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# Tanzania Investor Survey Report

Understanding the impact of domestic and foreign direct investment



**INCLUSIVE AND SUSTAINABLE INDUSTRIAL DEVELOPMENT** 

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This document is the result of a collaborative effort between the Tanzania Investment Centre (TIC) and the United Nations Industrial Development Organization (UNIDO).

All analysis, calculations and illustrations of results were prepared by UNIDO, unless otherwise noted.

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## Foreword from the Tanzania Investment Centre (TIC)

This report is an outcome of the ongoing collaboration established between the United Nations Industrial Development Organization (UNIDO) and the Tanzania Investment Centre (TIC) which led to the organization of several joint activities aimed to explore the use of the UNIDO Investor Survey to identify areas for further research and analysis pertaining to the main topic of foreign direct investment (FDI) impact in the United Republic of Tanzania.

The main objective of the Report is to analyse the impact of foreign and domestic investment in the Tanzanian economy through the employment effect, the trade impact and the expected determinant role in productivity performance. This Report and the underlying UNIDO Investor Survey database constitute a very useful resource and input to the Tanzania Investment Centre and certainly improve our investment promotion and monitoring role with existing and prospective foreign investors. It covers crucial analysis on how foreign investment can trigger investment by domestic firms through technology and knowledge and other spillover effects. Studies conducted in Tanzania and elsewhere have shown that domestic investors account for the lion's share of capital formation in developing economies. This group of investors should therefore be encouraged through the award of appropriate incentives to enable them to contribute to investment and industrialization growth in Tanzania.

Clearly, a vibrant domestic investor regime is indeed a catalyst for attracting FDI and this study impressively underscores that the path of TIC towards a holistic investment promotion approach has yielded and is likely to continue to yield good results in the future. Investor Surveys such as the one conducted in 2011 by UNIDO and which forms the basis of this Report, create an important "hearing device" whereby the private sector is heard to influence strategy design of TIC as well as its policy advocacy role with government.

I wish to express my gratitude to UNIDO for supporting TIC for many years and it is my hope that this partnership will be further continued and expanded.

**Juliet R. Kairuki** Executive Director Tanzania Investment Centre

# Foreword from UNIDO Managing Director, PTC

In its Lima Declaration of December 2013, the United Nations Industrial Development Organization reinforced its mandate to promote industrial and sustainable development which supports developing countries to fully harness the benefits of globalization.

One aspect of globalization is related to the volume and quality of foreign direct investment directed to developing countries. Investment is made by investors and investors require sound information basis from which to take decisions to define a growth trajectory of the firm and to uplift the firm to the next productivity and technology levels. The absence of reliable information increases risk perception and transaction costs and may inhibit the realization of much-needed investments.

It is against this backdrop that UNIDO has partnered with the Ministry of Industry and Trade (MIT) and the Tanzania Investment Centre (TIC) to provide a reliable information basis from which investment promotion stakeholders can define new strategies or review existing strategies in terms of their efficacy to generate new investment. This is the first report for the United Republic of Tanzania which extensively draws on the UNIDO Investor Survey conducted in 2011 database. It sheds new light on enterprise performance (both foreign and domestic) and maintains focus on the quantitative and qualitative impact of FDI, also as a result of technology and knowledge transfer from foreign to domestic enterprises. It makes an important contribution by evaluating the mechanisms and rationale for the provision of investment incentives to FDI projects and how incentives are then linked to actual enterprise performance.

It is my hope that this report will be a useful source of information for policy makers, the private sector, development partners, research institutions and academia as well as the general public.

*Philippe R. Scholtès,* Officer-in-Charge, Programme Development and Technical Cooperation Division (PTC)

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# List of Acronyms

AfrIPANet	The African Investment Promotion Agencies Network
AIS	Africa Investor Survey
BOP	Balance of Payments
EAC	East African Community
EPZ	Export Processing Zone
FDI	Foreign Direct Investment
EU	European Union
FEs	Foreign Entrepreneurs
GDP	Gross Domestic Product
IC	Implementation Committee
IPA	Investment Promotion Agency
IMP	Investment Monitoring Platform
ISIC	International Standard Industrial Classification
JVs	Joint Ventures
M&A	Merger and Acquisition
MENA	Middle East and North Africa
NSO	National Statistics Office
OECD	Organisation for Economic CO-operation and Development
OLS	Ordinary Least Squares
R&D	Research and Development
SADC	Southern African Development Community
SPX	Subcontracting and Partnership Exchange
SSA	Sub-Saharan Africa
TFP	Total Factor Productivity
TCCIA	Tanzania Chamber of Commerce, Industry and Agriculture
TIC	Tanzania Investment Centre
TNCs	Transnational Corporations
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
UK	United Kingdom
URT	United Republic of Tanzania
USA	United States of America
WOE	Wholly-owned enterprise

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This publication has been prepared under the overall direction and supervision of Philippe Scholtès, Officer-in-Charge, Programme Development and Technical Cooperation (PTC) Division, UNIDO, Mohamed-Lamine Dhaoui, Director Business Investment Technology (BIT) Services Branch, and Monica Carcò, Chief of the Investment and Technology Unit (ITU).

Stefan Kratzsch, UNIDO Staff and Project Manager was responsible for the overall report design, supervision and coordination. Brian Portelli, supported by Michela Bello, provided the substantive technical input to the report including the conceptual framework, data analysis and content drafting.

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## Summary

The contribution that FDI makes to a country's economic development and its integration into the world economy is widely acknowledged. Over the past three decades, Tanzania has made considerable efforts to improve its investment climate with a view to attract more FDI to its economy. Major policy and structural economic reforms have been undertaken since the mid-1980s aimed at improving the investment climate in the country. Tanzania's relative success in attracting FDI to its economy reflects the soundness and relevance of this development path undertaken. At the same time, more FDI activity in the Tanzanian economy has unearthed a new challenging need to monitor and better understand the economic impact of such investment flows in the national economic framework. The Report rests on the premise that Tanzania can do more to improve its investment mapping and management framework within which efforts aimed at investment attraction, targeting, generation and after-care should be pursued. The purpose of the Tanzania Investor Survey Report is to analyse the impact of foreign and domestic investment in the economy through reference to the employment effect, the trade impact and the expected determinant role in productivity performance. The Report also examines the link between the receipt of investment incentives and enterprise performance. This is the first report for Tanzania which extensively draws on the UNIDO Africa Investor Survey conducted between 2010 and 2011 in 19 countries in the region. It sheds new light on the enterprise performance (both foreign and domestic), in the context of the a priori expectations from increased foreign investment activity in the country and the increasing focus on the quality rather quantity aspect of FDI activity in the host economy. The Report makes some important recommendations on possible directions for upgrading the country's investment promotion framework.

The analysis contained in this Report is based on a sample of 459 firms surveyed in 2010, of which 305 firms are domestic-owned (66 per cent) and 153 firms are foreign-owned. Approximately 59 per cent of firms in the sample operate in the manufacturing sector, 28 per cent in services, and 7 and 6 per cent of surveyed companies operate in agriculture and mining, and electricity-water-construction sectors, respectively. More than 70 per cent of companies in the sample are located in Dar es Salaam, with 6.6 per cent and 4.1 per cent of surveyed firms located in Arusha and Kilimanjaro province, respectively. Zanzibar is also covered in the Survey with 13 observations which is however too small to draw representative conclusions for Zanzibar alone. The nature and extent of this dataset provides the opportunity to compare foreign and domestic firms in terms of investment activity, productivity performance, size and trade patterns (including export and import activities). Furthermore the dataset offers possibilities to analyse whether the FDI presence in the country results in a positive impact in the host economy and, if so, through which channels FDI spillovers tend to occur.

At the time of the Survey, the majority of surveyed domestic firms had been established and operating for more than a decade. Domestic firms are mainly small enterprises, both in terms of the number of persons they employ as well as in terms of gross output they generate. Some 71.9 per cent of domestic firms have less than 50 employees and similarly, around 72 per cent reported a value of gross annual output smaller than 1 million USD. Respondents operating in the agriculture and mining and services sectors planned to reinvest on average the largest share of their sales, yet half of the respondents in services did not plan to invest over the next three financial years, whereas half of those in agriculture and mining planned to invest less

than 10 percent of the sales. Survey results show that manufacturing and services are the sectors in which firms planned to invest on average the largest amount of capital, although 50 percent of surveyed firms indicated to have no intentions of making a new investment over the next three financial years.

Results suggest that domestic enterprises, independent of productivity measure used (i.e. valued added per employee or total factor productivity), are less productive than foreign firms, yet they are more inclined to invest in the future than foreign companies. Domestic enterprises tend also to be more labour intensive and report lower levels of capacity utilization when compared to their foreign counterparts. Among the domestic enterprises, medium-sized firms are those performing better, whereas smaller firms report lowest levels of productivity. Domestic enterprises tend to generate less employment than foreign firms, although they employ more local employees and report a higher skill ratio as measured by the share of technical employees over total employment. Results also suggest that small and medium foreign companies employ a higher share of skilled employees than do large foreign companies. Foreign and domestic firms seem to be facing competitive domestic markets. More than 70 per cent of sales from around half of domestic and foreign firms are sold in Tanzania and when compared to small firms, large firms exhibit a slighter inclination to export. Both foreign and domestic enterprises depend highly on imports, with around 50 per cent of the respondent firms importing at least 70 per cent of their total inputs.

The Report analyses information on the main source of financing for the initial investment of domestic companies. Results show that 55 per cent of domestic respondents in the country financed their initial investment borrowing money from friends or family, or using personal savings, whereas only 24 per cent of domestic companies financed their investment from commercial banks. These findings may suggest that access to financial services in Tanzania is still limited and too costly, and consequently, domestic companies in Tanzania tend to use money from private sources for financing their investment.

Zooming in on foreign-owned companies, the Survey findings suggest that around 60 percent of interviewed foreign firms operate in the manufacturing sector, and almost 31 percent in the services. The lowest shares of foreign companies - 7 and 2 percent - operate in agriculture and mining, and electricity-water-construction, respectively. It is important to note that the Survey sample is somewhat tilted towards the manufacturing and services sectors especially when compared to the total distribution of FDI stocks in the country with predominant shares of the mining and quarrying sector 44.4 per cent in 2011 (Bank of Tanzania, 2013). Some 66 per cent of surveyed foreign firms started their operations in Tanzania more than 11 years ago. The majority of the foreign-owned enterprises have more than 50 employees, whereas approximately 35 per cent of foreign respondents have more than 100 employees. Foreign enterprises engaged in agriculture and mining are planning to re-invest the highest share of total sales, followed by foreign companies in the services. Half of the respondent firms in agriculture and mining planned to re-invest around 9 percent of their total sales, whereas 50 percent of foreign companies in manufacturing as well as in services did not plan to make any new investment over the next three financial years. More than two thirds of the surveyed foreign firms are wholly-owned enterprises (WOEs), whereas joint-ventures (JVs) represent the remaining one third. Regarding their organizational structure, 55 per cent of FDIs in the sample are foreign entrepreneurs (FEs, stand alone foreign enterprises), and 45 per cent are subsidiaries of transnational companies (TNCs). The main channel of entry for FDI into Tanzania has been greenfield investment through the constitution of wholly-owned enterprises. Around 79 per cent of FDIs are driven by market-seeking motives, 15 per cent by efficiency-seeking motives and 4 per cent by resource-seeking motives. Market-seeking companies are mainly engaged in manufacturing (59 per cent) and services (34 per cent). These results have a double implication. On the one hand, respondents emphasize the positive fact that Tanzania is taking advantage of its domestic market, underpinned by the East African Community (EAC) Common Market to drive FDI inflows. On the other hand, the fact that only 15 per cent of foreign respondents have invested because of efficiency-seeking motives, implies that the country needs to improve under this aspect, in part by gearing its investment incentives to entice more such investment and for establishing adequate infrastructure to facilitate regional or global exports.

Survey results show that TNCs and FEs do not differ in terms of mode of entry and motive to invest. Both enter the country mainly through greenfield investment and to access new markets. The main countries from where FDI originates are India, Kenya and South Africa. However, FDI origin highly depends on the type of foreign companies. FEs are mainly from India (35 per cent), whereas TNCs originate for the most part from South Africa (20 per cent) and Kenya (18 per cent).

Among the manufacturing sectors, mean planned new investment reaches the highest values in non-metallic mineral products, rubber and plastic products, chemical products, textiles, furniture, and food and beverages. Among the services subsectors, average planned new investment is largest in the financial sector. Although the agriculture sector is one of the main sectors of the Tanzanian economy and employs the majority of population, it seems to grow at a very slow rate. Agricultural enterprises have indicated some of the lowest reported annual sales and export growth rates in the sample. Average labour productivity of agricultural companies, computed in terms of value added per employee, is low, when compared to the one of other sectors. On the other hand, respondent firms in the agriculture sector tend to export higher shares of sales than do other enterprises in other sectors, in part reflecting the dependence on primary goods as main export base.

In terms of employment impact, survey evidence suggests that on average the number of employees is larger in foreign enterprises than is in domestic companies. Survey results show that foreign enterprises exhibit different characteristics according to the country of investor origin. Median number of employees is largest in companies whose investors come from USA and Canada, South Africa, India and China, while companies from Europe, China, USA and Canada, and South Africa are the largest companies in terms of mean values. On average, production/ manual workers account for more than 50 per cent of total employment in both domestic and foreign enterprises, while the proportion of skilled workers is around 21 per cent in the domestic companies and 17 in the foreign companies. However, in nominal terms, foreign companies employ a smaller number of skilled workers than do domestic companies, and this pattern is observed if skill labour is measured in terms of technical/supervisory/managerial staff as well as if it is analyzed in terms of clerical/administrative staff. Both domestic and foreign companies in the manufacturing sector employ the largest share of production/manual workers, while the share of skilled labour is greater in firms operating in the services sector. It is also noteworthy that foreign companies tend to hire more foreign workers than do domestic companies. This result may imply some dissatisfaction about or lack of confidence in the level of skills of human capital in Tanzania. Around 60 per cent of foreign workers in domestic and foreign companies are employed for technical/supervisory/managerial positions. Foreign and domestic companies do not also seem to differ in terms of share of female workers employed on the total. Almost 30 per cent of total employment in domestic- or foreign-owned companies is female, and in

both types of companies females are mainly employed for manual production work. The share of female workers among clerical/administrative staff is considerable higher compared to the share that this group takes among all employees. In terms of wages, workers, independently of their positions, are better paid when engaged in foreign-owned firms compared to domestic firms. It is noteworthy that the differential in median wages between domestic and foreign enterprises is larger for high skilled positions than for the low skilled ones. Foreign firms' staff employed in technical/supervisory/managerial positions are paid almost double the amount similar category staff salary paid in domestic enterprises, whereas production/manual workers in foreign companies are paid marginally more than production workers in domestic companies. Amongst foreign firms, results suggest that TNCs are more generous than FEs. Conversely, no large differences are found in terms of wages between enterprises from more industrialised and less industrialized countries of origin and between JVs and WOEs. Among the foreign enterprises, those from USA and Canada, and Sub Saharan Africa (SSA) pay the highest median wages, whereas the lowest wages are paid by Chinese enterprises, which seem to pay their employees less than domestic firms.

Results suggest that foreign companies tend to spend more on training their employees than do domestic counterparts. Both domestic and foreign companies spend the largest share of their training budget for training managerial/technical/supervisory staff. Firms in the manufacturing sector spend less on training compared to firms in the primary sector and tertiary sector (the latter only in the case of domestic companies). Results confirm that although the skill ratio is not higher in the foreign firms than it is in the domestic enterprises, foreign companies report higher labour productivity when compared to their domestic counterparts, implying that foreign companies employ more experienced and better motivated employees. This outcome may be further explained by determining factors such as more investment in staff training, payment of higher wages and salaries and overall better ability to attract best qualified, more productive employees. Higher labour productivity may also be underpinned by superior production processes and access to more advanced technologies.

Domestic companies import on average more than what they export, whereas foreign firms seem to have a reasonable export cover to their imports. Whereas agriculture and mining are the only sectors in which mean value of exports exceeds the mean value of imports, firms in other sectors register higher value of imports to exports. One of the reasons why imports are very high in Tanzania may be a weak supporting industrial base for the production of intermediate and capital goods required for industrial production in the country. The majority of foreign and domestic companies in the sample have indicated that capital goods are mainly imported. This percentage is particularly high in the case of foreign firms and it reaches 63 per cent. Whereas the main export region is Sub-Saharan Africa, within the region, the main country of export is Kenya with more than 50 per cent of the domestic companies and almost 30 per cent of foreign companies selected Kenya as the main sub-Saharan export destination. It is noteworthy that the four main destination countries for FDI exports from Tanzania are the four other EAC Members; i.e. Kenya, Uganda, Burundi and Rwanda. On the other hand, domestic firms in the sample import inputs mainly from China, India and South Africa, while foreign companies import their inputs mainly from China, MENA region and SSA (excluding South Africa). Among sub-Saharan African countries Kenya appears to be the main import source. In terms of barriers to exports, factors are split between those influencing firm's export activities within Africa in general, and those affecting the company's decisions to export outside Africa. Both foreign and domestic enterprises consider infrastructure problems, bureaucracy and regulation as main barriers to export activities within Africa. Differently, costs of and access to finance represent a barrier only for the domestic companies. Foreign firms consider general infrastructure problems and tariff trade barriers as the two most important barriers to starting or expanding the export activities outside Africa. The two factors seen by domestic firms as the greatest constraints to exports outside Africa are bureaucracy and regulations, and difficulties in meeting high levels of standards.

The Report contains an empirical model used to analyze the effects of foreign presence on export behaviour of domestic companies. Findings suggest that domestic firms do not seem to benefit from the contact with the foreign companies' exporting strategies and techniques. This result may be explained by the fact that most foreign enterprises in the sample do not export or when they do, they export a small share of their total sales or they export larger shares but operate in different sub-sectors than domestic firms. As a result, the opportunities for the domestic companies to interact and learn from foreign firms' export activities are very low. Conversely, there is some evidence of the existence of the competition effect created by the presence of foreign firms in domestic markets which tends to incentivize the export effort of domestic enterprises. Results tend to suggest that the presence of foreign firms in the domestic market is positively and significantly associated with a higher probability that domestic firms export.

The Report analyses the impact of foreign presence on domestic firms' productivity. Evidence suggests that better quality of human capital and higher competition in a sector tends to increase the productivity of domestic firms. Results also show that only those firms with the necessary absorptive capacity may benefit from the positive externalities associated with FDI. Contrary to the expectations, domestic firms' human capital does not influence the incidence of spillover effects, most probably because the level of human capital in the domestic firms may be too low to absorb the foreign technology and know-how.

Through a comparative analysis of the performance of foreign and domestic companies, the Report attempts to provide a means to estimate the link between the receipt of incentives and foreign firms' investment decisions. The impact of incentives greatly depends on the characteristics of foreign investors. Exporting firms rank incentives higher than non-exporting firms do. Incentives are more important for FEs than for TNCs, and companies aged 21-year and over consider incentives not to be particularly important for their ongoing investment decisions. No large differences are found between small and large firms. However, the importance of investment incentives varies highly across economic sectors. Incentives seem to be very important in the agriculture and mining sectors, but they are less considered by firms in manufacturing, and services sectors. Although all types of incentives were indicated as crucial by at least one investor, tax incentives were singled out to be critical by more than 72 percent of respondents that have received that incentive.

The Report seeks to analyse if the new foreign investment would have materialized if no or lower incentives were offered. Enterprise characteristic comparisons refer to planned investment and employment and these are analysed for those enterprises which identified tax and infrastructure incentives, as critical (Group A), and for those firms which identified tax and infrastructure incentives as not critical (Group B). Group A includes those firms with the largest planned new investment. Total planned new investment of all respondent firms in Group A is almost 5 times higher than the total planned investment in Group B. This result is noteworthy since those enterprises considering tax incentives provided as most critical for their investment do plan to invest more in the near future. The picture does not change when the employment

plans of companies in both groups are considered. These results seem to underpin the relative success of the country's fiscal incentive framework in terms of the ability that incentives have in generating investment and creating employment opportunities. The picture is somewhat less positive when incentives for infrastructure are considered, where in this case, Group B contains the largest number of companies, and though the total and mean planned investment of companies in Group A exceeds the one of the other companies, planned employment is higher for Group B firms.

When it comes to comparing the performance of foreign firms receiving incentives with those foreign firms not receiving incentives, the analysis presents some notable results. Foreign-owned firms are more productive than domestic enterprises measured in terms of value added per employee. The productivity gap is even larger when domestic firms are compared to foreign firms that have not received any incentives. Other results suggest that foreign enterprises that have received incentives tend to be less productive than other foreign enterprises who have not received incentives. This result may partly indicate that incentives in Tanzania are granted to those enterprises which end up not performing to an adequate level of competitiveness. It may also be that the country may be attracting new FDI in sectors which are facing outstanding competitive pressures and have to face distinct structural and sectoral characteristics that tend to undermine their performance. In any case, it is important that this result triggers further examination on to what extent FDI receiving incentives can pay off these incentives in terms of multiplier impact, higher value added generated as well as spillover effects in the host economy over time. Further analysis is required to ascertain whether there exists an element of non-performing FDI appropriating incentives away from more-performing investment.

Overall the results from the Tanzania Survey do suggest that there is strong need to continue to generate firm level data, from similar Surveys and on a continuous basis, to improve on the monitoring capabilities of investment promotion stakeholders in the country. For an entity such as the Tanzania Investment Centre which aims to promote and facilitate foreign and domestic investment, it is crucially important to be able to draw upon analysis of foreign and domestic investment activity to the extent that performance comparisons between the two ownership categories can better contextualize and emphasize the performance of foreign-owned enterprises and help shape investment policy implementation. The Report has served to highlight the need for more efforts for Tanzania Investment Centre and other government entities to work together to fine-tune the investment incentive framework based on a comprehensive and sustained impact analysis.

# 1. General introduction

## **Background and objectives of the Report**

The broad purpose of the Tanzania Investment Monitor Report 2013 is to analyse the impact of foreign and domestic investment in the country's economy. Based on empirical data collected in the Tanzania<sup>1</sup> in the ambit of the UNIDO Africa Investor Survey 2010<sup>2</sup>, the Report presents analysis of investment impact from an overview of enterprise performance characteristics for both domestic and foreign direct investment (FDI). The Report refers to analysis of various resultant facets of investment impact, i.e. the employment effect, the trade impact, the expected determinant role in productivity performance etc. The Report also attempts to analyse the link between the receipt of investment incentives by foreign enterprises investing in Tanzania through FDI and the consequent enterprise performance.

This is the first report for Tanzania which extensively draws on the UNIDO Investor Survey database. It attempts to shed new light on the enterprise performance (both foreign and domestic) in view of the expected *a priori* expectations from increased foreign investment activity in the country. This point remains fundamentally important in the context of the ever-important and pressing need to focus more on the quality rather quantity aspect of FDI inflows. The focus on the qualitative impact of FDI should be seen more in terms of how much manufacturing value added can best be generated in the economy also as a result of technology and knowhow transfer from foreign to domestic enterprises. It also remains important to evaluate the mechanisms and rationale for the provision of investment incentives to FDI projects and how incentives are then linked to actual enterprise performance.

In the recent past, various report and studies have highlighted the constraints and potential of investment activity in Tanzania<sup>3</sup>. This Report attempts to make some important recommendations on possible directions for upgrading the country's investment promotion framework. Tanzania constantly needs to improve its investment mapping and management framework within which efforts aimed at investment attraction, targeting, generation and after-care should be pursued. This framework covers activities such as (i) domestic and foreign investment targeting in selected industrial sectors (in particular the priority on non-natural-resource based sectors), (ii) improving the capacity of government and public and private sector institutions to assess, generate and implement investment leads (e.g. through investment appraisal,

<sup>1</sup> The Report is based on findings pertaining mainly to mainland Tanzania, thereby the reference to Tanzania.

<sup>2</sup> The UNIDO Africa Investor Survey was concurrently undertaken in 19 Sub-Saharan African countries (i.e. Burkina Faso, Burundi, Cameroon, Cape Verde, Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Tanzania, Uganda and Zambia). It resulted in the publication of the UNIDO Africa Investor Report 2011, entitled 'Towards Evidence-Based Investment Promotion Strategies. Annex I provides further information on both Investor Survey and Report. For more information, refer to http://www.unido.org/fileadmin/user\_media/Publications/Pub\_free/AIS\_Report\_A4.pdf

<sup>3</sup> See for example, Tanzania Investment Report 2012: Foreign private investment and investor perception, Bank of Tanzania, Tanzania Investment Centre and the National Bureau of Statistics; and Report on the study of growth and impact on investment in Tanzania, Tanzania Investment Centre (TIC), 2008.

feasibility and impact analysis), and (iii) undertaking overall investment management and monitoring through firm-level analysis and impact assessment (e.g. through periodic industry investor surveys and analysis). For an entity such as the Tanzania Investment Centre (TIC)<sup>4</sup> which aims to promote and facilitate foreign and domestic investment, it is crucially important to be able to draw upon analysis of foreign and domestic investment activity to the extent that performance comparisons between the two ownership categories can better contextualize and emphasize the performance of foreign-owned enterprises. This is not only presented as a stand-alone analysis but provides the basis for the drawing of some parallels between the provision of investment incentives and enterprise performance<sup>5</sup>.

This document has benefited from the ongoing collaboration established between UNIDO and TIC which led to the organisation of a specific Technical Workshop in March 2013 aimed to identify the areas of further research and analysis pertaining to the main topic of FDI impact in the United Republic of Tanzania. The preparations, thematics and focus of this Report greatly benefited from extensive discussions undertaken between UNIDO and TIC. The analysis and conclusion contained herein have been discussed and validated by UNIDO and TIC. In the recent past, various reports and studies have highlighted the constraints and potential of investment activity in the Tanzanian economy.

## Method and Framework of analysis

This report contains analysis based on the UNIDO Investor Survey conducted in Tanzania during 2010 in the ambit of the Africa wide UNIDO Investor Survey undertaken between 2009 and 2010<sup>6</sup>. It is important to highlight that although the Survey data has been collected in 2010, some structural indicators about investment activity in the country are still considered to be valid to date. This validation process has been undertaken through ongoing reference to latest data and statistics on the topic as well as through close discussion and interactions with country stakeholders, such as TIC. As a result, the ensuing analysis and analytical conclusions contained in the Report can still be considered to be pertinent and relevant to the general debate on FDI and its impact on industrial development in the country as well as authorative enough for investment promotion stakeholders and policy makers in the country to take full notice of its contents and conclusions. Overall, the Tanzania Investor Survey 2010 consists of a sample of 459 firms of which 305 are domestic and 153 are foreign-owned. The sectoral concentration of this sample is skewed towards manufacturing activity (59 per cent of companies in the sample) as compared to 28 per cent of firms operating in the services sector, and 7 and 6 per cent of surveyed companies operating in agriculture and mining, and electricity/water/construction

<sup>4</sup> The Tanzania Investment Centre (TIC) is a One Stop Agency of the Government of Tanzania established under the Tanzania Investment Act, No. 26 of 1997 to promote, co-ordinate and facilitate investment into Tanzania. The Centre deals with all enterprises whose minimum capital investment is not less than 300,000 USD if foreign owned or 100,000 USD if locally owned. Enterprises engaged in Mining, and Petroleum follow the approval process contained in their respective laws. TIC assists all investors in obtaining permits, authorizations required by other laws to set up and operate investment in Tanzania.

<sup>5</sup> The unit of analysis in this Report remains the enterprise, although it may be argued that there may be cases where FDI inflows can occur in the form of projects, not merely through the set-up of new enterprises.

<sup>6</sup> Refer to Annex I for more information on the Africa Investor Survey and the ensuing Africa Investor Report 2011 including methodology.

sectors, respectively<sup>7</sup>. The most represented sub-sectors in the sample are Food and Beverages (13.1 per cent), Agriculture (6.3 per cent), Hotels and Restaurants (5.4 per cent), Construction (4.8 per cent) and Machinery and Equipment (4.1 per cent). Within the Manufacturing sector, the Food, Beverage and Tobacco are the leading sub-sectors represented in this Survey sample. Regarding the spatial distribution of the surveyed companies, more than 70 per cent of companies in the sample operate in Dar es Salaam, 6.6 per cent in Arusha and 4.1 per cent in Kilimanjaro province. Zanzibar is also covered in the Survey with 13 observations which does not permit to draw representative conclusions for Zanzibar alone.

## **Organization of the Report**

The Report is organized as follows. The current section signifies introduction of the Report. Section 2 provides an empirical background to the Report. Section 3 provides a general Survey sample presentation focusing on the characteristics of surveyed enterprises with specific emphasis on selected enterprise performance indicators. Section 4 is the central part of the Report comprising different parts analyzing the FDI impact assessment from different perspectives, through reference to employment, trade, productivity performance and spillover effects. Section 5 attempts to draw some parallels between enterprise performance and receipt of investment incentives by the part of FDI. Section 5 presents the main conclusions.

<sup>7</sup> For analysis purposes the agricultural and mining sectors have been aggregated. This decision is underpinned by the minor share of sample representation. In no way this is to be construed as drawing parallels between the sectoral activity, composition and performance of agriculture and mining firms.

# 2. Foreign direct investment trends and macroeconomic background

## Tanzania's FDI investment performance

This Chapter serves to present a brief analysis of the trends of FDI flows and stocks directed to Tanzania over the past couple of decades, as well as highlight key aspects driving this FDI performance. This background will look into FDI flows and stock trends and makes reference to FDI in terms of key economic indicators. The objective of this section is to provide a broad overview of Tanzania's FDI performance within which the Survey findings can be explored later on in the Report.



Figure 2.1: FDI inward flows and stocks in Tanzania, 1980-2012 (current prices, USD million)

Figure 2.1 illustrates a long term review of Tanzania's FDI performance over the period 1980 to 2012 by looking at FDI inflows and inward stocks in the country. It is immediately evident that Tanzania's FDI performance has followed closely the developments in its political economy, reflecting the dramatic shift from a centrally planned economy towards a more liberalized one open to foreign investment and increasingly active on the global market. From the early 1970s up till mid-1990s, Tanzania did not manage to make a significant breakthrough in attracting FDI to its economy. Suffice to say that in the twenty five years between 1970 and 1994, Tanzania attracted only around US\$ 175.0 million in cumulative FDI flows. It was only thereafter, from 1995 onwards that Tanzania started being successful in attracting FDI to its economy. 1995 represents an important turnaround year for foreign investment attraction in the country as this year was characterized by a strong momentum in the economic reform process and formal World Trade Organization's (WTO) membership. Thereafter, the implications of the Mining Policy

in 1996, the invigorated investment policy and Act of 1997 and other promotional efforts by Government, are noticeable through the sharp increase of FDI transactions from 1998 up to 2012. At the same time the political shocks of an infant democracy related to the October 2000 general elections may have affected the FDI inflows during that period, prompting investors to adopt 'a wait and see' approach to the continuation of the economic reform process. Overall, it can be argued that in the late 1990s a certain momentum in FDI flows has been registered as a result of a relatively successful investment policies enacted by the Government of Tanzania. Foreign investors become convinced about Tanzania's resolve towards liberalization and the country's potential as host to FDI activity. Over the 1995-2012 period, Tanzania is estimated to have received around US\$ 12 billion in cumulative FDI inflows compared to just US\$282 million registered over the 1980-1995 period.

	1980	1993	2011
FDI inward flows (USD million)	4.6	20.0	1,229.4
FDI inward stock (USD million)	342.3	419.8	9,278.1
FDI inward stock as a % of GDP compared to the percentage of	4.7	8.3	38.1
Sub-Saharan Africa	9.7	13.7	30.5
Least developed countries (LDCs)	5.7	10.6	23.4
FDI inward flows as a % of GFCF compared to the percentage of	0.3	1.2	15.3
Sub-Saharan Africa	0.4	6.1	16.7
Least developed countries (LDCs)	2.7	7.9	14.5
		SOURCE	INCTAD STATS DATABASE

#### Table 2.1: FDI indicators for Tanzania, selected years

Table 2.1 highlights some relevant indicators highlighting Tanzania's FDI performance in comparative terms with the performance of Sub-Saharan African countries and the least developed country groups. FDI flows in the country increased from US\$ 4.6 million in 1980 to reach more than US\$ 1.2 billion in 2011. On aggregate, FDI stock registered a dramatic increase from US\$ 342.3 million in 1980 to US\$ 9.3 billion in 2011. The share of FDI stock as a percentage of GDP reflects the importance of FDI activity in the country's productive capacity and the potential impact of FDI stock in the economy. This indicator has increased from a mere 4.7 per cent in 1980 to 38.1 per cent in 2011. Although this increasing share is in line with developments taking place in other economies in Sub Saharan Africa and in other LDCs, nevertheless the share for Tanzania exceeds that for Sub Saharan African group of countries and the LDCs. This may reflect the fact that in the last decade, FDI stock may have increased at a faster rate when compared to GDP since in 1980 and 1993 the indicator for Tanzania was following those for SSA and LDCs.

Equally important is the share of FDI inflows in total investment occurring in the host economy. This indicator provides a measure of the relative importance of FDI inflows with respect to the overall investment being undertaken in the host country. The share of FDI inflows in total

investment also showed notable increase from a mere 0.3 per cent in 1980 to 15.3 per cent in 2011. Whilst highlighting the importance of foreign investment in total investment for the Tanzanian economy, this indicator suggests that the Tanzanian economy could benefit from more potential direct private domestic investment.

Figure 2.2 illustrates the share of Tanzania in FDI inflows into Sub Saharan Africa and Least Developed Countries (LDCs). Tanzania's share in total FDI flows to Sub Saharan Africa increased markedly since the 1990s. Similarly the share in total FDI flows to the LDCs steadily increased since 1980. Although these trends highlight a positive scenario, they also reflect that Tanzania's positive comparative FDI performance in recent years is still underpinned by marginal shares in global FDI flows.





Although Tanzania has registered a positive FDI performance in recent years and shows great potential to attract further FDI activity, it is clear that it still has a long way to go to reach a more adequate share of FDI consonant with the capital and technological requirements of industrial development. As highlighted with the share of FDI in GDP and total investment as well as the structure of FDI in recent years, indicators do suggest that there is greater potential to increase FDI activity in the economy as well as maximizing the FDI impact among the various sectors.

### Sectoral distribution and source of FDI stocks

Data from national sources, namely the Bank of Tanzania and the Tanzania Investment Centre (TIC) highlight the predominant drivers of FDI activity in Tanzania. Mining and manufacturing are the two principal economic sectors driving foreign investment. According to official estimates, together the two sectors account for more than 60 per cent of total FDI stock. A disaggregated sectoral overview of FDI stocks in the most recent 2009-2011 period is shown in Table 2.2. As highlighted in the table, in 2009, 2010 and 2011, the two largest sectors were mining and manufacturing and these accounted for 49.6, 57.9 and 60.8 per cent, respectively of total FDI stock. At the same time, the share of electricity and gas sector in total FDI stock has shown a dramatic increase over the same period. Manufacturing is more or less stagnating around the 16 per cent level, whereas the share of information and communication is rapidly declining partly reflecting domestic market saturation after large scale investments undertaken in the early 2000.

	2009	% share in total	2010	% share	2011	% share in total
Mining and Quarrying	2,770.1	34.3	3,738.3	42.7	4,123.0	44.4
Manufacturing	1,235.8	15.3	1,332.9	15.2	1,520.5	16.4
Accommodation	671.7	8.3	747.0	8.5	872.8	9.4
Financial and Insurance	687.9	8.5	700.7	8.0	756.6	8.2
Information and communication	1,545.2	19.2	909.9	10.4	627.8	6.8
Electricity and Gas	111.3	1.4	328.6	3.8	539.8	5.8
Wholesale and retail trade	296.8	3.7	328.3	3.7	400.5	4.3
Agriculture	308.8	3.8	304.5	3.5	355.4	3.8
Construction	150.6	1.9	123.6	1.4	142.5	1.5
Real Estate activities	89.7	1.1	89.1	1.0	99.2	1.1
Professional activities	26.9	0.3	27.6	0.3	30.1	0.3
Other service activities	15.1	0.2	16.6	0.2	15.0	0.2
Education	18.2	0.2	20.6	0.2	10.8	0.1
Public administration and defence	0.5	0.0	0.4	0.0	0.8	0.0
Transportation and storage	137.8	1.7	94.2	1.1	-216.7	-2.3
Grand Total	8,066.3	100.0	8,762.2	100.0	9,278.1	100.0
			SOURCE: TANZA	NIA INVESTMENT	REPORT 2012. BA	NK OF TANZANIA

#### Table 2.2: Sectoral distribution of FDI Stock in Tanzania, selected years

Foreign investment in Tanzania originates from a wide range of countries. Table 2.3 shows the top ten source countries for FDI stock in 2011. Between 2008 and 2011, South Africa, the United Kingdom and Canada accounted for an average of 71.5 percent of the total FDI inflows. Inflows from South Africa accounted for an average of 32.5 percent of total inflows. South Africa, UK and Canada increased to USD 3,087.2 million in 2011, representing 49.6 percent of the total for that specific year (Bank of Tanzania 2013). Looking at the sources of FDI by regional groupings, the findings show that the largest share of FDI inflows originated from OECD countries which registered an annual average of USD 750.6 million (56.0 percent)

during the period under review. Again, Canada and the United Kingdom accounted for 74.1 percent of the total cumulative inflows<sup>1</sup>.

Source Countries	2009
South Africa	2,177.9
United Kingdom	1,344.8
Canada	1,080.4
Mauritius	650.4
Kenya	517.4
Switzerland	276.8
Japan	197.3
Norway	183.8
Botswana	114.9
France	75.0
	SOURCE: TANZANIA INVESTMENT REPORT 2012, BANK OF TANZANIA

#### Table 2.3: Top ten source countries for FDI stock in Tanzania, 2011, USD million

1 Most of the FDI from these countries is in the mining and quarrying, manufacturing and finance and insurance activities. For more background information, refer to *Tanzania Investment Report 2012, Foreign Private Investment and Investor Perception, Bank of Tanzania, 2013.* 

# 3. Characteristics of investment activity

## Introduction

This Section aims to present a general overview of the UNIDO Tanzania Investor Survey sample focusing on the characteristics of surveyed enterprises with specific emphasis on selected enterprise performance indicators. It consists of a brief description of the country dataset, including a short analysis of the manufacturing and services sectors, and an overview of foreign and domestic investment in Tanzania. Given its relative importance within the manufacturing industry, this Section concludes with a brief analysis of the performance of respondent firms operating in the food and beverages sector.

## Sample presentation

At the outset, it is important to refer to some basic definitions utilized throughout the Report<sup>1</sup>, the most important of which refers to the definition of FDI. The definition of foreign investment adopted in this survey follows the OECD's Benchmark Definition of Foreign Direct Investment which considers an incorporated or unincorporated enterprise in which a foreign investor owns 10 per cent or more of the ordinary shares or voting power of an incorporated enterprise or the equivalent of an unincorporated enterprise as foreign direct invested enterprise. This definition is consistent with the one adopted by the IMF's Balance of Payments Manual which defines the owner of 10 per cent or more of a company's capital as a direct investor. According to both IMF and OECD definitions, direct investment reflects the aim of obtaining a lasting interest by a resident entity of one economy (direct investor) in an enterprise that is resident in another economy (direct investment enterprise). This report adopts the OECD's FDI definition applied to the enterprise and aims to better understand the decision-making process of investors, examine how foreign companies perform compared to their domestic counterparts and study how and through which channels knowledge and technology spillovers occur.

The Tanzania Investor Survey contains data on 459 local and foreign enterprises operating in Tanzania and Zanzibar. The majority of interviewed firms are domestic-owned (66 per cent), whereas one third of enterprises in the sample have foreign ownership. Approximately 59 per cent of firms in the sample operate in the manufacturing sector, 28 per cent in services, and 7 and 6 per cent of surveyed companies operate in agriculture and mining, and electricity-water-construction sectors, respectively. Figure 3.1 refers to this sectoral distribution.



#### Figure 3.1: Sample distribution, by sector % share in total sample, no. of firms

1 Annex II refers to a list of definitions utilized in the Report.

Figure 3.2 illustrates the spatial distribution of responding enterprises with more than 70 per cent of firms in the sample operating in Dar es Salaam, 6.6 per cent operating in Arusha and 4.1 per cent operating in the Kilimanjaro region. As Table 3.1 highlights, the most represented sub-sectors in the Survey sample are food and beverages (13.1 per cent), agriculture (6.3 per cent), publishing, printing and reproduction of recorded media (6.3 per cent), hotels and restaurants (5.4 per cent), construction (4.8 per cent) and machinery and equipment (4.1 per cent). Food, beverages and tobacco are also the sectors leading in terms of gross output.



#### Figure 3.2: Sample distribution, by region no. of firms

#### Table 3.1: Sample distribution by ISIC sub-sector

Sub-sector	N	% share in total sample	% share in gross output
Agriculture, hunting and related service activities	29	6.3	1.6
Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	0.2	0.0
Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction excluding surveying	1	0.2	0.7
Manufacture of food products and beverages	60	13.1	29.1
Manufacture of tobacco products	3	0.7	17.6
Manufacture of textiles	13	2.8	2.9
Manufacture of wearing apparel; dressing and dyeing of fur	9	2.0	0.5
Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear	9	2.0	0.5
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	14	3.1	0.0
Manufacture of paper and paper products	9	2.0	0.6
Publishing, printing and reproduction of recorded media	29	6.3	2.1
Manufacture of coke, refined petroleum products and nuclear fuel	2	0.4	0.1
Manufacture of chemicals and chemical products	13	2.8	3.0
Manufacture of rubber and plastics products	22	4.8	2.8

#### Table 3.1: Sample distribution by ISIC sub-sector > Contd.

Manufacture of other non-metallic mineral products	9	2.0	8.1
Manufacture of basic metals	11	2.4	1.3
Manufacture of fabricated metal products, except machinery and equipment	11	2.4	0.4
Manufacture of machinery and equipment n.e.c.	19	4.1	0.7
Manufacture of electrical machinery and apparatus n.e.c.	5	1.1	0.9
Manufacture of radio, television and communication equipment and apparatus	2	0.4	0.1
Manufacture of motor vehicles, trailers and semi-trailers	3	0.7	1.8
Manufacture of other transport equipment	3	0.7	0.1
Manufacture of furniture; manufacturing n.e.c.	23	5.0	2.1
Recycling	3	0.7	7.3
Other manufacturing	3	0.7	0.0
Electricity, gas, steam and hot water supply	1	0.2	0.7
Construction	22	4.8	0.8
Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	10	2.2	1.2
Wholesale trade and commission trade, except of motor vehicles and motorcycles	13	2.8	1.8
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	12	2.6	0.8
Hotels and restaurants	25	5.4	1.3
Land transport; transport via pipelines	4	0.9	0.1
Water transport	2	0.4	0.0
Air transport	1	0.2	0.0
Supporting and auxiliary transport activities; activities of travel agencies	16	3.5	0.5
Post and telecommunications	3	0.7	0.1
Financial intermediation, except insurance and pension funding	11	2.4	4.3
Insurance and pension funding, except compulsory social security	8	1.7	2.6
Real estate activities	1	0.2	0.0
Renting of machinery and equipment without operator and of personal and household goods	1	0.2	0.0
Computer and related activities	2	0.4	0.0
Other business activities	14	3.1	0.4
Public administration and defence; compulsory social security	1	0.2	0.7
Education	1	0.2	0.0
Health and social work	2	0.4	0.1
Sewage and refuse disposal, sanitation and similar activities	1	0.2	0.0
Activities of membership organizations n.e.c.	1	0.2	0.0
Recreational, cultural and sporting activities	1	0.2	0.1
Total	459	100.0	100.0

# Comparison of domestic and foreign enterprise performance

One of the advantages of the UNIDO Africa Investor Survey 2010 is the inclusion of domestic enterprises in the sample. Data on private domestic investment in Tanzania is sparsely available and usually incomplete which makes the task of analyzing domestic enterprise performance and the assessment of FDI impact on the local economy very challenging. Overall, the Tanzania Survey dataset contains information on enterprise structural and performance characteristics, including productivity, investment, business linkages and trade patterns for 306 domestic and 153 foreign enterprises. The nature and extent of this dataset provides the opportunity to compare foreign and domestic firms in terms of investment activity, productivity performance, size and trade patterns (including export and import activities). Furthermore the dataset offers possibilities to analyse whether the FDI presence in the country results in positive impacts in the host economy and, if so, through which channels FDI spillovers tend to occur. Data refers to the year 2010.

	No. of firms in sample	% share in total
Firm age		
0-5 yrs	56	18.5
6-10 yrs	73	24.1
11-20 yrs	112	37.0
21+ yrs	62	20.5
Firm size		
Small	220	71.9
Medium	45	14.7
Large	41	13.4
Gross output group		
Less than USD 1,000,000	212	72.1
USD 1,000,000-10,000,000	67	22.8
Over USD 10,000,000	15	5.1
		NOTE: FOR DEFINITIONS REFER TO ANNEX II

#### Table 3.2: Domestic firms in sample, selected indicators

Table 3.2 refers to some selected indicators pertaining to domestic enterprises. The majority of surveyed domestic firms have been established and operating for more than a decade. Domestic firms are mainly small enterprises, both in terms of the number of persons they employ as well as in terms of gross output. Indeed, 71.9 per cent of domestic firms have less than 50 employees and similarly, around 72 per cent reported a value of gross output smaller than 1 million USD. Figure 3.3 shows domestic companies' share of planned investment over the next three financial years in total sales, by sector. It is noteworthy that respondents operating in the agriculture and mining and services sectors planned to reinvest on average the largest share of their sales, yet half of the respondents in services did not plan to invest over the next three financial years, and half of those in agriculture and mining planned to invest less than 10 percent of the sales.



Figure 3.3: Domestic firms' share of planned investment in total sales over the next three financial years, by sector %

Table 3.3 presents selected indicator comparisons of foreign and domestic enterprises in terms of key themes of capital, employment, taxes, business linkages, and productivity. Comparisons are disaggregated by enterprises' size and ownership type. Given the presence of outliers, the median is presented as summary statistics. Results suggest that domestic enterprises - independent of productivity measure used (e.g. valued added per employee or total factor productivity) - are less productive than foreign firms, yet they are more inclined to invest in the future than foreign companies. Domestic enterprises tend also to be more labour intensive and report lower levels of capacity utilization when compared to their foreign counterparts. Among the domestic enterprises, medium-sized firms are those performing better, whereas smaller firms report lowest levels of productivity.

			median values					
	Total		Small		Medium		Large	
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
Capital								
Capital re- investment over total sales (%)	4.1	0.0	13.0	0.0	0.2	0.0	0.5	0.0
	(266)	(119)	(186)	(49)	(41)	(32)	(39)	(38)
Capital-labour ratio (USD)	8,121.7	12,522.5	7,952.2	10,724.9	8,361.8	13,795.2	9,531.2	14,898.8
	(286)	(140)	(208)	(54)	(39)	(37)	(39)	(49)

#### Table 3.3: Selected comparative indicators for foreign and domestic firms, by size

			median values					
	Total Small		Medium		Large			
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
Employment								
Number of jobs created	20.0	62.5	15.0	22.0	65.0	66.0	175.0	200.0
	(306)	(150)	(220)	(59)	(45)	(40)	(41)	(51)
Share of technical labour-force over total (%)	16.7	14.3	20.0	17.8	9.2	13.1	16.2	9.3
	(302)	(147)	(217)	(57)	(45)	(40)	(40)	(50)
Share of foreign labour-force over total (%)	0.0	8.9	0.0	16.7	2.9	10.8	1.6	4.5
	(296)	(146)	(211)	(57)	(45)	(39)	(40)	(50)
Taxes								
Total taxes (USD)	7,524.7	32,402.7	5,267.3	15,049.3	23,158.3	61,405.3	115,879.9	176,077.3
	(245)	(108)	(181)	(43)	(36)	(32)	(28)	(33)
Linkages								
Imports over total inputs (%)	70.0	70.0	70.0	80.0	80.0	73.0	80.0	55.0
	(228)	(116)	(167)	(45)	(30)	(33)	(31)	(38)
Share of domestic sales in total sales (%)	80.0	72.0	87.6	75.0	80.0	70.0	70.0	63.5
	(73)	(49)	(45)	(14)	(13)	(9)	(15)	(26)
Productivity								
Value added per worker (USD)	6,166.1	12,544.2	5,755.6	12,438.5	14,364.6	12,544.2	5,412.0	14,974.1
	(261)	(119)	(188)	(47)	(37)	(29)	(36)	(43)
Total Factor Productivity (USD)	294.4	559.6	277.3	698.5	668.4	533.7	261.8	448.4
	(251)	(114)	(184)	(43)	(32)	(28)	(35)	(43)
Capacity utilization (%)	50.0	62.0	50.0	50.0	60.0	67.5	50.0	69.0
	(210)	(101)	(152)	(33)	(27)	(30)	(31)	(38)
					NOTE: NUM	BER OF OBSER	VATIONS IN PA	RENTHESIS

#### Table 3.3: Selected comparative indicators for foreign and domestic firms, by size > Contd.

The median foreign and domestic firms also differ in terms of the extent of employment generated. Domestic enterprises tend to generate less employment opportunities than foreign firms do, although they employ more local employees and report a higher skill ratio, measured as share of technical employees on total employment. Results also suggest that small and medium foreign companies employ a higher share of skilled employees that do large foreign companies. Differently, in the case of domestic companies, medium companies report the lowest skill ratio.

Despite these differences, foreign and domestic firms seem to have something in common: both categories have to face competitive domestic markets. More than 70 per cent of sales from around half of domestic and foreign respondent firms is sold in the domestic market. When compared to small firms, large firms exhibit a slighter inclination to export. Equally relevant is the relative high dependency of foreign and domestic enterprises on imports. Half of respondents of the respondents import at least 70 per cent of their total inputs. This high level of imports in Tanzania may be a consequence of a weak supporting industrial base.

In this sense, strengthening business partnership between domestic and foreign investment and public and private industrial sectors remains important<sup>2</sup>. This would ensure that such partnerships result in increased opportunities for local market industrial development (e.g. through enhanced subcontracting activity based on backward and forward linkages) and at the same time, creating enhanced scope for international trade integration of domestically manufactured products. Increased market opportunities in the domestic and export markets, would result in the need to upgrade domestic productive capacities through increased investment and as well as put more emphasis on the need for technology promotion and know-how transfer. In turn, this process can serve to support the selection and localisation of advanced technology and know-how to serve local needs and requirements.

The Tanzania Investor Survey contains information on the main source of financing for the initial investment of domestic companies. Results show that 55 per cent of domestic respondents in the country financed their initial investment borrowing money from friends or family, or using personal savings, whereas only 24 per cent of domestic companies financed their investment from commercial banks. These findings may suggest that access to financial services in Tanzania is still limited and too costly, and consequently, domestic companies in Tanzania tend to use money from private sources for financing their investment. Respondents were also asked to indicate the sources of working capital and fixed assets. On average, for both foreign and domestic enterprises, around 45 per cent of working capital and fixed assets come from retained earnings. Local banks supply, on average about 30 per cent of working capital and fixed assets of both domestic and foreign companies. Results also show that the share of working capital and fixed assets supplied by banks outside Tanzania is very low in both domestic and foreign companies. Domestic firms borrow capital from banks abroad to finance less than 1 per cent of their working capital and fixed assets, while foreign companies reported that around 9 per cent of their capital financing needs are met by banks outside Tanzania. However, in the case of foreign TNCs, respondents also indicated that around 9 percent of their working capital and fixed assets was supplied by the parent company, which most probably borrows from banks outside Tanzania.

2

The UNIDO Subcontracting and Partnership Exchange (SPX) Programme aims to support industrial subcontracting opportunities between domestic and foreign enterprises. The programme was established in Tanzania in 2011 and is hosted at the Tanzania Chamber of Commerce, Industry and Agriculture (TCCIA).

## **Characteristics of foreign companies**

The following part of this Section focuses on the characteristics of foreign enterprises in the Tanzania Investor Survey dataset and presents an analysis on sector, ownership type, origin of investment, size of operations, initial investment mode, investment motive and future investment.

Around 60 percent of interviewed foreign companies operate in the manufacturing sector, and almost 31 percent in the services (Figure 3.4). The lowest shares of foreign companies - 7 and 2 percent - operate in agriculture and mining, and electricity-water-construction, respectively. Some 66 per cent of surveyed foreign firms started their operations in more than 11 years ago. As opposed to their domestic counterparts, only 39 per cent of foreign firms in the sample are small (Table 3.4). The majority of the foreign-owned enterprises have more than 50 employees, whereas approximately 35 per cent of foreign respondents have more than 100 employees. Foreign enterprises engaged in agriculture and mining are planning to re-invest the highest share of total sales, followed by foreign companies in the services (Figure 3.5). Half respondents in agriculture and mining planned to re-invest around 9 percent of their total sales, whereas 50 percent of foreign companies in manufacturing as well as in services did not plan to make a new investment over the next three financial years. More than two thirds of the surveyed foreign firms are wholly-owned enterprises (WOEs), whereas joint-ventures (JVs) represent the remaining one third. Regarding their organizational structure, 55 per cent of FDIs in the sample are foreign entrepreneurs (FEs, stand alone foreign enterprises), and 45 per cent are transnational companies (TNCs). The main channel of entry for FDI into Tanzania has been greenfield investment through the constitution of wholly-owned enterprises (Table 3.5). Around 79 per cent of FDIs are driven by market-seeking motives, 15 per cent by efficiency-seeking motives and 4 per cent by resource-seeking motives. Market-seeking companies are mainly engaged in manufacturing (59 per cent) and services (34 per cent). These results have a double implication. On the one hand, respondents emphasize the positive fact that URT is taking advantages of its domestic market, underpinned by the East African Community (EAC) Common Market to drive FDI inflows<sup>3</sup>. On the other hand, the fact that only 15 per cent of foreign respondents have invested because of efficiency-seeking motives, implies that the country needs to improve under this aspect, in part by gearing its investment incentives to entice more such investment. The subsector with the highest concentration of foreign companies is food, beverages and tobacco.



#### Figure 3.4: Foreign firms' sample distribution, by sector % share in total, no. of firms

3 Other location factors, such as macroeconomic stability and the right policy framework, play an important role in the attraction of FDI.

	No. of firms in sample	% share in total
Firm age		
0-5 yrs	19	12.6
6-10 yrs	32	0.2
11-20 yrs	79	0.5
21+ yrs	21	0.1
Total	151	100.0
Firm size		
Small	59	38.6
Medium	40	26.1
Large	54	35.3
Total	153	100.0
Gross output group		
Less than \$1,000,000	51	35.9
\$1,000,000-\$10,000,000	66	46.5
Over \$10,000,000	25	17.6
Total	142	100.0

Table 3.4: Forei	gn firms in sam	ple, selected indicators
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Figure 3.5: Foreign firms' share of planned new investment in total sales over the next three financial years, by sector



Table 3.5 also presents some characteristics of foreign companies by splitting foreign respondents in transnational corporations and foreign entrepreneurs. Survey results show that TNCs and FEs do not differ in terms of mode of entry and motive to invest. These enter the country mainly through greenfield investment and to access new markets. Both categories of firms are also very active in food, beverages and tobacco. However, FEs tend to invest more into basic
metals and fabricated metal products sectors, whereas TNCs investing more in wood and wood products, construction, and the financial sector.

Table 3.5:	Foreign	firms'	sample	distribution
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		% share in tot	al
	Total	TNCs	FEs
Mode of initial investment			
Creation of a new operation as a wholly-owned enterprise	60.0	47.1	70.7
Creation of a new operation as a joint venture	16.7	20.6	13.4
Purchase of pre-existing assets from local private owners	8.7	14.7	3.7
Purchase of pre-existing assets from private foreign owners	8.0	10.3	6.1
Purchase of pre-existing state-owned assets	6.7	7.4	6.1
Total	100.0	100.0	100.0
Motive to invest			
Resource seeking	4.1	1.5	6.2
Market seeking	79.1	83.6	75.3
Efficiency seeking	14.9	11.9	17.3
Other	2.0	3.0	1.2
Total	100.0	100.0	100.0
TNC and FE distribution by subsector			
Agriculture, fishing and mining	7.2	7.2	7.1
Food, beverages and tobacco products	12.4	11.6	13.1
Textiles, garments, apparel and leather	5.9	5.8	6.0
Wood and products of wood, furniture and manufacturing n.e.c.	8.5	10.1	7.1
Paper and paper products	3.9	4.3	3.6
Publishing and media	4.6	5.8	3.6
Coke, refined petroleum products and chemicals	2.6	1.4	3.6
Rubber and plastics	6.4	4.3	8.3
Non-metallic minerals	1.3	2.9	0.0
Basic metals and fabricated metal products	8.5	2.9	13.1
Automobile, machinery and equipment	3.3	4.3	2.4
Office and electrical machinery; communication equipment	3.3	2.9	3.6
Construction and electricity, water and gas	1.3	1.4	1.2
Trading	9.2	10.1	8.3
Hotels and restaurants	5.9	7.2	4.8
Transport and communications	5.2	5.8	4.8
Financial institutions	6.5	10.1	3.6
Consultancy and other services	3.9	1.4	6.0
Total	100.0	100.0	100.0
	* NOTE: F	OR DEFINITIONS, RE	FER TO ANNEX II

Survey results show that investment in Tanzania is mainly originating from India (23 per cent) and Sub-Saharan Africa (33 per cent). The main countries from where FDI originates are India, Kenya and South Africa. However, FDI origin highly depends on the type of foreign companies. FEs are mainly from India (35%), whereas TNCs originate for the most part from South Africa (20%) and Kenya (18%). A more detailed analysis shows that Chinese companies are mainly involved in wearing apparel and leather products sectors, European companies are operating in the agriculture, furniture and tourism sectors, investors from India and Sub-Saharan Africa (with the exception of South Africa) mainly operate in food and beverages, whereas South African companies are mainly involved in the tourism sector.

## Sector characteristics

Survey results show that manufacturing and services are the sectors in which investors planned to invest on average the largest amount of capital, although the 50 percent of them indicated to have no intentions of making a new investment over the next three financial years. Among the manufacturing sectors, mean planned new investment reaches the highest values in non-metallic mineral products, rubber and plastic products, chemical products, textiles, furniture, and food and beverages (Refer to Figures 3.6 and 3.7). Among the services subsectors, average planned new investment is largest in the financial sector.

Although the agriculture sector is one of the main sectors of the Tanzanian economy and employs the majority of population, it seems to grow at a very slow rate. Agricultural enterprises have reported figures for annual sales and export growth rates which are among the lowest in the sample (Table 3.6). Average labour productivity of agricultural companies, computed in terms of value added per employee, is also very low, when compared to the one of other sectors (Table 3.7). On the other hand, respondent firms in the agriculture sector tend to export higher shares of sales than do other enterprises in other sectors, in part reflecting the dependence on primary goods as main export base.



Figure 3.6: Planned new investment over the next three financial years by main sector, all firms / USD

# Box 3.1 Government of Tanzania and UNIDO's Tanzania Industrial Competitiveness Report 2012

The Tanzania Industrial Competitiveness Report (TICR) 2012 was the first major output of UNIDO's institutional capacity building programme for industrial policy in Tanzania. The TICR 2012 — a result of the collaboration between the Ministry of Industry and Trade (MIT), the President's Office Planning Commission (POPC) and the United Nations Industrial Development Organization (UNIDO) — contributes to the ongoing debate and raises important policy issues on industrial development. It focuses on the manufacturing sector to identify key areas of intervention. Using UNIDO's methodology and indicators, it assesses Tanzania's industrial performance vis-à-vis other countries in the region and role models in Asia and sheds light on strategic short- and long-term industrialization paths for the country.

The Report tracks Tanzania's industrial performance at the macro-level, including the analysis of industrial value addition and export competitiveness. Furthermore, it also analyses crucial areas that require special attention to improve Tanzania's industrial competitiveness in the world. It examines the impact of regional integration, identifies competitive threats and opportunities in the domestic and international market, presents the current status of modern skills for industry and explores the country's prospects of resource-based industrialization.

The key findings of the TICR 2012 can be summarized as follows:

- Tanzania's industrial capacity grew remarkably in the last decade, but this growth remains insufficient to close the gap to the next tier of comparator countries in the near future.
- Tanzania's manufactured exports expanded rapidly during the last decade, driven chiefly by precious metal and other resource-based manufactures, but the absolute level of manufactured export capacity is still considerably lower than most of its comparator economies.
- In terms of industrialization intensity, Tanzania's MVA share of GDP remained constant at around 9 percent during the last decade, indicating that this sector is far from being a growth driver of the economy.
- With regard to structural change on the export side, the share of manufactured exports in total exports more than doubled, and Tanzania successfully caught up with Kenya while overtaking Rwanda and Zambia in this respect.
- Regional integration (EAC and SADC) and increased access to global and domestic markets as well as the build-up of new resource-based manufacturing activities can all contribute to a sustained industrial growth path for Tanzania.

The TICR 2012 concludes that industrialization offers considerable prospects for the Tanzanian economy. However, Tanzania will only benefit from these opportunities if a number of serious challenges are addressed – among them, the acute skill deficit in the industrial workforce. A lot can be achieved if industrialization is made a national policy priority, considering its potential for employment generation and equitable growth. The Report concludes that industrialization will not be able to bring about the transformative structural change envisaged in the Tanzania Development Vision (TDV) 2025, without a clear top priority status in the national policy framework.

# Figure 3.7: Main manufacturing sub-sectors in terms of average planned new investment over the next three financial years, USD



#### Table 3.6: Foreign firms in sample, selected indicators

	% share in total				
	Sales growth	Export growth	Export share in total sales		
Electricity, water, construction	32.0		4.3		
Manufacturing	30.0	21.5	10.5		
Services	28.0	58.9	2.2		
Agriculture and Mining	6.4	(6.4)	33.7		
NOTE			SERVATIONS ARE LESS OR FOUNT TO 5		

NOTE: VALUES REPLACED WITH "..." WHEN THE NUMBER OF OBSERVATIONS ARE LESS OR EQUAL TO 5

#### Table 3.7: Labour productivity by sector

cultur	e, mining	Manufa	cturing	Electricit constr	y, water, uction	Serv	ices
ean	Median	Mean	Median	Mean	Median	Mean	Median
,471	12,010	44,596	8,307	90,984	18,247	78,043	18,747
,737	7,755	33,321	5,937	28,860	13,099	38,958	14,548
	<i>ean</i> ,471	lean Median 6,471 12,010 7,737 7,755	lean Median Mean 5,471 12,010 44,596 7,737 7,755 33,321	Iculture, mining         Manufacturing           lean         Median         Mean         Median           5,471         12,010         44,596         8,307           7,737         7,755         33,321         5,937	Iculture, mining         Manufacturing         Electricit           lean         Median         Mean         Median         Mean           6,471         12,010         44,596         8,307         90,984           7,737         7,755         33,321         5,937         28,860	Inculture, miningManufacturingElectricity, water, constructionIeanMedianMeanMedianMedianMeanMedianMedian5,47112,01044,5968,30790,98418,2477,7377,75533,3215,93728,86013,099	Iculture, mining         Manufacturing         Electricity, water, construction         Service           lean         Median         Mean         Median         Mean         Mean

NOTE: AVERAGE ESTIMATE PERTAINING TO 19 COUNTRIES PARTICIPATING IN THE UNIDO AFRICA INVESTOR SURVEY 2011

# The performance of the Food and Beverages Sector

The food and beverage processing sector represents one of the main manufacturing sectors in the Tanzanian economy<sup>4</sup>. Almost a quarter of all registered manufacturing enterprises in the country operate in the food-processing sector. It caters for more than half of total employment in manufacturing (56 per cent), employing around 58,000 people (International Growth Centre, 2012).

4 It refers to the manufacturing, processing and preservation of meat, fish, fruit, vegetables, oils and fats; manufacture of dairy products; manufacture of grain mill products, starches and starch products and prepared animals feeds; manufacture of other food products (e.g. bread, sugar, chocolate, pasta coffee, nuts and spices); and the manufacture of bottled and canned soft drinks, fruit juices, beer, wines, etc. The Tanzania Investor Survey contains information on 60 companies in the food and beverages sector, which corresponds to 13 per cent of the total sample under analysis. Within this group, 44 companies are domestic-owned, 8 companies are joint ventures between domestic and foreign investor interests and 8 are foreign-owned firms. Respondent firms operate in diverse sectors, such as: cooking oil (4 companies), flour (4 companies), bread (3 companies), drinking water (3 companies), animal feed products (2 companies), biscuits (2 companies), bottled drinking water (2 companies), coffee (2 companies), and other products (18 companies). Survey results suggest that companies in the food and beverages tend to grow faster than those in the manufacturing sector (Table 3.8). Despite being the largest growing sector, it is not among the dominant sectors in terms of future planned new investment (Figure 3.7). Median growth rates of sales, employment and exports are higher in the food and beverages sectors than those in the total manufacturing sector<sup>5</sup>. Although the food and beverage sector seems to be among the fastest growing manufacturing sectors, firms in this sector are less productive (in terms of labor productivity and TFP) than manufacturing firms. Food and beverage firms are also more labour intensive, they employ a higher share of non-technical workers and they invest a smaller share of total sales in training employees. The majority (52 per cent) of food and beverage processors employ between less than 50 employees, whereas the share of companies with 51-100 employees is 18 per cent. Around 30 per cent of food and beverages companies employ more than 100 employees.

	Food and Beverages		Overall Ma	anufacturing*
	Mean	Median	Mean	Median
Growth rates				
Sales growth (%)	29.8	16.0	30.0	14.3
Employment growth (%)	26.0	13.6	16.5	0.5
Export growth (%)	6.4	7.1	21.5	3.6
Productivity				
Value added per worker (USD)	24,529.1	5,869.2	33,321.1	5,937.2
TFP (USD)	957.7	276.6	1.171.9	275.2
Capital labour ratio (USD)	30,084.5	8,996.9	25,183.5	9,029.6
Trade				
Export-Import Ratio	0.8	0.0	0.6	0.0
Export share (%)	13.4	0.0	10.5	0.0
Business linkages				
Share of inputs locally manufactured	25.2	20.0	32.8	20.0

# Table 3.8: Food and Beverages sector compared to overall manufacturing, selected indicators

5 Results are slightly different if the mean is considered. However, mean figures may be driven by the presence of large observations in the sample.

	Food and	Food and Beverages		nufacturing*
	Mean	Median	Mean	Median
Share of inputs imported	65.0	79.5	58.8	70.0
Employment				
Total number of employees	210.2	48.0	106.1	34.0
Skill ratio (%)	17.1	14.1	17.8	15.4
Share of foreign employees (%)	3.4	0.0	5.7	1.0
Share of female employees (%)	28.5	25.9	24.5	22.9
Training over total sales (%)	0.1	0.0	0.2	0.0

# Table 3.8: Food and Beverages sector compared to overall manufacturing, selected indicators > Contd

\* NOTE: OVERALL MANUFACTURING INCLUDES FOOD AND BEVERAGES, WHICH IS THE LARGEST MANUFACTURING SUBSECTOR (IT REPRESENTS 22 PERCENT OF TOTAL MANUFACTURING). FIGURES ARE THUS HIGHLY INFLUENCED BY THE ONES OF THIS SECTOR

Most food and beverage products are sold in the local market. Exports are low and only represent on average 13.4 per cent of total sales, 3 percentage points more than manufacturing companies. Half of the respondents in food and beverages indicated to not export. Survey participating firms were asked to indicate the most important barrier to starting or expanding export activities within and outside Africa. The largest share of companies in food and beverages sector indicates general infrastructure problems as the main barrier to exports within Africa, and bureaucracy and regulation as the main barrier to export activities outside Africa. Food and beverages firms mainly use imported inputs. Only 25 per cent of inputs, on average, are locally manufactured. Foreign companies were asked to indicate the most important factor that influences their decision to cancel or not enter into local procurement contracts. The largest share of companies (42 per cent) indicated the low quality of products and services as the main reason. The low quality of raw material was also mentioned among the reasons not to increase local procurement volumes. As highlighted elsewhere in this Report, many surveyed firms experienced obstacles in accessing finance and the sub-sample of food and beverage firms makes no exception in that. The majority of firms operating in the food and beverages sector financed their initial investment borrowing money from friends or family, or using personal saving (52 per cent), only 20 per cent of companies financed their initial operations from commercial banks.

# 4. Impact of foreign direct investment

This Section comprises different parts of the analysis of the impact of FDI on the Tanzanian economy from different perspectives, through reference to employment, trade, productivity performance and spillover effects.

# 4.1 Employment impact

# Introduction

This part aims to estimate the impact potential of foreign investment on local employment in Tanzania analyzing the differences between domestic and foreign companies in terms of number of employees, wages, training expenditures and labor productivity. The positive effects of foreign investment on employment have long been considered as one main a priori expected impact of FDI inflows in developing countries and in particular in labour surplus economies. FDI impacts on local employment in different ways. In an ideal scenario, foreign companies are expected to generate employment in the host country because they bring factors of production such as capital, technology and know-how, which permit the utilization and absorption of an existing surplus labour factor that is relatively abundant which, otherwise, would have remained either underemployed and/or un-utilized. Foreign investors facilitate access to the international markets and, through exports, may generate a significant scope for enhanced industrial activity which in turn leads to added employment generation. Overall, it is expected that foreign firms may improve the quality of the workforce, and thus the productivity of labour, improve economic welfare, contribute to government revenue and economic growth, and provide know-how, modern management and technology<sup>1</sup>. Conversely, some FDI literature (see for example, Tanchoco-Subido, 1979; Kuwahara et al., 1979) considers the FDI effect on local employment insignificant or non-existent because all people willing to work may already be employed and the additional investment simply results in a substitution of new employment at marginally higher wages for previous employment. Thus, according to these studies, FDI may not yield any net growth of employment by itself.

# **Employment trends**

Survey evidence suggests that on average the number of employees is larger in foreign enterprises than is in domestic companies (Figure 4.1). If the median is used as summary statistics, firms of Northern origin seem to employ more people than do Southern investors as well as TNCs and JVs result to have more workers than do FEs and foreign wholly owned enterprises, respectively. Survey results show that foreign enterprises exhibit different characteristics according to the country of investor origin. Median number of employees is largest in companies whose investors come from USA and Canada, South Africa, India and China, while companies from Europe, China, USA and Canada, and South Africa are the largest companies in terms of mean values (Figure 4.2).

1 See also Kingombe, 2002



Figure 4.1: Employment distribution, by investor characteristics, no.of employees

Figure 4.2: Employment distribution by investor country of origin, no. of employees



#### Table 4.1: Median number of employees by sub-sector and ownership type

	Domestic	Foreign
Agriculture, fishing and mining	21	75
Food, beverages and tobacco products	41	120
Textiles, garments, apparel and leather	16	150
Wood and products of wood, furniture and manufacturing n.e.c. (including recycling)	16	35
Paper and paper products		88

	Domestic	Foreign
Publishing and media	23	26
Coke, refined petroleum products and chemicals	34	90
Rubber and plastics	33	89
Non-metallic minerals	15	
Basic metals and fabricated metal products	25	65
Automobile, machinery and equipment	19	20
Office and electrical machinery; communication equipment		60
Construction and electricity, water and gas	15	
Trading	20	21
Hotels and restaurants	50	69
Transport and communications	13	30
Financial institutions	58	71
Consultancy and other services	14	62
Public admin, education, health and other community, social and personal service activities	65	

#### Table 4.1: Median number of employees by sub-sector and ownership type > Contd

\* VALUES ARE REPLACED WITH "..." WHEN THE NUMBER OF OBSERVATIONS WITHIN A SECTOR IS SMALLER OR EQUAL TO 5

Table 4.1 highlights the median number of employees by economic sub-sector and ownership type<sup>2</sup>. Survey evidence suggests that median foreign firms tend to be larger than their domestic median counterparts in all agriculture, manufacturing and services subsectors. The difference is the largest in those sectors which by definition tend to be the most labour intensive sectors: i.e. the rubber and plastics, agriculture, fishing and mining, food, beverage and tobacco products, textiles, garments, apparel and leather subsectors.

To gather further insights in the employment impact of FDI, it is important to look into categories of full-time employment; i.e. production/manual workers, clerical/administrative staff and technical/supervisory/managerial staff (Refer to Table 4.2). Survey results suggest that, on average, production/manual workers account for more than 50 per cent of total employment in both domestic and foreign enterprises, while the proportion of skilled workers is around 21 per cent in the domestic companies and 17 in the foreign companies. Interestingly, foreign companies employ a smaller share of skilled workers than do domestic companies, and this pattern is observed if skill labour is measured in terms of technical/supervisory/managerial staff as well as if it is analyzed in terms of clerical/administrative staff. Both domestic and foreign companies in the manufacturing sector employ the largest share of production/manual workers, while the share of skilled labour is greater in firms operating in the services sector. It is also worth noting that foreign employees hire more foreign workers than do domestic companies. This result may imply that foreign companies are not satisfied with the level of skills of human capital in Tanzania. Around 60 per cent of foreign workers in domestic and foreign

<sup>2</sup> Median values are used because less sensitive to the presence of outliers in the sample.

companies are employed for technical/supervisory/managerial positions. Foreign and domestic companies do not also seem to differ in terms of share of female workers employed on the total. Almost 30 per cent of total employment in domestic- or foreign-owned companies is female, and in both types of companies females are mainly employed for manual production work. The share of female workers among clerical/administrative staff is considerable higher compared to the share that this group takes among all employees.

	Total		% Share of Female Employees		% Share of Foreign Employees	
	Domestic firms	Foreign firms	Domestic firms	Foreign firms	Domestic firms	Foreign firms
Share in total number of employees			28.2	27.4	2.9	11.8
Production/manual workers	57.8	63.6	46.5	52.6	14.3	25.0
Technical/supervisory/ managerial staff	21.2	17.7	18.1	13.6	60.1	59.0
Clerical/administrative staff	20.6	18.3	34.9	33.7	24.5	16.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

### Table 4.2: Full-time employees by category and ownership type, mean values

## Wages

Having showed that foreign enterprises generate more employment when compared to domestic firms, the next obvious indicator of FDI impact to consider is wages and salaries. Several studies have shown that foreign companies pay a wage premium relative to domestic firms in order to prevent labour turnover leading to knowledge spillovers benefitting domestic competitors. Such wage premium also tends to secure labour force commitment, compensates for higher labour demand volatility in foreign plants, identifies and attracts good workers and compensates and results from higher productivity. Survey evidence confirms the hypothesis that foreign enterprises pay higher wages and salaries when compared to domestic firms (see Figure 4.3).



Figure 4.3: Annual wages and salaries per employee, by investor type USD

An examination of wages according to the investor type shows that TNCs pay higher wages than FEs. Conversely, no large differences are found in terms of wages between enterprises from the North and those from the South<sup>3</sup>, and between JVs and WOEs. Among the foreign enterprises, those from USA and Canada, and SSA (including South Africa) pay the highest median wages (Figure 4.4). Lowest wages are paid by Chinese enterprise respondents, which seem to pay their employees less than domestic firms.





In terms of differences in median wages and salaries by sub-sector, workers in financial institutions, transport and communications, public administration and social services sub-sectors receive the highest wages, while firms in rubber and plastics subsector tend to offer the lowest wages. The picture slightly changes when only foreign companies are considered. Foreign firms pay the lowest wages in the textiles, garment, apparel and leather subsector, while they offer the highest wages in the financial sector.

Results suggest that workers, independently of their positions, are better paid when engaged in foreign-owned firms. It is noteworthy that the differential in median wages between domestic and foreign enterprises is larger for high skilled positions than for the low skilled ones. Foreign firms' staff engaged in technical/supervisory/managerial positions are paid almost double the amount paid to similar category staff in domestic enterprises, whereas production/manual workers in foreign companies are paid only 25 USD per month more than production workers in domestic companies. The premium for employees working in more technical positions as compared to production/manual workers is lower for domestic companies than it is for foreign firms. Survey results suggest that technical/supervisory/managerial staff in domestic enterprises receive around 110 USD per month more than production workers, compared to around 270 dollars in the foreign companies. More specifically, the differential between low skill and high skill position wages is more evident in the case of investors from South Africa and India. A technical/supervisory/managerial employee in an Indian or South African company receives a salary 3.5 times that of production workers in the same company, and more than twice that of a person employed for a similar position in a Chinese or domestic company.

# Skills and training expenditures

An analysis of employment impact normally includes an analysis of knowledge and skills of the employees in an enterprise usually acquired through education and training. The Tanzania Investor Survey contains information on the training expenditures of responding firms according to the various employment categories. Table 4.3 refers to the mean expenditures per worker and the shares in total training of each of the three types of job categories, e.g. production/ manual, technical/supervisory/managerial staff, and clerical/administrative staff. Companies are divided in foreign and domestic.

	Domestic	Foreign
Training expenditures per worker (USD)	146	193
Share of training expenditure for production/ manual workers on total expenditure (%)	34.6	38.2
Share of training expenditure for technical/super- visory/managerial staff on total expenditure (%)	43.3	39.5
Share of training expenditure on clerical/admin- istrative staff on total expenditure (%)	21.9	22.3
Total	100.0	100.0

#### Table 4.3: Annual wages and salaries per employee, by investor type, USD

Results suggest that foreign companies tend to spend more on training their employees than do their domestic counterparts. Both domestic and foreign companies spend the largest share of their training budget for training managerial/technical/supervisory staff. Table 4.4 highlights comparisons between training expenditure per employee in foreign and domestic companies, disaggregated by sectoral and technology level. Results suggest that firms in the manufacturing sector spend less in training compared to firms in the primary sector and tertiary sector (the latter only in the case of domestic companies). In the primary sector, foreign companies tend to spend more on employee training than do their domestic counterparts in the same sector. By contrast, in the high-tech manufacturing sector, domestic companies' training expenditure per employee is, on average, more than the double the figure for foreign firms.

# Table 4.4: Mean training expenditures per employee, by sector, ownership type andtechnology level, USD

	Domestic firm	Foreign firm
Primary sector	91	144
High-tech manufacturing	79	38
Medium-tech manufacturing	43	52
Low-tech manufacturing	27	31
Tertiary sector (including Utilities, Construction)*	340	

NOTE: TERTIARY SECTOR INCLUDES UTILITIES AND CONSTRUCTION FOR SIMPLIFIED ANALYSIS

	Domes	Domestic firms		n firms
	Mean	Median	Mean	Median
Skill ratio (%)	42	33	36	27
Value added based labour productivity (USD)	25,270	6,166	49,343	12,544

#### Table 4.5: Skill ratio and labour productivity, by ownership type

Results confirm that although the skill ratio is not higher in the foreign firms than it is in the domestic enterprises, foreign companies report higher labour productivity when compared to their domestic counterparts (Table 4.5). This result may imply that foreign companies employ more experienced and better motivated employees and this result may be further explained by determining factors such as more investment in staff training, payment of higher wages and salaries and overall better ability to attract best qualified, more productive employees. Higher labour productivity may be underpinned by superior production processes and the utilization of higher quality.

# 4.2. Trade impact

## Introduction

Another expected impact of FDI on the local economy is its effect on the export and import patterns in the host economy. FDI may increase the country's exports by reducing export costs through knowledge spillovers (learning by doing, research and development, human resource movements, knowledge transfer)<sup>4</sup>. Exporting involves fixed costs, such as the establishment of distribution networks, the creation of transport infrastructures, investment in advertising, research about the foreign markets regarding consumers' tastes, market structure, competitions, regulations etc. These may be lower for foreign firms as they already have the knowledge and experience of operating in foreign markets and experience shows that this information could lead to spillover effects to domestic enterprises. Alternatively the onset of FDI may trigger important changes in import patterns which may be exacerbated by the lack of intermediate products and services available in the host country. This part of the analysis focuses on exports, specifically analyzing the impact of the foreign presence on the export behaviour of domestic enterprises.

#### Box 4.1 Tanzania's trade structure and patterns

During the period 2004-2012, Tanzania trade flows more than quadrupled to reach US\$ 20,361 million in 2012 underpinned by increases in both imports and exports. During the

FDI impact on export patterns mainly occurs through three channels: (a) FDI may generate positive spillovers to domestic firms in productivity, which may improve domestic firms' competitiveness in the international market, (b) FDI can strengthen domestic industrial linkages through buying and supplying parts and components, which in turn tend to encourage domestic firms in the upstream and downstream industries to be involved into international production specialization, thus enhancing domestic firms' ability to export, and (c) FDI can pass information between international markets and domestic firms, facilitating domestic firms' exports (see for example Aitken et al, 1997; Wang and Blomström, 1992; Cantwell, 1989).



2004-2012 period, whereas exports more than doubled, imports increased much faster leading to a widening in the country's trade balance. As a result, Tanzania's trade deficit increased from US\$ 539 million in 2004 to US\$ 5,462 million in 2012 (World Development Indicators, 2013).

SOURCE: WORLD DEVELOPMENT INDICATORS, 2013, WORLD BANK

In 2011 and 2012, Tanzania's imports of goods and services increased by 47.9 per cent and 10.3 percent, respectively. The main imported items included mineral fuels, oils, distillation products, machinery, vehicles, and electronic equipment. Imports of manufactures account for 54.1 percent of Tanzania's total imports, whereas imports of fuels and mining products represent 32.1 percent of the total. In 2012, the main source markets for Tanzania's imports were the European Union, China, United Arab Emirates, and South Africa, on aggregate accounting for 52.6 percent of the country's total imports (Source: WTO, 2013).

In 2011 and 2012, Tanzania's domestic exports increased by 27.5 per cent and 7.2 percent, respectively. The main destinations of Tanzania's exports during 2012 were South Africa, Switzerland, the European Union, China and India (Source: WTO 2013). The dominant position of South Africa as the primary destination of Tanzania's exports implies a positive trade balance for Tanzania with this country. The main exported products are ores, slag and ash which account for around 16 percent of total exports, and tobacco and manufactured tobacco substitutes, accounting for around 13 percent of total exports (Trade Competitiveness Map, 2013). Exports of agricultural products represent some 24.2 percent of Tanzania's total exports. Fuels and mining products, and manufactures account for 16.7 and 16.4 percent of Tanzania's total exports, Tanzania's trade balance in this sector registered one of the highest deficits.

Tanzania has active memberships in two regional trade agreements, namely the South African Development Community (SADC) and the East African Community (EAC). Tanzania is eligible for multilat–eral trade preferences under the United States Africa Growth and Opportunity Act (AGOA) and the EU's Everything But Arms (EBA) initiative, both of which has presented more export opportunities than Tanzania has been able to exploit, given the low level of Tanzania's exports directed to these regions. The Government continues to undertake efforts to build Tanzania's capacity to access global markets and increase its export capacity, while conforming to trade rules, especially those emanating from the World Trade Organization (WTO) of which Tanzania is member since 1st January 1995.

# Trade patterns of foreign and domestic companies

The Tanzania Investor Survey contains information on export and import patterns of respondent enterprises. Table 4.6 shows that domestic companies import on average more than what they export. Conversely, results suggest that exports of foreign firms seem to cover their imports, although the ratio of exports over imports is only slightly larger than 1.

	Exports*	Imports*	Export-import ratio
Domestic firms	842,951	2,943,598	0.8
Foreign firms	3,251,324	3,255,239	1.1
	* NOTE: ONLY INCLUDES FIRMS FOR WHICH	EXPORT AND IMPORT	VALUES ARE BOTH AVAILABLE

#### Table 4.6: Mean exports and imports by ownership type, USD

Survey evidence also suggests that agriculture and mining are the only sectors in which mean value of exports exceeds the mean value of imports. The corresponding export-import ratio is 5.8. Companies in other sectors registered a value of imports higher than that for exports (Refer to Table 4.7) and export-import ratios are rather far away from parity. This result is in line with empirical evidence showing that exports of manufacturing goods in Tanzania are still very low and, consequently, there is a need to increase investment in the manufacturing sector to produce more globally competitive products and to develop more reliable local manufacturing supply chains. As Survey evidence suggests, Tanzania does not seem to be able to produce enough exports to meet its needs for imported goods. More exports volumes provide the necessary leeway to import technology-intensive industrial inputs and capital goods with which to pursue the country's industrialization development objective. Industrialization enables a country to change the structure of exports from reliance on primary exports to manufactured exports and especially to high-technology exports<sup>5</sup>.

#### Table 4.7: Mean exports and imports by sector, USD

	Exports*	Imports*	Export-import ratio
Agriculture and Mining	888,991.0	530,914.3	5.8
Manufacturing	2,011,740.9	3,422,294.2	0.6
Electricity, water, construction	83,607.4	159,972.9	0.1
Services	211,168.9	2,783,059.2	0.3
* NOTE: ONLY INCLU	DES FIRMS FOR WHICH EX	PORTS AND IMPORTS	VALUES ARE BOTH AVAILABLE

## Table 4.8: Mean exports and imports percentage share by manufacturing sub-sectors

Average export share on total sales	Average import share on total inputs
17.1	62.2
13.1	54.9
	Average export share on total sales 17.1 13.1

5 Experience also shows that manufacturing promotes the economic growth of a country because it is less exposed to external shocks, price fluctuations and climatic conditions, stimulates technological progress and innovation, and has a "pull effect" on other sectors of the economy (see for example "UNIDO Industrial Development Report 2009").

	Average export share on total sales	Average import share on total inputs
Wood and products of wood, furniture and man- ufacturing n.e.c. (including recycling)	11.4	43.6
Paper and paper products	1.7	61.0
Publishing and media	5.7	62.2
Coke, refined petroleum products and chemicals	18.0	76.9
Rubber and plastics	9.4	69.6
Non-metallic minerals	0.6	42.8
Basic metals and fabricated metal products	1.9	69.1
Automobile, machinery and equipment	7.1	53.4
Office and electrical machinery; communication equipment	10.3	61.7
Construction and electricity, water and gas	4.5	40.7

# Table 4.8: Mean exports and imports percentage share by manufacturing sub-sectors > Contd

Table 4.8 presents the mean values of export shares over total sales and the import shares over total input values for different manufacturing subsectors. Subsectors with the highest values of export shares tend to be the food, beverages and tobacco products, and coke, refined petroleum products and chemicals. However, in these sectors firms do not seem to export on average more than 20 per cent of their total sales, which in any case constitutes a very low value. Conversely, enterprises in all manufacturing subsectors import on average more than 40 per cent of their inputs. Food, beverage and tobacco, paper products, publishing and media, and coke, refined petroleum products and chemicals, rubber and plastics, basic metals, and office and electrical machinery producers import more than 60 per cent of their inputs. One of the reasons why imports are very high in Tanzania may be a weak supporting industrial base which produces intermediate and capital goods required for industrial production in the country. As Table 4.9 suggests, the majority of foreign and domestic companies in the sample have indicated that capital goods are mainly imported. This percentage is particularly high in the case of foreign companies. Moreover, it is likely that intermediate and capital goods that are acquired through distributors in the country are indirectly also related to imported products at the lower tier levels, in which case the "real" import ratio might be even higher.

% of responses Foreign firms' acquisition of capital goods	
Imported	63.4
Through distributors in Tanzania	24.7
Foreign parent	10.9
Other	1.0
Total	100.0
Domestic firms' acquisition of capital goods	
Imported	55.5
Through distributors in Tanzania	43.5
Other	1.0
Total	100.0

#### Table 4.9: Acquisition of capital goods

The Tanzania Investor Survey also includes questions on the trading partners of the respondent firms, both from an export and import point of view. Figures 4.5, 4.6, 4.7, and 4.8 summarize these responses. As Figure 4.5 illustrates, the main export region is sub-Saharan Africa. Within the region the main country of export is Kenya (Figure 4.6). More than 50 per cent of the domestic companies and almost 30 per cent of foreign companies selected Kenya as the main sub-Saharan export destination. Overall, it is noteworthy that the four main destination countries for FDI exports from Tanzania are the four other EAC Members, Kenya, Uganda, Burundi and Rwanda<sup>6</sup>.



Figure 4.5: Main export destinations, % share of total exports (mean)

Figure 4.6: Main export markets in Sub-Saharan Africa (excl. South Africa), % share of total responses



Conversely, domestic firms in the sample import inputs mainly from China, India and South Africa, while foreign companies import their inputs mainly from China, MENA region and SSA (excluding South Africa) (Refer to Figure 4.7 and 4.8). Among sub-Saharan African countries Kenya appears again to be the main import provenance.

6 For an interesting reference to the discussion on regional integration and industrial development, please refer to the Tanzania Industrial Competitiveness Report 2011, UNIDO.



Figure 4.7: Country source of imports, % share of total imports (mean)





## **Barriers to export activities**

The Tanzania Investor Survey also covers factors that constrain the export activities of responding firms. Responses are summarized in Tables 4.10 and 4.11. Factors are split between those influencing firm's export activities within Sub-Saharan Africa in general, and those affecting the company's decisions to export outside the region. Both foreign and domestic enterprises consider infrastructure problems, bureaucracy and regulation as main barriers to export activities within the region. Differently, costs of and access to finance represent a barrier only for the domestic companies. Foreign firms consider general infrastructure problems and tariff trade barriers as the two most important barriers to starting or expanding the export activities outside Sub-Saharan Africa. The two factors seen by domestic firms as the greatest constraints to exports outside Africa are bureaucracy and regulations, and difficulties in meeting high levels of standards.

	Domestic firms	Foreign firms
General infrastructure problems	35.5	37.0
Tariff trade barriers	14.5	16.7
Non-tariff trade barriers	1.3	0.0
Cost and access to finance	17.1	0.0
Bureaucracy and regulation	19.7	25.9
Inadequate export support services	7.9	9.3
High cost of production for export markets	2.6	7.4
Difficulties in meeting high levels of standards	1.3	1.9
Other	0.0	1.9
Total	100.0	100.0

#### Table 4.10: Barriers to exports in the Sub-Saharan Africa region, % of responses

#### Table 4.11: Barriers to exports beyond the Sub-Saharan Africa region, % of responses

	Domestic firms	Foreign firms
General infrastructure problems	7.1	22.6
Tariff trade barriers	10.0	20.8
Non-tariff trade barriers	7.1	3.8
Cost and access to finance	10.0	3.8
Bureaucracy and regulation	22.9	9.4
Inadequate export support services	7.1	9.4
High cost of production for export markets	14.3	17.0
Difficulties in meeting high levels of standards	20.0	9.4
Other	1.4	3.8
Total	100.0	100.0

## FDI impact on export behaviour of domestic firms

The following part examines the FDI impact on the export behaviour of domestic firms. As referred to earlier, one immediate spillover channel is for domestic firms to learn from demonstration effects resulting from the export activities of foreign enterprises operating in the host economy through so called information externalities. Foreign firms can also be a source of knowledge and technology transfer through new technologies and management techniques, from which domestic firms could benefit through similar processes of demonstration and imitation. In addition, the entry of foreign firms tends to lead to increased competition in the domestic market which can reinforce the imitation effect, as it constitutes an incentive to engage in more efficient production techniques which in turn facilitate entry into foreign markets. In this part, the relationship between FDI and export activities of domestic firms is tested in an empirical model that relates the foreign firms' share of total exports and output to the choice (and action) of domestic enterprises to export.

The model<sup>7</sup> explanation is as follows:

$$\begin{split} Exporter_{c} \\ =& \beta_{o} + \beta_{i} ForeignPresence_{s} + \beta_{2} lnR\&D_{c} \\ &+ \beta_{3} SectorShareOutput_{s} + \beta_{4} SectorShareExports_{s} \\ &+ \beta_{5} lnWagesPerEmployee_{c} + \beta_{6} lnAssetsPerEmployee_{c} \\ &+ \beta_{7} lnTurnover_{c} + \delta_{c} \end{split}$$

Exporter is a dichotomous dependent variable, which takes the value 1 or 0 depending on whether the domestic firm decide to export or not. ForeignPresence measures the spillovers generated by foreign companies in the same sector s. It is calculated as the share of foreign output in total output in the sector s (in specification 1), and as a share of foreign exports on total exports in the sector s (in specification 2). The former accounts for the relative importance of foreign companies at the sector level in the domestic market. The greater their relative importance, the stronger the competitive pressure on domestic firms within the same sector. The latter represents the relative importance of foreign companies' export activities in a sector. The larger the importance of foreign firms in the exports of a given sector, the larger the scope for domestic firms to benefit from information externalities. In variations of the model the foreign companies are divided into two groups: exporting and non-exporting companies. Two measures of foreign presence are thus computed: the output share of the foreign exporting companies and output share of the foreign non-exporting companies. SectorShareOutput and SectorShareExports are the importance of sector s in the local output and local exports, respectively. SectorShareExports controls for factors that affect a sector's overall export profile, whereas SectorShareOutput controls for industry size and, consequently, for spillovers not directly associated with export activities. R&D, WagesPerEmployee, AssetsPerEmployee and Turnover represent the domestic expenditures on research and development, total wages per employee, total fixed assets per employee and total turnover, respectively, and account for the domestic company's characteristics. The probability a domestic company exports is estimated in a logit model.

Results from the estimation are shown in Table 4.12. The empirical model is used to analyze the effects of the foreign presence on export behaviour of domestic companies, which is analyzed in terms of export decision to investment. This specification avoids selectivity biases associated with focusing exclusively on export propensity (share of exports in total sales) of exporting firms and allows the analysis of how the presence of foreign companies affects the export behaviour of domestic companies, and not only exporting companies<sup>8</sup>.

Findings suggest that local firms do not seem to benefit from the contact with the foreign companies' exporting strategies and techniques. This result may be explained by the fact that most foreign enterprises in the sample do not export or when they do, they export a small share

<sup>7</sup> The model follows that approach used in the literature. See for example Greenaway, Sousa and Wakelin, 2001.

<sup>8</sup> The impact of foreign presence on export propensity of domestic companies was also tested in order to study domestic companies' export behavior not only as decision to export but also as proportion of production exported. However, no evidence of spillovers from foreign companies was found. The presence of foreign companies does not seem to contribute to domestic companies' export propensity.

of their total sales turnover or they export larger shares but operate in different sub-sectors than domestic firms. Therefore the opportunities for the domestic companies to interact and learn from foreign firms' export activities are very low. Conversely, there is some evidence of the existence of the competition effect created by the presence of foreign firms in domestic markets which tends to incentivize the export effort of domestic enterprises. Results tend to suggest that the presence of foreign firms in the domestic firms export. When foreign firms are grouped in exporting FDI and non-exporting FDI, results suggest that only non-exporting companies play a role in generating positive spillovers to domestic firms in the same industry, most probably for their higher involvement in the local market. Results also show a positive and significant relationship between domestic companies' turnover and expenditures in research and development, and the probability of the domestic firm being an exporter.

Variables	(1)	(2)	(3)	(4)	(5)
	0.277				
Foreign presence in total exports	(0.374)				
		1.294*			
Foreign presence in total output		(1.844)			
Processo of experting companies			0.693		0.684
Presence of exporting companies			(0.820)		(0.786)
Presence of non-exporting				2.410**	2.437**
companies				(2.106)	(2.097)
	0.138***	0.145***	0.138***	0.146***	0.148***
R&D (IN log)	(2.962)	(3.064)	(2.971)	(3.078)	(3.105)
Coston shows in total sutmut	0.393	5.134	0.490	7.709	8.495
Sector share in total output	(0.047)	(0.586)	(0.060)	(0.852)	(0.922)
Sector chara in total experts	-0.246	-2.748	-0.637	-3.232	-3.845
Sector share in total exports	(-0.064)	(-0.663)	(-0.163)	(-0.781)	(-0.903)
Magas par amplayas (in lag)	0.360	0.486	0.382	0.436	0.488
wages per employee (m log)	(1.086)	(1.432)	(1.154)	(1.331)	(1.446)
Total assats par amplayee (in lag)	-0.150	-0.166	-0.154	-0.146	-0.158
	(-1.030)	(-1.127)	(-1.054)	(-1.002)	(-1.069)
Turpover (in log)	0.422***	0.455***	0.428***	0.444***	0.456***
	(3.673)	(3.853)	(3.720)	(3.815)	(3.857)
Constant	-8.403***	-10.375***	-8.682***	-9.922***	-10.648***
Constant	(-2.817)	(-3.330)	(-2.988)	(-3.406)	(-3.431)
Observations	179	179	179	179	179
Log likelihood	-85.22	-83.51	-84.95	-83.05	-82.75
Pseudo-R^2	0.156	0.173	0.158	0.177	0.180
NOTE: T STATISTICS IN PA	RENTHESES. *, **	, *** DENOTE STAT	ISTICAL SIGNIFIC	ANCE AT 10,5, 1 F	PERCENT LEVEL

#### Table 4.12: FDI impact on export behaviour of domestic firms

# 4.3 FDI impact on productivity performance

## Introduction

One of the main elements justifying the efforts made by governments to attract foreign direct investment is the belief that the presence of foreign companies improves the productivity of domestic companies. The economic literature classifies these spillover effects in horizontal spillovers and vertical spillovers. Horizontal spillovers are the beneficial effects from foreign companies on domestic firms operating in the same industry, while the term vertical spillovers refers to productivity spillovers taking place due to linkages between foreign firms and their local suppliers or distributors. The former are generated in a situation in which domestic firms are forced to improve efficiency in order to be able to compete successfully with multinationals. Differently, vertical spillovers can occur through direct knowledge transfer from foreign customers to local suppliers; higher requirements regarding product quality and on-time delivery introduced by the foreign companies; indirect knowledge transfer through labour turnover; and increased demand for intermediate products due to multinational entry (Smarzynska, 2003).

Negative externalities may offset the potentially positive effects of both horizontal and vertical spillovers. Horizontal spillovers might be mitigated by the increased competition generated by foreign companies which can steal the market share of domestic firms and force them up their average cost curve. Vertical linkages between domestic and foreign firms may generate negative spillovers in case of asymmetries in bargaining power. More specifically, foreign companies may be expected to have much more bargaining power than domestic companies due to their size and international operations and they may appropriate the productivity gains of domestic companies (Klein et al., 1978, Graham et al., 1999).

In the following analysis, only horizontal spillovers are analysed.

# FDI impact on domestic productivity

As highlighted elsewhere in this Report, in general foreign firms seem to be better performing than domestic enterprises. This difference creates the potential for productivity spillovers to occur. The extent to which the presence of foreign firms impacts on domestic firms depends on the degree of foreign ownership, type of FDI, trade orientation of the foreign companies, mode of entry, and motivation for FDI<sup>9</sup>. Productivity spillovers also highly depend on the characteristics of the domestic companies and their "absorptive capacity", i.e. the ability of domestic companies to utilize the knowledge from foreign companies. Measures of the absorptive capacity of domestic firms are their trade openness, the quality of human capital and the technology gap between foreign and domestic companies.<sup>10</sup> This part of the Report aims to

9 The degree of foreign ownership of investment projects is likely to matter for spillovers because domestic firms may have harder access to the technology of fully-foreign owned companies than to the technology of joint ventures of foreign firms and domestic firms (Abraham et al.,2010; Javorcik & Spatareanu, 2008).
 10 Exporting companies have usually higher efficiency and productivity levels than non-exporting companies, and thus may be more able to imitate technology and adopt know-how brought by foreign investors (Barrios and Strobl, 2002). However, this also means that there is less potential to learn because these firms are already exposed to foreign technology. The quality of human capital of domestic companies is also very important for the absorption of productivity spillovers from the foreign companies (Narula & Marin,

analyze the existence of horizontal spillovers stemming from the presence of FDI activity in the economy. More specifically, the impact of the foreign presence on the domestic productivity is studied in a regression model which also takes into account the characteristics of domestic enterprises (through reference to size, human capital, exporting status, age and size), as well as the degree of internal competition in a sector.

Some summary statistics of related variables are presented in Table 4.13. In terms of total factor productivity, domestic companies are on average more productive, in wood and wood products sector, automobile, machinery and equipment sector, and trading companies in the services sector. Foreign presence is measured by the foreign share in the local output in a given sector, which is included as an explanatory variable for the domestic productivity, measured as total factor productivity. Accordingly, the presence of foreign companies in the sample is higher in the textiles, garments, apparel and leather sectors, paper and paper products, non-metallic minerals, basic metals and fabricated metal products, office and electrical machinery. Textiles, garments, apparel and leather, and non-metallic minerals are also the sectors are food, beverages and tobacco products, and wood and wood products, including furniture. The degree of internal competition is calculated as Herfindahl index in terms of sales, the value of which decreases with greater competition and in situations when few large firms command significant market shares within a sector. The Herfindahl index is defined by the sum of squared firm market shares in each sector.

Sector	TFP <sup>1</sup>	Foreign presence	Herfindahl index
Agriculture, fishing and mining	1.00	0.77	0.14
Food, beverages and tobacco products	0.41	0.69	0.13
Textiles, garments, apparel and leather	0.22	0.86	0.47
Wood and products of wood, furniture and manufacturing n.e.c. (including recycling)	4.35	0.08	0.10
Paper and paper products	0.02	0.99	0.24
Publishing and media	0.35	0.11	0.25
Coke, refined petroleum products and chemi- cals	0.18	0.44	0.23
Rubber and plastics	0.27	0.75	0.16
Non-metallic minerals	0.48	0.97	0.60
Basic metals and fabricated metal products	0.70	0.89	0.19
Automobile, machinery and equipment	1.68	0.79	0.31

#### Table 4.13: Summary statistics for productivity and competition, by sector

2003). With a more skilled labour force, domestic firms are likely to exhibit a greater capacity to absorb spillovers from foreign firms. Finally, a determinant of spillovers is also the technology gap between the foreign and domestic companies. If the difference in the level of technology between domestic and foreign firms is too large, domestic companies are less likely to be able to adopt the foreign technology and know-how. On the other hand, a small technology gap may mean that there is too little to learn from foreign investors (Blalock and Gertler, 2009).

Sector	TFP <sup>1</sup>	Foreign presence	Herfindahl index
Office and electrical machinery; comm tion equipment	unica- 1.03	1.00	0.37
Construction and electricity, water and	gas 1.01	0.12	0.24
Trading	3.59	0.48	0.15
Hotels and restaurants	0.53	0.71	0.20
Transport and communications	0.63	0.59	0.12
Financial institutions	0.66	0.61	0.12
Consultancy and other services	1.52	0.51	0.19
Public admin,education,health and oth munity, social and personal service action	er com- vities 0.69	-	0.62
	1 TEP IS MEASURED AS IN	DEX WITH 1.00 FOR AGRICULTUR	RE FISHING AND MINING

#### Table 4.13: Summary statistics for productivity and competition, by sector > Contd

The description of the model is shown below.

The base specification of the model to measure the impact of the foreign presence on the domestic firms' productivity is taken from the literature<sup>11</sup> and is:

*lnTFP*<sub>c</sub>

 $= \beta_{o} + \beta_{I} ForeignPresence_{s} + \beta_{2} Age_{c} + \beta_{3} lnSize_{c} + \beta_{4} Herfindahl index_{s} + \beta_{5} Exporter_{c} + \beta_{6} TechnologyGap_{c} + \beta_{7} HumanCapital_{c} + \delta_{c}$ 

TFP is the total factor productivity level (TFP) of the domestic company c. ForeignPresence measures the spillovers generated by foreign companies in the same sector s. It is calculated as the share of foreign output in total output in the sector s. Age is the age of the firms, and control for differences between firms at different stages in their life circle. Size refers to the company size. The total number of employees is used as proxy of the size. Herfindahl index is the Herfindahl index, which is defined by the sum of squared firm market shares in each sector. Exporter is a dichotomous dependent variable, which takes the value 1 or 0 depending on whether the domestic firm decides to export or not. *TechnologyGap* is the distance to the technological frontier of foreign-owned firms and is obtained by subtracting the domestic firm's total factor productivity from the most productive foreign firm's TFP in the same sector and dividing by the most productive foreign firm's TFP. HumanCapital is measured as total wages per employee. Exporter, TechnologyGap and HumanCapital are considered as three indicators of the absorptive capacity of the domestic companies. In the case of the exporting status, the argument is that trading firms have a higher productivity than their non-trading counterparts and, consequently, have a greater absorptive capacity for spillovers. However, it may also mean that there is less potential to learn because domestic companies are already exposed to the foreign technology. To capture this, the foreign presence variable is interacted with the exporting status of domestic companies in the specification 2. The technological gap between foreign and domestic companies may also influence spillovers. If the technology gap between domestic and foreign companies is considerable, domestic companies will not be able to imitate the foreign technology. To examine this effect, specification 3 includes the interaction term between the foreign presence and the technology gap. Specification 4 examines the role of human capital in the process of spillovers, and includes the interaction term of the foreign presence with the proxy of human capital of domestic firms. It is expected that with a more skilled labor force, domestic companies are able to absorb spillovers from foreign firms.

Dependent variable: TFP in log					
	OLS1	OLS2	OLS3	OLS4	OLS5
- ·	1.1918*	0.2359	1.3244**	6.4641	5.1774
Foreign presence	(1.91)	(0.41)	(2.11)	(0.57)	(0.44)
Foreign presence *		6.1478***			6.1080***
Exporting status		(4.07)			(4.09)
Foreign presence *			-0.1478***		-0.1358***
Technology gap			(-3.17)		(-3.98)
Foreign presence *				-0.6894	-0.6294
Human capital				(-0.47)	(-0.41)
4.55	-0.0052	-0.0033	-0.0050	-0.0040	-0.0020
Age	(-0.36)	(-0.24)	(-0.35)	(-0.29)	(-0.16)
Size (in log)	-0.0551	-0.0676	-0.0562	-0.0589	-0.0719
Size (in log)	(-0.41)	(-0.52)	(-0.42)	(-0.45)	(-0.57)
Harfindahlinday	-1.9653	-2.0955*	-2.8022**	-2.0600	-2.9502**
Hernindani index	(-1.51)	(-1.69)	(-2.24)	(-1.57)	(-2.45)
Exporting status	-0.2571	-3.7797***	-0.2330	-0.2634	-3.7405***
Exporting status	(-0.57)	(-3.65)	(-0.52)	(-0.58)	(-3.60)
Tashnalagu gan	-0.0253***	-0.0302***	-0.0116**	-0.0249***	-0.0171***
тесппотоду дар	(-5.46)	(-8.87)	(-2.27)	(-5.49)	(-4.68)
	1.0687***	1.1045***	1.0884***	1.3837	1.4099
	(2.68)	(2.72)	(2.73)	(1.40)	(1.36)
Constant	-4.4810	-4.2181	-4.5033	-6.9002	-6.4489
CONSTANT	(-1.36)	(-1.26)	(-1.36)	(-0.89)	(-0.80)
R^2	0.1632	0.2359	0.1856	0.1661	0.2586
Ν	232	232	232	232	232

#### Table 4.14: FDI impact on export behaviour of domestic firms

NOTE: T STATISTICS IN PARENTHESES. \*, \*\*, \*\*\* DENOTE STATISTICAL SIGNIFICANCE AT 10,5, 1 PERCENT LEVEL

Results of the model are shown in Table 4.14. Evidence suggests that better quality of human

capital and higher competition in a sector tends to increase the productivity of domestic firms. Results also show that only firms with the necessary absorptive capacity may benefit from the positive externalities associated with FDI (i.e. the coefficient of Foreign Presence is insignificant in the regression where the interaction term with the dummy Exporter is included). In contrast, the greater the distance to the frontier is, the smaller the benefits from foreign presence are. Contrary to the expectations, domestic firms' human capital does not influence the incidence of spillover effects, most probably because the level of human capital in the domestic firms may be too low to absorb the foreign technology and know-how.

# 5. Investment incentives and enterprise performance

# Introduction

This Section aims to shed light on whether and how investment incentives support private investment in URT and how these incentives indirectly impact on the local economy. Every investment incentives policy has potential costs and benefits for the country providing them. The benefits arise from the economic activity and impact generated, as well as through other resultant benefits such as additional investment, job creation, productivity spillovers and knowledge transfer. The cost and benefit analysis of investment incentives has to invariably take into account the opportunity cost and value of the incentives provided. For example, public funds diverted to be used for investment incentive purposes may starve funds made available for other public policy functions. The value of incentives provided to investment which would have occurred anyway irrespective of the receipt of incentive also increases the opportunity costs of the incentive provided<sup>1</sup>. Lastly an investment incentive policy framework has to factor in administrative and management costs of policy implementation. For example, a fiscal incentive is beneficial if the lost revenue and indirect costs are more than compensated for by higher revenue and social benefits from the additional investment generated. However, it is not easy to determine where, when and how spillovers occur and, in particular, to calculate the value of externalities to assess if the investment incentive is smaller than the value of externality.

The Tanzania Investor Survey contains important information on the different types of incentives received by foreign investors in the country, the importance of incentives in the context of the overall location factors in the business environment, as well as identifies the types of investors to whom incentives do matter. Indeed, an important aspect of this analysis is not only the provision of investment incentives but, more specifically, whether these incentives are considered a crucial aspect of the investment decision and the optimal conduct of operations in the host economy. On this basis, through a comparative analysis of the performance of foreign and domestic companies, the Report attempts to provide a means to estimate the link between the receipt of incentives and enterprise performance as measured by a number of selected economic indicators.

It has to be highlighted that the analysis contained in this Section refers to all types of investment incentives as provided by the various investment promotion institutions in the country, including but not solely limited to the Tanzania Investment Centre (TIC)<sup>2</sup>. As a result, the anal-

<sup>1</sup> The questionnaire asks for the receipt of incentives during the last financial year.

In Tanzania, the majority of investment incentives are provided by TIC through the TIC Certificate of Incentives. These are available at a fee to all investors that register with TIC (provided that project size is above the threshold of USD 100,000 and 300,000 for domestic and foreign investors respectively). The incentives covered in the Certificate mostly take the form of enhanced capital deductions and allowances. Under Section 19 of the 1997 Tanzania Investment Act, any business enterprise holding this Certificate is entitled to benefits applicable under the provision of the Income Tax 1973, the Customs Tariff Act 1976 and the Sales Tax 1976. In addition to multiple fiscal incentives, the TIC Certificate also grants investors the automatic ability to hire up to five expatriate employees without government review. The investment regime also includes a financial stability clause - Section 19(2) which guarantees that these incentives will

ysis and results emanating therefrom should not be construed as constituting an economic impact analysis of investment incentives provided by TIC, nor a dedicated critique of the TIC administered incentive framework. The following analysis should be considered as a general analysis of the overall incentive framework in the country as provided by various institutions and received by responding firms in this Survey.

This Section continues as follows. The first part analyses the role of incentives in the investment decisions of foreign enterprises. The second part focuses on the incentive impact on the total economy, by comparing the performance and investment indicators of foreign and domestic companies. The last part provides some main conclusions.

## The role of incentives in investment promotion

Empirical research seems to suggest that international investment incentives play only a limited role in determining the international pattern of foreign direct investment (OECD 2002; James, 2009)<sup>3</sup>. Factors related to the investment climate, such as ease of import and export, availability of local suppliers, regulatory framework, production costs, adequate infrastructure and the country's geographic location explain most of the cross-country variations in FDI inflows. The effectiveness of incentives is thus linked to the environment from where these are offered and therefore incentives can never fully compensate and offset the challenges posed by generally weak or unfavourable investment climate conditions. The Survey results confirm these findings. Firms were asked to rank the importance of selected location factors on their decision to invest in URT. Figure 5.1 illustrates these responses. It emerges that the three most important location factors reported as influencing investment decisions were political, economic stability, and local market conditions. The fact that local market is ranked among the three most important factors is consistent with previously analysed results indicating that local market conditions are a principal driver to local market-seeking FDI, which by far constitutes the most prominent investment motive in the sample. It may also be argued that the apparent low presence of 'footloose' export-oriented FDI may have led to a less 'stressed' investment policy framework that does not see the need to use comprehensive incentive instruments to compete in FDI markets.

not be modified to the detriment of investors. Further incentives are also provided under all tax laws (customs, income tax and VAT) as well as under Export Processing Zones (EPZ) schemes. Non fiscal incentives are also provided especially for small scale investors and outside of the TIC umbrella in the tourism and agriculture sectors, among others. The provision of investment incentives is also inscribed within most bilateral investment treaties signed by Tanzania. Beyond the basic incentives within the TIC certificate, additional incentives are granted for investors in so called 'lead' and 'priority' sectors. These sectors were first formally defined in the Customs Tariff Act, 1976, then amended by the Financial Laws (Miscellaneous Amendments) Act of 1997 and finally reduced to a shorter list in 2002, including agriculture, mining, agrobased industries, infrastructure, tourism, petroleum and gas, mining and EPZs. Among these sectors, EPZ projects (petroleum and gas), mining and gas fall under specific legislations and therefore *ad hoc* incentive packages. A comprehensive list of investment incentive is included in Annex III.

3

Political stability	3.8
Economic stability	3.7
Local market	3.5
Transparency of business regulations and legal framework	3.5
Cost of raw materials	3.4
Labour costs	3.4
Availability of skill labour	3.4
Quality of life	3.3
Availability of local suppliers	3.2
Incentive package	3.0
Bilateral agreements and double taxation treaties	2.9
Export market	2.9

#### Figure 5.1: Investor ranking of location factors, 5 being highest, 1 lowest





The impact of incentives also greatly depends on the characteristics of foreign investors. The nature and impact of incentives may differ if they apply to new or existing companies. Start-up companies may prefer incentives that reduce their initial expenses, while expanding firms will prefer tax incentives that target profit. Small investors can be more responsive to incentives, in particular fiscal incentives, than large companies because they do not have the required financial and human capacity. Similarly, the influence of incentives may be expected to be more pronounced for export-oriented firms than for domestic market oriented ones. Figure 5.2 illustrates the importance of investment incentives by investor type. The results confirm that exporting enterprises rank incentives higher than non-exporting firms do. Incentives are more important for FEs than for TNCs, and companies aged 21-year and over consider incentives not to be particularly important for their ongoing investment decisions<sup>4</sup>. On the contrary, no large differences are found between small and large firms. These results reflect the important reference of the different investor type being targeted by specific investment incentives since incentives since incentives need to be tailored to targeted investor types.

4 This may also be determined by the fact that the incentive framework in the country is a very recent policy phenomenon and a decade ago incentives were not provided to investors.

Figure 5.3: Importance of incentives in the decision to invest, by selected sector, 5 being highest, 1 lowest

Agriculture and Mining	3.4
Manufacturing	3.0
Services	3.2

The importance of investment incentives varies highly across economic sectors (Figure 5.3). Incentives seem to be very important in the agriculture and mining sectors, but they are less considered by investors in manufacturing, and services sectors. This result may be explained by the fact that in industrial and manufacturing activities, key location-specific factors such as infrastructure, domestic market conditions and the availability of skilled workers are more likely to attract investment and are to be considered as key generators of economic activity.

Respondents were asked to indicate which incentives they received and which one was crucial in their investment decision selecting from a list of six items which include capital grants, tax exemption, grants for hiring, training employees, infrastructure and other. Figure 5.4 illustrates the results. All types of incentives were indicated as crucial by at least one investor. However, only tax incentives were deemed to be critical by more than 50 percent of those respondents that have received that incentive (72 per cent responded that the incentive was "crucial"). The next most crucial incentives are considered to be capital grants (42 per cent) and infrastructure (39 per cent). It is noteworthy that grants for hiring and training employees are the least requested incentives by companies in the sample and are also the less considered to be crucial for the receiving enterprises.





# Impact of incentives on the local economy

The argument for the efficacy of incentives presupposes that the incentive providing authorities in the country are capable of identifying the level of benefits generated by the new investment, determining the costs and consequently being able to choose the exact level of incentives requested. The first and most direct costs are those associated with the potential loss of revenues (if tax incentives are concerned) or opportunity cost of funds diverted to other alternative public policy uses. In this context it is important to seek to determine if the new foreign investment would have materialized if no or lower incentives were offered. Given that, many companies in the sample enjoying the incentives in Tanzania would have invested without them, one might expect that the revenue costs are higher than the benefits generated by the incentive policy. However, the validity of this inference depends on the characteristics of the respective investors. In order to delve deeper into this aspect, the following part of this Section focuses on the comparison of key enterprise characteristics. Enterprise characteristic comparisons refer to planned investment and employment and these are analysed for those enterprises which identified tax and infrastructure incentives<sup>5</sup>, as critical (Group A), and for those firms which identified tax and infrastructure incentives as not critical (Group B)<sup>6</sup>.

	Total	Group A Firms considering tax incentives critical	Group B Firms considering tax incentives not critical
Planned investment (in USD)			
		No. of foreign firm	15
0-500,000	97	25	8
500,000-1,000,000	5	0	0
1,000,000-10,000,000	21	2	3
10,000,000-50,000,000	1	1	0
50,000,000-100,000,000	1	0	0
Total	125	28	11
		Value (USD)	
Total planned investment	174,499,849	47,112,383	8,126,234
Mean planned investment	1,395,999	1,682,585	738,749
Planned employment (No. of e	employees)		
		No. of foreign firm	15
Under 11	80	15	3
20-11	18	6	2
21-50	11	4	3
51-100	7	2	0
101-200	1	1	0
Total	117	28	8
		No. of employees	5
Total planned employment	1,369	490	154
Mean planned employment	12	18	19

 Table 5.1: Planned investment and employment by foreign investor type based on the criticality of tax incentives

Starting with the analysis of tax incentives, as presented in Table 5.1, it is evident that Group A includes those firms with the largest value of planned new investment. Indeed, the total planned new investment of all respondent firms in Group A is almost 5 times higher than the total planned investment in Group B<sup>7</sup>. This result is noteworthy in the sense that those

<sup>5</sup> These are selected on the basis of the most prevalently received incentive types.

<sup>6</sup> This method of analysis follows the approach adopted by Bruce R. Bolnik for the Mozambique case (2009).

<sup>7</sup> Even when the mean is considered, the average planned investment of companies in Group A far exceeds the other.

enterprises considering tax incentives provided as most critical for their investment do plan to invest more in the near future. The picture does not change when the employment plans of companies in both groups are considered. Indeed, 3 out of the 28 companies in Group A planned to create more than 50 jobs each, resulting in a total planned employment of 490 jobs, three times larger than the one generated by companies in Group B.<sup>8</sup> At face value, these results seem to underscore the relative success of the country's investment fiscal incentive framework as measured in terms of the ability of incentives have in generating investment and creating employment.

The picture is somewhat less positive when incentives for infrastructure are considered (Table 5.2). In this case, Group B contains the largest number of companies, and though the total and mean planned investment of companies in Group A exceeds the one of the other companies, planned employment is higher for Group B firms. Of course, the above analysis is just a limited assessment of the relationship between the granting of incentives and the eventual action or set of actions (in terms of new planned investment and employment generated) undertaken by receiving enterprises.

	Total	Group A Firms considering infra. incentives critical	Group B Firms considering infra. incentives not critical
Planned investment (in USD)			
		No. of foreign firm	15
0-500,000	97	8	0
500,000-1,000,000	5	0	3
1,000,000-10,000,000	21	3	0
10,000,000-50,000,000	1	0	0
50,000,000-100,000,000	1	0	0
Total	125	11	16
		Value (USD)	
Total planned investment	174,499,849	8,126,234	5,595,304
Mean planned investment	1,395,999	738,749	349,707
Planned employment (No. of e	employees)		
		No. of foreign firm	าร
Under 11	80	4	5
20-11	18	2	4
21-50	11	2	3
51-100	7	0	1
101-200	1	0	1
Total	117	8	14
		No. of employees	5
Total planned employment	1,369	113	348
Mean planned employment	12	14	25

# Table 5.2: Planned investment and employment by foreign investor type based on the criticality of infrastructure incentives

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However, though no large differences are found between the two groups in terms of mean planned employment, median planned investment of Group B is the double than the one for Group A.

To take the analysis a step further, in order to assess the potential of spillover effects, Table 5.3 lists some selected performance indicators for enterprises based on the receipt of incentives<sup>9</sup>. The analysis attempts to compare performance and impact indicators along specific thematics, such as employment and skills, innovation, growth, trade patterns and investment potential for foreign firms receiving and not receiving incentives and for domestic enterprises (Refer to Columns 1 to 6). Columns 7 - 10 list results of *t-tests* on the equality of means and non-parametric equality of median tests respectively for the two groups of firms, in order to check whether the differences between the two groups are statistical significant.

The main observation that can be inferred from the results highlighted in Table 5.3 is that this analysis further confirms that the performance of foreign firms highly differs from that of domestic enterprises. For example, the difference is statistically significant when firms are analyzed in terms of the total number of employees, skill ratio, value added, capital-labor ratio, export share and last major investment. Foreign firms that have benefited from incentives tend to create more employment, are more productive, export a higher share of their turnover and invest more than domestic firms. When it comes to comparing the performance of foreign firms receiving incentives with those foreign firms not receiving incentives, the analysis presents some notable differences. Survey results suggest that companies that responded to have benefited from investment incentives seem to be performing worse on some parameters compared to those foreign firms that did not receive such incentive support. Indeed, the receipt of incentives seems not to be related to more employment creation, productive efficiency and investment. It is important to qualify these results through closer analysis of the type of sector in which such foreign firms operate in and what other factors in their operations lead them to perform better or worse since differences across different types of enterprise categories may reflect a number of other firms' characteristics.

In order to take into account enterprise heterogeneity, a regression analysis is included in the analysis. The model consists of three specifications. The first specification relates performance indicators of firms to explanatory variables including firm ownership so as to test whether foreign firms outperform their domestic counterparts. The second and third variations of the model differ among foreign firms on the basis of whether firms have received (*ForeignOwnership\_Incentives*<sub>c</sub>) or have not received incentives (*ForeignOwnership\_NoIncentives*). In the second specification, domestic firms act as reference group, which means that each group of foreign enterprises is compared with domestic firms, whereas the third specification is run only on foreign firms and, consequently, it tests whether foreign firms receiving incentives differ, in terms of performance, from those that have not received any. Differences across firms are analyzed in terms of value added per employee, and wages per employee.

The regression model is specified as follows<sup>10</sup>. The base specification estimated has the following form:

$$lnX_{c} = \beta_{o} + \beta_{i}ForeignOwnership_{c} + \beta_{2}Small_{c} + \beta_{3}Medium_{c} + \beta_{4}lnKL_{c} + \beta_{5}Exporter_{c} + \beta_{6}Industry_{c} + \varepsilon_{c}$$

 $X_c$  refers to the performance indicators of the firms. ForeignOwnership<sub>c</sub> is a dummy variable that takes value 1 if the firm is foreign owned. Small<sub>c</sub> is a dummy variable that takes value

<sup>9</sup> Because of the opacity of data responses, it was difficult to distinguish between different types of incentives as provided by different national institutions, including but not limited to TIC.

<sup>10</sup> The model follows the procedure adopted in previous studies. See for example Bernard and Jensen, 1999, or Grasseni, 2010.

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Sector	Foreign firms incenti	receiving ves	Foreign firms n incenti	iot receiving ives	Domes firms	stic (	Differe Foreign Incentiv	:nce es - Domestic)	Difference (Foreig - Foreign No In	n Incentives centives)
	(1) Mean	(2) Median	(3) Mean	(4) Median	(5) Mean	(6) Median	(7) Mean	(8) Median	(9) Mean	(10) Median
Employment and skills										
Total number of employees	130.5	60.0	189.5	63.0	50.5	20.0	80.0*	40.0*	(59.0)*	(3.0)*
Employment growth (%)	12.4	6.3	2.8	1.7	20.4	0.0	(8.0)	6.3	9.6*	4.6
Training expenditure over sales (%)	0.1	0.0	0.1	0.0	0.4	0.0	(0.3)	0.0	0.0	0.0
Skill ratio (%)	34.1	25.0	37.4	28.0	41.8	33.3	(7.7)*	(8.3)*	(3.3)*	(3.0)
Innovation										
R&D expenditure over sales (%)	1.9	0.0	0.1	0.0	24.9	0.0	(23.0)	0.0	1.8	0.0
Performance										
Sales growth (%)	24.7	15.0	21.9	8.2	30.5	15.4	(5.8)	(0.4)	2.8	6.8
Value added per worker (USD)	41,257.9	10,208.5	55,002.1	16,519.2	25,270.4	6,166.1	15,987.5	4042.4*	(13,744.2) (	6,310.7)*
Capital-labour ratio	28,996.1	13,884.8	35,693.8	11,540.2	19,610.1	8,121.7	9,386.0	5,763.1*	(6,697.7)*	2,344.6
Trade										
Export share (%)	16.2	0.0	11.6	0.0	7.5	0.0	8.7*	0.0	4.6	0.0
Exports growth (%)	12.7	20.0	(0.6)	3.1	37.4	7.1	(24.7)	12.9	13.3	16.9
Imports share (%)	57.5	70.0	61.9	70.0	60.0	70.0	(2.5)	0.0	(4.4)	0.0
Investment										
Age	13.6	12.0	14.7	13.0	15.0	12.0	(1.4)	0.0	(1.1)	(1.0)
Last major investment (USD)	7,697,752.0	403,224.3	11,976,388.4	500,000.0	1,586,042.6	113,855.7	611,709.4*	289,368.6*	(4,278,636.4)*	(96,775.7)*
New planned investment (USD)	1,541,933.7	25,000.0	1,295,422.1	0.0	642,774.9	11,287.0	899,158.8	13,713.0	246,511.6	25,000.0*
								L <b>L</b> *	EST SIGNIFICANT AT T	HE 0.05 LEVEL

1 if the firm has less than 50 employees. *Medium*<sub>c</sub> is a dummy variable that takes value 1 if the firm has more than 50 and less than 100 employees.  $KL_c$  refers to the capital intensity of the firms, and is measured as total fixed assets per employee. *Industry*<sub>c</sub> are sector dummies. *Exporter*<sub>c</sub> is a dummy, which takes value 1 if the firm exports.

The parameter  $\beta_i$  denotes the differences between the performance of foreign owned firms and domestic firms. Two different variables are used as dependent variables: value added per employee, and total wages per employee. The log of capital intensity is added as control only when the dependent variable is labour productivity. The three specifications are estimated by using OLS.

Dependent variable: Value added-based labor productivity (in log)			
Reference group:	OLS1 Domestic firms	OLS2 Domestic firms	OLS3 Foreign firms, no incentives
Foreign Ownerships	0.3169*		
Foreign Ownerships	(1.77)		
ForeignOwnership_Incentives		0.1125	-0.4977*
		(0.43)	(-1.75)
ForeignOwnership_NoIncen-		0.4879***	
tives		(2.63)	
KL (in log)	0.4311***	0.4287***	0.6286***
	(7.34)	(7.35)	(7.50)
Europeter	0.6657***	0.6544***	0.7942**
Exporter	(3.14)	(3.10)	(2.49)
Small	0.0276	0.0285	0.4248
Small	(0.14)	(0.15)	(1.14)
Medium	0.4298*	0.4459**	0.4934
	(1.96)	(2.03)	(1.59)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic companies Total economy	Foreign and domestic companies Total economy	Foreign companies Total economy
R^2	0.4513	0.4546	0.6861
Ν	378	378	121
NOTE: T STATISTICS IN PARENTHESES. *, **, *** DENOTE STATISTICAL SIGNIFICANCE AT 10,5,1 PERCENT LEVEL			

#### Table 5.4: Productivity comparisons between foreign and domestic firms, overall sample

Results from the regression models are explained hereunder. Concerning productivity trends (Refer to Table 5.4), results suggest that in general and as reflected elsewhere in this Report, foreign-owned firms are more productive than domestic enterprises measured in terms of value added per employee<sup>11</sup>. The productivity gap is even larger when domestic firms are compared to foreign firms that have not received any incentives. Interesting results emerge when one distinguishes between foreign firms on the basis of whether these received incentives or not.

<sup>11</sup> This result is not surprising and is mainly consistent with the modern theory of foreign direct investment, which states that, in order to compete with local firms, which have advantages over foreign enterprises in the domestic market because of their better knowledge of the local environment, foreign firms must have some advantages that compensate them for the disadvantage of operating in a foreign environment (Dunning, 1988). These advantages include better technology and managerial knowhow, human and physical capital, which can result into higher performance of these companies.

Results suggest that foreign enterprises that have received incentives tend to be less productive than other foreign enterprises who have not received incentives. This result may partly indicate that incentives in Tanzania are granted to those enterprises which end up not performing to an adequate competitive level. It may also be that the country may be attracting FDI in sectors which are facing intense competitive pressures which as a result may tend to undermine firm performance. In any case, it is important that this result triggers further analysis on to what extent such FDI receiving incentives can pay off these incentives in terms of multiplier impact, higher value added generated as well as spillover effects in the host economy over time. Further analysis is required to ascertain whether there exists an element of non-performing FDI appropriating incentives away from and at the costs of more-performing investment.

On the other hand, results do not show that foreign investors pay higher wages than domestic companies (Refer to Table 5.5). However, when foreign firms are split in two groups controlling for receipt of incentives, those firms that have not received incentives seem to end up paying the highest wages. Since firm performance is determined by the sectoral conditions, a further test is made to control for sectoral composition. In this sense, similar results to the above mentioned analysis are found when only the manufacturing sector is considered (Tables 5.6 and 5.7). Manufacturing foreign enterprises tend to be more productive than domestic ones and foreign firms that have not received incentives seem to perform better than the domestic ones. Nevertheless, no significant differences are found between foreign firms that have benefited from the incentives and those that have not received any incentive. In the manufacturing sector, foreign and domestic firms do not seem to significantly differ in terms of wages paid to their employees during the last financial year.

Dependent variable: Wages per employee (in log)			
Reference group:	OLS1 Domestic firms	OLS2 Domestic firms	OLS3 Foreign firms, no incentives
Foreign Ownerships	0.1169		
	(1.61)		
ForeignOwnership_Incentives		0.0456	-0.2816**
		(0.47)	(-2.13)
ForeignOwnership_NoIncen- tives		0.1758**	
		(2.01)	
Exporter	0.2191***	0.2186***	0.1574
	(2.68)	(2.67)	(1.17)
Small	-0.0429	-0.0400	0.0614
Sinan	(-0.49)	(-0.46)	(0.43)
Medium	0.1173	0.1216	0.2712*
	(1.08)	(1.12)	(1.71)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic companies Total economy	Foreign and domestic companies Total economy	Foreign companies Total economy
R^2	0.3095	0.3118	0.5395
Ν	425	425	139
NOTE: T STATIST	ICS IN PARENTHESES. *, **, *** D	ENOTE STATISTICAL SIGNIFICAN	CE AT 10,5,1 PERCENT LEVEL

#### Table 5.5: Wages per employee comparisons between foreign and domestic firms, total sample
Dependent variable: Value added-based labor productivity (in log)			
Reference group:	OLS1 Domestic firms	OLS2 Domestic firms	OLS3 Foreign firms, no incentives
Foreign Ownershine	0.5343**		
Foreign Ownerships	(2.26)		
ForeignOwnership Incontives		0.4263	-0.3352
ForeignOwnership_incentives		(1.16)	(-0.88)
ForeignOwnership_NoIncen-		0.6119**	
tives		(2.57)	
KL (in log)	0.4290***	0.4282***	0.6603***
KL (III log)	(5.85)	(5.85)	(5.34)
Exportor	0.8764***	0.8693***	0.8824**
	(3.74)	(3.72)	(2.40)
Small	0.1240	0.1300	0.5548
	(0.55)	(0.58)	(1.24)
Medium	0.2899	0.2985	0.4208
	(1.04)	(1.06)	(1.05)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic companies Manufacturing	Foreign and domestic companies Manufacturing	Foreign companies Manufacturing
R^2	0.4175	0.4183	0.6867
Ν	224	224	74
NOTE: T STATISTICS IN PARENTHESES. *, **, *** DENOTE STATISTICAL SIGNIFICANCE AT 10,5,1 PERCENT LEVEL			

# Table 5.6: Productivity comparisons between foreign and domestic firms, sampledmanufacturing

Dependent variable: Wages per employee (in log)			
Reference group:	OLS1 Domestic firms	OLS2 Domestic firms	OLS3 Foreign firms, no incentives
Foreign Ownerships	0.0718		
Foreign Ownerships	(0.81)		
ForoignOwnorship Incontivos		0.0230	-0.1886
Foreignownersnip_incentives		(0.19)	(-1.58)
ForeignOwnership_NoIncen-		0.1077	
tives		(1.11)	
Eventer	0.2666***	0.2638***	0.1812
exporter	(3.21)	(3.13)	(1.18)
Small	-0.0007	0.0022	0.1299
	(-0.01)	(0.02)	(0.84)
Medium	0.1839	0.1871	0.2221
	(1.53)	(1.54)	(1.55)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic companies Total manufacturing	Foreign and domestic companies Total manufacturing	Foreign companies Total manufacturing
R^2	0.1699	0.1711	0.5247
Ν	256	256	87
NOTE: T STATISTICS IN PARENTHESES. *, **, *** DENOTE STATISTICAL SIGNIFICANCE AT 10,5,1 PERCENT LEVEL			

# Table 5.7: Wages per employee comparisons between foreign and domestic firms, sampled manufacturing

To gain further insights on the impact of investment incentives on the local economy and foreign investment patterns, a variation of the previous model tests whether certain firms' characteristics, including the receipt of investment incentives, are associated with a higher probability that a company invests in the future. This insight represents an important aspect of the analysis of investment incentives because it examines whether the receipt of incentives is related to the company's growth intentions. Since in the first part of this Section it was found that investment incentives can stimulate investment, one can further hypothesize that investment incentives influence the expansion plans of foreign companies. The Tanzania Survey dataset contains data on the respondents' investment plans over the next three financial years, and this information is used as a dependent variable which takes value 1 if a company planned to invest in the future, 0 otherwise. The new model adds total sales in the previous financial year and company age to the variables estimated in Tables 5.4 and 5.6, and examines which factors influence the company's investment plans. The probability that a company makes an investment in the next three financial years is analyzed in a logit.

Dependent variable: Future investment decision			
Reference group:	<b>(1)</b> Domestic firms	<b>(2)</b> Domestic firms	<b>(3)</b> Foreign firms, no incentives
Foreign Ownerships	-0.691**		
Foreign Ownerships	(-2.336)		
Foreign Ownership Incontines		0.083	1.619***
ForeignOwnership_incentives		(0.221)	(2.700)
ForeignOwnership_NoIncen-		-1.458***	
tives		(-3.703)	
Eventer	0.273	0.267	0.191
Exporter	(0.835)	(0.799)	(0.284)
Small	0.649*	0.638	1.260
Sinali	(1.700)	(1.633)	(1.592)
Madium	0.595	0.560	0.794
Medium	(1.501)	(1.379)	(1.102)
ColorT 1 (in log)	0.084	0.089	0.416*
Sales1_1 (III log)	(1.084)	(1.127)	(1.714)
Age	-0.010	-0.012	-0.006
	(-0.980)	(-1.132)	(-0.177)
Constant	-1.350	-1.479	-7.586**
Constant	(-1.148)	(-1.240)	(-1.996)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic companies Total economy	Foreign and domestic companies	Foreign companies
Observations	350	350	94
Log likelihood	-224.5	-218.8	-53,99
Pseudo-R^2	0.0745	0.0979	0.149
NOTE: T STATISTICS IN PARENTHESES, *, **, *** DENOTE STATISTICAL SIGNIFICANCE AT 10.5.1 PERCENT   FVF			CE AT 10,5,1 PERCENT LEVEL

#### Table 5.8: Future investment decisions, total sample

Results in Table 5.8 indicate that foreign firms are less likely to invest in the next three financial years when compared to domestic ones. When foreign companies are split in two groups on the basis of the receipt of incentives, the probability that a foreign company that has received incentives invests in the future is not significantly different from the probability a domestic company expanding its business. In contrast, among the foreign firms, those that have received investment incentives are more likely to make an investment over the next three financial years

than are foreign companies that have not received any incentives. Results do not change when only the manufacturing sector is considered (Table 5.9).

Dependent variable: Future investment decision			
Reference group:	(1) Domestic firms	(2) Domestic firms	(3) Foreign firms, no incentives
Foreign Ownerships	-1.490***		
Foreign Ownerships	(-3.594)		
ForeignOwnership Incontives		-0.372	3.330***
Foreignownersnip_incentives		(-0.711)	(3.125)
ForeignOwnership_NoIncen-		-2.619***	
tives		(-4.467)	
Funerhan	0.066	0.155	0.060
Exporter	(0.164)	(0.369)	(0.061)
Small	1.297**	1.175**	2.034
Small	(2.517)	(2.210)	(1.611)
	0.839	0.832	0.997
Medium	(1.624)	(1.521)	(0.867)
	0.237**	0.224**	1.040**
SalesT_1 (in log)	(2.201)	(2.031)	(2.395)
A	-0.018	-0.021	-0.051
Age	(-1.336)	(-1.561)	(-1.128)
	-2.123	-1.426	-15.987**
Constant	(-1.283)	(-0.825)	(-2.471)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic companies Total manufacturing	Foreign and domestic companies Total manufacturing	Foreign companies Total manufacturing
Observations	350	350	94
Log likelihood	-224.5	-218.8	-53.99
Pseudo-R^2	0.0745	0.0979	0.149
NOTE: T STATISTICS IN PARENTHESES. *, **, *** DENOTE STATISTICAL SIGNIFICANCE AT 10,5,1 PERCENT LEVEL			

#### Table 5.9: Future investment decisions, sampled manufacturing

Results contained in this Section seem to point that more analysis and studies need to be undertaken to carefully assess the impact of investment incentive policy framework at the wider economic and sectoral level.

# 6. Conclusions

The broad purpose of the Tanzania Investor Survey Report is to analyse the investment impact in the economy. Based on empirical data collected in the United Republic of Tanzania (URT) in the ambit of the UNIDO Africa Investor Survey 2010, the analysis of investment impact is based on an overview of enterprise performance characteristics of both domestic and foreign direct investment (FDI). The Report refers to analysis of various resultant facets of investment impact, i.e. employment effects, trade impact and the expected determinant role in productivity performance. The Report also examines the link between the receipt of investment incentives by foreign enterprises investing in Tanzania through FDI and the enterprise performance.

The main findings and conclusions can be summarised in the following points:

- Foreign investors are mainly wholly-owned enterprises, who invested in Tanzania mainly driven by market-seeking FDI motives. Foreign enterprises are mainly from Europe, India and other Sub Saharan African countries and their main channel of entry into Tanzania is greenfield investment through the constitution of wholly-owned enterprises;
- Comestic companies are comparatively smaller than foreign companies in terms of both the number of employees as well as gross output. They are more labour-intensive than foreign firms and show lower levels of labour productivity even though the skills ratio prevalent in domestic firms is quite similar to that of foreign firms.
- Soth foreign and domestic enterprises share a common characteristic in that they are local market oriented whilst they import the majority of their inputs. Overall, the Report highlights that manufacturing firms are those growing fastest, both in terms of total sales as well as exports. However, manufacturing firms tend to export a relatively low share of their total sales. Indeed exports in Tanzania seem to be characterized mainly by primary goods with the agriculture and mining sector firms being those exporting the most. Imports of foreign and domestic enterprises are very high and, in the case of domestic firms, on average these exceed the value of exports. One of the reasons why imports are very high in Tanzania may be due to the lack of capital and intermediate products in the country as well as the poor quality of available inputs;
- Weak infrastructure is the main barrier to export inside and outside the Sub Saharan African region for both domestic and foreign companies. Another main challenge faced by the domestic firms is represented by the limited access to finance, which also represents a constraint to export activity;
- Overall, the Report suggests that there is a potential positive impact of FDI on local employment; in that foreign firms employ more people, pay higher wages and invest more in training when compared to their domestic counterparts. Domestic firms do not seem to benefit as much as they should from the contact with the foreign companies' exporting strategies and techniques, most probably because foreign firms do not export or do export a small share of their sales. The Report suggests that there is some evidence of productivity spillovers generated by the presence of foreign companies onto domestic firms operating in same sectors. As expected, only those domestic enterprises having the

necessary absorptive capacity, limiting the technology gap, may benefit from the positive FDI externalities;

- Results confirm that although the skill ratio in foreign firms is not higher than that in domestic enterprises, foreign companies report higher labour productivity when compared to their domestic counterparts. This may be the result of complementary innate factors within the firms such as technology know-how and knowledge.
- The Report suggests that political stability, economic conditions and local market environment represent the three most important location factors actively sought by investors. In terms of investment incentives, companies that considered tax incentives critical for their investment are the ones that planned to invest the most in the future and expected to create the largest number of employment opportunities. This result underpins the main notion that the investment incentive policy framework may be working to generate investment and create employment; When compared to those critical investment determinants, the granting of investment incentives is generally perceived to be of much lower importance. Amongst FDI firms, exporting firms and firms in the agriculture and mining sector placed relatively higher importance on incentive schemes.
- Foreign firms who have received investment incentives were more likely to make an investment in the next three financial years irrespective of their sector. Although foreign enterprises are more productive than domestic ones, those foreign firms that have received incentives do not seem to significantly differ from domestic companies in terms of productivity and wages paid to their employees, while they seem to be less productive and generous towards their employees than those foreign enterprises that have not received incentives. Results may therefore point to the fact that FDI may not be generating as much economic impact as originally expected and therefore although positive their impact could be much more and better.

Overall the results from the Tanzania Survey do suggest that there is strong need to continue to generate firm level data, from similar Surveys and on a continuous basis, to improve on the monitoring capabilities of investment promotion stakeholders in the country. For an entity such as the Tanzania Investment Centre which aims to promote and facilitate foreign and domestic investment, it is crucially important to be able to draw upon analysis of foreign and domestic investment activity to the extent that performance comparisons between the two ownership categories can better contextualize and emphasize the performance of foreign-owned enterprises. The Report has served to highlight the need for more efforts for the Tanzania Investment Centre and other government entities engaged in investment promotion to work together to fine-tune the investment incentive framework based on a comprehensive results-oriented policy based on factual impact analysis. The Report highlights that there is a constant need for a comprehensive national effort to improve business linkages to increase local sourcing and support/reward localisation efforts by foreign owned enterprises. More interaction at the level of foreign and domestic firms could be facilitated by efforts to encourage joint venture agreements and may further serve to overcome distorted import-export patterns.

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## Annex I

### The Africa Investor Survey and Report 2011

#### **Background of UNIDO's Regional Investment Programme**

The UNIDO Regional Investment Programme is a capacity building programme based on the creation of empirical investor data bases to support African countries in understanding the dynamics of investment flows and their role in development and poverty reduction. The programme currently includes 20 African countries and its main beneficiaries are the private sector, government departments and Investment Promotion Agencies (IPAs). Developed as an outgrowth of UNIDO's support programmes for African IPAs, the Programme is a response to their requests and is designed in the context of the Network of African Investment Promotion Agencies (AfrIPANet). This Network is a platform of 43 member countries established by UNIDO in 2001 for the development and implementation of investment-related activities in Africa.

The Programme provides an empirical basis and tools to support policy makers in changing the culture of investment promotion in Africa with the following objectives:

- To shift the emphasis of investment promotion from quantity of promoted foreign direct investment (FDI) flows, to a more holistic measurement of the impact that foreign investments have on local economies, particularly on the growth and competitiveness of domestic firms;
- To mainstream investment promotion into private sector development and small and medium enterprise support programmes to foster poverty reduction and wealth creation on a broad based level;
- To emphasize the role of domestic investment promotion;
- To enhance the quality and speed of delivery of business support services and information that IPAs provides to existing and potential investors;
- To provide a policy tool for Ministries, an operational tool for IPAs and a business tool for private sector enterprises.

#### **UNIDO's Africa Investor Survey**

A core component of UNIDO's Regional Investment Programme is a firm-level survey of the investment activities, performance and perceptions of companies active in sub-Saharan African countries. During 2010, close to 7,000 face-to-face interviews were conducted with top-level managers of foreign- and domestic-owned firms. The data collection activities were conducted simultaneously in 19 sub-Saharan African countries, and covered a range of economic activities from agriculture to services, albeit with a focus on manufacturing. This has been UNIDO's fourth Investor Survey, with previous surveys conducted in 2001, 2003 and 2005.

The preparatory phase of the survey included the theoretical and methodological groundwork required to ensure that the survey met rigorous standards and would be internationally recognized as an authoritative reference survey of investment in sub-Saharan Africa. National project governance was established through setting up an Implementation Committee (IC) in each country, consisting of government authorities, IPAs, the National Statistics Offices (NSOs) and representatives from business associations. These ICs facilitated a high level of ownership of the survey activities as well as promotion and dissemination of the survey results. Moreover, the ICs will ensure a sound continuation of the programme for future survey rounds.

The survey was designed to cover a representative sample of all public and private sector, for-profit enterprises which were formally registered and employed more than ten employees. Significant effort was invested into collecting business directories from various national institutions, harmonizing these directories, and verifying the entries. Eventually, the sampling frame for each country contained, apart from each firm's contact details, information on three sampling strata: economic sub-sector (ISIC 2-digit level), size (number of employees), and ownership status (foreign- or domestic-owned). These directories are now available for institutions that are planning to carry out firm-level surveys. They can also be used as a tool for encouraging business-to-business linkages. <sup>1</sup>

#### Sampling methodology

The Africa Investor Survey is based on a stratification sampling methodology. Before the sampling could start, a business directory or list of firms was created. The sampling frame for each country contained, apart from each firm's contact details, information on the three sampling dimensions or "strata". For each firm, these were: economic sub-sector, size (number of employees), and ownership status (foreign- or domestic-owned). The mode of data collection was face-to-face interviews to ensure a maximum level of participation of firms. In most cases, the interview was scheduled with the most senior decision maker within the firm, that is the chief executive or general manager. The sample selection method is the probability proportion to size (PPS), employment is taken as a size measure.

$$p_j = n \frac{m_j}{\sum m_j} \qquad j = \overline{1 \dots N}$$

The PPS applied is without replacement, which means that a unit, one selected, is not considered for further selection. The reason of this choice is that the number of larger companies in the survey frame is small, however, their contribution to the total estimates is high and the per unit cost of data collection may be similar for units of different size. For this reason, larger establishments are given higher probability of selection in the sample.

The sample size for each stratum ni is proportional to the total number of unit in each stratum Ni and to the standard deviation of each stratum si.

1

For a more in-depth description of the sample composition, survey implementation and data quality assurance, please refer to Africa Investor Report 2011, UNIDO.

$$Ni = (Ni^* si / S(Ni^* si)) * n$$
  
 $n = total size$ 

In some cases (e.g. more than 100 employees), no randomization process is used, as the probability of being chosen is 1. The sample then equals the sampling frame.

In other cases (e.g. 50-99 employees and domestic investor), only a fraction of companies will be selected. These companies will be chosen via the PPS (Probability proportional to size) method.

#### UNIDO's Investment Monitoring Platform – http://investment.unido.org

The objective of the programme is to make the aggregated data available to a large and diverse audience in order to mainstream the findings into the day-to-day routine operations of policy makers, IPAs and investors in Africa. To this end, UNIDO has developed an online Investment Monitoring Platform (IMP), which offers participating government authorities, private sector associations, firms that participate in the surveys, financial institutions, development organizations, and civil society organizations access to an array of the most recent primary data and analysis on investment in Africa.

The IMP allows registered users to carry out primary research using firm-level data available on the platform through an easy-to-use data visualization instruments. It offers users a set of interactive data visualization tools (histograms, pie-, bar-, bubble charts, and heat maps) for data analysis. A built-in online report generator enables users to package generated graphs into reports. These functions facilitate online information sharing of research results generated on the IMP or uploaded from external sources to the platform and creates a rich country- and sector specific knowledge base. The Platform facilitates the analysis of performance (growth, new investments, capacity utilization) and inter linkages (local sourcing and value addition). The data can be filtered in terms of sectors, countries, firm size, age or ownership. It facilitates comparing the benefits of different types of investment for host economies through a variety of impact indicators such as employment growth, expenditure on training and technological upgrading, or on development of domestic suppliers. Moreover, the platform also permits analysis of firm responses to changes in the business and economic environment. Through particular investor perception variables, it allows users to monitor changes in firms' assessments of the investment climate and future investment plans.

#### The UNIDO Africa Investor Report

Complementary to the development of the online data management tools, UNIDO has prepared the UNIDO Africa Investor Report 2011 which presents the results of the 2010 survey, in particular the interactions between foreign and domestic firms to study the influence of foreign investment on the domestic sector. It also merges investors' perceptions about IPA services with analysis of investor performance, accompanied by an econometric study of the effect different types of foreign investment have on growth and productivity of domestic firms. The analysis considers performance of firms in terms of indicators such as growth rates, profitability and productivity, as well as impact of foreign-owned firms on the overall economy and on performance of domestic firms.

Key findings of the survey permit the mapping of the complex interactions between foreign and domestic firms, and how these interactions influence potential economic and social benefits for host countries.

The report provides guidance to government departments and Investment Promotion Agencies (IPAs) for more effective allocation of scarce resources available for investment promotion and better alignment of investment promotion with national development strategies. An important contribution made here is to combine analysis of firm performance with demand for investment promotion services. The analysis examines the kinds of investment promotion services deemed useful by different kinds of firms, as well as identification of services needed but not provided. This presents IPAs with a well-defined strategy for determining priority services tailored to investors' requirements and positive economic impact.

## Annex II

## Definitions used in the Report

#### **Foreign Direct Investment**

The definition of foreign investment adopted in this survey follows the OECD's *Benchmark Definition of Foreign Direct Investment* which considers an incorporated or unincorporated enterprise in which a foreign investor owns 10 per cent or more of the ordinary shares or voting power of an incorporated enterprise or the equivalent of an unincorporated enterprise as foreign direct invested enterprise. This definition is consistent with the one adopted by the IMF's *Balance of Payments Manual* which defines the owner of 10 per cent or more of a company's capital as a direct investor. According to both IMF and OECD definitions, direct investment reflects the aim of obtaining a lasting interest by a resident entity of one economy (direct investor) in an enterprise that is resident in another economy (direct investment enterprise).

# Definition of wholly-owned enterprise and joint venture firm

A foreign enterprise is defined as wholly-owned enterprise (WOE) when it has a foreign ownership share equal to or greater than 90 per cent. A foreign enterprise is defined as a joint-venture enterprise (JV) when it has a foreign ownership share equal to or greater than 10 per cent but less than 90 per cent.

# Definition of transnational corporations and foreign entrepreneurs

In this survey, a firm is considered to be part of a transnational corporation (TNC) if it is the wholly-owned subsidiary or joint venture of a parent firm with headquarters in another country. If the foreign investor is a foreign national or family that has invested in the firm alone or as a joint venture partner and it is not a subsidiary of an enterprise based in another country, it is considered to be a foreign entrepreneur firm.

#### Investors' entry strategy

The questionnaire asks questions on the way in which the initial investment took place. The respondent can choose among the following options:

- Creation of a new operation as a wholly-owned enterprise (Greenfield);
- creation of a new operation as a joint venture (Greenfield);

- view purchase of pre-existing assets from local private owners (Acquisition/Takeover);
- v purchase of pre-existing assets from private foreign owners (Acquisition/Takeover);
- vertication of pre-existing state-owned assets.

#### Resource, market and efficiency seeking investment

The definition of enterprises into resource, market and efficiency seeking enterprises follows Dunning (1993) to the greatest extent possible but with some necessary adjustments due to the design of the questionnaire. The investment motives have been grouped as follows:

- EFFICIENCY SEEKING: Enterprises that invested with the primary motivation of improving efficiency (e.g. lower production costs, export back to home country or benefit from trade agreements). This also includes join a specific partner.
- RESOURCE SEEKING: Enterprises that invested with the primary motivation of accessing natural resources and inputs.
- MARKET SEEKING: Enterprises that invested with the primary motivation of accessing the local market.

#### **Origin of Foreign investors**

- Origin of foreign investors is aggregated by city and region;
- One classification divides companies in companies from the North and those from the South. North origin refers to investors from industrialized countries, while South origin refers to investors from developing countries as defined in The International Yearbook of Industrial Statistics (UNIDO, 2010);
- Countries of investor origin are also aggregated in: China, Europe, India, MENA, SSA, South Africa, USA and Canada, and other Asia.

# Classification of industrial sub-sectors according to level of technology

The classification of industrial sub-sectors into low-, medium- and high-technology manufacturing follows a classification prepared by the OECD (OECD, 2005). In a slightly adjusted version (three categories were used instead of the original four) the sub-sectors represented in the survey fall into the following categories:

LOW-TECH MANUFACTURING: Publishing, printing and reproduction of recorded media; Manufacture of food products and beverages; Manufacture of wearing apparel, dressing and dyeing of fur; Manufacture of textiles; Tanning and dressing of leather, manufacture of luggage, handbags, saddlery, harness and footwear; Manufacture of furniture, manufacturing *n.e.c.*; Manufacture of wood and products of wood and cork, except furniture, manufacture of articles of straw and plaiting materials; Manufacture of tobacco products; Manufacture of paper and paper products; Recycling;

- MEDIUM-TECH MANUFACTURING: Manufacture of rubber and plastics products; Manufacture of other non-metallic mineral products; Manufacture of fabricated metal products, except machinery and equipment; Manufacture of basic metals; Manufacture of coke, refined petroleum products and nuclear fuel;
- **HIGH-TECH MANUFACTURING:** Manufacture of chemicals and chemical products; Manufacture of machinery and equipment *n.e.c.;* Manufacture of electrical machinery and apparatus *n.e.c.;* Manufacture of motor vehicles, trailers and semi-trailers; Manufacture of office, accounting and computing machinery; Manufacture of radio, television and communication equipment and apparatus; Manufacture of other transport equipment; Manufacture of medical, precision and optical instruments, watches and clocks;

#### **Market orientation**

Enterprises are classified according to the following categories:

- Iocal market-seeking if less than 10 per cent of total sales is exported;
- regional market-seeking if 10 per cent or more of total sales is exported and more than 50 per cent of the exported sales is directed to other sub-Saharan African countries;
- I global market-seeking if 10 per cent or more of total sales is exported and more than 50 per cent of the exported sales is directed to global markets outside of sub-Saharan African countries.

#### Size

Enterprises are classified according to the following categories:

- Small-sized companies have less than 50 employees.
- Medium-sized companies have more than 50 and less than 100 employees.
- Carge-sized companies have more than 100 employees.

#### **Productivity measures**

Three important productivity measures are: value added per employee, gross output per employee and total factor productivity (TFP). Value added per employee and gross output per employee represent two measures of labor productivity.

- Gross output is equal to total turnover, minus purchase of goods and services resold, minus stocks of final goods at the beginning of the year, plus stocks of final goods at the end of the year;
- Value added is defined as gross output minus intermediate consumption;
- Gross output-based labor productivity is defined as gross output (GO) on total number of full-time employees (L).

$$LP = \frac{GO}{L}$$

Value added-based labor productivity is defined as value added (VA) divided by total full-time employees (L).

$$LP = \frac{VA}{L}$$

Total Factor Productivity (TFP) is the portion of output not explained by the amount of inputs used in production. As such, its level is determined by how efficiently and intensely the inputs are utilized in production. TFP is computed by using the standard growth accounting approach of Solow under the assumption that factor shares are 1/3 (α) and 2/3 (β) for capital (K) and labor (L), respectively. In this computation constant returns to scale (α + β = 1) is assumed.

$$TFP = \frac{VA}{K^{\alpha}L^{\beta}}$$

#### Skills and employment categories

Number of technical and administrative staff (and sales staff) over total number of employees.

# Annex III

#### Investment incentives<sup>1</sup>

#### Introduction

With an investment climate supported by a sound regulatory framework, improved infrastructure, high quality telecommunications, and a reasonably professional workforce, the Tanzania's economy is dynamic and offers substantial tax and other incentives that are designed to encourage investment projects.

#### **Investment tax incentives**

Tanzania recognizes the importance of investment in stimulating economic growth and development in the country and creating a potential for sustainable future revenue generations. A number of tax incentives are granted to both local and foreign investors in a variety of sectors in order to encourage investment.

An Investment policy was put in place in 1990 when the Government enacted the National Investment Promotion and Protection Act (NIPPA) 1990, which granted tax incentives to investors in the form of tax holidays for a specific period of time. The NIPPA 1990 was repealed and replaced by the Tanzania Investment Act, 1997 that is now operational.

The Tanzania Investment Act (TIA) 1997, transferred all the tax incentives to Income Tax, 2004, East African Community Customs Management Act, 2004, Value Added Tax Act 1997 as revised in 2006. The main objective of this incentive was to make the tax structure more transparent and less complicated to taxpayers. Since then income tax holidays were abolished and tax incentives are now granted to investors in the form of enhanced Capital deductions and allowances.

Investment Laws abolished Income Tax holidays and tax incentives are now granted in the form of enhanced capital deductions and allowances. 100% capital expenditure to Mining & Agricultural sectors. The Income Tax Laws allow 50% Capital allowances in the first year of use for Plant and Machinery used in manufacturing processes and fixed in a factory, fish farming; or providing services to tourists and in a hotel. Indefinitely carry forward of losses against future profits. However Companies with perpetual tax loss for 3 consecutive years as a result of tax incentives on investments are charged 0.3% of annual turnover.

**Corporate Tax** - 30% and newly listed company to DSE with at least 30% of its shares issued to the public for three consecutive years from the date of listing -25%

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Extracted from the publication '2013 Investors guide to Tanzania' prepared and published by the Tanzania Investment Centre.

Withholding Tax on: dividends (10%) and (10%) on loan interest, on Rental Income (10%).

The investors who are in lead and priority sectors, they are allowed Import Duty and VAT exemptions on their Capital/ Deemed Capital Goods; these sectors are; agriculture including livestock, Air Aviation, Commercial buildings, Commercial, development and microfinance Banks, export oriented projects, Geographical Special development areas, Human resources development, manufacturing, Natural Resources including fisheries, timber and beekeeping, rehabilitation and expansion, tourism and tour operations, Radio and television broadcasting, Transportation (Cargo and marine) and Economic Infrastructure.

**Import Duty and VAT exemption on Deemed Capital Goods.** These are like; Building materials, Utility Vehicles, Equipment etc.

According to the 2012/13 budgetary changes the import Duty exemption granted to Deemed Capital Goods is now 90% whereby the investor shall pay 10% of import Duty due.

**Import duty (0%)** on imported 4WDs designed and built for tourist purposes, subject to satisfying criteria set by East African Community Secretariat.

**Import duty (0%)** on hotel equipment, which where engraved, printed, or marked with hotel logo imported by licensed hotel for its use

**VAT Special Relief on Project Capital Goods** (i.e. Capital Goods by Generic Description). These are like Plant, Machinery, Forklifts, Crane, Boilers, Furnace, crushers, graders, Caterpillars, excavators, bulldozers, angle dozers, lifts/ escalators etc.

**VAT Exemption** on Pesticides, Fertilizers, health supplies, livestock, unprocessed agricultural products, agricultural implements, Books and Newspapers, Educational services, Financial services, petroleum products, Aircrafts, aircrafts engines, aircrafts parts, computers, wind generators and liquid elevators, photovoltaic and solar thermal. Heat insulated milk cooling tanks and aluminum jerry cans used for storage and collection of milk in diary industry. Farm services of land preparation, cultivation, planting and harvesting.

### Zero VAT on Exports

#### Import Duty Drawback

Import duty charged on imported inputs used for producing goods for export and goods sold to foreign institutions like the United Nations in Tanzania, is refundable.

#### **Manufacturing Under bond**

All factories registered to manufacture goods under bond for export purpose are exempted from import duty and other taxes on inputs used to manufacture such goods.

### **Economic infrastructure**

Road, railways, air and sea transport, port facilities, telecommunication, banking & insurance

Item	Duty	VAT
All capital goods	0%	Relieved
Corporate tax	30%	
Listed company to DSE	25%	
Withholding tax on dividends	10%	
Withholding tax on interest	10%	

Losses carried forward indefinitely Companies with perpetual tax loss for 3 consecutive years as a result of tax incentives on investments are charged 0.3% of the annual turnover. Provision of strategic investors' status with incentives beyond those provided to normal investors.

#### **Mineral sector**

Item	Duty	VAT
All capital goods	0%	Relieved
Spare parts	0%	Relieved
Explosives & other supplies	0%	Relieved
Fuel & Oil	0%	Relieved
Corporate tax	30%	
Capital allowance	100%	
Withholding tax on technical services	5%	

- Other Applicable tax and levies on mineral sector are:
- Koyalty of 3% except for diamond, which is 5% and 12.5% for petroleum & gas
- No tax, duty, fee or other fiscal impost on dividends
- K No capital gain tax
- Losses carried forward for unrestricted period
- Cuty rate of 5% and VAT will be charged after the first five years of commercial production
- Yearly appreciation of unrecovered capital in investment
- Importation by or supply to a registered licensed exploration, prospecting, mineral as-

saying, drilling or mining company, of goods which if imported will be eligible for duty under customs law, and service for exclusive use in exploration, prospecting, drilling or mining activities.

## Holders of Certificate of Incentives Item Duty VAT

Item	Duty	VAT
All capital goods	0%	Relieved
Corporate tax	30%	
Listed company to DSE	25%	
Withholding tax on dividends	10%	
Withholding tax on interest	10%	

Losses carried forward indefinitely

Companies with perpetual tax loss for three consecutive years as a result of tax incentives on investments are charged 0.3% of the annual turnover.

#### Agriculture

Item	Duty	VAT
All capital goods	0%	Relieved
Agricultural machinery / equipment	0%	Exempt
Fertilizers & pesticides	0%	Exempt
Farm implements & inputs	0%	Exempt
Corporate tax	30%	
Capital allowance	100%	
Withholding tax on interest	10%	
Withholding tax on dividends	10%	

Losses carried forward indefinitely

#### **Tourism**

Item	Duty	VAT
All capital goods	0%	Relieved
Corporate tax	30%	

Item	Duty	VAT
Listed company to DSE	50%	
Withholding tax on dividends	10%	
Withholding tax on interest	10%	

#### Losses carried forward indefinitely

Exempt import duty on imported 4WDs designed and built for tourist purposes, subject to satisfying criteria set by East African Community Secretariat

Exempt import duty on hotel equipment, which where engraved or printed or marked with hotel logo imported by licensed hotel for its use

#### **Petroleum and Gas**

- Tax exemption on equipment & material used for exploration
- Negotiated levels of cost oil or gas split after the discovery of oil or gas for the purposes of recovering costs for exploration, development, and production
- Negotiated levels of profit oil or profit gas split
- Importation by or supply to a registered licensed exploration, prospecting, mineral assaying, drilling or mining company, of goods which if imported will be eligible for duty under customs law, and service for exclusive use in exploration, prospecting, drilling or mining activities.



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