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On the Determinants of Domestic and Foreign Investment to SADC: What Role for Regional Integration?

Susanna Wolf

Center for Development Research (ZEF Bonn), Bonn University

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1. INTRODUCTION

To increase investment is one of the major goals of economic policy in many countries. Also the governments of most SADC countries hope to attract foreign direct investment and to increase private domestic investment.[1] Support for the private sector also ranks high on the agenda of donors such as the EU in the Cotonou Agreement.

There are good reasons for this new attitude: Empirical evidence shows that private investment in SSAfrica has a significantly stronger effect on growth than public investment because of higher efficiency in the private sector. And as ODA declines the need for foreign capital has to be met increasingly by FDI (Hernandez-Cata, 2000).

In the new WTO round launched at Doha investment rules and competition policy have been put on the agenda. Although it is debated whether the WTO is the right forum for the agreement of investment rules there is widespread agreement that the chaotic actual situation with more than 2000 bilateral investment agreements and investment provisions in TRIMs, GATS and elsewhere is causing problems for developing countries because of a lack of transparency.

The trend towards closer regional integration among African countries was reemphasised by the NEPAD initiative and is making progress in SADC. Despite problems of overlapping membership and distribution of tariff revenue the attempt to create bigger markets and to cooperate in various areas is growing. As market size is an important determinant of investment that aims to serve the local market the process of regional integration should have a significant impact on foreign and domestic investment.

It is widely agreed that infrastructure is a precondition for domestic as well as foreign investment. However, it is not clear what the contribution of different types of infrastructure (transport, communication, power) is and what role the private provision plays for example in the case of telecommunication where large network externalities exist.

Therefore a closer look at the specific causes of domestic and foreign private investment in the SADC countries is needed. This paper has the aim to look especially at those factors that are under direct control of governments like infrastructure and regional integration and where decisions have to be made in the coming years. In the existing literature on the determinants of investment these aspects haven't been investigated in detail. Therefore this paper focuses on the effects of deepening regional integration and improvement of infrastructure. It covers domestic as well as foreign investment and identifies policy measures for improving the attraction of investment by focusing on investment determinants that are under control of the SADC governments. Only if effects of FDI under specific circumstances are well understood investment policies can be designed that will attract investment in those sectors that can bring the highest benefits to the country and increase the potential for sustainable growth.

[1] See for example the NEPAD initiative

2. INVESTMENT IN SADC RELATIVE TO SUB-SAHARAN AFRICA

In 1980 the Southern African Development Co-ordination Conference (SADCC) was founded in Lusaka. But only after Namibia (1990), South Africa and Mauritius (1994) joined the organisation progress was made in regional integration. In 1992 the Southern African Development Community (SADC) replaced the SADCC with the aim to foster development through integration.

The trade protocol entered into force in 2000 and will transform the SADC into a FTA within a transition period of 8 years. To make the FTA work it is however essential to reduce not only tariffs but also non-tariff barriers such as inefficient border-controls, mutual recognition of standards etc. To promote investment in the region a SADC Finance and Investment Sector Co-Ordinating Unit (FISCU) was established in 1995. It should help to speed up the pace of liberalization, encourage private-public partnerships, and help to establish simple, transparent and non-discriminatory procedures (FISCU, 1999).

In 2001 Africa's GDP grew faster (4.3 %) than any other developing region, despite the expected problems after September 11. Individual SADC countries had even much higher growth rates e.g. Mozambique (9.2%), Mauritius (6.1 %), DRC (5.7 %), Tanzania, and Sierra Leone (5 % each). Also Africa's average per capita income grew by 1.9 % in 2001. This is due to various factors such as reduced conflicts and insecurity, improvements in macroeconomic policies, improvements in agricultural output (especially in Malawi, Seychelles and Zambia) and higher than expected exports under the U.S. African Growth and Opportunity Act (AGOA). Furthermore the lower oil prices helped 42 oil-importing African countries by easing pressures on foreign exchange, inflation, and public spending. However, some of the SADC countries especially Zimbabwe had a negative growth rate of -7.5 % (partly due to the drought which influenced the lower than average growth rate of Southern Africa that was only 2.4 %). Five of the SADC countries secured industrial growth in 2000, notably Lesotho (11.8 %), Angola (7.9 %), Mozambique (7.8 %), Tanzania, and Botswana (5.7 % each) (UNECA, 2002).

African exports towards the US have grown considerably in recent years from about USD 1.5 billion a month in 1999 to USD 2.3 billion a month in 2000. The US is the top importer from Africa in 2000. AGOA helped especially to diversify African exports towards the US. Especially South Africa provided a mix of products – with transportation equipment accounting for 75%, followed by minerals and metals (24 %), agricultural products (13 %) and textiles and apparel (6 %) (UNECA, 2002).

These relatively positive macroeconomic developments lead to an increase in gross domestic fixed capital formation which was just over 20 % of Africa's GDP in 2000. With many countries privatizing state-owned enterprises, private investment accounts for a growing share of domestic investment and public investment for a shrinking share. There are significant differences between the more advanced SADC countries with regard to investment (see Table 1). In Mauritius and Botswana most of the private investment went to financing and other services, in Zimbabwe to manufacturing, and in South Africa to mining. Investment performance improved in

almost all sectors in South Africa in 2001 with faster growth in private investment (UNECA, 2002).

Table 1: Gross Fixed Capital Formation by Sector, 1995 in %

Sector	Country			
	Mauritius	**Zimbabwe**	**Botswana**	**RSA**
a. Agriculture, hunting, forestry and fishing	2,66	9,87	1,30	3,50
b. Mining and quarrying	0,00	13,71	4,93	9,43
c. Manufacturing	13,22	28,18	5,78	26,90
d. Electricity, gas and water	0,00	8,88	1,68	8,75
e. Construction	2,03	3,17	5,35	1,12
f. Wholesale and retail trade, restaurants and hotels	14,48	10,17	3,59	7,56
g. Transport, storage and communication	4,84	7,67	11,00	6,14
h. Financing, insurance, real estate and business services	28,30	13,98	12,48	24,93
i. Social and other personal services	1,55	0,00	4,04	0,00
j. Other services	0,00	0,23	0,00	1,07
k. Government [a]	32,93	4,15	49,84	10,59
Total	100,00	100,00	100,00	100,00

Source: Ministry of Economic Development and Regional Co-operation-Mauritius, 1998, Reserve Bank of Zimbabwe, 1998, Central Statistics Office-Republic of Botswana, 1998, South African Reserve Bank, 1998, own calculations.

[a] As these figures are collected from different sources the definition of government capital formation also differs. In principle, however, it includes government capital formation in all sectors.

International investment flows seem to have bypassed sub-Saharan Africa to a large extent in the last decades. Only 3 % of world-wide FDI are directed towards SSAfrica. The low level of investment corresponds with the low level of GDP per capita in most African countries. The investment / GDP ratios have been lower in comparison to other regions (Rodrik, 1999). But the situation has improved in recent years. The inflows of foreign investment in 1997 were more than twice as high as in 1990. A number of small African countries like Lesotho, Namibia the Seychelles and Swaziland with low absolute FDI have received a high stock of FDI as percentage of GDP (UNCTAD, 1998 and Basu and Srinivasan, 2002). The share in world FDI is higher for a number of SADC countries than their share in world GDP like for Lesotho (7.4), Angola (7.7), Seychelles (3.1), Mozambique (1.9), Swaziland (2.7), and Zambia (1.7) (WIR 2001 Annex table A.I.10). Mozambique, South Africa and Tanzania are also mentioned by many multinational corporations as more attractive FDI destinations. These examples are encouraging, because they show that countries with a low income level can also become increasingly attractive to foreign investors. The SADC countries could also increase their share of all FDI going to Africa from less than a third for the period 1990-94 to more than a half in 1995-99 although the overall trend is quite volatile (see Table 2). Unlike emerging markets in other regions South Africa was not hurt by the September 11 attacks. From 2000 to 2001 net private flows and net equity investment increased driven by large-scale deals and privatizations (UNECA, 2002, p.23f). However, in South Africa 60 % of FDI inflows consist of Mergers & Aquisitions. In absolute terms Angola and South Africa recieve the highest FDI inflows of all SADC countries (see Table 2, Muradzikwa, 2002).

Table 2: FDI inflows into the SADC countries, USD million

	1987-1992	1993	1994	1995	1996	1997	1998	1999	2000
Angola	178	302	170	472	181	412	1114	2471	1800
Botswana	-29	-287	-14	70	71	100	96	37	30
DRC	-11	7	-2	1	2	1	1	1	1
Lesotho	11	15	19	275	286	269	262	136	223
Malawi	12	11	9	25	44	22	70	60	51
Mauritius	25	15	20	19	37	55	12	49	277
Mozambique	12	32	35	45	73	64	213	382	139
Namibia	44	55	98	153	129	84	77	111	124
Seychelles	19	4	15	40	30	54	55	60	56
South Africa	-24	-17	334	1241	818	3817	561	1502	877
Swaziland	62	72	63	33	-62	-48	165	90	-37
Tanzania	3	20	50	150	149	158	172	183	193
Zambia	102	2	40	97	117	207	198	163	200
Zimbabwe	-8	38	41	118	81	135	444	59	30
TOTAL	396	269	878	2739	1956	5330	3320	5304	3964

Source UNCTAD, World Investment Report various issues

South Africa's rand was Africa's worst performing currency in 2001 with a depreciation against the US Dollar by 45 %. It is likely that this is partly caused by declining investor confidence due to the situation in Zimbabwe. However, South Africa's international credit ranking by Moody's was recently upgraded and strong economic fundamentals together with a stable macroeconomic environment should allow for continued robust expansion over the coming years (UNECA 2002).

The sectoral composition of FDI in African countries has changed in recent years, and FDI is no longer exclusively directed towards the primary sector. However the nine oil-exporting countries still account for about 75 % of FDI inflows to Africa. But even in oil-exporting countries, services and manufacturing have become key sectors for FDI. The growing importance of services in FDI due to liberalisation in the GATS has not only shifted the industrial composition of FDI but also the locational patterns. In manufacturing and especially services the proximity to customers is especially important. On the other hand there is a positive linkage between the level of technology in an industry and the level of concentration because of agglomeration effects. Therefore in developing countries in general FDI remains concentrated in labour intensive, low-technology industries (UNCTAD, WIR 2001).

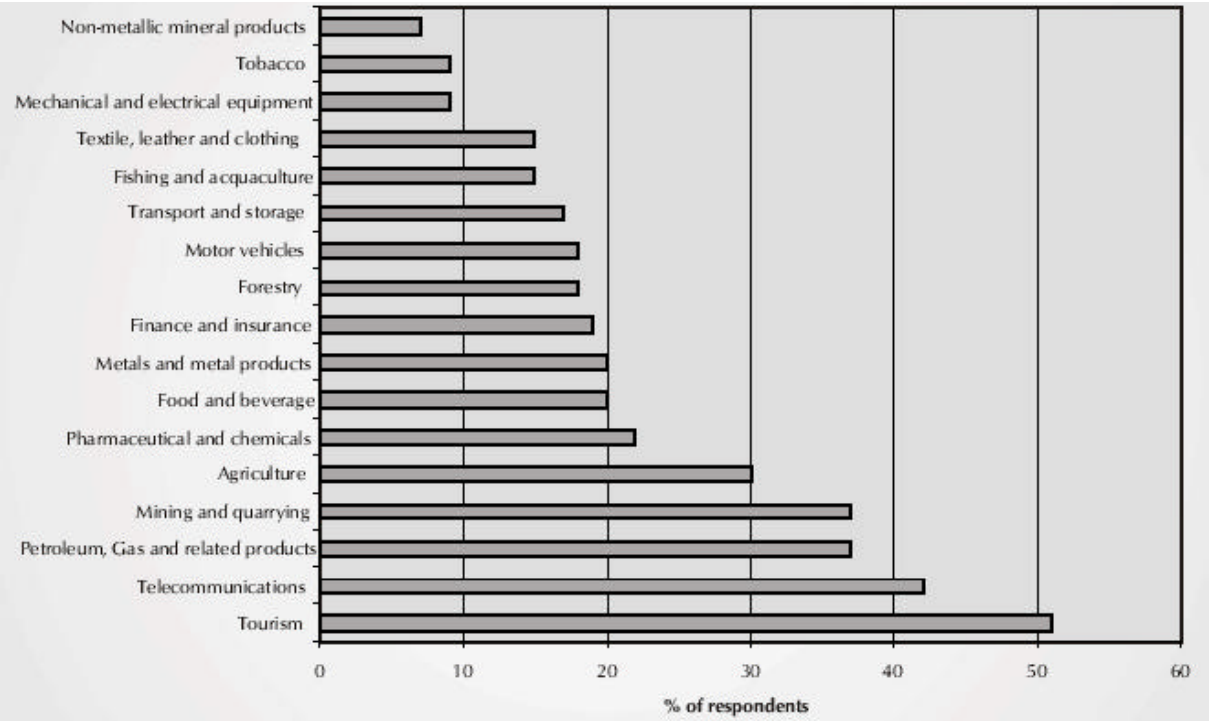
Table 3. FDI into SADC by Industry (% of total)

Industries	**1996**	**1997**	**1998**
Metal products and minerals	0,0	58,2	56,4
Mining	17,8	26,9	27,8
Energy and oil	69,1	0,5	0,4
Food, beverages and tobacco	5,9	8,7	2,4
Agriculture, forestry and fishing	4,3	1,2	2,1
Telecommunication and information technology	0,0	0,1	2,1
Hotel, leisure and gaming	0,8	0,2	3,6
All other combined	2,2	4,2	5,3

Note: Amounts include intentions and actual investments.
Source: BusinessMap, 1999. cited form Odenthal

In SADC the sectoral composition of FDI fluctuates as one major project has a big influence on the statistics (see Table 3) In general mining and energy are still the most important sectors but others are gaining in importance. Manufacturing FDI was mainly located in sectors that produce for local consumption like breweries, dairies, shoes and clothing (Odenthal, 2001). The growth of FDI in services such as tourism and telecommunication has also contributed to job growth (see Figure 1 and Muradzikwa, 2002).

Figure 1:Sectoral Distribution of FDI in SADC, 1998-2000



There have also been changes in the sources of FDI in Africa in the last decade. Before 1990 FDI in Africa came from a few OECD countries, mainly France, the United Kingdom, and the United States. During the 1990s however other OECD countries increased their share and FDI from Asian countries (Korea, China, India, Malaysia) rose significantly. South Africa and Mauritius are the only African countries that have significant outward FDI in other African countries, especially in the SADC region (Mauritius in Mozambique, Seychelles and South Africa). South Africa is the leading foreign investor in the SADC region, accounting for about a quarter of FDI activity. South African companies also invest in the least developed SADC countries e.g. in Malawi, Mozambique, Tanzania, and Zambia (UNCTAD 2001b). This FDI activity by new entrants also contributed substantially to the sectoral diversification. While the biggest share of FDI stock from traditional source countries is still located in natural-resource related industries FDI activity from new entrants tends to be increasingly diversified (Odenthal, 2001).

3. HOW TO INCREASE PRIVATE INVESTMENT?

The poor investment record of most African countries can be attributed to the existence of a number of deficiencies, as a result of which minimum adequate environment for investments is largely still lacking. The size of the market is only one of the factors influencing investment, others as the macroeconomic structure of the economy, economic policies, levels and magnitudes of domestic savings, trade competitiveness, the legal system and degree of accessibility to domestic and international credit facilities are of equal or greater importance. These points are mentioned in various surveys by African companies and include trade liberalisation. However it is also noted that the implementation of improved investment policies by a number of African countries has not generated the expected growth in FDI (ACP 2002).

In general there is a limited number of reasons why foreign firms invest in developing countries:

- The availability of natural resources is still a major factor and therefore the bulk of FDI in SADC in absolute terms goes to Angola.
- Reduction of production costs is also often mentioned by multinational firms, e. g through low labour costs.
- To benefit from low costs of course a minimum of macroeconomic and political stability and adequate infrastructure and education has to be there.
- Furthermore many SADC countries try to attract investment through incentive policies, e. g. Export Processing Zones and Investment Promotion Agencies.
- A major reason for investing in other countries is also to seek new markets, but as most SADC economies are rather small this objective can only be exploited through deeper regional integration.

These factors cannot be regarded independently as they are mutually reinforcing. A critical mass has to be achieved to make FDI attraction work. However their importance varies for investment in different sectors. For example low production costs are especially important for exporting industries. (Basu and Srinivasan, 2002 and MIGA, 2002).

In some of these areas the SADC countries have made substantial progress. One of the most important factors in the renewed interest of investors in the SADC region in the 1990s is the improved political situation (independence of Namibia, end of civil war in Mozambique, end of apartheid). Furthermore most SADC countries have also eased restrictions on foreign entry and ownership although with some exceptions. Although mixed in general the economic performance of the region has also been encouraging as described above.

But it is not at all sufficient to consider only FDI when it comes to investment promotion. Domestic investment is even of greater importance because it can provide sustainable investment. One has to bear in mind that in any country local investment whether public or private, much exceeds foreign investment. Appropriate domestic firms are also needed as partners for foreign investors (Page, 1999).

The relative lack of a business culture makes it hard for foreign investors to find local investment partners or managers. The development of a strong local private sector is a prerequisite for FDI. A local investor community and a well-established class of entrepreneurs used to operating on a level playing field and not addicted to rent-seeking, can serve as a magnet to foreign investment (Bheenick, 1997). However as domestic savings are low, FDI is needed to reach a level of investment that can enhance growth.

As the list of factors that have a negative impact on investment is long it is of crucial importance what can be done to improve the situation and by whom. Empirical studies find that host country market size, the economic and political stability, the level of economic development, the openness of the economy and the institutional environment are important factors that influence FDI to developing countries (Basu and Srinivasan, 2002). However, there are also major discrepancies between different studies and often only very view African countries are included in the sample.

Furthermore not all of these factors are under the control of individual governments, for many measures regional and international cooperation is needed. As the perception of a country by foreign investors does not only depend on its own performance but also on stability and prosperity in the neighbouring countries regional integration could help to market a region. A recent study finds that factors that drive FDI to developing countries have a different impact on FDI in Sub-Saharan Africa. One main finding is that controlling for various other determinants FDI is uniformly lower in Sub-Saharan Africa which indicates an adverse regional effect. Furthermore infrastructure and openness to trade seem to have a lower effect on FDI in Africa but this might be driven by the different nature of FDI (Asiedu 2002).

Interestingly in the New Partnership for Africa's Development (NEPAD) private sector development also has a high priority. The need to diversify the economies on the basis of natural resources is stressed. Support for private enterprises should be directed mainly towards micro-enterprises and small and medium enterprises as these are the main contributors to value added and employment in most African countries (NEPAD, Article 156). NEPAD acknowledges the prime responsibility of African governments for the development of the continent and therefore increases the ownership of the development strategies as the creation of "the necessary political, social and economic conditions in Africa that would serve as incentives to curb the brain drain and attract much needed investment" that is foreseen in Article 125 (NEPAD) is primarily the responsibility of the African states that have to simplify administrative procedures and improve the legal system.

3.1 Investment and regional integration

Kindleberger (1966) extended the concept of trade creation and diversion to investment creation and diversion. Investment creation in this sense is the augmented FDI that is generated by trade diversion. It occurs because the external tariff of a free trade agreement (FTA) remains high. If investing inside the FTA is the only way to serve the market, exports are replaced by investment. Basically through regional integration the size of the domestic market that is an important determinant of FDI is

increased. This can also lead to a better exploitation of economies of scale and therefore to increasing competitiveness. Through enhanced competition also rationalisation investment will take place (Kindleberger, 1966 and Robson, 1998). The latter types of investment will enhance trade and are also likely to increase transfer of technology and learning effects. However, so far there is only little empirical evidence for a positive effect of regional integration on investment although this is regarded as increasingly important by policy makers in Africa. The lack of empirical evidence could also be due to data limitations (Basu and Srinivasan, 2002).

Regional integration in SADC is not only a matter of trade liberalisation. The new regionalism gives special emphasis to potential gains from reduced administrative and transaction costs due to improved institutions. As increased internal competition leads to higher competitiveness and a reduction of production costs and monopoly rents it will also stimulate exports to the rest of the world. Therefore countries could benefit from regional integration even if there is no substantial increase in internal intra-industry trade (Robson, 1998). Experience from the EU and other integration schemes teaches us, that only economic reasons are not sufficient for regional integration, but that a strong political will is needed that is only persistent if benefits are equally distributed.

With respect to regional integration in SADC there are also a number of problems. Not only are the member states at very different stages of development ranging from South Africa to one of the poorest countries in the world. This diversity is by far larger than within the EU. Also the overlapping membership of almost all SADC members in other regional integration schemes leads to some questions of the sincerity of the commitments. For example Tanzania is not only a member of SADC and COMESA but also of the newly revitalized EAC.

Although the SADC-wide FTA is not yet fully implemented the number of bilateral trade agreements between SADC members have already lead to higher intra-regional trade. The absolute amount of intra-regional trade is the highest of all African regional trade blocs and the share of intra-regional exports in total exports has grown from 3.1 % in 1990 to 11.4 % in 1997, which is only partly due to increased membership. Since 1995 the intra-regional trade without South Africa's share grew faster than total intra-regional trade.

In at least some of the SADC countries services will be of greater importance in the future. This holds not only true for tourism which is important for most SADC countries and where investors still see opportunities according to a business survey (Hough, 1998). There are also financial services, information technology, transport etc. which are increasingly important. South African firms have for example invested in financial services in almost all the SADC countries. This rising trend in FDI is not only due to the introduction of market-based reforms in most SADC countries but also to regional attempts towards greater harmonisation, co-ordination and integration of financial activities (FISCU, 1999). However, all these sectors are generally highly dependent on trained workforce. Therefore only few of the SADC countries might be able to attract investment there.

3.2 Infrastructure provision: regional cooperation, privatisation and competition

Cooperation in infrastructure provision is also an important element of most regional integration schemes such as SADC. Especially in the transport sector considerable cost reductions can be achieved. As 6 of the 14 SADC countries are landlocked transport is especially important for them (Robinson, 1996). The coverage of African countries with infrastructure as well as its maintenance is much lower than in other regions. For example teledensity in SADC countries is lower than the average for developing countries. Accordingly prices of infrastructure are much higher. Freight rates for rail transport are on average around double those in Asia and air transport is even four times more costly than in East Asia. This results in a share of freight and insurance payments of 15 % of exports earnings in Africa compared to 6 % for the average for all developing countries (Collier/Gunning, 1999). However, in recent years, especially with the privatisation of parts of infrastructure, progress has been made. In the SADC region there is a growing number of transport corridors that are also regarded as regions with investment potential. It is not only in the well-known Maputu Development Corridor but also the Tazara Development Corridor between Tanzania and Zambia, the Walvis Bay Development Corridor between Botswana and Namibia and others where new investment into rail and road routes and therefore between linkages within the region are expected. In most SADC countries national airlines have been privatised or are on the way and new competitors have been established, so that prices are likely to go down (FISCU, 1999).

Through privatisation of government enterprises the share of private investment could be increased. Moreover privately run companies are assumed to be more efficient and therefore sell goods and services at lower cost with higher quality. To achieve these gains it is however necessary to allow also for competition and introduce an independent regulator, rather than turning a public monopoly into a private one where rents are diverted. (Mattoo et al. 2001) This is especially important for the privatisation of infrastructure such as electricity, telecommunication, water supply, transport etc. as these services are inputs into every economic activity and therefore have a great effect on the investment climate.

In a number of African countries there has been a shift from public to private provision of information infrastructures through privatisation of existing state providers and allowing new entries of private providers. In most SADC countries the mobile phone sector has been deregulated which lead to considerable investment and increased access. In a number of countries the number of mobile phone subscribers is already higher than fixed line subscribers (Muradzikwa, 2002). Access to ICT is especially important for investment decisions not only because its network character is complementary to the network structure of transnational corporations but because access to information is crucial for the reduction of transaction costs and the reduction of uncertainty. As risk and uncertainty are among the biggest obstacles for investment in SSAfrica the availability of better information can be expected to increase investment.

However, restrictions on entry of foreign firms or the participation of foreign capital are still common (Mattoo et al., 2000). But new entry is crucial to decrease the costs of access and improve the quality of the services. Recent research shows clearly that larger welfare gains arise from an increase in competition than from simply a change in ownership from public to private hands. This increase in competition is possible

because of the erosion of the natural monopoly in telecommunication markets due to technological development, especially with respect to cellular phones. On the other hand monopolistic or oligopolistic rents can be seen as a means to allow firms to fulfil universal service obligations. But as a significant negative relationship between performance (measured by price and quality indicators) in the telecom sector and the number of firms and the existence of an independent regulator can be found, other means to ensure access for all groups of the population should be looked for.

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4. RESEARCH METHODOLOGY

Although there is a significant empirical literature on the determinants of FDI to developing countries in most of the studies only a few African countries are included and therefore they have a bias towards countries at a higher level of development. To determine the effects of regional integration and distinguish the factors that drive investment in the SADC from other regions, a sufficient number of SADC members in the sample is needed. Policies that have been successful in driving FDI may not be equally successful in SADC or Sub-Saharan Africa in general.

To identify the factors that influence domestic and foreign investment (I) cross-country panel data regressions are carried out. The focus of the analysis lies on the effects of regional integration (RI) and infrastructure improvement (INF). The econometric analysis is based on a reduced-form investment model that relates domestic or foreign investment to indicators of regional integration, especially in the SADC and indicators for infrastructure.

Therefore the model is the following:

$$I_{it} = \beta I_{i,t-1} + \delta RI_{i,t-1} + \gamma INF_{i,t-1} + \lambda' X_{i,t-1} + u_{it}$$

Where $u_{it} = s_i + r_t + v_{i,t}$

And X is a vector of control variables. For the estimations GLS regressions with random effects are used.

The regional dummies for membership in an FTA are used to construct a variable of regional market size, which is measured as the combined GDP of all members of the group and is included in logarithmic form. Furthermore the SADC dummy is interacted with other variables to distinguish the different effects some factors have in SADC as compared to other regions. For infrastructure different indicators such as road and telecommunication density, air departures and power consumption are available. Recently especially telephone density has been used in cross-country studies as this variable became available for many countries. In addition the degree of competition, regulation and liberalisation in telecommunication provision from a dataset that was constructed by the ITU and the World Bank are used (see Mattoo et al. 2000). In a number of econometric studies the quality of infrastructure turned out

to be positive and significant. However Asiedu (2002) finds that although infrastructure promotes FDI elsewhere it has no significant impact on FDI flows to SSAfrica.

Furthermore variables commonly used in investment regressions such as the level of human capital, the initial level of GDP, the growth of GDP per capita, inflation, trade openness, education, and political instability are used as control variables. It is also common to control for investment in the previous period. Therefore for the regression with FDI inflows as dependent variable, FDI in the previous period is used and for analysing the factors that determine domestic investment, domestic investment in the previous period is included. In addition period dummies are used (see Mody and Murshed, 2002). The investment data are normalized by country GDP.

FDI is included in the domestic investment regression because it is a direct component of gross domestic investment and should therefore have a positive coefficient. But as FDI is also assumed to crowd out domestic investment to some extent also FDI squared is used which might have a negative coefficient. As common in growth and investment regressions the initial level of GDP per capita is included in logarithmic form. The sign of that variable is ambiguous as on the one hand the convergence hypothesis would imply that poor countries grow faster and also need higher levels of investment. On the other hand savings levels in poor countries are on average low which leads to lower levels of domestic investment. Hence in different econometric studies GDP per capita is positive, negative or insignificant (Asiedu, 2002). Growth of GDP per capita is assumed to have a clearly positive relationship with investment as a more dynamic country will attract more domestic and foreign investment. Human capital is measured as primary school enrolment because primary education of the workforce is a basic precondition for profitable investment and data are widely available. In addition as an indicator for industrialisation the share of value-added industry in total GDP is included in the regressions as this will capture possible agglomeration effects. New investment is more likely to allocate where already a substantial economic activity especially in industry is existent.

Of the policy variables openness measured as exports plus imports relative to GDP is most popular in investment regressions. Most studies find a significant positive effect on FDI. However the marginal benefit from openness to FDI seems to be smaller in SSAfrica than in other regions (Asiedu, 2002). There is an ongoing debate whether openness is really a good policy measure or whether it measures other things such as dependency of commodity exports. Therefore trade policy is also captured more directly with the share of import tariff revenues in total imports. The proxy for financial depth, the ratio of M2 to GDP has been widely used for this purpose since it provides a measure of the size of the financial sector relative to the size of the economy (Mody and Murshed, 2002). Political indicators are obviously also important determinants of investment. However, as they are difficult to measure the results of empirical studies are somewhat mixed. Some find a significant negative impact but others don't find a significant impact at all (Asiedu, 2002). Here different indicators of policy are used that are taken from the Kaufmann, Kraay, Zoido-Lobaton (2002) dataset. All independent variables are lagged one period.

The data used in this study consists of a panel of 112 countries observed at annual frequency over a period from 1975 to 1999. As we wanted to include as many SADC countries as possible in the analysis not all independent variables that are used in

other studies of investment determinants could be used here. The data used that were not described above are from the World Bank World Development Indicators database. Four year averages of the variables are used in order to abstract from the cyclical factors that influence investment behaviour as we are interested in structural determinants of investment rates across countries. This still allows for dynamics whilst also reducing the problem of endogeneity (Mody and Murshed, 2002). This leaves us with 442 to 523 observations to be used in the regressions.

5. RESULTS

First the determinants of FDI are analysed for all countries (see Table 4). A number of determinants that are expected to influence FDI turn out to be significant. Especially the coefficients for past FDI, trade openness (exports + imports/GDP), and the regulatory quality of the economy are positive and significant. The ratio of savings to GDP has a negative and significant coefficient and the coefficient for telecommunication regulation was closest to conventional levels of significance from all three telecommunication policy indicators. Interestingly the coefficient for the SADC dummy is positive and significant at the 10 % level which means that FDI is higher in the SADC countries controlling for other factors. This is in contrast to the usually negative coefficient for a SSA dummy. However, neither the size of the domestic nor the regional market was found to be close to significance in any specification and was therefore excluded from the regressions. This result could be influenced by the inclusion of previous FDI that already captures the market size to some extent.

In a second regression the variables that were found to influence FDI in general were interacted with the SADC dummy. The coefficients and significance levels remained in the same range except for the savings rate that turned positive but insignificant. The coefficient for openness interacted with SADC is positive and significant which suggests that openness increases FDI even more in the SADC countries. However for regulation and savings the interaction terms are negative and significant. And also the SADC dummy itself becomes insignificant.

Table 4: Regression Results, dependent variable fdi_gdp

	coef.	**P>|z|**	**coef.**	**P>|z|**
fdi_gdp	0.470	0.000	0.456	0.000
openness	0.013	0.000	0.011	0.000
telecom_regulation	0.306	0.110	0.413	0.030
regulation	0.245	0.089	0.235	0.123
savings_gdp	-0.011	0.089	0.007	0.423
sadc_openness			0.019	0.020
sadc_regulation			-0.744	0.077
sadc_savings			-0.041	0.004
sadc	0.521	0.092	-0.514	0.507
period	0.088	0.000	0.089	0.000
constant	-175.536	0.000	-177.974	0.000
No of obs.	523		523	
R-sq overall	0.3797		0.4021	

In a second set of regressions the same determinants were used with domestic investment as the dependent variable (see Table 5). Therefore also the share of FDI was included as an independent variable. Except the share of FDI, previous domestic investment and the savings ratio the variables that determine FDI don't seem to play a significant role for domestic investment and also the coefficient for the SADC dummy is not significant. If the same variables are interacted with SADC membership only openness becomes significant again.

Table 5: Regression Results, dependent variable domestic investment

	coef.	**P>|z|**	**coef.**	**P>|z|**
fixed_capital_formation	0.728	0.000	0.672	0.000
fdi_gdp	0.352	0.000	0.294	0.001
openness	0.007	0.127	0.006	0.177
telecom_regulation	-0.383	0.356	-0.132	0.749
regulation	0.140	0.653	0.009	0.979
savings_gdp	-0.048	0.001	0.009	0.656
sadc_openness			0.041	0.019
sadc_regulation			-0.752	0.399
sadc_savings			-0.115	0.000
sadc	-0.213	0.746	-2.024	0.213
period	0.012	0.730	0.017	0.623
constant	-18.127	0.792	-27.448	0.684
No of obs.	504		504	
R-sq overall	0.6525		0.6662	

Therefore we ran a third set of regressions to find the determinants of domestic investment (see Table 6). Again variables that were not significant were excluded.

Table 6: Regression Results, dependent variable domestic investment

	coef.	**P>|z|**	**coef.**	**P>|z|**
fixed_capital_formation	0.543	0.000	0.531	0.000
fdi_gdp	0.337	0.000	0.339	0.000
openness	0.008	0.251	0.004	0.533
industry_gdp	0.073	0.022	0.078	0.016
savings_gdp	-0.070	0.003	-0.055	0.024
school_enrollment	0.017	0.117	0.015	0.149
m2_gdp	0.026	0.039	0.029	0.024
gdp_pc_growth	0.282	0.000	0.254	0.000
sadc_openness			0.042	0.082
sadc_industry			-0.132	0.087
sadc_growth			0.164	0.357
sadc	-0.591	0.521	0.272	0.925
period	0.029	0.435	0.032	0.383
constant	-52.975	0.473	-59.487	0.421
No of obs.	442		442	
R-sq overall	0.6924		0.6978	

The most important determinants of domestic investment that were found include the level of industrialisation, the financial development and the growth of GDP per capita. The coefficient for school enrolment is also close to significance but the SADC dummy and the domestic and regional GDP remain again insignificant. When these variables were interacted with the SADC dummy it turned out that the growth rate and the openness indicator are more important for investment in SADC than elsewhere. However, the level of industrialisation seems to play no special role for domestic investment in the SADC region.

Overall it seems that different factors influence domestic and foreign investment both in general and in the SADC region. For foreign investors openness plays a bigger role in general but within the SADC region it is important for both investors. To some extent these differences might be due to different perspectives of the two types of investors which might be especially true for the regulatory quality that is more important for foreign investors as they are less used to deal with administrations that don't work properly. But it is also likely that this finding is due to the differences in sector allocation of foreign and domestic investment. Especially mining plays a greater role in foreign investment, whereas manufacturing is more important in domestic investment. For manufacturing also agglomeration effects, the education of the workforce and a functioning credit market together with a growing demand are more crucial factors. However, as foreign owned enterprises are in general more export oriented than domestic ones they also rely more on a efficient infrastructure, that is more likely to be in place when an independent regulator is implemented.

6. POLICY CONCLUSIONS

The SADC protocol as many regional integration agreements still is not fully implemented and therefore the limited effects especially of regional market size in the econometric analysis could be due to this fact as well. Furthermore not all members of a regional integration scheme benefit in terms of investment in the same way. It is likely that the more advanced countries will attract more investment due to agglomeration effects (Muradzikwa, 2002).

The analysis confirms that in order to attract more FDI and to increase domestic investment, governments have to embark on, or continue with, reforms in a wide range of policy areas. Many of these reforms are not only conducive to investment, but are by themselves crucial and necessary for the development process in general.

Regarding the macroeconomic environment, the most obvious lesson to learn from successful countries, such as Mauritius, is that stability is crucial. However, it has become increasingly evident that simply pursuing macroeconomic stability and enacting liberal FDI regulatory and legal regimes is not enough, although they remain basic pre-conditions. Therefore, the focus now increasingly shifts onto the meso-level of specific sectoral policies, from privatisation, competition, and infrastructure provision. Privatisation has emerged as a catalyst in attracting investors. Parallel liberalisation and deregulation of the service industries, especially in telecommunications have offered new FDI opportunities. The induced improvement in infrastructure provision is especially important for exporting enterprises.

Together with social (education and health) infrastructure facilities, these are crucial factors shaping the investment appeal of a country. In industries that are globally integrated, the state of the transport and telecommunication infrastructure is a key element. The cost, quality and reliability of logistics are important factors in the overall cost calculations that companies undertake when evaluating competing locations. Given the substantive investment needed, many African governments have rightly started to look increasingly at private provision of these services. It should be noted that most of the measures that play a role when attracting FDI are relevant for all companies, be they domestic-or foreign-owned (Odenthal 2001).

In this context it is increasingly important to foster regional integration not only by implementing a FTA but by connecting the markets through cross-border infrastructure projects and by harmonizing rules and regulations as well as economic policies.

A number of South African firms are becoming transnational, either in search for hitherto inaccessible resources and markets in Africa or seeking for efficiency. As discussed in this paper, South Africa is emerging as a major investor in Southern Africa and is gradually moving North. It would be unwise to dismiss as old-fashioned nationalism the tensions that emerge in recipient countries, in particular within the SADC region, and which reflect the perceived lack of openness of the South African market. Neighbouring (and poorer) economies, however, are likely to gain from the capital, skills and technology spillovers that come with cross-border FDI flows. Evidence of the positive effects of such flows on the development of more peripheral economies in a regional integration area can be found in other regions. What is more, as regional investors are less likely to be deterred by wrong information about the investment conditions in the region, they can have an important "pioneering" function: non-African investors might be more easily attracted to a country when they find that other foreign companies have already invested there (Odenthal, 2001).

However, one major problem in Africa in general and also in SADC is the negative image and the lack of visibility and credibility of macroeconomic reforms. In this respect the envisioned peer review mechanism of NEPAD could help a great deal to regain investor confidence.

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