

FOREIGN DIRECT INVESTMENT, R&D AND TECHNOLOGY TRANSFER IN AFRICA: An Overview of Policies and Practices

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Background

African countries are reforming their policies, legislation and institutional arrangements to attract Foreign Direct Investment (FDI). They treat FDI as a major source of capital for their economic change and development. Some of them are putting emphasis on FDI as a carrier of new scientific knowledge and related technological innovations. Investment policies and laws of a growing number of African countries contain provisions aimed at encouraging foreign investors to contribute to the strengthening of national scientific and technological base by targeting research and related technology development activities. Despite these efforts, research and development (R&D) content of FDI flows to Africa is very low. This is mainly because of weak domestic R&D capability and, in many cases, the absence of institutional mechanisms that provide explicit incentives to investors to target knowledge-based and intensive activities.

Generally, FDI flows to Africa have expanded only marginally and are still at levels behind those of other developing country regions. The region accounted for less than one percent of the global total FDI inflows in the late part of the 1990s (Odenthal, L. 2001). While inflows to developing countries as a group increased from US\$ 20 billion to US\$ 75 billion between 1981 and 1985, Africa's share of that inflow dropped (UNCTAD, 1999). Historically, low rates of FDI inflows to the region are explained by hostile policies, unstable political environment characterized by civil wars and armed conflicts, lack of effective regional integration efforts, poor and deteriorating infrastructure, burdensome regulations or lack of institutional capacity to implement FDI policies, and lack of institutional clarity to promote investment in Africa.

There is scant information on the sectoral composition of FDI in Africa. However, available data shows that more than 50 percent of total FDI inflows to the region target natural resource sectors. The strong relationship between FDI flows and natural resources has been well researched and evidence generated by many studies. For example, in Ghana, US, Canadian and Australian firms have been interested in gold—between 1988 and 1998, more than 60 prospecting and reconnaissance licenses were awarded to companies from these countries. In Guinea, more than US\$ 130 million was invested in the Aredor mine by 1996. In Tanzania the largest sector for FDI is mining and the largest industry is gold. By 1998 total cumulative FDI in mining was estimated at US\$ 370 million. Mining attracted 65 per cent of FDI, services 19 per cent and manufacturing 16 per cent. (UNCTAD, 2001a)

More than 90 per cent of US\$ 1.5 billion FDI inflows to Nigeria in the 1990s targeted petroleum and natural gas sectors. FDI inflows to Uganda went to the beverages, sugar, food processing, textiles and packaging activities of the manufacturing sector and in coffee and tea plantations. Outside manufacturing and agricultural sectors, liberalization of telecommunication sector attracted considerable investment. The petroleum sector dominates FDI in Angola while in Ethiopia the hotel industry is the largest recipient.

The agricultural sector in the region has attracted modest FDI. Some of the major

projects of the 1990s include Del Monte's investment of more than US\$ 9 million in bananas in Cameroon, Lonrho's US\$ 7.5 million in tea estates in Tanzania, and Aberfoyle Holding's multimillion dollar investment in palm oil in Zimbabwe.

The surge of interest in FDI and multinational companies has been so high that in many countries there have been high expectations in terms of what the companies can do and generally on the development effects of FDI. While FDI can, indeed, contribute to national economic and social development in many ways, the engagement and performance of domestic actors are very crucial. The effect of FDI largely depends on the policies of the host country. This goes beyond the mere liberalization of economies. Deliberate measures to develop human capital and the physical and social infrastructure can also be valuable ways to enhance the quality of FDI that countries can attract.

Most Africa countries are making major efforts to increase FDI inflows by improving the investment climate. They embarked on wide-ranging policy, political and institutional reforms aimed at reducing (and, if possible removing) barriers to entry of foreign capital, particularly FDI. Trade and investment liberalization, privatization and the creation of various incentives for foreign investment have received considerable attention of governments. Regional economic integration bodies and free trade zones have been created to enlarge the size of markets and adopt common investment regimes at sub-regional and regional levels. These efforts are based on the recognition that FDI can stimulate economic growth, generate new employment opportunities, promote transfer of new technologies and contribute to environmental sustainability in the region.

The role of trans-national corporations and FDI in promoting scientific and technological development of African countries is the subject of increasing policy debate and academic research.¹ There is concern about the extent to which FDI stimulates R&D in and transfer of new technologies to Africa. This study focuses on the nature of policies and institutions that are necessary to encourage R&D based FDI. Its main focus is the necessary reforms that should be instituted by countries of the region to deliberately attract FDI that builds or strengthens their domestic R&D capabilities and stimulates local technological learning.

The study shows that trans-national corporations tend to invest in R&D in those countries that: (a) have a minimum domestic R&D capacity; (b) provide legal and economic incentives for knowledge-based investments; and (d) provide flexibility for local institutions to forge R&D partnerships with foreign companies. Using cases from Kenya and South Africa, it demonstrates that for FDI to contribute to R&D host countries' technology policies should converge with FDI legislation. In the case of Kenya, restrictive measures pertaining to granting of research permits to foreigners and the absence of a national strategy focusing on knowledge-based investment have restrained FDI to a few R&D oriented activities mainly in agriculture. In the case of South Africa there are explicit strategies to encourage foreign companies to engage in R&D. Local companies and affiliates of trans-national companies are increasingly investing in R&D. FDI is a growing but not really significant carrier of R&D in the motor industry, ICTs and agriculture in South Africa.

¹ See Oyeyinka, B. 2004. 'How Can Africa Benefit from Globalization?' ATPS Special Paper Series No. 17.