African Studies Centre Leiden, The Netherlands

Tax regimes in emerging Africa: Can corporate tax rates boost FDI in sub-Sahara Africa?

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Foreword

This thesis is written to finish my bachelor Urban Planning. The chosen subject, tax regimes in emerging Africa, seems quite an odd choice for an Urban Planning student. But I have developed my interest more and more in the International Development Studies direction since I started the bachelor Urban Planning. That is why I wanted to follow a internship at the International Development Studies department of the University of Amsterdam.

Dr. A.F.M. Zaal of the International Development Studies department asked me if I could investigate tax regimes in sub-Sahara Africa, and that is how this thesis is born. Although tax regimes where not my interest before this thesis, I really enjoyed doing research about this subject, especially because not much is known about tax regimes in emerging Africa. Hopefully this thesis could help to shed some light on which way tax regimes can attract FDI.

Special thanks go to Dr. A.F.M. Zaal for giving me the helpful comments that where necessary to complete this research..Problems with statistics where solved by my sister, Renée Stapper or Dr. S. De Vos, thus I want to thank them too.

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Abbreviations

ASEAN: Association of South East Asian Nations

CIA: Central Intelligence Agency CPI: **Corruption Protection Index Double Taxation Treaties** DTTs: **Export Processing Zones** EPZs: Foreign Direct Investment FDI: General Domestic Product GDP: International Monetary Fund IMF: Kenyan Revenue Authority KRA: MFEZs: Multi-Facility Economic Zones Non-Governmental Organisation NGO:

OECD: Organisation for Economic Co-operation and Development

R&D: Research and Development

UN: United Nations

UNCTAD: United Nations Conference on Trade And Development

ZCCM: Zambian Consolidate Copper Mines ZDA: Zambian Development Agency

Chapter 1: Introduction

Foreign direct investment (FDI) plays an important role in the developing of developing countries. In particular in Africa, attracting more FDI can be especially useful in stimulating economic growth (Naudé *et al.*, 2007). FDI can have a positive impact on growth by engaging domestic capital accumulation. Strong domestic investment performance is a sign of high returns to capital, which in turn will attract more foreign capital (Ndikumana *et al*, 2008). In addition, FDI bring with it employment, managerial skills and technology (Asiedu, 2002).

This study intends to verify how developing countries in sub-Sahara Africa can influence the amount of foreign direct investment flowing towards their country with tax regimes. Do they use their tax regimes to attract more foreign direct investment? Or is a tax regime with confusing rules the cause of a low FDI rate? Maybe there is not at all a relation between a tax regime and foreign direct investment.

The tax literature does not provide much information about the relation between tax regimes and FDI in developing countries, and even less about sub-Sahara Africa. The few related studies that I could find will be shortly summarized. C. Azémar and A. Delios have done a study about the investment of Japanese corporations in developing countries. They found in their study that the relation between corporate taxes and FDI is not obvious. They also provided a perspective on the situation of tax competition. The strong negative correlation they have observed between these FDI and corporate tax rates is robust to the inclusion of the other control variables and is not an artefact generated by outliers. The results give some credit to the fear of the so-called race to the bottom, the tax competition between countries to attract foreign investors, with respect to corporate tax rates, and particularly for developing countries. Downward pressures on the taxation of capital are limited by the importance of public goods and public governance which increase the attractiveness of an host country and which are partly financed by fiscal receipts derived from corporate taxes (C.Azémar, et al, 2008.). R. Bahl and R. Bird found in contrast to 30 years ago, most developing countries now seek to attract FDI to stimulate technological progress and economic growth the literature suggest that host-country tax rates matter, and that tax rate elasticises of FDI are roughly about -0,6. It appears to Bahl and Bird that home country rates are not very important. An obvious implication is that an investment-attracting strategy might be to provide preferential tax treatment for foreign versus domestic corporations, as China has done for many years (Bahl *et al.*, 2008). R. M. Bird and E. M. Zolt point out that tax policy is not just about economics. It also reflects such political factors as concerns about fairness and the desire of governments to stay in power. Tax policy choices are shaped by both economic structure and administrative capacity – factors that constrain the options available (Bird *et al.*, 2008).

The literature has left a range of questions. Therefore I formulated the following main question:

In which way do the fastest emerging economies in sub-Sahara Africa use their tax regimes to attract foreign direct investment?

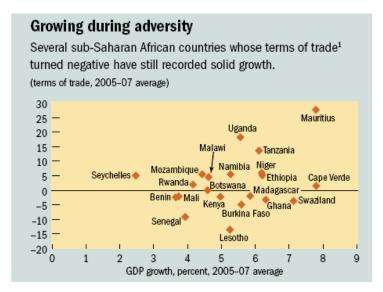
With this question I will outline the differences between the emerging economies of sub-Sahara Africa. Why does one country attract a high FDI rate and another country a low FDI rate? Does this depend on their reputation of are there other aspects, like infrastructure, important? The main concepts of this questions are, the fastest emerging economies in sub-Sahara Africa, tax regimes and foreign direct investment.

The definition of the emerging economies of sub-Sahara Africa will be the definition of the IMF. In the September issue of the IMF magazine finance & development, Nellor (2008) selected eight countries in sub-Sahara Africa that, because of their stability and economic potential, are emerging economies. The countries are Botswana, Zambia, Mozambique, Kenya, Tanzania, Uganda, Nigeria and Ghana. Nellor selected these countries because the countries are comparable with the ASEAN countries (Myanmar, Brunei, Cambodia, Philippines, Indonesia, Laos, Malaysia, Singapore, Thailand and Vietnam) in 1980. Since the 1980s the ASEAN countries have gone through a steady economic growth. In 2006 ASEAN countries such as Cambodia and Vietnam had GDP growth rates of more than 8 percent. Malaysia, Indonesia, the Philippines and Thailand presently became lower or upper middle income countries (World Bank, 2006). Nellor found similarities between the ASEAN countries in 1980, when they had a economic take-off, and eight sub-Saharan African countries. Nellor compared the ASEAN countries of 1980 with eight sub-Saharan African countries on GDP, inflation, financial debt, size of government, international reserves, debt, foreign direct investment and portfolio inflows (Table 1). The comparison is very promising for subSahara Africa, especially because of the fact that the inflation is lower in the eight emerging economies of sub-Sahara Africa, as is the debt. The international reserves, the portfolio inflows and the foreign direct investment are higher than the ASEAN countries. Furthermore the size of the government in the eight emerging economies of sub-Sahara Africa is half the size of the ASEAN countries in 1980(Table 1). The size of the government can be favourable as it leads to public sector growth. Because there is a lot of corruption in African countries (see chapter 5) a big public sector is probably a negative aspect.

Measuring up Emerging markets in sub-Saharan Africa (SSA) today compare favorably with the			
first-generation emerging	markets	S.	
	ASEAN1	Select SSA ²	
	1980	2007	
GDP (annual growth, percent)	7.5	6.9	
Inflation (annual CPI, percent)	16.5	7.3	
Financial depth ³	28.9	29.1	
Size of government ⁴	11.0	22.1	
International reserves ⁵	3.1	9.4	
Debt ⁶	27.0	12.0	
Foreign direct investment ⁶	1.3	4.8	
Portfolio inflows ⁶	0.1	0.3	
¹ Indonesia, Malaysia, the Philippines, Thailand, and Singapore. ² Botswana, Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda, and Zambia. ³ Money supply as a percentage of GDP. ⁴ Government expenditures as a percentage of GDP. ⁵ As a percentage of the following year's imports. ⁶ As a percentage of GDP.			

Table 1: Measuring up, Nellor (2008)

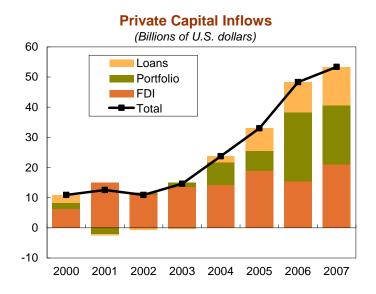
Nellor states that the emerging economies of sub-Sahara Africa have high scores on growth, private-sector led growth and investible markets (Nellor, 2008). Although some of the countries had negative terms of trade they managed to have a solid growth (Graph 1). This depends largely on policy frameworks that helped the markets adjust towards higher import prices. Notably, Zambia fails to grow during adversity.



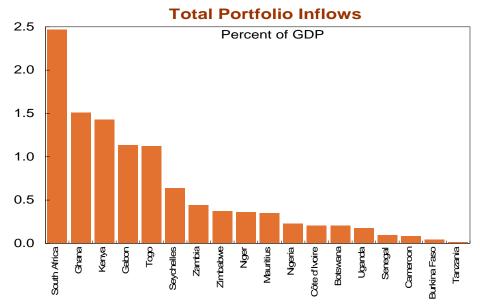
Graph 1: Growing during adversity (Nellor, 2008)

Note: Oil-exporting countries, fragile states, Zimbabwe and South-Africa are excluded from the graph

Private led growth has grown in the whole of sub-Sahara Africa (Graph 2). But the total portfolio inflows show that especially the emerging sub-Sahara African countries attract private investment (Graph 3). Notably Mozambique is not on Graph 3. South-Africa receives 87,6 percent of the total portfolio inflows. Uganda is second with 3,3 percent of the total portfolio inflows in sub-Sahara Africa and Ghana third with 3,2 percent of the total portfolio inflows in sub-Sahara Africa (IMF, 2008).

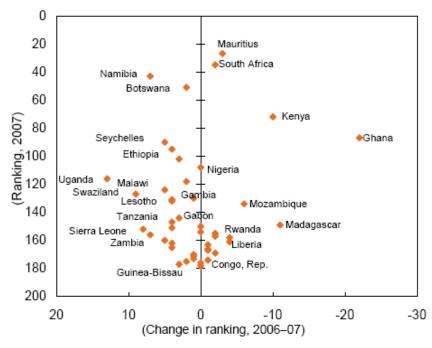


Figuur 1Graph 2: Private capital inflows (IMF, 2008)



Graph 3: Total Portfolio inflows (IMF, 2008)

Graph 4 shows the raking of the Doing Business indicator of 2007. The Doing Business indicator indicates the ease of doing business in a country. Although some emerging countries of sub-Sahara Africa have a lower ranking in the Doing Business indicator of 2007 most of the emerging sub-Sahara Africa countries, such as Botswana, Kenya and Ghana are at the top of the Doing Business indicator.



Graph 4: Ranking of Doing Business 2007 sub-Sahara Africa (World Bank, 2008)

Tax regimes can be an important trigger for foreign investors. Therefore capital is often very mobile between countries. In general, countries that attempt to impose substantially heavier corporate or capital gain taxes often experience outflows of domestic savings to countries employing lower tax rates on capital. This movement of capital is quite distinct from the type of capital flight from developing to developed countries often observed in countries experiencing serve domestic political turmoil or exchange-rate uncertainties (Perkens *et al.*, 2006). There is a heavy competition between countries to attract foreign direct investment. But the impact of the capital flight on developing countries is more important than the impact on developed countries due their relative small economies. This makes it interesting for developing countries to study how they can control foreign investors. Capital flight concerns the direct impact of taxes, the indirect impact of taxes will be described next.

In this research I will use the definition of the IMF for FDI, because their definition is internationally accepted. Foreign direct investment is international investment that reflects the objective of a resident in one economy (the direct investor) obtaining a lasting interest in an enterprise resident in another country (the direct investment enterprise). A direct investment relationship is established when the direct investor has acquired 10 percent of more of the ordinary shares of voting power of an enterprise abroad. FDI does not only affects the direct investor and the direct investment enterprise but all subsequent capital transactions between them and among affiliated enterprises resident in different countries. (IMF, 2003)

1.1 Study's questions

To answer the main question, this research will have three study questions. The questions are:

- What is the general tax policy for foreign investors, and for the different sectors and in which way do corporations react on tax adjustments?
- What is the reputation of the tax regime?
- What are the other aspects of attracting foreign direct investment?

These questions have each indicators. The indicators will provide a systematic framework which will be used to answer the main question. When I have answered the study questions, I will know the characterizes of tax regimes in emerging Africa. Then it is possible to compare the different countries and answer the main question.

1.2 Theoretical framework

This research is a multiple case study with eight cases. The cases will be selected on predicted similar results (Yin, 2003). Thus, the different cases have literal replications and the same indicators are used in every case. Because the case studies are based on data this is an embedded case study. The cases are the emerging economies of sub-Sahara Africa that are selected by the IMF on three criteria: growth, private-sector led growth and investible markets (Nellor, 2008). Botswana, Zambia, Mozambique, Kenya, Tanzania, Uganda, Nigeria and Ghana are emerging economies in the definition of the IMF. The case studies can verify in which way emerging economies stimulate foreign direct investment with their tax regime.

First this study will describe the tax regimes of the eight cases. The necessary information will be provided by either Price Waterhouse Coopers or UNCTAD. The online tax summary database of Price Waterhouse Cooper does not have a description of all the tax regimes of the eight cases. Luckily, UNCTAD has written Investment Policy Reviews with descriptions of tax regimes of the cases that are not included on the Price Waterhouse Coopers database. To make the tax regimes more comparable the main characteristics of the tax regimes will be compared in a table.

Second the impact of the corporate tax rate on the foreign investment will be explored. First the foreign investment flows between 1990-2000 and 2004-2008 will be analyzed. The total foreign investment flows and the growth of the total foreign investment will be part of the analysis. The necessary data will be provided by UNCTAD and Price Waterhouse Coopers. Thereafter graphs will show whether the corporate tax rate changes between 1995-2002 have affected the foreign investment flows between 1995-2002. The necessary data will be provided by the World Tax Database of the University of Michigan. This will verify whether foreign investors react on corporate tax rate changes and whether FDI can result in a tax completion in sub-Sahara Africa.

Third, next to the tax regime there can be many other factors that influence FDI. Therefore this study verifies what the impact of the trust of investors, the functioning of the government, the infrastructure, the share of natural resources in the total export and the rigidity of employment is on FDI. The relations will be explored with the use of Pearson's correlation coefficient. Pearson 's correlation coefficient will be used because

it is widely used in the academic world and can be used with different scales. Pearson 's correlation coefficient calculates a linear dependence between two variables. The calculations will be done with the use of SPSS. The dependent variable is the total foreign investment as a percentage of the GDP, which is standard for research on FDI in the literature. The table 2 shows that the skewness of the dependent variable is 0,373. A skewness between -1 and 1 is considered as acceptable.

Table 2 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skev	vness
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Total foreign investment as a	8	2,34	6,46	4,0775	1,52131	,373	,752
percentage of the GDP							
Valid N (listwise)	8						

The variable will be compared with either the average of the OECD and sub-Sahara Africa, and if the average is not available with two of the biggest economies of the OECD (United States and Germany) and the biggest economy of sub-Sahara Africa (South-Africa).

Trust of investors

To measure the impact of the trust of investors on FDI I will use three indicators, the foreign investment as a percentage of Gross Fixed Capital Formation, the insurance ceilings for investment in a country and the Investor Protection Index.

The insurance ceiling of a country is the maximum investment that can be insured without the guarantee from a bank. The insurance company Ducroire Delcredere can cover export transactions financed by both short-term credits and medium/long term credits against political and commercial risks on open account terms, i.e. without a bank guarantee being required. In conformity with the OECD Arrangement, the maximum reimbursement period for medium- and long-term transactions with this country has been set at 10 years. Ducroire Delcredere insures investments in this country against, war risk, the risk of expropriation and government action and the transfer risk regarding payment of dividends or repatriation of capital. Each application is decided case by case on the basis of a detailed analysis (Ducroire Delcredere, 2009).

The Investor Protection Index is an index that is developed by S. Djankov, R. La Porta, F. Lopez-de-Silanes and A. Schleifer (Djankov *et al.*, 2008). The index measures the strength of minority shareholders against directors misuse of corporate assets for personal gain. The Investor Protection Index is based on three indexes: the disclosure index, the director liability index and the shareholder suits index. The disclosure index measures the transparency of the party-related transactions, the director liability index measures the liability of self-dealing, the shareholder suits index measures the shareholders ability to sue officers and directors for misconduct. In this research I use a survey of the World Bank Group and the International Finance Centre based on the methodology of Djankov (Djankov *et al*, 2008).

The last indicator is total foreign investment as a percentage of Gross Fixed Capital Formation. Gross Fixed Capital Formation as defined by the European System of Accounts (ESA) consists of resident producers' acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets realized by the productive activity of producer or institutional units (ESA, 2001). Thus Gross Fixed Capital Formation is a indicator of long term business activity in a country. The higher the percentage of Gross Fixed Capital Formation is in the total foreign investment, the more corporations are connected with a country through fixed assets. The presence of fixed assets suggests a long term activity in a country. A corporation would not invest in fixed assets if the corporations would want to leave the corporation within a few years. The necessary data will be provided by UNCTAD and Price Waterhouse Coopers.

The functioning of the government

For the functioning of the government we will use four indicators, the number of days it takes to start a new business, the number of procedures it takes to start a new business and the number of days until a contract is enforced. The indicator on enforcing contracts which measures the efficiency of the judicial system in resolving a commercial dispute and the methodology is developed by S. Djankov, R. La Porta, F. Lopez-de-Silanes and A. Schleifer (Djankov *et al.*, 2008). The data are built by following the step-by-step evolution of a commercial sale dispute before local courts. The data are collected through study of the codes of civil procedure and other court regulations as well as surveys completed by local litigation lawyers by the World Bank Group, International

Finance Centre and Palgrave Macmillian (World Bank Group e.a, 2009). The necessary data will be provided by the Doing Business survey.

<u>Infrastructure</u>

The impact of the infrastructure on FDI will be measure by one indicator. The number of airports per 100.000 inhabitants will indicate the quality of the infrastructure. Other possible indicators as paved roads, railways and waterways are related to the number of airports per 100.000 inhabitants or are quite static.

The share of natural resources in the total export

The share of natural resources of the total export clarifies how much a country depends on the export of natural resources. The export of natural resources can be a very important aspect for foreign investors to invest in a country. The natural resources that have more than one percent of the total export will be included in the research. The necessary data will be found in the database of the International Finance Centre.

The rigidity of employment

The rigidity of employment index methodology is developed by J.C. Botero S. Djankov, R. La Porta, F. Lopez-de-Silanes and A. Schleifer (Botero *et al*, 2004) The rigidity of hours index has five components: whether night work is unrestricted, whether weekend work is unrestricted, whether the work week can consist of 5,5 days, whether the workweek can extend to fifty hours or more for two months a year to respond to a seasonal increase in production and whether paid annual vacation is twenty-one working days or fewer.

The difficulty of firing index has eight components: whether redundancy is disallowed as a basis for terminating workers, whether the employer needs to notify a third party to terminate one redundant worker, whether the employer needs to notify a third party to terminate a group of twenty-five workers, whether the employer needs approval from a third party to terminate one redundant worker, wheter the employer needs approval from a third party to terminate a group of 25 redundant workers, whether the law requires the employer to reassign or retrain a worker before making the worker redundant, whether priority rules apply for redundancies and whether priority rules apply for reemployment (Botero *et al*, 2004).

1.3 Validity and reliability

There are three kinds of validity, construct validity (a sufficiently operational set of measure), internal validity (no illusionary relation) and external validity (the findings can be generalized) (Yin, 2003). This research has a construct validity because of the multiple sources of evidence. A broad range of institutions will be used to attract data. Private enterprises as Price Waterhouse Coopers and Ducroire Delcredere will provide data but institutions as the World Bank, IMF and the UN will provide data too. The only problem is that companies can make arrangements with governments about corporate tax rates and other agreements that are not known by this institutions. But it is not in the range of this study to explore this arrangements. Though the internal validity is ensured enough due the study of other factors that can attract foreign investors such as the trust of investors, the functioning of the government, the infrastructure, the share of natural resources in the total export and the rigidity of employment. Thus an illusionary relation will be avoided. Survey research relies on statistical generalization, whereas case studies rely on analytical generalization (Yin, 2003). The outcomes of this research can only be generalized to emerging economies in Africa. Therefore I will study eight emerging economies in Africa. This will provide for the external validity. There are eight cases thus it is possible that not all the data will be available for all the cases. Because I use different indicators and different institutions that provided the data the research will be reliable. The theoretical framework will function as a guideline for the research. I will describe every step in the research elaborate making sure that other researches can use this research.

Chapter 2: Corporate tax policy

This chapter describes the corporate tax regime of the eight emerging economies of sub-Sahara Africa. Of each case there will be a description of the corporate tax rates and whether there are differences between the primary, secondary and tertiary sector. Next to the corporate tax rates the incentives, relevant deductions for foreign investors and relevant other taxes for foreign investors will be described. Table 3 shows the corporate tax rates in Australia and Canada. Both Australia and Canada export a large amount of minerals and are known as developed countries. The height of the corporate tax rates of both countries will be compared with the emerging sub-Sahara African countries to compare possible differences between developing countries and developed countries.

Table 3: Corporate tax rates in Australia and Canada	Corporate tax rates in Australia	Corporate tax rates in Canada
Primary sector	30	28
Secundary sector*	30	28
Tertairy sector	30	28
Capital gains	-	-
other**	-	14

^{*}for manufacturing and processing the corporate tax rate is 19,5 percent

Source: Price Waterhouse Coopers 2009

For foreign investors it is important to know whether there are any tax treaties. Tax treaties are treaties between countries to avoid double taxation. At the end of the chapter the tax regimes will be compared on different corporate tax rates for certain sectors, the main goal of the tax regime, the existence of Export-Processing Zones (EPZs), special policies on fixed assets, special policies on the training of employees and R&D, and the total number of Double Tax Treaties (DTTs) that are signed with various countries

2.1 Tax policy in Botswana

In the following paragraph the tax regime of Botswana will be described. Table 4 shows the corporate tax rates in Zambia. The primary and the tertiary sector have both a corporate tax rate of 15%. The secondary sector has a corporate tax rate of only 5%. The economy of Botswana depends largely on the diamond industry, currently diamond mining accounts for more than one-third of GDP and for 70-80% of export earnings

^{**}Provincal corporate tax rate

(CIA, 2009) To make the economy more diverse Botswana tries to attract investors in the secondary sector with low corporate tax rates (Conteh, 2008).

Table 4: corporate tax rates in Botswana	Corporate tax rates	Comments
Primary sector	15	
Secundary sector	5	
Tertairy sector	15	
Capital gains	-	
other	10	additional company tax

Source: Price Waterhouse Coopers 2009

Next to the corporate tax rate there is an additional company tax too. This additional company tax is 10% of the total company income. Botswana does not have a capital gains tax.

The government can encourage investment in specific business development projects with tax reliefs on capital and gains if the government thinks the project is beneficial for Botswana (Price Waterhouse Coopers, 2009).

There are several deductions for non-mining corporations for equipment, machinery and buildings. Annual taxation allowances for expenditure incurred on machinery and equipment can be claimed up to 100 percent. A initial allowance of 25 percent of cost is granted on certain industrial buildings. All industrial and commercial building are granted a 2,5 percent annual allowance based on cost or, in the case of an industrial building on which an initial allowance has been claimed, the original cost less the initial allowance. A deduction of 200 percent of the cost of approved training expenditure is allowed. For diamond mining, corporations are usually taxed in an agreement with the government of Botswana (Price Waterhouse Coopers, 2009).

Botswana has taxation treaties with Russia, India, Namibia, South-Africa, the United Kingdom, Sweden, Mauritius, Zimbabwe, France and the Seychelles.

The corporate tax rate of Botswana plus the additional company tax is 25 percent. The corporate tax rate in Australia and Canada are both higher. The difference with Australia (30 percent) is not so big, but the difference between the Canadian corporate tax rate plus the provincial tax rate (28 percent plus 14 percent) and the corporate tax rate is a striking difference.

2.2 Tax policy in Zambia

In the following paragraph the corporate tax regime of Zambia will be described. The general corporate tax rate in Zambia is 35 percent (Table 5), although there are a lot of incentives.

Table 5: Corporate tax rates in Zambia	Corporate tax rates	
Primary sector*	3	35
Secundary sector	3	35
Tertairy sector	3	35
Capital gains	-	
other	-	

^{*}mining sector 25%, agricultural sector 10%

Source: UNCTAD 2006

For the mining and agricultural sector the government has reduced the corporate tax rate. For agricultural companies the corporate tax rate is 15 percent. There is a incentive for mining companies too, but the ZCCM holding needs to maintain a share of stocks in the mining companies to use the incentive. The ZCCM holding possess stocks of all the main Zambian mining companies. The ZCCM related corporations have to pay 25 percent tax, mining companies that are not a part of the ZCCM holding have to pay the moderate tax rate of 35 percent.

Companies that are listed on the Lusaka Stock Exchange have to pay 33 percent tax. The tax rate was first 30 percent, but not many companies made use of this incentive thus the tax was raised to 33 percent. Commercial banks are taxed 45 percent of their profits above 250 million Kwacha (\$83.500). (UNCTAD, 2006)

In 2006 the ZDA (Zambian Development Agency) announced new incentives for investors. Investments above \$500.000 that are licensed by the ZDA and are operating within a sector that is selected by the ministry of Commerce, Trade and Industry benefit from this incentives. The incentives contain for the first five years of operation that corporate tax should be calculated on 50 percent of profits, that dividends should be exempt from tax and that capital expenditure on the improvement or upgrading of infrastructure should qualify for an improvement allowance of 100 percent. In addition, imported machinery and equipment is exempt from customs duty (UNCTAD, 2006). The ZDA implements Multi-Facility Economic Zones (MFEZs) too (UNCTAD, 2006). Unlike EPZs, which were never established in Zambia, the proposed MFEZs will not enjoy customs extra-territoriality, but function like industrial parks with good quality

facilities, infrastructure and incentives. Zone developers will be granted a ten-year tax exemption on profits and dividends, and relief from import duty on equipment. Investors within an MFEZ will receive a tapered relief from profits tax over ten years, a five-year exemption from dividends tax and exemption from import duties on raw materials, intermediate and capital goods. The profits and dividend taxes exemption period will begin from the first year that profits are earned. Additional incentives cover expenditure on export promotion, human resource development, research and development, recreational facilities for staff, and the fight against HIV/Aids, tuberculosis and malaria. A 100 percent tax allowance will apply on infrastructure improvement. Investments in these zones have non-fiscal and fiscal profits.

Zambia has several DTTs (DTT). Zambia signed DTTs with: Botswana, Canada, Denmark, Finland, France, Germany, India, Ireland, Italy, Japan, Kenya, Netherlands, Norway, Romania, South-Africa, Sweden, Switzerland, Tanzania, Uganda, United Kingdom and the United States (UNCTAD, 2006). The total amount of 21 DTTs is, compared to the region, quite impressive.

The corporate tax regime of Zambia is focused on attracting investments in the mining and agricultural sector. Also it is fiscally attractive to be enlisted on the Lusaka Stock Exchange as a corporation. Although not many corporations make use of this incentive. The standard corporate tax rate of Zambia is 32 percent, for the primary sector the corporate tax rate is 10 percent. The corporate tax rate of Australia is slightly lower (30 percent). The Canadian corporate tax rate plus the provincial corporate tax rate (28 percent plus 14 percent) is much higher.

2.3 Tax policy of Mozambique

The corporate tax rate of Mozambique is set on 32 percent (table 6). Except for income arising from agriculture and cattle breeding activities, which is subject to a reduced rate of 10 percent up to 2010 (Price Waterhouse Coopers 2009). Capital gains are considered as profit. Therefore the corporate tax rate of 32 percent counts on capital gains too.

Table 6: corporate tax rates in Mozambique	Corporate tax rates
Primary sector	10
Secundary sector	32
Tertairy sector	32
Capital gains	32
other	-

Source: Price Waterhouse Coopers 2009

For investments in fixed assets there is a tax reduction of five percent of the total foreign investment realised for five years. This tax reduction shall be deductible from the amount of the total corporate tax. The tax reduction shall not apply when the investment in tangible fixed assets is in respect of the construction, acquisition, restoration or extension of buildings, passenger vehicles, furnishings and articles of comfort and decoration, leisure equipment, advanced technology and other assets not directly associated with the production activity carried out by the enterprise (Price Waterhouse Coopers, 2009).

New immovable assets used for corporate activities can be depreciated twice the normal rate. This incentive is also granted for rehabilitated assets, machinery and equipment used in the agricultural sector. (Price Waterhouse Coopers, 2009).

During the first 5 years form date of commencement of activity is the amount invested in specialized equipment considered as advanced technology shall, benefit from a deduction from taxable income for purposes of calculating the corporate income tax up to a maximum of 15 percent of taxable income. The professional training of Mozambican workers shall, up to a maximum amount of 5 percent of the taxable income, be deductible from taxable income for the purposes of calculating the Corporate Income tax during the first 5 years from the date of commencement of activity. There are also deductions for expenditures in the construction and rehabilitation of roads, railways, airports, telecommunications, water supply, electric energy and other works of public utility. The deduction for corporations active in the city of Maputo is 120 percent of the value of expenditure. Corporations active in the rest of the provinces have a deduction of 150 percent of the value of expenditure. (Price Waterhouse Coopers, 2009).

Mozambique has signed DTTs with four countries. The countries are: Portugal, Mauritius, Italy and Dubai (Price Waterhouse Coopers, 2009).

Overall, the most deductions and incentives created in the Mozambican tax policy are related to (public) infrastructure, knowledge and the agricultural sector.

The corporate tax rate of Australia is slightly lower (30 percent) except for the primary sector which is much lower. The Canadian corporate tax rate plus the provincial corporate tax rate (28 percent plus 14 percent) is much higher.

2.4 Tax policy in Kenya

The corporate tax rate in Kenya is 37,5 percent, this rate counts for all the sectors (table 7). Tax on capital gains is suspended since 1985 (UNCTAD, 2005). According to UNCTAD the overall tax regime in Kenya is efficient and fair relative to other developing countries. Kenya compares favorably with other countries in the region and elsewhere in terms of revenue collection as a percent of GDP (UNCTAD, 2005).

Table 7: Corporate tax rates in Kenya	Corporate tax rates
Primary sector	37,5
Secundary sector	37,5
Tertairy sector	37,5
Capital gains	-
other*	-

*EPZs: first 10 years 0%, next ten years 25% thereafter 30%

Source: Price Waterhouse Coopers 2009

The incentives that the Kenyan government uses are for resident corporations, EPZs and companies listed on the Nairobi stock exchange. Resident corporations have a reduced corporate tax rate of 30 percent. In EPZs there is a exemption of tax for the first ten years. After ten years there is a corporate tax rate of 25 percent and the standard rate thereafter. Corporations that are listed at the Nairobi stock exchange have an incentive too. Newly enlisted corporations are taxed at either 25 percent or 27 percent for five years from the year of listing if they float a minimum of 30 percent or 20 percent of their capital, respectively (UNCTAD, 2005).

The manufacturing, secondary, sector also benefits from an 'investment deduction' for expenditure on buildings and other capital spending, while hotels benefit from the investment deduction on buildings only. The investment deduction is an accelerated rate of depreciation in the first year. As of 2004 and until 2008, the investment deduction allowed a 100 percent rate of depreciation in the first year. This rate has fluctuated widely in the past, sometimes according to the region in which the investment takes place (UNCTAD, 2005).

Kenya has signed eight DTTs, including the major sources of FDI towards Kenya: United Kingdom, Canada and Germany. The other countries are: Denmark, India, Norway, Sweden and Zambia. Thus the only African country that has signed a double taxation treaty with Kenya is Zambia. Since 1999 there are talks with the East African Community members to sign a treaty. Although the East African Community is ambitious, with creating a common market in East Africa, to date they have not ratified a double taxation treaty.

Compared with the corporate tax rate of Australia (30 percent) is the corporate tax rate of Kenya quite high. Still the Kenyan tax rate is lower than the Canadian corporate tax rate plus the provincial tax rate (28 percent plus 14 percent).

2.5 Tax policy in Tanzania

The corporate tax rate in Tanzania is set on 30 percent of the corporate income (table 8).

Table 8: Corporate tax rates in Tanzania	Corporate tax rates
Primary sector	30
Secundary sector	30
Tertairy sector	30
Capital gains	-
other	-

Source: Price Waterhouse Coopers 2009

For agricultural, mining, tourism and manufacturing companies there are incentives. Expenditure on plant machinery is generally written off on a reducing balance basis at rates of 37,5 percent, 25 percent or 12,5 percent depending on the category of the asset. Specified plant and machinery for manufacturing, fish farming and tourist hotels benefits from a 50 percent allowance in the first year, with the normal rates applying to the remaining balance in subsequent years. There is an immediate write-off of expenditure on plant and machinery used in agriculture. Expenditure on buildings qualifies for a depreciation allowance of 5 percent straight-line. For intangible assets, the write off is over the useful life of the asset. Agricultural businesses also benefit from the immediate write off of plant, machinery and agricultural improvement expenditure. Buildings, structures, dams, water reservoirs, fences and similar works of a permanent nature used in agriculture, livestock or fish farming are written off on a straight-line basis over 5 years. Mining companies are entitled to a 100 percent capital deduction in respect of capital expenditure on exploration and development (Price Waterhouse

Coopers, 2009). Tanzania has EPZs on the mainland and special economic zones on Zanzibar. The EPZs on the mainland are not developed by the government. The private sector has to develop the zones; the government provides land and attractive legislation. EPZ status is to be given to individual factories with the potential to export 80 percent or more of their production. The special economic zones on Zanzibar included a 10 year tax holiday, no withholding tax on dividends, interest and any other income accrued from business transactions during the tax holiday period, free repatriation of dividends after taxation, 25 percent investment allowance and 100 percent ownership retention, several exemptions from customs and import duties used for manufacturing and export purposes and a generous term of government land lease for 49 years, which can be extended to 98 years (UNCTAD, 2002). DTTs are in force with Canada, Denmark, Finland, India, Italy, Norway, South-Africa, Sweden and Zambia. Certain other DTTs (including an East African double tax treaty with Kenya and Uganda) have been signed but not yet ratified (Price Waterhouse Coopers, 2009).

The Tanzanian corporate tax rate is the same as the Australian corporate tax rate (30 percent) and lower than the Canadian corporate tax rate plus the provincial tax rate (28 percent plus 14 percent).

2.6 Tax policy in Uganda

The corporate tax rate in Uganda is 30 percent (table 9).

Table 9: Corporate tax rates in Uganda	Corporate tax rates
Primary sector*	30
Secundary sector	30
Tertairy sector	30
Capital gains	-
other	-

^{*}The mining industry has a calculated

tax rate

Source: Price Waterhouse Coopers 2009

Uganda has a special corporate tax rate for the mining sector. The mining industry has a calculated tax rate. The calculation for the corporate tax rate is (70-1500/X) where x is the ratio of the company's chargeable income to the gross revenue for the year. However the minimum tax rate is 25 percent and the maximum tax rate is 45 percent (Price Waterhouse Coopers, 2009)

Uganda has general incentives too. There is a tax holiday for ten years for exporters of finished consumer and capital goods. The tax payer should export at least 80% of his products (Price Waterhouse Coopers, 2009). Initial allowances are available for companies that put a qualifying item of plant and machinery into use for the first time in a year of income. If a qualifying asset is placed in service outside specified locations, it is entitled to capital allowances of up to 75% of the cost base of the asset. If it is within the specified areas then it attracts an initial allowance of 50% of the cost base of the asset. Initial allowances of 20% of the cost base of a building are available for new industrial buildings brought into service for the first time (Price Waterhouse Coopers, 2009). Other incentives include a 25 percent allowance on start up costs, 100 percent allowance for scientific research expenditure, training expenditure and mineral exploration expenditure. Industrial building allowances and farm works allowances are also available for investments in specific sectors (Price Waterhouse Coopers, 2009). Uganda has DTTs with Denmark, East Africa (Kenya and Tanzania), India, Italy, Mauritius, the Netherlands, Norway, South-Africa and the United Kingdom (Price Waterhouse Coopers, 2009).

The Ugandan corporate tax rate is the same as the Australian corporate tax rate (30 percent) and lower than the Canadian corporate tax rate plus the provincial tax rate (28 percent plus 14 percent).

2.7 Tax policy in Nigeria

Nigeria is a country with a lot of incentives and deductions. The regular corporate tax rate is 32 percent, with a small minimum tax applicable four years after business start-up. This minimum tax is payable by a company where the total assessable profits from all sources results in a loss or no tax being payable or tax payable that is less than the minimum tax. Where turnover is NGN 500.000 or less the minimum tax is the highest of 0.5 percent of gross profits, or 0,5 percent of net assets, or 0,25 percent of paid-up capital or 0,25 percent of turnover. Where turnover is higher than NGN 500.000 an additional tax is payable, calculated at the rate of 0,125 percent of turnover exceeding NGN 500.000. Agricultural and agro-allied companies, companies with at least 25 percent foreign equity and any company in the first four years of commencement of business are not required to pay the minimum tax (Deloitte, 2009). An unusual excess profits tax also applies. Excess profits tax is payable either as 15 percent of the shortfall between actual taxable income and a flat amount of \$40.000 or at 15 percent of a

weighted average concept of capital employed. The excess profits tax is effectively a second-tier minimum tax (when applied to the flat amount) but without the grace period and exemptions available on the minimum tax. See table 10.

Table 10: Corporate tax rates in Nigeria	Corporate tax rates
Primary sector	32
Secundary sector	32
Tertairy sector	32
Capital gains	-
other	-

Source: UNCTAD 2008

In Nigeria, corporations have several annual capital allowances (including 10 percent on buildings, 25 percent on plant, 20 percent on furniture and fittings) supplemented in many cases by substantial initial year allowances (including 50 percent on plants, 15 percent on buildings and motor vehicles). Agricultural, mining and public transportation assets have especially favourable initial year allowances. Replacement plant and machinery have an initial allowance of 95 percent. However, the deduction of capital allowances is capped at two thirds of annual assessable profits, except in agriculture and agro processing, and the total allowance is limited to 95 percent of asset cost (UNCTAD, 2008).

Next to the capital allowances there are three types of incentives in Nigeria. First is the so-called pioneer industry incentive. Designated 'pioneer' industries may qualify for a five-year profits and dividends tax holiday. There are currently 69 designated types of pioneer industries in agriculture, agro-processing, mining, quarrying, manufacturing, tourism, property development and utilities. Minimum capital invested to qualify is about \$2.500,- for nationally-owned companies and about \$40.000 for foreign-owned companies. Despite the generosity of this scheme, there appears to have modest take-up (UNCTAD, 2008).

Second there are five sectoral incentives. The sector with incentives are: agriculture, agro-processing, mining, manufacturing and services. Mining has an own incentive of a three years tax holiday. The manufacturing sector has its own incentives too.

Manufacturing is entitled to rapid depreciation allowances, although these are somewhat vitiated by the cap on aggregate capital allowances and the four-year limit on loss carry forward. Also, manufacturing plant and machinery receives a 10 percent investment allowance. (UNCTAD, 2008)

Third there are outcomes incentives which includes EPZs. The amount invested in the EPZs must be at least \$500.000. The income tax relief is made proportionate to the amount of exports in relation to total turnover. A separate scheme permits manufacturers that export at least 50 percent of output to qualify for pioneer status. It is also possible for exporters to qualify for financial assistance for export marketing expenses (the Export Development Fund), for expansion and export diversification (the Export Expansion Grant Fund) and to compensate for higher production costs arising from poor infrastructure or factors beyond the exporters control (the Export Adjustment Scheme Fund). Tax law provides that profits earned from goods exports may, if reinvested, be exempt indefinitely from income tax. However, it seems that this scheme does not operate in practice due to the difficulties of monitoring the reinvestment conditions. Dividends received from wholly export-oriented businesses are also exempt from tax (UNCTAD, 2008). Next to the EPZs Nigeria has four more outcomes incentives. The first concerns R&D. Nigeria has several fiscal incentives to encourage R&D by firms. The general provisions are that, for any business, up to 10 percent of profits set aside as a reserve for R&D qualify as allowable expense (UNCTAD, 2008). Then there is a incentive for local sourcing. Local manufacturers of spare parts, tools, equipment supplied to other local businesses or exported can obtain a 25 percent investment tax credit on their capital expenditure. A company buying locally manufactured plant, machinery and equipment is entitled to a 15 percent investment tax credit (UNCTAD, 2008). Small and middle enterprises (SMEs) are exempt from minimum tax, pay a lower profits tax rate of 20 percent in the first five years in several sectors, and dividends are exempt from tax. For outward investment dividends from Nigerian affiliates abroad are exempt from tax in Nigeria if repatriated to official domiciliary accounts (UNCTAD, 2009)

Nigeria has DTTs with Belgium, Canada, France, Pakistan and the United Kingdom. Agreements with China, South Africa and Sweden are awaiting ratification (UNCTAD, 2009).

The Australian tax rate(30 percent) is slightly lower than the corporate tax rate of Nigeria The corporate tax rate of Canada (28 percent plus a provincial tax rate of 14 percent) is higher than the corporate tax rate of Nigeria.

2.8 Tax policy in Ghana

The corporate tax rate in Ghana is 25 percent for companies that are not listed on the Ghana Stock Exchange and 22 percent for companies listed on the Ghana Stock Exchange (Table 11).

Table 11: Corporate tax rates in Ghana	Corporate tax rate***
Primary sector*'**	25
Secundary sector***	25
Tertairy sector*'***	25
Capital gains**	5
other	-

^{*}Companies engaged in non-traditional export and rural banking (8%) after 10 years, bank lenders to the agricultural and leasing sectors (20%), and companies in the hotel industry (25%)

Source: Price Waterhouse Coopers 2009

Ghana stimulates investment in several sectors. After ten years applies for nontraditional export and rural banking companies, a corporate tax rate of 8 percent. For bank lenders to the agricultural and leasing sectors counts a corporate tax rate of 20 percent. The hotel industry applies for a corporate tax rate of 25 percent. A capital gains in excess of GH¢ 50 (€24,20) are subject to a tax of 5 percent, however companies enlisted on the Ghana Stock Exchange are exempt (Price Waterhouse Coopers, 2009). To encourage investment in Ghana there are several incentives. Under the Ghana Investments Promotion Centre Act 1994, the sectors of agriculture, manufacturing industries engaged in export trade or using predominantly local raw materials or producing agricultural equipment, and so on, construction and building industries, mining and tourism have incentives. These incentives include exemption from customs import duties on plant and machinery, reduced corporate income tax rates, more favourable investment and capital allowances on plant and machinery, reduction in the actual corporate income tax payable, where appropriate, retention of foreign exchange earnings where necessary, guaranteed free transfer of dividends or net profits, foreign capital, loan servicing and fees and charges in respect of technology transfer and guarantees against expropriation by the government (Price Waterhouse Coopers, 2009). A venture capital tax incentive is in play too. This incentive includes relief from stamp duty in each year on subscriptions for new equity shares in venture capital funds, full

^{**}Exceptions: gains on stocks/shares form the GSE and because of and activities concerned reforms

^{***}Companies enlisted on the Ghana Stock Exchange have a corporate tax rate of 22 percent

tax exemption from corporate income tax, dividend tax and capital gains tax for five years, losses from disposal of shares during the tax exempt period may be carried forward to the post-exempt period up to five years, and financial institutions which invest in venture capital subsidiaries will receive a chargeable income tax deduction equal to 100 percent of their investment (Price Waterhouse Coopers, 2009).

Ghana has several EPZs, the so-called Free Trade Zones (FTZs). The FTZs provides several incentives, including zero percent income tax for 10 years and a guarantee that income tax thereafter shall not exceed 8 percent, total exemptions from payment of withholding tax from dividends arising out of investments in FTZs, relief from double taxation for foreign investors and employees, no import licensing requirements, 100 percent foreign ownership is allowed and no restrictions on repatriation of profits.

Companies that export 70 percent of their production can obtain free zones status even if established outside the zone.(UNCTAD, 2003).

Ghana has DTTs with the United Kingdom, the Netherlands, Gambia, Sierra Leone, Nigeria and Sweden. The double tax treaty with France is not yet ratified (Ministry of Finance, 2009; Ghana Stock Exchange, 2000).

The corporate tax rate of Ghana is lower than Australia (30 percent) and Canada (28 percent plus a provincial tax of 14 percent).

2.9 Comparison

Table 12: the cases compared	Different tax rates per sector	Main goal tax policy	EPZ	Special policy on fixed assets	Special policy on training of empolyees and R&D	DTT
Botswana	Yes (secondary sector)	Making the economy less depending on the mining industry	No	Yes (only for non-mining companies)	No	10
Zambia	Yes (mining and agricultural sector)	Attracting investments in the mining and agricultural sector.	No*	No	No	21
Mozambique	Yes (primary sector)	Stimulate investments in infrastructure, knowledge and the agricultural sector	No	Yes	Yes	4
Kenya	No	Stimulate investment in the manufacturing and hotel industry	Yes	Yes (only for manufacturing companies and hotels)	No	8
Tanzania	No	Stimulate investment in agricultural, mining, tourism and manufacturing companies.	Yes	Yes	No	9
Uganda	Yes (for the mining sector)	Stimulate investment in the mining sector and export	No	Yes	Yes	10
Nigeria	No	Stimulate export and growth in pioneer industries, agriculture, agro-processing, mining, manufacturing and services.	No	Yes	Yes	5
Ghana	Yes (Agriculture, rural banking, leasing and hotel)	Stimulate export and investment in the rural/agriculture sector and leasing and hotel industry.	Yes	Yes	No	6

^{*} Instead of EPZs Zambia has economic zones that are not extra-territorial but are comparable to EPZs

The tax regimes of the cases are, not unexpected, as diverse as the continent Africa itself (table 12). Yet, there is a similarity between Kenya and Tanzania. The both have no special taxes for different sectors, they try to stimulate investment in the manufacturing and tourist industries, have both EPZs and special policy on fixed assets. The explanation of this similarity could be that the two countries are working together in the East African Community and have the ambition to have a common market in 2010 and a monetary union by 2012 (EAC, 2009). Uganda is a member state of the East African Community too, but the tax regime of Uganda has no obvious similarities with Kenya and Tanzania. The tax regime of Uganda will probably move more towards the tax regime of Kenya and Tanzania as the integration of the East African countries continues.

Next to the similarity between the Kenyan and Tanzanian tax regimes the tax regimes of Mozambique, Ghana and Zambia are striking. The similarity between Mozambique and Zambia could be the result of the membership of the SADC (Southern African Development Community). The Mozambican government stimulates investment in (public) infrastructure by the private sector with deductions. This policy is used by the Zambian government too, but only in MFEZs.

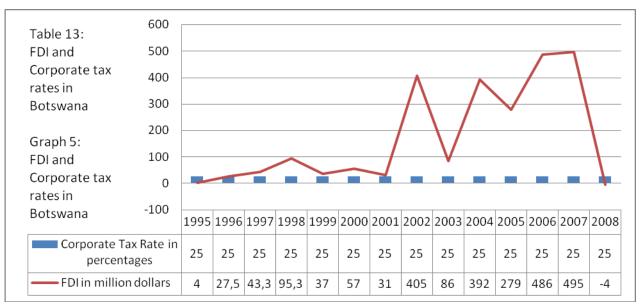
The Ghanaian government stimulates investment in the rural areas of Ghana with special corporate tax rates for rural banking. Thus next to direct incentives for the agricultural sector the Ghanaian government stimulates rural banking to provided capital in the rural areas and to promote rural development.

The Zambian government has signed a total of 21 DTTs. The totals of 21 DTTs are a lot compared with the other countries. That are even more treaties than Nigeria, Ghana and Uganda altogether.

Chapter 3: Foreign investment and the impact of corporate tax rate changes

In the following chapter the foreign investment in the eight cases will be described. First total foreign investment and the growth of the total foreign investment will be described. This information will outline remarkable changes in the foreign investment flows. Then the corporate tax rates between 1995-2002 will be compared with the total foreign investment in the same period. This will show how companies react on changes of the corporate tax rate.

3.1The impact of the corporate tax rate on foreign investment in Botswana



Source: UNCTAD 2008, World Tax Database 2009

Botswana emerged from a least developed country (LDC) status within one generation to a middle-income country. Foreign direct investment was a driving force in this dramatic change (UNCTAD, 2003). Because Botswana has a large diamond reserve it has a high potential to attract foreign investors.

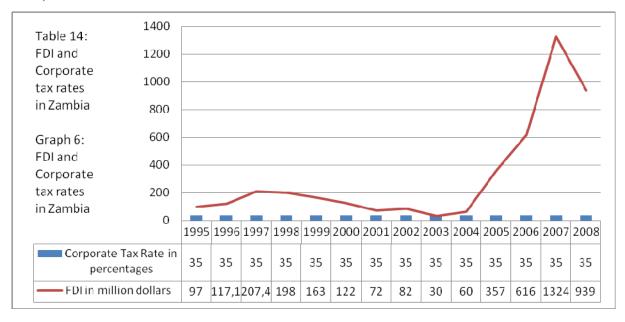
Table 13 shows a fast growth in foreign investment after 2000. Before 2000 the total foreign direct investment peaked at 95,3 million dollar in 1998. Four years later in 2002 the total foreign direct investment was 405 million dollar, a growth of 325 percent. In 2003 the total foreign direct investment declined to 86 million dollars, probably because of a government cut in economic development projects. Between 2004 and the 2007 the total foreign direct investment was significant better than before 2002. The annual average total foreign direct investment between 2002 and 2007 is 357 million dollar, the

31

annual average between 1995 and 2001 is 42 million dollar. Thus the total foreign direct investment grew significantly after 2001.

The tax regime of Botswana has no significant change since 1999, when the Income Tax Act became effective (Botswana IFSC, 2005). The growth of total foreign investment seemed to be quite random between 1995 and 2001 but after 2001 the total foreign investment grew explosive, while the corporate tax rate remained 25 percent (Graph 5). Thus there is no obvious relation between the corporate tax rate and the total foreign direct investment.

3.2 The impact of the corporate tax rate on foreign investment in Zambia Zambia's economy largely depends on the mining of copper. Because of the high copper prices the recent years, the real GDP could grow in 2005-2008 about 6 percent per year. The government-owned copper mines were privatized in the 1990s (CIA, 2009).

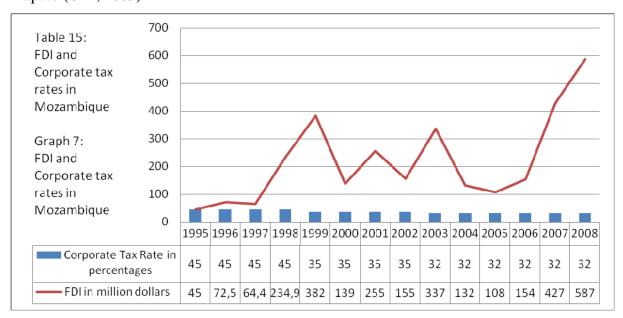


Source: UNCTAD 2008, World Tax Database 2009

Table 14 shows the impressive growth of the total foreign direct investment in million dollars after 2003. The average total foreign direct investment between 1995 and 2003 is circa 121 million dollar. The average total foreign direct investment between 2004 and 2008 is circa 660 million dollar. The growth peaked 2007 in 2008 the total foreign direct investment declined to a, compared to the other cases, still impressive 939 million dollar. A possible reason is the global food crisis of 2008.

In 2006 the tax regime got a new list of incentives (UNCTAD, 2006). Because the foreign investment grew after 2006, the new incentives had a positive effect on the total foreign direct investment. Probably other factors were important as well. Graph 6 shows that the total foreign investment grew until 1997 after which the total foreign investment decreased. The corporate tax rate remained the same rate, thus the corporate tax rate does not seem to affect the total foreign investment.

3.3 The impact of the corporate tax rate on foreign investment in Mozambique Mozambique has long suffered from a civil war (1977-1992) and mismanagement. Therefore Mozambique is one of the poorest countries in the world. Since 1994 there are multiparty elections, and the government has worked on several macroeconomic reforms. The country's largest foreign investment is a new build aluminium smelter in Maputo (CIA, 2009).

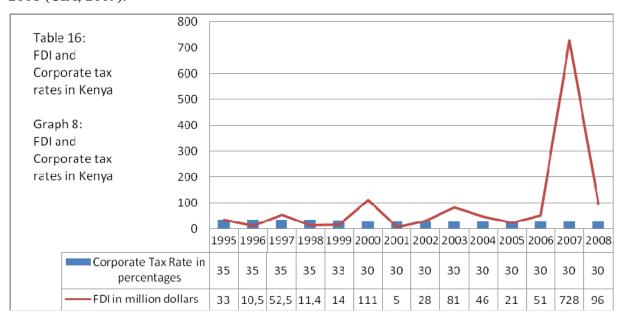


Source: UNCTAD 2008, World Tax Database 2009

The growth of the total foreign direct investment is quite random in Mozambique. After 2005 the growth of total foreign direct investment skyrockets with an average annual growth percentage of 85 percent. But the total foreign direct investment in Mozambique has had also a period of fast growth between 1997 and 1999. There was of decline in the total foreign direct investment in 2000, 2002, 2004 and 2005. Although the growth in recent years is promising, the total foreign investment in Mozambique is far from steady,.

Mozambique has reformed its tax regime in 2003, which has replaced the corporate tax and strengthen the tax administration by improving collection procedures and increasing enforcement capacity (Price Waterhouse Coopers, 2009). After the tax reform in 2003 the total foreign direct investment declined in 2004 and grew after 2005. Thus there is no obvious relation between the tax regime reform and the total foreign direct investment. In 1999 the Mozambican government decreased the corporate tax rate from 45 percent to 35 percent (Graph 7). This decrease of ten percent resulted in a even lower total foreign investment. Thus there is not an obvious relation between the corporate tax rate on the total foreign direct investment.

3.4 The impact of the corporate tax rate on foreign investment in Kenya Although Kenya is considered as the regional hub for trade and finance it suffers from corruption and mismanagement. Several times has the IMF resumed loans to Kenya, after repeatedly stopping their loans for various reason related to corruption. In 2001 the IMF ended the loans because the Kenyan government could not institute several anticorruption measurements. After some early progress in rooting out corruption and encouraging donor support, the government was rocked by high-level graft scandals in 2005 and 2006. The unstable politics led to riots after the 2007 elections. These riots and the economic crisis reduced the growth of the GDP from 7 percent in 2007 to 2,2% in 2008 (CIA, 2009).

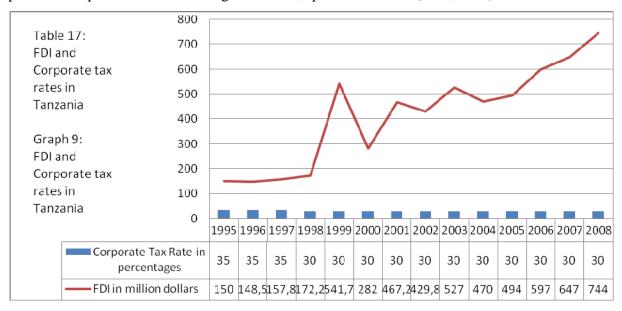


Source: UNCTAD 2008, World Tax Database 2009

The total foreign direct investment in Kenya balances between the 0 and 120 million dollar. Kenya has a few peaks in 1997, 2000 and 2003 but corruption scandals such as the 2005 corruption scandal have a very negative impact on the total foreign direct investment. Only in 2007 the total foreign direct investment sky rocketed towards 738 million dollar. This is not a trend because the next year, in 2008, the total foreign direct investment was again between the 0 and 120 million dollar. (Table 16).

The Kenyan tax regime is in force since 1995. In 2004/2005 the Kenyan Revenue Authority reformed the tax regime. In 2008/2009 the second phase of this reform will proceed. After the reforms in 2004/2005 the total foreign investment increased in 2006 and 2007 (KRA, 2006). Thus I can assume that these reforms were positive, although other variables could affect the foreign investment too. Graph 8 shows a quite random total foreign investment growth in Kenya between 1995 and 2002, and a decreasing corporate tax rate. Thus it seems that there is no relation between the corporate tax rate and total foreign investment.

3.5 The impact of the corporate tax rate on foreign investment in Tanzania Tanzania depends strongly on the agricultural sector, though only 4 percent of the land area is suitable for cultivating crops. Since 2005 the industrial sector is getting more important and increases the export of minerals, led by gold. Recent banking reforms have helped increase private sector growth and investment. This solid macroeconomic policies has paid off with a GDP growth of 7,1 percent in 2008 (CIA, 2009).

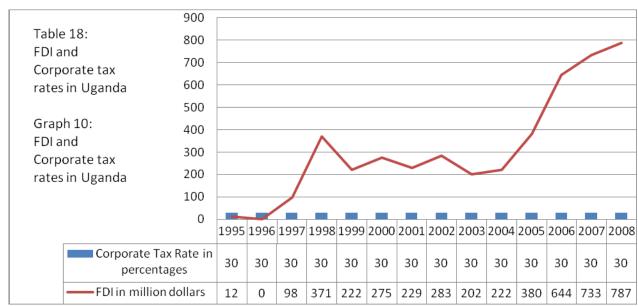


Source: UNCTAD 2008, World Tax Database 2009

The total foreign direct investment growth in Tanzania is quite stable, with only in 1999 an big exception. Between 1995 and 2008 the total foreign direct investment in Tanzania grew with 396 percent. In a relative short time, 13 years, the total foreign direct investment in Tanzania quadrupled. Graph 9 shows from 2004 almost a straight line, what means that there is a stable growth of total foreign direct investment in Tanzania.

The current tax regime is in force since 2004 with limited changes since then. Table 17 shows a growth of the foreign investment in Tanzania. Since 2004 there is a stable growth of the total foreign direct investment thus the tax regime change was positive. The decrease of the corporate tax rate in 1998 resulted in a massive growth of foreign direct investment. Thus I can assume that the change of the corporate tax rate was positive, but other variables could affect the growth in foreign investment too.

3.6 The impact of the corporate tax rate on foreign investment in Uganda
Uganda has several natural resources including copper, cobalt and gold. But agriculture
is the most import sector of the economy, employing over 80 percent of the work force
and coffee is the main export product. Since the 1990s the economy has a steady growth,
through incentives for production and exports, reduced inflation, gradually improved
domestic security, and the return of exiled Indian-Ugandan entrepreneurs (CIA, 2009).

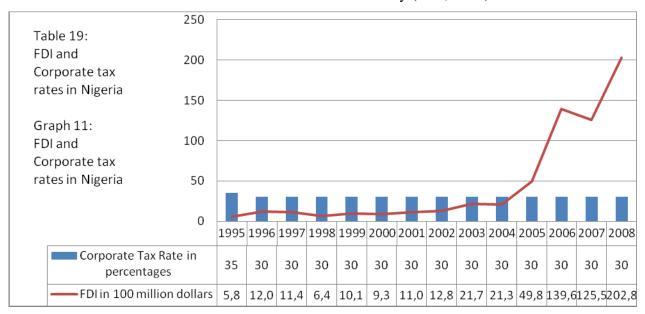


Source: UNCTAD 2008, World Tax Database 2009

The total foreign direct investment in Uganda started from a very low level in 1995. In 1996 the total foreign direct investment shrunk to 400.000 dollar. After 1996 there is a steady growth of the total foreign direct investment. Between 1999 and 2004 the total foreign direct investment stayed between the 200 and 300 million dollar. After 2004 the growth of the total foreign direct investment accelerated. In 2008 the total foreign direct investment was 787 million dollar. The total foreign direct investment grew from 1995 with 6458 percent (!).

The Uganda tax regime is in force since 1998 with changes made in 2008. Since the reform of the tax regime in the 1998 the foreign investment in Uganda increased. Thus, I can assume the change of tax regime was positive. Probably other factors influenced the growth in foreign investment too. The corporate tax rate did not change between 1995 and 2008 while the total foreign direct investment grew from almost nothing in 1995 (12 million dollar) towards 787 million dollar in 2008. We can assume that there is no relation between the corporate tax rate and the total foreign direct investment.

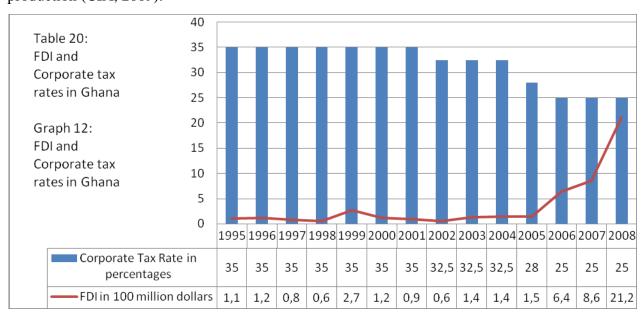
3.7 The impact of the corporate tax rate on foreign investment in Nigeria Nigeria's large oil reserves have boosted the economy the last years. Nigeria is depends strongly on oil exports, the budgetary revenues are for 80 percent provided by oil earnings. Although the elections of 2007 were troubled by violence and irregularities it also marked the first civilian-to-civilian transfer in the country (CIA, 2009).



Source: UNCTAD 2008, World Tax Database 2009

Table 19 shows that Nigeria has, compared with the other cases, a very high level of foreign investment. Between 1995 and 2003 the total foreign direct investment balanced between the 500 and 1300 million dollar. After 2003 the total foreign direct investment grew fast. In 2005 and 2006 the foreign investment increased with 134,04 percent and 180,35 percent, probably due the high oil prices. In 2007 there were casualties around the elections what could have affected the 10,11 percent decrease of the total foreign investment. In 2008 the total foreign direct investment was 202.800 million dollar. The total foreign direct investment grew between 1995 and 2008 with 3396,6 percent. Since 1995 the tax regime of Nigeria is in force. Because the total foreign investment since then rose, we can assume the change was positive. Probably other factors influenced the growth in foreign investment too. The corporate tax rate of Nigeria was reduced in 1995, the total foreign investment reacted positively on this reduction (Graph 11).

3.8 The impact of the corporate tax rate on foreign investment in Ghana Ghana is well endowed with natural resources including gold, oil and diamonds. The domestic economy is dominated by the agricultural sector, especially the cacao production (CIA, 2009).



Source: UNCTAD 2008, World Tax Database 2009

Table 20 shows a steady growth of the total foreign investment from the 1995 until 2005. The total foreign direct investment balances between the 60 million dollar and the 150 million dollar. After 2005 the growth of the total foreign direct investment sky

rockets. First grew the total foreign direct investment with 338,62 percent to 636 million dollar in 2006. Thereafter the total foreign investment increased even more to 855 million dollar in 2007. In 2008 the total foreign direct investment increased again explosive towards 2120 million dollar, an increase of 148 percent.

The tax regime of Ghana is in force since 2000, with amendments in every year since 2002. Because Ghana has shown every year an increase in total foreign investment we can assume that these changes had a positive effect. Probably other factors influenced the growth in foreign investment too. The corporate tax rate decreased from 2002 until 2006. Every time the corporate tax rate decreases, the total foreign direct investment increases. This suggests that there is a relation between the corporate tax rate and the total foreign direct investment.

2.9 The relation between foreign investment and the corporate tax regime
In the following paragraph the characteristics of the corporate tax regimes of the eight
cases (table 12) will be compared with total foreign investment as a percentage of the
total GDP. Because the corporate tax rates varies between sectors I will use the highest
standard tax rate. For Botswana the corporate tax rate is set on 25 percent, a sum of the
corporate tax rate and the additional company tax. Table 21 shows that the total foreign
investment is more important for some countries than other. Especially Zambia and
Nigeria profit from foreign investment.

Table 21: Coporate tax	Corporate	Total foreign investment in		Total foreign investment as a percentage
rates, FDI and GDP	tax rate	million dollars	GDP	of the GDP
Botswana	25	495	13810	3,58
Zambia	35	984	15230	6,46
Mozambique	32	427	9788	4,36
Kenya	37,5	728	31142	2,34
Tanzania	30	600	20630	2,91
Uganda	30	368	15040	2,45
Nigeria	32	12545	220300	5,69
Ghana	25	855	17720	4,83

Table 22 shows no significant correlations between the total foreign investment as a percentage of the GDP and the characteristics of the tax regime, but gives insights which characteristics of a tax regime are important in attracting FDI:

- There is a positive correlation between the number of DTTs and the total foreign investment as a percentage of the GDP. Thus, DTTs have a positive impact on FDI.
- There is a negative correlation between EPZs and the total foreign investment as a percentage of the GDP. Thus, EPZs do not provided more FDI flows towards a country.
- There is a strong negative correlation (with a significance of 0,092) between special policy on fixed assets and the total investment as a percentage of the GDP. Thus, special policy on fixed assets is not recommend when a country wants to attract more FDI.
- There is no correlation between special policy on employees and R&D. Thus special policy on employees and R&D have no negative or positive influence on attracting FDI.
- There is a positive correlation between different tax rates and the total foreign investment as a percentage of the GDP. Thus different tax rates attracts foreign investors.
- There is no correlation between the corporate tax rates and the total foreign investment as a percentage of the GDP.

Table 22: correlations between characteristics of the tax regime and The total foreign investment as a percentage of the GDP

		Total foreign investment as a percentage of the GDP
Number of DTTs	Pearson Correlation	,320
	Sig. (2-tailed)	,439
	N	8
EPZ 0=No 1=Yes	Pearson Correlation	-,391
	Sig. (2-tailed)	,339
	N	8
Special policy on fixed assets	Pearson Correlation	-,633
0=No 1=Yes	Sig. (2-tailed)	,092
	N	8
Special policy on training of	Pearson Correlation	,049
employees and R&D 0=No	Sig. (2-tailed)	,909
1=Yes	N	8
Different tax rates per sector	Pearson Correlation	,235
0=No 1=Yes	Sig. (2-tailed)	,576
	N	8
Corporate tax rate	Pearson Correlation	,030
	Sig. (2-tailed)	,944
	N	8

When a tax regime is designed for attracting FDI it should be a tax regime with many DTTs, no EPZs, no special policy on fixed assets and different tax rates per sector. Special policy on the training of employees and R&D are additional.

Because there is no correlation between the corporate tax rate and the total foreign investment as a percentage of the GDP I can concluded the height of the corporate tax rate is not important for investors. This suggests that a tax competition between the emerging economies of Africa is avoidable. The feared so-called race to the bottom is not applicable for foreign investors in emerging economies of Africa. This could be explained because the economies are specialized, and especially the countries with a lot

of natural resources, to compete which each other. When a foreign investor wants to invest, for example, in the wining of copper, he has to invest in Zambia because it is impossible the win copper in Mozambique.

3.10 Conclusion

We can concluded four things. First, tax regime reforms in the recent years have never affected the foreign investment in the eight cases negatively. After a tax regime reform the foreign investment increased in all the cases. This does not mean that there are no other factors that are important in the increase of foreign investment, but investors neither stopped their activities in the countries.

Second, there is no evidence that investors are attracted to lower corporate tax rates. In five cases the corporate tax rates was reduced. In two cases, Tanzania and Ghana, investors reacted positively on the reduction of the corporate tax rate. In one case, Kenya, the investors reacted on the first reduction of the corporate tax rate positively, but on the second reduction of the corporate tax rate negatively. And in the two last cases, Mozambique and Nigeria reacted the investors negatively on the reduction of the corporate tax rate. In short, the reaction of investors on corporate tax rate reductions is quite random.

Third, there is no correlation between the height of the corporate tax rates and the total foreign investment as a percentage of the GDP. Thus it seems that the tax regime does not affect foreign investment and that other factors are more important.

Fourth, a tax regime with many DTTs, no EPZs, no special policy on fixed assets and different tax rates per sector is more likely to attract FDI than other tax regimes. Zambia is the only country that has this characteristics. Notably, Zambia has the highest percentage of total foreign investment as a percentage of the GDP and the highest number of DTTs. Also, Zambia is the only country without special policy on fixed assets, but still has the second place in attracting foreign investment in fixed assets (chapter 4). This is probably because of the important copper industry in Zambia, which needs investment in fixed assets. Investors do not like procedures (chapter 5) and that is probably why special policy on fixed assets, including a range of incentives, deductions and tax allowances are not considered as positive. The less procedures and rules the better.

Chapter 4: The trust of investors

Whether a investor invests in a country depends on a lot of factors. But I assume that when a investor invests in a project he trusts that his investment will be profitable. Sub-Sahara Africa is perceived as overly risky and therefore a country in the region will receive less FDI by virtue of its geographical location (Asiedu, 2002). Therefore I will investigated how much trust foreign investors have in the eight emerging economies of sub-Sahara Africa. I use three indictors to measure if a country is trustworthiness for foreign investors. The first indicators are the insurance ceilings (short and long term investment), the second indicator is the Investor Protection Index and the third indicator is the foreign investment as a percentage of Gross Fixed Capital Formation. First the insurance ceilings for short term and long term investments of the eight cases will be compared. Next there will be explored if there is a correlation between the total foreign investment as a percentage of the GDP and the insurance ceilings. Second the Investor Protection Indexes of the eight cases will be compared. Thereafter there will be explored whether there is a correlation between the total foreign investment as a percentage of GDP and the Investor Protection Index. The Investor Protection Indexes of the eight cases will be compared with the OECD and sub-Sahara Africa.

Third the foreign investment as a percentage of Gross Fixed Capital Formation. The foreign investment as a percentage of Gross Fixed Capital Formation is an commonly used indictor for long term activity in a country. The total foreign investment as a percentage of Gross Fixed Capital Formation will be compared with the total foreign investment as a percentage of the GDP.

4.1 Insurance ceilings

The insurance company Ducroire Delcredere can cover export transactions financed by both short-term credits and medium/long term credits against political and commercial risks on open account terms, i.e. without a bank guarantee being required. In conformity with the OECD Arrangement, the maximum reimbursement period for medium- and long-term transactions with this country has been set at 10 years. Ducroire Delcredere insures investments in this country against, war risk, the risk of expropriation and government action and the transfer risk regarding payment of

dividends or repatriation of capital. Each application is decided case by case on the basis of a detailed analysis (Ducroire Delcredere, 2009).

Table 23: Insurance ceilings	Insurance ceilings short term In millions	Insurance ceilings long term in millions	Total foreign investement as a percentage of the GDP	Rank
Botswana	170	475	3,58	5
Zambia	150	325	6,46	1
Mozambique	70	220	4,36	4
Kenya	275	725	2,34	8
Tanzania	140	350	2,91	6
Uganda	110	220	2,45	7
Nigeria	1500	750	5,69	2
Ghana	250	625	4,83	3
Average	333,125	461,25	4,08	-
Germany	2250	2250	-	-
United States	2250	2250	-	-
South-Africa	1500	1500	-	-

Ducroir Delcredere, 2009/UNCTAD, 2008

Table 23 shows the insurance ceilings for short term investment and the insurance ceilings for long term investments. Striking is that the short term insurance ceiling for Nigeria is higher than the long term ceiling. This assumes that Ducroir Delcredere have less trust in long term investments than in short term investments. All the other cases have a lower short term ceiling.

When the average short term insurance ceiling and the average long term insurance ceiling of the eight cases are compared with OECD-members Germany and the United States and the economic motor of Africa, South-Africa, the ceilings are very low. Probably the risky reputation that Asiedu already addressed affect the eight cases too. It is remarkable that the short and long term insurance ceilings from Germany, the United States and South-Africa are the same, while the short and long term insurance ceilings differ for the eight cases. This could also be the result of the risky reputation of sub-Sahara Africa.

		Total foreign investment as a percentage of the GDP
Insurance ceilings short term	Pearson Correlation	,410
	Sig. (2-tailed)	,313
	N	8
Insurance ceilings long term	Pearson Correlation	,110
	Sig. (2-tailed)	,795
	N	8

Table 24 shows the correlations between the insurance possibilities and the total foreign investment. There is no significant correlation between the total foreign investment as a percentage of the GDP and neither the short term nor long term insurance possibilities. But the correlation between the total foreign investment as a percentage of the GDP and the short term insurance possibilities is stronger than the correlation between the total foreign investment as a percentage of the GDP and the long term insurance possibilities.

This suggest that insurance companies trust long term investments less than short term investments. This seems expectable, because the longer a project takes the more risks there are. But OECD countries such as the United States and Germany and the economic motor of Africa, South-Africa, have all the same ceilings for short term investments and long term investments (Doing Business, 2009). It could be that insurance companies have less trust in long term investments than in short term investments in the eight cases, still the long term insurance ceilings are in seven cases higher than the short term insurance ceilings.

4.2 Investor Protection Index

The Investor Protection Index measures the strength of minority shareholders against directors misuse of corporate assets for personal gain (Djankov *et al.*, 2008). The index is from a range of 0-10, and based on a survey under corporate lawyers.

Table 25: Investor Protection Index	Investor Protection Index	Total foreign investment	Rank Total foreign investment
Botswana	4.3	495	6
Zambia	5.3	984	2
Mozambique	6,0	427	7
Kenya	5,0	728	4
Tanzania	5,0	600	5
Uganda	4,0	368	8
Nigeria	5.7	12545	1
Ghana	6,0	855	3
Average	5,20	2125,25	•
OECD	5.8	-	-
Sub-Sahara Africa	4.3	-	-

Doing Business 2009

Table 25 shows that the average score on the Investor Protection Index of the eight cases is 5,2. Compared with the score of the OECD (5,8), the average of the eight cases is relatively good. Mozambique and Ghana have both a Investor Protection Index of 6, higher than the members of the OECD. This means that the protection of investors can be considered as good in Mozambique and Ghana. Mozambique has the seventh place in the ranking o total foreign investment, Ghana the third. The other countries have a lower score on the Investor Protection Index, although Nigeria is very close to the OECD countries with a score of 5.7. Nigeria is the country that attracts the most foreign investment. Compared with the average score of sub-Sahara Africa(4,3) only Uganda scores less (4,0), notably Uganda attracts the least foreign investment too.

Table 26: Correlation between total foreign investment as a percentage of the GDP and Investor Protection Index

		Total foreign
		investment as a
		percentage of
		the GDP
Investor protection index	Pearson Correlation	,614
	Sig. (2-tailed)	,105
	N	8

Table 26 shows the correlation between total foreign investment as a percentage of the GDP and the Investor Protection Index. There is no significant correlation, although there is a positive relation between the total foreign investment and the Investor Protection Index. This means that how saver the investment is, the more a country can attract investment.

4.3 Foreign investment as a percentage of Gross Fixed Capital Formation

The total foreign investment as a percentage of Gross Fixed Capital Formation shows how much foreign investors invest in fixed assets. Investment in fixed assets suggests long term activity in a country. Table 27 shows the total foreign investment as a percentage of Gross Fixed Capital Formation in 1990-2000 and 2005,2006 and 2007 of the eight cases plus OECD members and two of the biggest economies in the world Germany and the United States and the economic motor of Africa, South-Africa. The investment as a percentage of Gross Fixed Capital Formation has grown in all the countries since 1990. But the growth was not a steady growth. In 2005 five of the eight cases had a lower total foreign investment as a percentage of Gross Fixed Capital Formation percentage than the annual average of 1990-2000. This could be because the oil prices roses sharply because the hurricane Katrina hit the Gulf of Mexico. This could explain the high investment in fixed assets in Nigeria of 2006 too. Probably oil producents expanded their investments in the oil fields in Nigeria because of the problems in the Gulf of Mexico.

The very low total foreign investment as a percentage of Gross Fixed Capital Formation in 2005 and 2006 of Kenya could be explained by the corruption scandals of 2005 and 2006 in Kenya.

The average total foreign investment as a percentage of Gross Fixed Capital Formation of the eight cases is over time always higher than in Germany and the United States. This could be explained due the lack of fixed assets in the eight cases, while Germany and the United States already have a lot of fixed assets.

Countries that highly depending on the export of natural resources (Chapter 6) are Botswana, Zambia, Mozambique and Nigeria. They are the four cases that have the highest total foreign investment as a percentage of Gross Fixed Capital Formation percentages too. This could be explained because investors need fixed assets to explore natural resources.

Table 27: Investment as a percentage of gross fixed capital formation	1990-2000	2005	2006	2007
Botswana	1,5	14,7	26,9	24,4
Zambia	31,1	19,9	22,8	35,6
Mozambique	13,4	8,5	9,1	22,6
Kenya	1,5	0,6	1,2	13,1
Tanzania	12,4	20	17,7	17,9
Uganda	8,3	17,6	15,8	12,3
Nigeria	41,8	36,7	88,5	69,6
Ghana	8,6	4,6	19,4	22,3
Average	14,825	15,325	25,175	27,225
Germany	6,9	8,6	10,5	8,3
United States	7	4,3	9,1	9
South-Africa	4,1	16,1	-1,2	11,5

Table 28 shows a significant correlation between the total foreign investment as a percentage of the GDP and the total foreign investment as a percentage of Gross Fixed Capital. Though the total foreign investment as a percentage of Gross Fixed Capital Formation and the share of natural resources in total export correlate too.

Table 28: Correlations between the Total foreign investment as a percentage of the GDP, the Total foreign investment as a percentage of Gross Fixed Capital Formation and the share of natural resources in the Total export

	Toolardoo III IIIo Total Oxport				
		As a percentage of gross fixed capital formation	Total foreign investment as a percentage of the GDP	Share of natural resources in total export	
As a percentage of gross	Pearson Correlation	1	,728 [*]	,748 [*]	
fixed capital formation	Sig. (2-tailed)		,041	,033	
	N	8	8	8	
Total foreign investment as a	Pearson Correlation	,728 [*]	1	,683	
percentage of the GDP	Sig. (2-tailed)	,041		,062	
	N	8	8	8	
Share of natural resources in	Pearson Correlation	,748 [*]	,683	1	
total export	Sig. (2-tailed)	,033	,062		
	N	8	8	8	

^{*.} Correlation is significant at the 0.05 level (2-tailed).

4.4 The trust of investors

The only significant correlation I found was between the total foreign investment as a percentage of the GDP and the foreign investment as a percentage of Gross Fixed Capital Formation. Therefore I can assume that investors have more trust in countries where other investors have invested in fixed assets, and thus have probably a long term strategy for this country. Though this correlation is influenced by the share of natural resources in the total export of a country. I assume that investors want to take more risks when they invest in a country with a high share of natural resources in the total export then in a country with less profitable and more footloose export goods.

Other indicators of the trust of investors play a less important role neither the investor protection index nor the insurance ceilings have significant correlations with the total foreign investment as a percentage of the GDP. This assumes that investors mainly follow fellow investors when the invest in one of the eight cases. The risky reputation of sub-Sahara Africa probably results in lower insurance ceilings (for short and long term). The average investor protection index of the eight cases is better than the average

of the region and comparable with the score of OECD members. It seems that the risky reputation of sub-Sahara Africa affects FDI flows towards the eight cases too.

Chapter 5: The functioning of the government

In which way affects the functioning of the government the foreign investment in a country? To explore the effect of the functioning of the government on the foreign investment I use four indicators. The number of days it takes to start a business, the number of procedures it takes to start a business, the number of days it takes to enforce a contract, and the corruption perception index.

5.1 Starting a business

The number of days and the number of procedures it takes to start a business are surveyed by Doing Business in 2009. It takes the most days to start a business in Botswana, almost one third of a year. Compared with the average of the eight cases and sub-Sahara Africa this is very high. The duration of starting a business in Botswana is eight times (!) the duration of starting a business in a OECD country. In Mozambique and Tanzania starting a business goes quite quickly compared with the average of the eight countries and sub-Sahara Africa, it still goes faster in a OECD country (Table 29).

Table 29: Starting a		
business	Number of days	Number of procedures
Botswana	108	11
Zambia	33	6
Mozambique	29	10
Kenya	44	12
Tanzania	29	12
Uganda	28	18
Nigeria	34	9
Ghana	42	11
Average	43,375	11,125
OECD	13,4	5,8
sub-Sahara Africa	47,8	10,2

Table 30 shows that starting a business (number of days) and starting a business (number of procedures) correlate both negatively with total foreign investment. The number of procedures it takes to start a business correlates significantly with the total foreign investment as a percentage of the GDP, the correlation between the total foreign investment as a percentage of the GDP and the number of days it takes to start a business correlates less.

Table 30: correlations between total foreign investment as a percentage of the GDP and starting a business

		Total foreign investment as a percentage of the GDP
Starting a business (number	Pearson Correlation	-,127
of days)	Sig. (1-tailed)	,382
	N	8
Starting a business (number	Pearson Correlation	-,821 ^{**}
of procedures)	Sig. (1-tailed)	,006
	N	8

5.2 Enforcing a contract

The number of days it takes to enforce a contract is surveyed by Doing Business in 2009. The average for the cases is 609,25 days. Especially in Botswana (987 days) and Mozambique (1010 days) it takes a long time before a contract is in force. In Uganda it takes 535 days, and all the other countries are comparable with the score of the OECD countries (462,7 days). This is quite an achievement, especially compared with the average for sub-Sahara Africa, which is 1052,9 days (Table 31).

Table 31: Enforcing a	
contract	Number of days:
Botswana	987
Zambia	471
Mozambique	1010
Kenya	465
Tanzania	462
Uganda	535
Nigeria	457
Ghana	487
Average	609,25
OECD	462,70
sub-Sahara Africa	1052,90

Table 32 shows that there is almost no correlation between the total foreign investment as a percentage of the GDP and the number of days it takes to enforce a contract.

table 32: correlation between enforcing a contract and total foreign investment as a percentage of the total foreign investment

		Total foreign
		investment as a
		percentage of
		the GDP
Enforcing a contract (number	Pearson Correlation	-,077
of days)	Sig. (1-tailed)	,428
	N	8

5.3 Corruption

The corruption perception index (CPI index) is provided by Transparency International with a range from 0 to 10. This NGO maps corruption all over the world. If the CPI index is lower than 3, Transparency International considers that as rampant. A score between the 3 and 5 is a serious challenge for the government. There are only three countries in sub-Sahara Africa that score above the mid-point of 5, that are Mauritius, Cape Verde and Botswana (Transparency International, 2008).

Table 33: CPI index	CPI
Botswana	5,8
Zambia	2,8
Mozambique	2,6
Kenya	2,1
Tanzania	3
Uganda	2,6
Nigeria	2,7
Ghana	3,9
Average	3,1875
Germany	7,9
United States	7,3
South-Africa	4,9

Source: Transparency International, 2008

Table 33 shows that only three countries score above the 3, that are the already mentioned Botswana, Tanzania and Ghana. The other countries, Zambia, Mozambique, Kenya, Uganda and Nigeria score below the 3 points, and thus are very corrupt. Tanzania and Ghana score between the 3 and 5 and thus have a serious challenge to handle the corruption. Though Botswana has a high score for the region of 5,8, on a scale from 0 to 10 it's not that impressive.

Compared with the OECD-members, Germany (7,9) and the United States (7,3) the average of the eight cases (3,2) is very low. South-Africa (4,9), the economic motor of Africa, scores also better.

Table 34: correlation between total foreign investment as a percentage of the GDP and the CPI index

		Total foreign investment as a percentage of the GDP
Total foreign investment as a	Pearson Correlation	1
percentage of the GDP	Sig. (1-tailed)	
	N	8
CPI index	Pearson Correlation	,034
	Sig. (1-tailed)	,468
	N	8

Table 34 shows that the correlation between total foreign investment as a percentage of the GDP and the CPI index is insignificant. Thus there is no relation between the level of corruption and the total foreign investment.

5.4 Conclusion

The significant correlation between total foreign investment as a percentage of the GDP and the number of procedures it takes to start a business suggest that much procedures does not attract investors. Maybe that is why there is no correlation between the CPI index and the total foreign investment as a percentage of the GDP. When the corruption is common, it is easier to bribe government officials and to avoid procedures. The other indicators did not have strong correlations with the total foreign investment as a percentage of the GDP.

Table 35 is a overview of the score of the eight cases per indicator. The country that score the best on a indicator gets a green colour. The country that scores the worst gets a red colour. No country scores best on all the indicators. Remarkable is that Botswana scores best on the CPI but the worst on the number of days it takes to start a business. Uganda has a best and worst score too. Uganda scores the best on the number of days it takes to start a business but the worst on the number of procedures in takes to start a business. That seems strange because I expected that the less procedures have to be completed, the faster a business can start.

Only Ghana scores on all the four indicators better than the average, yet has never a best score. None of the countries scores exquisite.

Table 35: Functioning of the government	Starting a business (number of days)	Starting a business (number of procedures)	Enforcing a contract	СРІ
Botswana	108	11	987	5,8
Zambia	33	6	471	2,8
Mozambique	29	10	1010	2,6
Kenya	44	12	465	2,1
Tanzania	29	12	462	3
Uganda	28	18	535	2,6
Nigeria	34	9	457	2,7
Ghana	42	11	487	3,9
Average	43,375	11,125	609,25	3,1875
OECD	13,4	5,8	462,70	-
sub-Sahara Africa	47,8	10,2	1052,90	-

Chapter 6: Other variables

In this chapter we will do a quick scan whether three other variables affect foreign investment in the eight cases. This variables are: the infrastructure, the share of minerals in the total export and the level of rigidity of employment.

The infrastructure has as indicator the total airports with paved runways per 100.000 inhabitants. The data is found in the CIA world fact book. I assume that a investors will sooner invested in a country with much infrastructure than in a country with less infrastructure.

The share of minerals in the export data will be provided by the International Trade Centre. I assume that a country with a high share of minerals in the export attracts more foreign investors.

The Doing Business survey contains a rigidity of employment index. A high rigidity means that there are many regulations that protect employees I assume that the lesser the rigidity of employment the more foreign investment in a country.

6.1 Infrastructure

The indicator of infrastructure is the total airports per 100.000 inhabitants. The eight cases will be compared with Germany, the United States and South-Africa. Germany and the United States are two of the biggest economic powers in the world, while south-Africa is considered as the economic motor of Africa.

Table 35 shows that the average of the eight cases is 0.04 airports with paved runways per 100.000 inhabitants. This is, compared with Germany, the United States and South-Africa, not much. Only Botswana (0,55) comes near Germany (0,67). Probably Botswana scores high because of the small population. Especially Nigeria, but Uganda and Tanzania too, have a very low score.

Table 36:			Airports per 100.000	
Infrastructure	Airports	Population	people	
Botswana	11	1.990.876	0,55	
Zambia	9	11.862.740	0,08	
Mozambique	22	21.669.278	0,10	
Kenya	36	39.002.772	0,09	
Tanzania	10	41.048.532	0,02	
Uganda	5	32.269.558	0,02	
Nigeria	15	149.229.090	0,01	
Ghana	12	23.832.495	0,05	
Average	15	40.113.168	0,04	
Germany	549	82.329.758	0,67	
United States	5146	307.212.123	1,68	
South-Africa	636	49.052.489	1,30	

Table 37 shows a weak negative correlation between the airports with paved runway per 100.00 inhabitants and the total foreign investment as a percentage of the GDP. This means that the less airports with paved runways per 100.000 inhabitants there are, the more foreign investment a country attracts. Thus, I can assume that foreign investors do not consider infrastructure as an important indicator for investment in a country.

Table 37: correlation between total foreign investment and airports with paved runways per 100.000 inhabitants

		Total foreign investment as a percentage of the GDP
Number of aiports per 100.000 inhabitants	Pearson Correlation Sig. (1-tailed)	-,112 ,396
	N	8

6.2 Share of natural resources in the total export

Table 38 shows the total share minerals in the total export of the eight cases and Germany, the United States and South-Africa. Germany and the United States are OECD-members and two of the biggest economic powers in the world, while south-Africa is considered as the economic motor of Africa.

Especially Botswana (88,2%) and Nigeria (98%) are highly depending on natural resources for their export. But countries such as Zambia (73,2% and Mozambique

(73,7%) are depending largely on the export of natural resources too. The average of the eight cases is 54,18 percent. Thus, the eight cases are highly depending on natural resources for their export. Compared with the OECD-members Germany (5%) and the United States (7,6%) all the eight cases are highly depending on the export of natural resources. South-Africa (46,2%) depends less than the average of the eight cases on the export of natural resources, but still depends also highly on the export of natural resources.

Table 38: Share of minerals in total export	Share of minerals in total export
Botswana	88,2
Zambia	73,2
Mozambique	73,7
Kenya	10,4
Tanzania	37,14
Uganda	19,7
Nigeria	98
Ghana	33,1
Average	54,18
Germany	5
United States	7,6
South-Africa	46,2

Source: International Finance Centre, 2006

Table 39 shows a strong positive correlation between total foreign investment as a percentage of the GDP and the share of minerals in the total export. Although the correlation is not significant, I can assume that countries with a high share of minerals in the total export attract more foreign investors.

Table 39: Correlation between the Total foreign investment as a percentage of the GDP and the share of natural resources in Total export

	Total foreign
	investment as a
	percentage of
	the GDP
Share of natural resources in Pears	on Correlation ,683
total export Sig. (2-tailed) ,062
N	8

6.3 Rigidity of employment

Table 40 shows the rigidity of employment index. The higher the index score the more rigid regulations on employment a country has. The four countries with the highest scores, Tanzania (63), Mozambique (49), Ghana (37) and Zambia (34), have all considered themselves, on one point in their history, as socialist states. Probably they have therefore quite rigid regulations on employment. The score of Uganda (3) and Nigeria (7) are both very low. The average of sub-Sahara Africa is 42,3. Only Mozambique and Tanzania score higher. The average of the OECD is 31,4 which is comparable with the average of the eight cases.

Table 40: Rigidity of employment index	Rigidity of empolyment index
Botswana	20
Zambia	34
Mozambique	49
Kenya	17
Tanzania	63
Uganda	3
Nigeria	7
Ghana	37
Average	28,75
Sub-Sahara Africa	42,3
OECD	31,4

Table 41 shows that the correlation between the total foreign investment as a percentage of the GDP and the rigidity of the employment index is insignificant. This suggests that the rigidity of the labor market in the eight cases is not important for foreign investors.

Table 41: correlations between Total foreign investment and the rigidity of employment index

	! /	
		Total foreign investment as a
		percentage of
		the GDP
The rigidity of employment	Pearson Correlation	,072
index	Sig. (1-tailed)	,432
	N	8

6.4 Conclusion

The quick scan of the infrastructure, the share of minerals in the total export and the rigidity of employment index did not result in another significant correlation. Foreign investors do not consider infrastructure and the rigidity or employment as a important indicators for investment. Mineral-exporting countries are more likely to attract foreign investors.

Conclusion

There have been few studies on the influence of tax regimes on FDI in developing countries, even fewer studies that focus on sub-Sahara Africa. This study has shed some light on the relation between FDI and tax regimes in sub-Sahara Africa. Emerging economies in sub-Sahara Africa with a tax regime that has no special policy on fixed assets and no EPZs, but have different tax rates per sector and their government have signed a lot of DTTs are more likely to attract FDI than other tax regimes. I assume that foreign investors want few bureaucratic rules as possible, considering the strong negative correlation between the special policy on fixed assets (including incentives, deductions and tax allowances) and the total foreign investment as a percentage of the GDP and the significant negative correlation between the number of days it takes to start a business and the total foreign investment as a percentage of the GDP. The height of the corporate tax rate does not affect foreign investors. Fear for tax competition and the so-called race to the bottom of investors is unfounded. An explanation could be that the economies of the eight cases, especially considering the winning of natural resources, are too specialized to lead to heavy competition. Further research in this direction is needed. Furthermore companies can make special arrangements about corporate tax rates that are not known by the institutions I have consulted in this research. Because it is not in the range of this study to explore this arrangements further research in that direction is needed too.

This research has explored whether the trust of investors, the functioning of the government, the infrastructure, the share of natural resources in the total export and the rigidity of employment are more important factors to attract FDI than the corporate tax rates. Especially the number of procedures it takes to start a business indicator for the functioning of the government and the total foreign investment as a percentage of the Gross Fixed Capital Formation for the trust of investors are important factors in attracting FDI. Sub-Sahara Africa has a risky reputation and this reputation affects investment in the eight cases too.

Table 41 shows that the number of procedures it takes to start a business and the total foreign investment as a percentage of the Gross Fixed Capital formation have a R Square of 0,777, thus those two indicators can strongly predict the height of FDI. Table 42 shows that fewer procedures to start a business has a positive effect on FDI with a significance of 0,065. A high percentage of the total foreign investment of the Gross

Fixed Capital Formation has a positive effect on FDI too, with a significance of 0,189. A high percentage of the total foreign investment as a percentage of the Gross Fixed Capital Formation is highly influenced by the share of natural resources in the export.

Table 41: Model Summary

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	,881ª	,777	,688	,85007

a. Predictors: (Constant), As a percentage of gross fixed capital formation, Starting a business (number of procedures)

Table 42: Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Mode	I	В	Std. Error	Beta	t	Sig.
1	(Constant)	6,210	1,689		3,678	,014
	Starting a business (number of procedures)	-,269	,114	-,602	-2,353	,065
	As a percentage of gross fixed capital formation	,032	,021	,389	1,519	,189

a. Dependent Variable: Total foreign investment as a percentage of the GDP

Thus a less bureaucratic government and a good reputation in the eyes of investors help to attract FDI.

Summarizing, a tax regime with less rules, different tax rates per sector and a lot of DTTs is more capable in attracting FDI than other tax regimes. A less bureaucratic government and the trust of investors to invest in fixed assets are important to attract FDI too. Tax regimes can help to boost FDI in the emerging economies of sub-Sahara Africa, but a comprehensive policy is needed. The reputation of sub-Sahara Africa has to improve, it has to be clear for investors that sub-Sahara Africa is divers and that sub-Sahara Africa is not only the DRC but also promising emerging economies such as the eight emerging economies investigated in this research. Investing in the emerging economies has to be easier for investors, with less procedures and a tax regime with few incentives, deductions and tax allowances.

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