhat limited in South Africa. Main reasons for this is the market size and the privatisation issue.

1.2 Objectives

The main objective of this document is the investigation of relationships between foreign direct investment and competitiveness. The main focus lies on Africa, since Africa's main FDI attractors will be compared with Africa's most competitive nations.

1.3 Roadmap

After introducing competitiveness as a concept, the two main sources of global competitiveness data, the Global Competitiveness Report and the Global Competitiveness Yearbook will be evaluated in terms of methodology and African countries. The Africa Competitiveness Report will not be taken into account, since the latest results stem from 2000.

By looking at FDI, the main concept will be explained and the main source of information, the Global Investment Report will be assessed and the figures for African countries will be extracted.

The figures from the competitiveness as well as the FDI sections will be compared later in the document, before a conclusion on the findings will be drawn.

Competitiveness

2.1 Preamble

Trade based on comparative advantage still exists: France and Italy are still known for their wines, and Switzerland maintains a reputation for fine watches. Along with this kind of trade, an exchange based on competitive advantage began late in the 19th century. Competitive advantage came about when several countries in Europe and North America reached a fairly advanced stage of industrialization. With relatively similar economies they could begin competing for customers in each other's home markets.

Whereas comparative advantage is based on location, competitive advantage must be earned by product quality and customer acceptance. German manufacturers sell cars in the United States, and American automakers sell cars in Germany. German, American, and Japanese automakers all compete for customers throughout Europe and in Latin America. Hotel companies based in the United States, Great Britain, France, and Japan all operate hotels in each other's countries as well as in neutral sites such as Hong Kong and Singapore. Competitive advantage is thus attained by seeking market share on a global basis. In the late 20th century Japanese companies practiced this seeking of markets with great success. They succeeded because these companies sought to develop market share before concentrating on profitability (Encyclopædia Britannica 2002).

When it comes to measuring and ranking of countries according to competitiveness, the World Economic Forum (2002) and the International Institute for Management Development (2002) are the first to come into ones mind. Since both rankings rely on different factors in

order to rank the countries, the results are different as well. While the World Economic Forum (WEF) focuses mainly on openness of the economy, the International Institute for Management Development (IMD) focuses more on efficiency and human qualities. The biggest limitation for both rankings is the fact, that not all states of the world are ranked. This is an important limitation for this article, since especially the poorer nations are not ranked (Breytenbach 2002, pp. 2-3).

2.2 World Economic Forum

The WEF measures global competitiveness since 1980. In 2002, the Global Competitiveness Report consists of two main indexes, namely Growth Competitiveness Index (GCI) and Microeconomic Competitiveness Index (MICI). The GCI represents as estimate of underlying prospects for growth within the next five to eight years. It consists of three sub indexes, namely Technology, Public Institutions and Macroeconomic Environment. In contrast to the GCI, the MICI examines the underlying conditions defining the sustainable level of productivity. The MICI is composed of two sub indexes: the first one reflects the degree of company sophistication and the second mirrors the quality of the national business environment (World Economic Forum 2002).

Country	GCI Ranking	Technology Index	Public Institutions Index	Macroeconomic Environment Index
South Africa	32	38	34	30
Tunisia	34	60	24	37
Mauritius	35	45	35	36
Botswana	41	61	31	48
Namibia	53	59	41	66
Morocco	55	62	56	44
Nigeria	71	71	78	61
Zimbabwe	79	75	68	80

Table 2.1: Growth Competitiveness Index for African Countries
Source: World Economic Forum (2002)

While countries like Botswana, Morocco, Namibia and Tunisia are included in the 2002 report, Egypt dropped out due to the lack of survey data (maybe because of their economic

Country	MICI Ranking	Company Operations and Strategy Ranking	Quality of the National Business Environment Ranking
South Africa	29	31	33
Tunisia	32	37	30
Morocco	48	50	46
Mauritius	49	42	50
Namibia	51	58	49
Botswana	57	64	51
Zimbabwe	70	68	70
Nigeria	71	71	71

Table 2.2: Microeconomic Competitiveness Index for African Countries
Source: World Economic Forum (2002)

difficulties due to the fixed exchange rate).

The results in the tables 2.1 and 2.2 show some deviation in the Indexes. Tunisia for example has an overall GCI of 34 with a technology index of 60 and a public institutions index of 24. Overall, South Africa is Africa's most competitive Nation, followed by Mauritius, Tunisia and Botswana. This is somehow contradicting, since Cook & Sachs (2000) do not rank South Africa that high in their Africa Competitiveness Report 2000.

2.3 Institute for Management Development

Because they felt that efficiency was under-measured in the Global Competitiveness Report, the International Institute for Management Development (2002) produced their own "global masterpiece" called the World Competitiveness Yearbook. The International Institute for Management Development (IMD) measures competitiveness according to four factors, namely economic performance, government efficiency, business efficiency and Infrastructure. Since the IMD methodology measures human efficiencies to a greater extent, welfare states like Denmark, Netherlands and Germany get a better ranking than in the more open ones (Breytenbach 2002, pp. 2-3).

The biggest limitation with the World Competitiveness Yearbook (WCY) is the fact, that the global approach of the IMD ranks only 49 out of the 230 countries of the world. The only African Country present in the WCY 2002 is South Africa on 39th place. The detailed ranking

for South Africa in 2002: Economic performance 46, government efficiency 36, infrastructure 42 and business efficiency 30 (all figures are out of 49).

Because of the limited data available in this report, it will not be taken into account. Even if the data is limited, it might still be a good benchmarking tool, since it shows the lack of economic performance and infrastructure as opposed to the relatively good ranking in government and business efficiency.

Foreign Direct Investment

3.1 Preamble

Foreign investment means ownership of foreign property in exchange for financial return, such as interest and dividends. Foreign investment comes in two forms: direct and portfolio. This article concentrates on foreign direct investment (FDI). This kind of investment is one, which gives the investor a controlling interest in a foreign company. Control in this content does not need to be 100% or even 50% investment. If a company holds a minority stake and the remaining ownership is widely dispersed, no other owner may be able to counter the company effectively (Daniels & Radebaugh 1999, pp. 11-12).

In theory, everything sounds so easy. The underlying economic forces responsible for international flow of goods and services are virtually the same for the movements of factors of production (i.e. capital, labour and entrepreneurship, land does not move that quickly). Productive factors move, when they are permitted to, from nations where they are abundant (low productivity) to nations where they are scarce (high productivity). Productive factors flow in response to differences in return (such as wages and yields on capital) as long as these are large enough to more than outweigh the cost of moving from one country to another (Carbaugh 1999, p. 305). This might be where competitiveness factors come into play.

But the point about FDI is that it is far more than mere “capital”: it is a uniquely potent bundle of capital, contacts and managerial and technological knowledge. It is the cutting edge of globalisation (The Economist 2001, p. 90).

3.2 World Investment Report

Attracting FDI is an important policy concern for countries at all levels of development; it is useful to develop benchmarks of inward FDI performance. Instead of just comparing the absolute values of FDI inflows per country, the size of the country has to be taken into account as well. The United Nations Conference on Trade and Development (2002) evaluates FDI performance according to two indexes, namely the Inward FDI Performance Index and the UNCTAD Inward FDI Potential Index. While the Inward FDI Performance Index is the ratio of a country's share in global FDI flows to its share in global GDP, the UNCTAD Inward FDI Potential Index is an unweighted average of eight factors, namely the rate of growth of GDP, per capita GDP, share of exports in GDP, telephone lines per 1,000 inhabitants, commercial energy use per capita, share of R&D expenditures in gross national income, share of tertiary students in the population and country risk. The whole exercise of this report is to provide useful data to policy makers and analysts on relative performance (United Nations Conference on Trade and Development 2002, pp. 23-24).

It can be observed from the data in table 3.1 on page 11 that the results regarding FDI in African Countries are somehow mixed.

A shortcoming in the World Investment Report is the measurement of the potential Index. Togo for example may not be not having enough telephone lines to tell them that they are doing so badly in the potential index. Their actual performance is quite good (4th rank in Africa and 46th world wide), even if they do not have the potential according to the Index. Despite the good performance in the potential index, South Africa is doing very badly in attracting FDI. Is this index really referring to the real potential of the country?

Another example might be Singapore. Their FDI performance dropped from 2 (13.8) in 1990 to 18 (2.2) in 2000, despite the fact that they increased their potential index from 16 (0.470) in 1990 to 3 (0.641) in 2000. USA has highest potential index (1) for years, but performance wise only 50 (1.1) respective 74 (0.8) in ranking. Maybe attracting FDI is not about what you have but how you utilise it?

A possible explanation for these factors is given by the World Economic Forum (2002). They classify countries according to their score in both indexes:

Front-runners: Countries with strong (above average) potential and performance. Example: Namibia.

Above potential: Countries without strong structural capabilities (low or below average potential) that have done well in FDI performance (high or above average). Most of these countries are poor with a weak industrial base. Example: Tunisia.

Below potential: Countries with high FDI potential failing to attract FDI (low performance) because of policy and a tradition of low reliance on FDI, political and social factors or weak competitiveness. Example: Botswana.

Under-performers: Countries in this group are generally poor that fail to attract their expected share of global FDI. Some countries moved into this group after a significant decline in FDI due to a major financial or other crisis. Example: Morocco, Nigeria, South Africa and Zimbabwe.

It is very interesting, that countries that operate below their FDI potential like Botswana and to a certain extent South Africa, may have – besides other things – a lack of competitiveness.

3.3 Global FDI Regime

According to Breytenbach (2002), there are three important factors influencing the flow of FDI, namely the International Financial Institutions (IFIs), Host Policies and the decisions of the multinational company (MNC) itself.

Host countries tend to attract FDI through various policies. Privatisation of former state-owned enterprises and Export Processing Zones (EPZs) are among the most popular ones in these days. While EPZs also offer taxation and incentive benefits, the total offer goes beyond this. Together with suspended labour laws, EPZs become a very powerful factor in the host-policies of a country.

The list of reasons for doing FDI on the side of the MNCs is almost endless. Resources, markets and efficiency are among the most popular ones, while the World Association of Investment Promotion Agencies (WAIPA) has a list of ten important requirements.

The IFIs set the international “regulatory” framework for FDI. Especially organisations like the World Bank, heavily involved in third world development, have a particular interest in FDI flowing into these countries, since they identified the lack of FDI as a major explanation for Third World stagnation and underdevelopment.

As we can plainly see in this, competitiveness plays a minor role in most of the factors influencing FDI, since competitiveness can be seen as openness (World Economic Forum 2002) or efficiency (International Institute for Management Development 2002).

Country	FDI Performance Index				FDI Potential Index			
	Value		Rank		Score		Rank	
	88-90	98-00	88-90	98-00	88-90	98-00	88-90	98-00
Angola	0.0	5.1	129	3	0.151	0.166	105	126
Mozambique	0.3	1.8	109	23	0.068	0.178	137	118
Zambia	4.2	1.7	9	28	0.111	0.160	124	131
Togo	1.1	1.2	52	46	0.166	0.177	95	119
Uganda	0.0	1.0	130	59	0.115	0.228	123	94
Malawi	1.1	1.0	51	61	0.150	0.203	106	105
Gambia	1.9	0.9	34	62	0.199	0.250	75	85
Namibia	0.5	0.9	94	63	0.164	0.179	98	68
Ivory Coast	0.4	0.9	101	64	0.150	0.195	107	108
Tunisia	0.7	0.8	68	67	0.179	0.268	86	74
Nigeria	4.0	0.8	11	72	0.134	0.204	114	103
Zimbabwe	-0.2	0.8	136	73	0.152	0.147	104	133
Mali	0.3	0.7	105	76	0.132	0.216	117	97
Congo	0.3	0.7	107	79	0.171	0.207	91	101
Senegal	0.6	0.6	78	83	0.133	0.180	116	116
Tanzania	0.1	0.6	119	84	0.120	0.161	122	129
Egypt	2.8	0.5	21	91	0.172	0.287	90	66
Gabon	1.4	0.5	44	96	0.188	0.253	81	83
Ethiopia	0.1	0.5	118	97	0.085	0.171	135	122
Madagascar	0.5	0.4	89	99	0.121	0.184	121	114
Morocco	0.6	0.4	76	101	0.178	0.237	88	90
Guinea	0.6	0.3	74	106	0.129	0.203	118	106
Ghana	0.2	0.3	113	107	0.140	0.179	110	117
Botswana	2.2	0.3	29	109	0.297	0.346	41	45
Algeria	0.0	0.3	126	111	0.198	0.216	76	96
South Africa	0.0	0.2	131	113	0.220	0.266	67	77
Kenya	0.5	0.2	90	117	0.127	0.168	120	124
Congo. DRC	-0.1	0.1	134	118	0.097	0.085	131	138
Cameroon	-0.3	0.1	137	120	0.164	0.181	99	115
Niger	0.7	0.1	69	121	0.102	0.185	128	112
Rwanda	0.6	0.1	73	129	0.072	0.094	136	137
Sierra Leone	1.0	0.0	55	134	0.101	0.078	129	140
Lybia	0.5	-0.1	86	136	0.182	0.218	85	95

Table 3.1: African countries in the World Investment Report 2002
Source: United Nations Conference on Trade and Development (2002, pp. 25-26)

Comparison

In comparing data from the World Competitiveness Report and the World Investment Report, the lack of data on the competitiveness side is the biggest restriction. Strangely enough, one of Africa's major FDI attractors, Mauritius, is not listed in the World Investment Report. Unfortunately, the World Investment Report gives no reason or explanation for this. The World Economic Forum (2002) lists 75 and the United Nations Conference on Trade and Development (2002) 140 out of the 230 countries in the world.

Country	GCI Rank	MICI Rank	WEF Average	WEF Rank	FDI PI	FDI Rank
South Africa	32	29	30,5	1	113	7
Tunisia	34	32	33	2	67	2
Mauritius	35	49	42	3	n.a.	n.a.
Botswana	41	57	49	4	109	6
Morocco	55	48	51,5	5	101	5
Namibia	53	51	52	6	63	1
Nigeria	71	71	71	7	72	3
Zimbabwe	79	70	74,5	8	73	4

Table 4.1: Comparison of Competitive and FDI Indexes
Source: (World Economic Forum 2002, United Nations Conference on Trade and Development 2002)

The figures in table 4.1 are calculated as follows: GCI and MICI are directly taken from the Global Competitiveness Report. The unweighted average of GCI and MICI gives us the WEF Average. The eight listed African countries from the Global Competitiveness Report are now ranked according to the WEF Average. This figure is shown in the column WEF

Rank. Finally, the FDI Performance Index figures for the eight listed countries are taken from the Global Investment Report, and ranked as well.

The following calculations are done without the data of Mauritius, since it was not listed in the Global Investment Report. In order to establish if a relationship exists between FDI and competitiveness, the spearman rank correlation coefficient will be utilised (Keller & Warrack 1999, pp. 659-660). The spearman rank correlation is calculated by first ranking the data, which was done in table 4.1. The population spearman correlation is labelled ρ_s , and the sample statistic used to estimate its value is labelled r_s .

$$r_s = 1 - \frac{6 \cdot \sum d_i^2}{n \cdot (n^2 - 1)}$$

or

$$r_s = \frac{COV(a, b)}{s_a \cdot s_b} \quad (4.1)$$

$$r_s = \frac{-1.7143}{2 \cdot 2}$$

$$r_s = -0,4286$$

In equation 4.1, a and b are the ranks of the data (FDI and competitiveness), while d_i is the difference between the ranks for every pair (country). It can now be determined if a relationship exists between the two variables (FDI and competitiveness). The hypotheses to be tested are:

$$H_0 : \rho_s = 0$$

$$H_1 : \rho_s \neq 0$$

From Keller & Warrack (1999, p. B-22) we can now establish a rejection region for $n = 7$ and $\alpha = 0.01$. The rejection region is ± 0.893 . Since r_s falls in between the region, we cannot reject H_0 and therefore we have to assume a relationship between FDI and competitiveness, even if the figures do not really show this and the relationship is not very strong.

Over the years, Mauritius, Tunisia, Botswana and South Africa have been ranked very highly in the competitiveness reports, yet they struggle to attract FDI. Namibia, 4th ranked

in the World Competitiveness Report 2002, attracts more FDI in relation to its share in the world's GDP. Figures for Mauritius are not included in the World Investment Report, but since the Export Processing Zone (EPZ) in Port Louis seems to work very well, their FDI performance is assumed to be the highest in Africa.

While competitiveness according to the World Economic Forum is measured mainly according to openness, nobody really knows what MNCs and TNCs are really looking for. Estimates like resources, markets and efficiency as well as the WAIPA requirements have not yet proven to be correct. But even if the measurement might not be the same, a relationship between FDI and competitiveness cannot be denied.

Finally, FDI decisions depend also on the perception of individual Transnational Corporations (TNC's), and this may be at variance with data based on past performance (United Nations Conference on Trade and Development 2002). In terms of attracting FDI, lots of theories can be established, but in the end, it is the decision of the MNC or TNC itself.

Conclusion

There is small evidence that there is a relationship between competitiveness and FDI attraction. A good example for this kind of phenomenon might be China's success over the last 15 years. China's impressive export growth, from \$26 billion in 1985 to \$249 billion in 2000, was accompanied by a substantial growth in FDI inflows, from \$2 billion in 1985 to \$41 billion in 2000. The country's strong export growth was underpinned by a strengthening of its export competitiveness in all markets, reflected in an increase of the country's market share from less than 2% to more than 6% during this period. More important, the structure of China's exports also changed from primary products and resource-based manufactures (50% in 1985) to non-resource-based products and high-technology manufactures (87% in 2000). Foreign affiliates account for more than 48% of the exports, with a high share in manufactured and technology-intensive products (United Nations Conference on Trade and Development 2002)

Is growth through exports and increasing competitiveness enough for South Africa? With a weak public sector and government, export growth and increasing competitiveness will be a tough thing to realise. Even if South Africa's export gained some competitiveness through the depreciation of the Rand until the end of 2001, This effect was almost reversed in 2002 when the Rand rose from R12 to R9 for 1US\$ (Markowski 2002, The Economist 2002, Quirk 1996). On the long run, with prime rates above 15% and a weak public sector, South Africa has to think of attracting FDI.

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