Capital Flows and Economic Transformation

4.1 Introduction

Africa needs economic transformation in order to achieve sustainable growth and reduce its dependence on primary commodity production and exports. Economic transformation is a process that alters the relative contribution of economic sectors to GDP and employment over time. This process occurs through two main channels: first, reallocation of factors of production from less productive sectors to more productive ones; and second, diversification of the economy away from primary commodity sectors (agriculture, oil and minerals) into industry and services (Berthelemy and Soderling 2001).

"In many African countries increases in industry's share in GDP originate largely from production of oil and minerals."

Given the strong linkages of industry with other economic sectors, increases in the share of industry in GDP have the greatest potential to contribute to sustainable growth and structural change. We use the term economic transformation in this chapter to refer to a growth process associated with an increasing share of industry in GDP.[1] Economic transformation is more effective - in terms of employment creation and reducing vulnerability to shocks - when increases in industry's contribution to output are driven by increased manufacturing output rather than increases in the output of extractive sectors such as oil and minerals. Therefore, the shares of manufacturing output in GDP and total exports may be used as additional indicators of economic transformation.

The pace of structural transformation in Africa has been very slow. Although the share of agriculture in GDP declined over the last four decades, this decline was mainly the result of increases in the shares of sectors other than industry – mainly services – and reflects the lack of adequate policies and incentives to direct investment towards domestic industrial activities. Meanwhile, in many African countries increases in industry's share in GDP originate largely from production of oil and minerals. The contribution of revenues from these activities to economic transformation depends

1 Economic activity is expected to shift over time from the primary (agriculture and industry) sectors to the secondary (services and tertiary) sectors. Relative saturation in the consumption of industrial commodities normally induces expansion of the service sector, which requires high investment in such areas as information technology, export processing, and financial services (Hayami and Godo, 2005: 38). Typically investment in these areas is low in Africa, which limits opportunities for genuine economic transformation. While this chapter focuses on industry as a driver of economic transformation, we recognize that, in some countries, services may also play an important role.

crucially on the extent to which they are used to finance investment in other sectors, specifically manufacturing.

Sustained economic transformation depends crucially on the quality and quantity of physical and human capital

The chapter examines the key factors that enhance the role of capital flows in economic transformation. Sustained economic transformation depends crucially on the quality and quantity of physical and human capital. Factor accumulation, in turn, requires a conducive institutional framework and an investment climate that provides necessary incentives to attract both domestic and external capital. The same factors that constrain Africa's growth - such as slow accumulation of capital, slow productivity growth, weak institutional environment, and infrastructure deficiencies - also inhibit structural transformation.

Capital flows, official and private, have the potential to influence economic transformation mainly through capital accumulation and productivity enhancement. In fact, there is a two-way causation between capital flows and economic transformation. While official capital flows may enhance economic growth and transformation by facilitating the development of human and physical infrastructure, private capital flows are likely to follow economic transformation and go to countries with good industrial and trade strategies. Consequently, targeted policy interventions that foster economic transformation will indirectly help to attract these types of capital flows.

Experiences of successful transformation in East Asian economies as well as some African countries indicate that capital flows have to be adequately managed to generate positive spillover effects to the rest of the economy. The positive effects of capital flows arise from targeted strategies aimed at harnessing foreign capital, including investments in human capital accumulation, physical infrastructure and other measures that improve the investment environment.

The next section examines the state of, and need for, economic transformation in Africa[2]. The section then discusses the role of capital flows in economic transformation and provides a quantitative assessment of this role in the context of Africa. Section 4.3 analyzes the constraints that have to be addressed for strengthening the link between capital flows and economic transformation on the continent. Experiences of two relatively successful African countries, Mauritius and Tunisia, are highlighted in section 4.4 along with the case of Nigeria, where structural transformation failed to materialize despite huge economic potential. Section 4.5 summarizes key findings and policy recommendations.

2 Due to data limitations, the discussion in some parts of the chapter focuses exclusively on SSA. The main data sources, the World Development Indicators and the Africa Database of the World Bank, report aggregate data for North Africa as part of the Middle East and North Africa subregion.

4.2 Africa needs structural transformation: what can capital flows do?

Structural transformation is essential for reducing poverty and vulnerability to shocks

Among the reasons for African countries' failure in reducing poverty and eradicating hunger is their inability to diversify their economies and achieve sustainable economic growth. The majority of the labour force in Africa is engaged in agriculture, which is characterized by low productivity. Meanwhile, export earnings depend heavily on commodity exports and are highly volatile due to terms of trade changes and natural shocks.

> *The share of the value added of agriculture in GDP in Africa has not changed significantly over the last three decades*

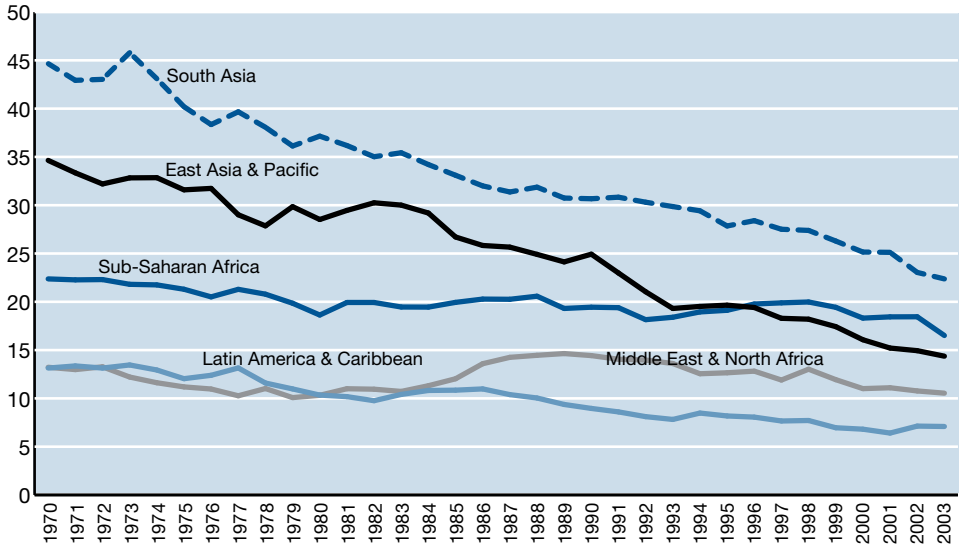
Although African economies are generally considered as agrarian, there is a large variation across countries in the role of agriculture. In many countries, mining and services play an even more important role. In 2003, the contribution of agriculture as a percentage to GDP in Africa varied between 2.4 per cent in Botswana and 60.8 per cent in the Central African Republic (World Bank 2005).

Unlike other regions, such as East and Southern Asia, the share of the value added of agriculture in GDP in Africa has not changed significantly over the last three decades (figure 4.1). Industry's share in Africa's GDP fluctuated between 29 and 34 per cent between 1970 and 2003 with no clear trend over time. In comparison, East Asia industry's value added rose from about 38 per cent to 48 per cent of GDP over the same period (figure 4.2). Further, the share of manufacturing in Africa has decreased slightly from around 16 per cent during the 1970s and 1980s to an average of 13.4 per cent between 2000 and 2004.

The share of manufacturing in Africa's merchandise exports almost doubled between 1970-1974 and 2000-2003, from 10 per cent to over 20 per cent. In comparison, the share of manufacturing exports in East Asia's merchandise exports rose from about 33 per cent in 1980-1984 to about 80 per cent in 2000-2003. Promoting manufactured exports is important in view of the fact that they have a positive impact on the growth of the non-export sector as well as overall GDP (Fosu 1990). In contrast, primary exports have been unable to stimulate growth in the non-export sector of a developing economy (Fosu 1996).

Figure 4.1

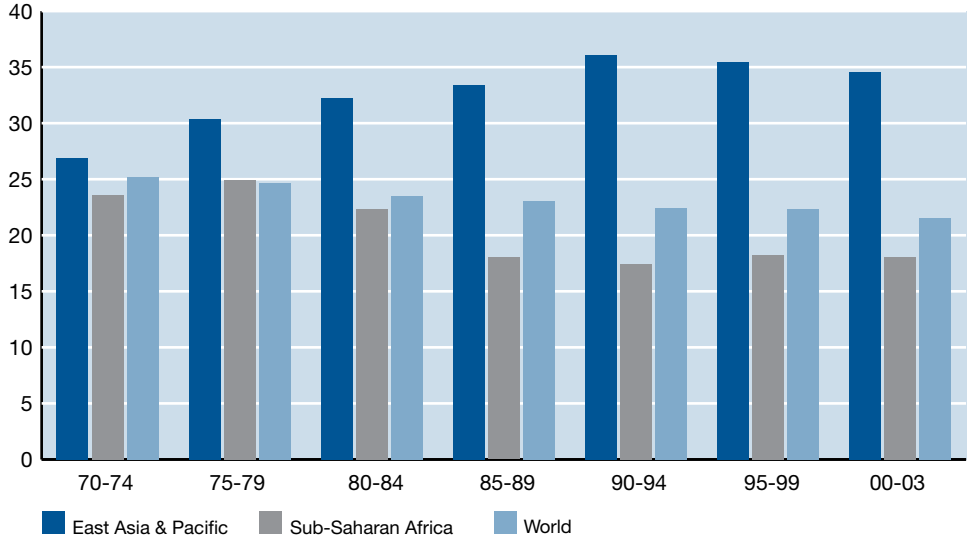
Agriculture's value added as a percentage of GDP in Africa and other regions, 1970-2003 (% of GDP)



***Source**: World Bank, 2005*

Figure 4.2

Industry's value added, 1970-2003 (% of GDP)



***Source**: World Bank, 2005*

Primary commodity dependence increases vulnerability to shocks, which raises uncertainty and retards growth. Primary commodity price volatility led to large terms of trade shocks that contributed to lower growth rates in many African countries. It is

estimated that a 44 per cent annual decline in the price of a primary commodity can generate a loss of almost 7 per cent of GDP (Collier 2003). Instability in the output of primary commodities and prices also generates uncertainties with regard to fiscal solvency, which undermines macroeconomic management, increases investment risks, and leads to debt overhang.

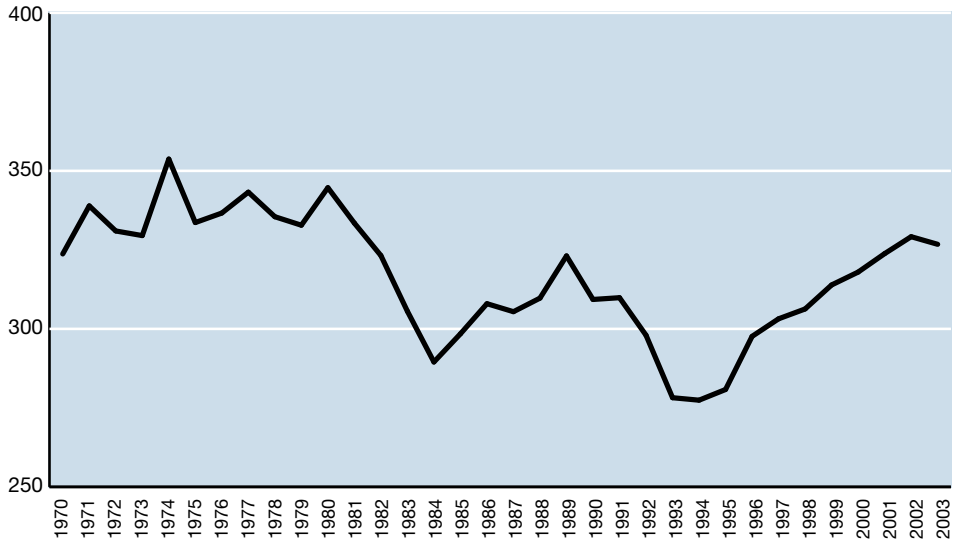
More importantly, in many African countries the rents generated by primary commodities, especially oil, have been associated with poor governance and policy environment because they enable corrupt governments to reward constituencies, fund inefficient public-works programmes and buy off opponents (Herbst and Soludo 2001). Availability of oil revenue reduces incentives for governments to initiate and sustain policies to encourage broad growth. Thus, agriculture and manufacturing are often neglected in oil/mineral-dependent countries.

> *Africa needs to improve agricultural productivity through more and better use of technology*

Productivity increases in agriculture paired with improved absorptive capacity in other sectors allow the release of farm labour to industry and other sectors, which is the starting point for economic transformation. This process could not happen in Africa because agricultural productivity per worker has not changed over time (figure 4.3). Among the reasons for this low productivity is minimum use of technology in agriculture. For instance, the use of tractors per worker has even decreased in Africa over time; in 1961, 417 agricultural workers shared one tractor compared with 806 agricultural workers in 2002. Over the same period, the use of tractors in South Asia has been multiplied by 25 times (figure 4.4). Policies to accelerate economic transformation in Africa should be accompanied with more efforts to improve agricultural productivity through more and better use of technology.

Figure 4.3

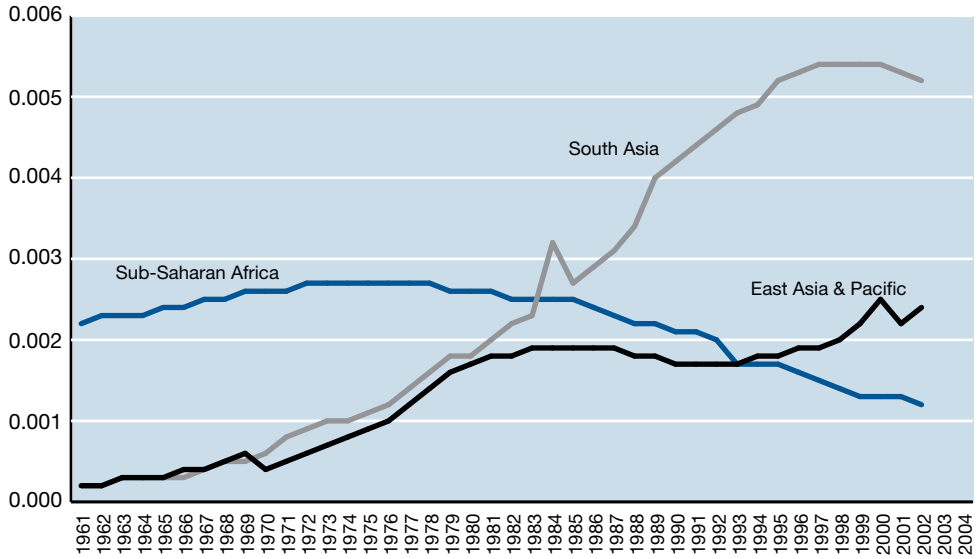
Agricultural value added per worker in Sub-Saharan Africa (constant $US 2000)



***Source**: World Development Indicators 2005*

Figure 4.4

Agricultural use of tractors per worker in Africa and other regions (1960-2004)



***Source**: World Development Indicators 2005*

Capital flows can boost economic transformation

"When poorly managed, ODA flows can have negative consequences"

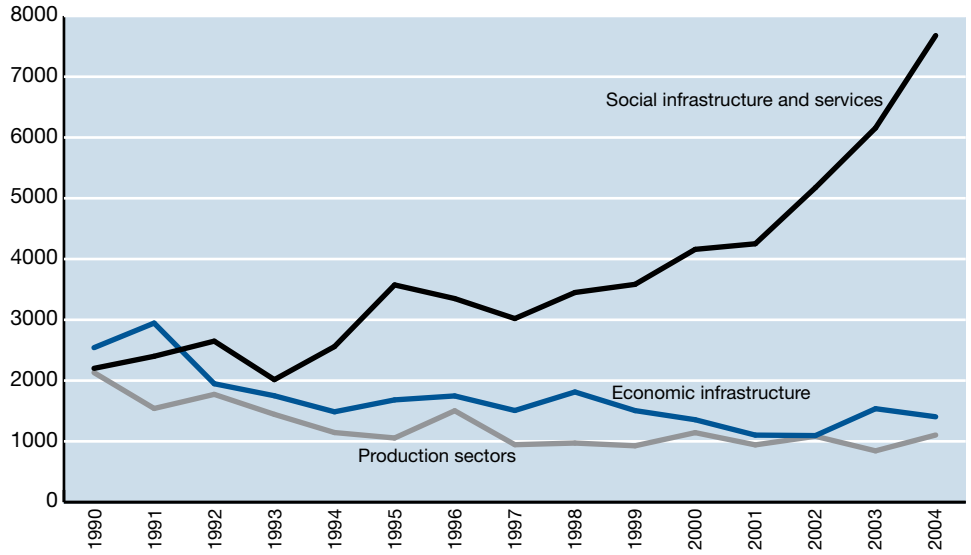
African countries face a shortage of funds to meet their investment and development needs. This resource gap must be filled by capital inflows, composed of FDI, portfolio investment, ODA, net borrowing, debt relief and remittances. These different types of capital flows have different impacts on the economy.

ODA flows can foster economic transformation by assisting recipient countries to finance physical, human and institutional infrastructure (see chapters 2 and 3 for further discussion). When poorly managed, ODA flows can have negative consequences including chronic current account imbalance, inflationary pressure, real exchange rate appreciation and declining exports - the "Dutch Disease" phenomenon (see chapter 5). This phenomenon is particularly likely in small countries with high ODA-GDP ratios (Laplagne et al. 2001). In addition, ODA may undermine or delay critical institutional and policy reforms and enable wasteful spending by corrupt governments (Erixon 2005).

Available data indicate that the current ODA structure is not likely to directly influence economic transformation in Africa. The bulk of these flows has been directed towards social infrastructure and services (mainly education, health and population, water supply and sanitation) and very little ODA has been directed to economic infrastructure and services and productive sectors (transport and communication, industry, mining and construction) (figure 4.5). In 2004, ODA flows to the energy

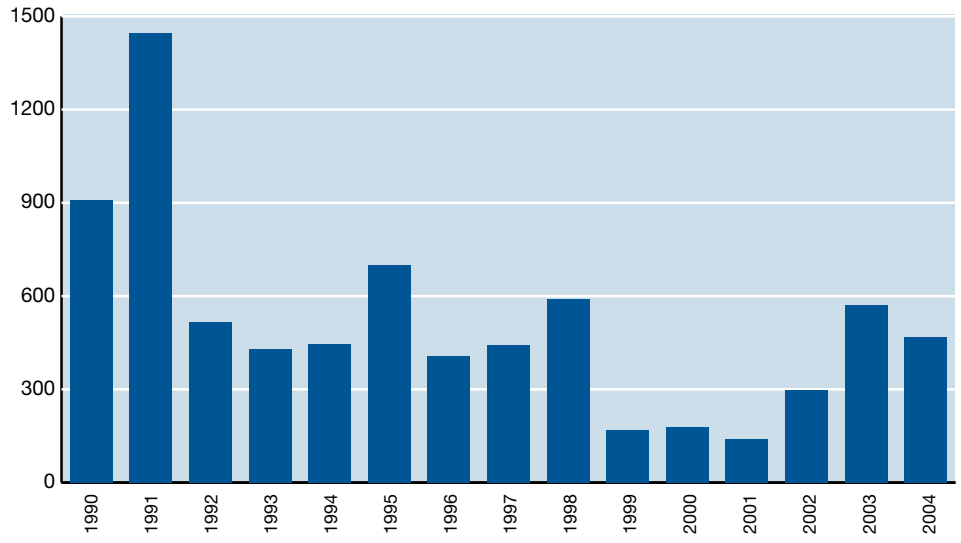
sector were only 30 percent of the 1991 level, when ODA flows to this sector peaked at about $1.4 billion (figure 4.6).

Figure 4.5
Bilateral ODA flows to Africa by sector (% of total)



***Source**: Development Assistance Committee, OECD, 2006*

Figure 4.6
Bilateral ODA flows to the energy sector in Africa ($ million)



***Source**: Development Assistance Committee, OECD, 2006.*

Infrastructure development is a key factor for enabling economic transformation

Infrastructure development is a key factor for enabling economic transformation. Therefore, Africa needs to mobilize more resources to upgrade its physical infrastructure. To this end, donors and African governments should reconsider their priorities with regard to ODA allocation taking into account potential synergies between investment in infrastructure and other sectors. For example, it has been observed that improving roads in remote areas has improved access to schools and healthcare facilities in some countries (AU/UNECA 2005).

When ODA flows are properly managed to build or strengthen infrastructure and institutions, private capital flows are likely to follow. Private capital usually flows to countries where the business environment and investment climate are perceived as attractive in terms of macroeconomic and political stability, infrastructure and availability of factors of production and access to markets. An exception is extractive FDI, especially in oil and mineral sectors, which can generate quick returns even in the absence of good infrastructure and institutions and in the presence of market failures (see chapter 3).

FDI is generally expected to enhance economic growth through improvements in technology, efficiency and productivity (Lim 2001), but the direction of causality can run both ways (Chowdhury and Mavrotas 2006). Moreover, while FDI flows might be associated with economic success, they do not exert an independent effect on growth (Carkovic and Levine 2002). FDI promotes growth in countries with sufficiently developed financial systems (see chapter 6), a greater degree of trade openness, and an adequate level of human resources development (Balasubramanyam et al 1999).

Indeed FDI has a greater potential than other forms of private capital flows to increase the rate of technical progress in the recipient country through knowledge diffusion. This can improve efficiency and productivity in local firms that can copy new technology or learn how to use existing technology and resources more efficiently in order to compete in global markets (Lim 2001). However, these spillover effects can only happen when the host country has an adequate level of human capital (see chapter 3).

The current sectoral distribution of FDI exacerbates natural resource dependence and undermines economic transformation on the continent. The 24 African countries classified by the World Bank as oil and mineral-dependent have on average accounted for close to three-quarters of annual FDI inflows to Africa over the past two decades. The primary sector accounted for nearly 50 per cent of FDI flows between 1996 and 2000. In 2005, the share of the petroleum industry exceeded 90 per cent of total inflows to Angola, Equatorial Guinea and Nigeria. In Egypt, a relatively more diversified economy, the share of FDI flows to the oil industry was still 64 per cent (UNCTAD 2005).

In brief, FDI flows to Africa have been below expectations in terms of both volume and composition (see chapter 2). Efforts to attract more FDI should be accompanied

with strategies to stimulate broad-based growth and economic diversification. In the absence of such strategies, FDI will continue to be concentrated in enclave sectors with no or little overall developmental impact (UNCTAD 2005).

With regard to other private capital flows, it has been observed that portfolio investments normally flow to countries with well-established capital markets in search of quick and higher returns and have no clear links with structural transformation. In SSA, only South Africa receives a meaningful amount of portfolio flows. As for remittances, they are mainly aimed at consumption and income support to families. Remittances represent a stable source of flows and are better distributed across and within countries. They can affect consumption and aggregate demand, which boosts growth through multiplier effects. However, there is still little evidence of direct effect of remittances on economic transformation.

Quantitative evidence on capital flows and economic transformation in Africa

Solid empirical evidence on structural transformation in Africa is scarce. O'Connell and Ndulu (2000) provide the only comprehensive empirical investigation of the process and factors influencing economic transformation in Africa. Two results from their cross-sectional study are worth emphasizing. First, the study finds that given income and population the size of the services sector is markedly smaller in SSA than in other regions, and that of industry and manufacturing is larger than expected. The share of agriculture in GDP is just slightly higher in SSA than in other regions, but the share of agriculture in total employment in SSA is markedly larger. Second, compared to other regions, Africa's movement out of agriculture and into industry has been significantly more rapid than would have been predicted on the basis of its growth performance.

> *Efforts to attract more FDI should be accompanied with strategies to stimulate broad-based growth and economic diversification*

There is also evidence that movement of labour out of agriculture has been slower despite sharp falls in agricultural output in SSA. Recently, notable diversification in favour of industry and manufacturing has taken place, but this diversification is not yet robust enough to stimulate significant structural change in Africa (Berthelemy and Soderling, 2002). The evidence underscores Africa's excessive dependence on agricultural employment and that low agricultural productivity and aggregate income are important constraints to economic transformation.

To examine the link between capital flows and economic transformation in Africa, we extended the O'Connell and Ndulu (2000) model by adding a capital-flow variable. Explanatory variables comprised initial capital flows, initial per capita income, initial population size, and the squares of these variables as well as regional dummies. Using data on 42 African countries[3], we calculated correlations between indicators of economic transformation and capital flows. For Africa as a whole, total capital flows were

3 The data are organized into six 5-year panels plus one 3-year panel covering the period 1970-2003.

insignificantly but positively correlated with structural transformation, as measured by the share of industrial output in GDP. This correlation was stronger for North Africa and negative for SSA (table 4.1). ODA dominates capital flows to Africa and seems to have a high positive association with the share of industry in North Africa's GDP, but a negative association for SSA. North Africa has generally received more aid than SSA and invested substantially in economic and human infrastructure with the help of donor funding.

> *North Africa has invested substantially in economic and human infrastructure with the help of donor funding*

The share of manufacturing in GDP is negatively correlated with total capital flows and ODA and not related to FDI (table 4.2). This is consistent with the fact that most FDI to Africa goes to extractive industries and very little is channelled to manufacturing. Both industry and manufacturing shares in GDP are weakly correlated with growth. Thus, for Africa as a whole, neither ODA nor private capital flows have been effective in triggering economic transformation.[4]

Table 4.1

Correlation between capital flows, growth and industry's share in GDP

Region	Total capital flows	FDI	ODA	Portfolio investment	Remittances	GDP growth
Africa	0.11	-0.02	0.11	-0.04	0.80	0.16
SSA	-0.24	-0.03	-0.24	-0.09	0.55	0.01
North Africa	0.36	0.29	0.90	-0.19	0.71	0.22

***Source**: Authors' computations using data from World Bank Africa Database 2005.*

Table 4.2

Correlation between capital flows, growth and manufacturing's share in GDP

Region	Total capital flows	FDI	ODA	Portfolio investment	Remittances	GDP growth
Africa	-0.80	0.01	-0.80	0.26	-0.05	0.02
SSA	-0.61	0.02	-0.61	0.22	0.37	0.03
North Africa	-0.76	0.14	-0.55	-0.03	-0.33	-0.30

***Source**: Authors' computations using data from World Bank Africa Database 2005.*

4 Panel data regressions yielded positive, but insignificant effects of capital flows on economic transformation. The results are not reported here.

4.3 Key constraints to structural transformation in Africa

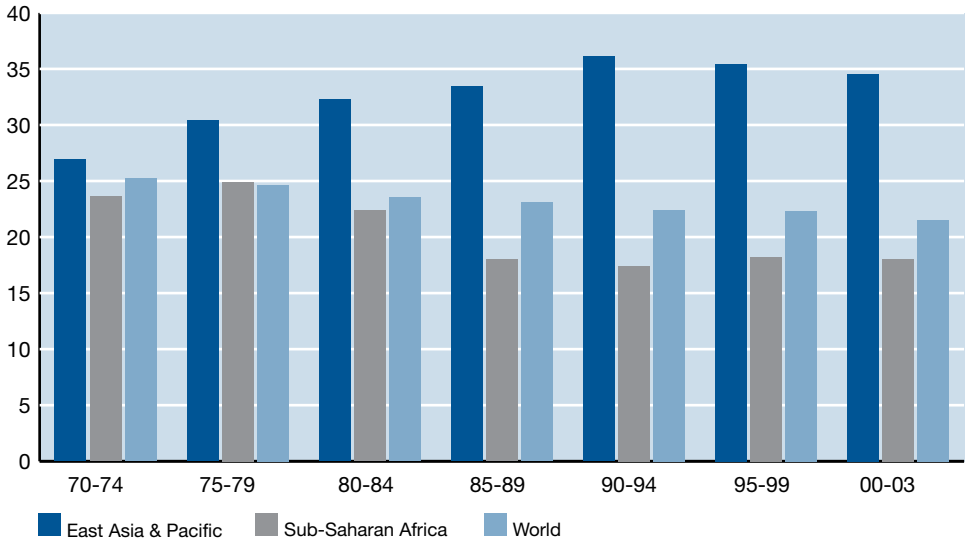
Low investment rates and low productivity growth hamper economic transformation

> *Reallocation of factors of production to more productive uses can permanently raise total factor productivity*

Relatively slow capital accumulation (figure 4.7), low saving rates and slow productivity growth are among the major reasons for disappointing growth performance and lack of structural change on the continent (Hoeffler 2000). Physical and human capital productivity are the lowest in SSA compared to other regions (table 4.3). In regions where accumulation of physical capital has a more prominent role in growth (South Asia, East Asia and Pacific, the Middle East and North Africa, and industrial countries), total factor productivity also has a greater contribution to growth. Low productivity growth in Africa is due to low quality of physical and human capital, poor policy environment and weak governance (O'Connell and Ndulu 2000).

Africa needs long-term strategies in order to increase productivity. While macroeconomic reforms that reduce waste can produce short-run productivity gains, sustained long-run productivity gains require a balanced mix of capital accumulation, human capital development and structural change. In addition, reallocation of factors of production to more productive uses can permanently raise total factor productivity.

Figure 4.7
Gross capital formation (% of GDP)



***Source**: World Development Indicators 2005*

Table 4.3
Growth accounting decomposition by region, 1960-2000 average

Variable	SSA	Latin America & Caribbean	South Asia	East Asia & pacific	Middle East & North Africa	Industrial countries	Total
Growth of real GDP per worker	0.51	0.76	2.18	3.89	2.37	2.23	1.63
Contribution of growth in physical capital per worker*	0.36	0.44	1.04	2.20	1.10	0.96	0.83
Contribution of growth in education per worker*	0.25	0.33	0.31	0.48	0.44	0.32	0.34
Residual (TPG)*	-0.09	0.00	0.82	1.21	0.84	0.96	0.47

***Source**: Ndulu and O'Connell (2003). Note: * Contribution to overall GDP growth*

Human capital: a key to economic transformation in Africa

"There is often a mismatch between school curricula and the skills that are demanded on the labour market"

Africa's labour force is less competitive compared with other developing regions because of lack of adequate education and relatively poor health, among other reasons. Africa also loses a higher proportion of their skilled labour force to the developed countries through the "brain drain" because insufficient opportunities on the continent. Therefore, improving human capital should feature prominently on the development agenda (UNECA 2004a).

Guided by the MDGs, many African countries have made notable progress towards achieving universal primary education (see chapter 1). However, educational indicators still remain low for Africa as a whole. SSA has the second lowest adult literacy rate (60.5 per cent) after South Asia with 58.9 per cent. In some African countries, such as Burkina Faso, Niger and Mali, adult literacy is extremely low, with rates of 12.8, 14.4 and 19 per cent, respectively. In contrast, Zimbabwe, Namibia and Mauritius had adult literacy rates of 90, 85 and 84.3 per cent, respectively, in 2003 (UNDP 2006). The African countries (e.g. Tunisia and Mauritius) with a better human capital base have also experienced substantial economic transformation over time.

It is worth noting that investment in education has not led to economic growth or improvements in total factor productivity because of the poor quality of education, poor utilization of skills, and low returns on education. There is often a mismatch between school curricula and the skills that are demanded on the labour market. Furthermore, university graduates are mainly absorbed in bloated bureaucracies or inefficient State enterprises, adding to low productivity and growth (Pritchett 1996).

Improving human capital requires not only increasing enrolment rates but also improving the quality of schooling and returns to education. High-quality secondary and tertiary education, adapted to the needs of a dynamic economy is important for

promoting innovations, which contribute to faster productivity growth and higher wages. The limited capacity of African States to enhance spending on education can be mitigated through joint regional efforts. For example, jointly designing, producing and distributing teaching materials and textbooks reduces costs. Harmonization of curricula facilitates transferability of high school degrees.

Although limited, some efforts of the regional economic communities (RECs) to jointly develop human resources are promising. The Francophone member States of the West African Economic and Monetary Union (UEMOA) and the Central African Economic and Monetary Community (CEMAC) are cooperating at all levels of education, especially in higher education. In the Economic Community of West African States (ECOWAS), member States cooperate in developing joint curricula, examination standards and degree requirements (UNECA 2004b)

"The limited capacity of African States to enhance spending on education can be mitigated through joint regional efforts"

In addition to educational efforts, building human capital requires improving the population's health status. The HIV/AIDS pandemic reduces the size of the active work force as well as productivity levels. According to ILO projections, the labour force in high-prevalence countries will be 10-30 per cent smaller by 2020 than it would have been without HIV/AIDS. Moreover, AIDS and other infectious diseases reduce labour supply and labour productivity in the agricultural sector, factors which undermine economic growth and increase poverty (UNECA 2004c).

The role of infrastructure in development and economic transformation

Inadequate infrastructure is a major constraint to investment and economic transformation in Africa. Relatively high transport costs are a major obstacle to improving Africa's competitiveness. For instance, freight cost as a percentage of total import value was 13 per cent for Africa in 2000 compared to 8.8 per cent for developing countries and 5.2 per cent for industrialized countries (UNCTAD 2002).

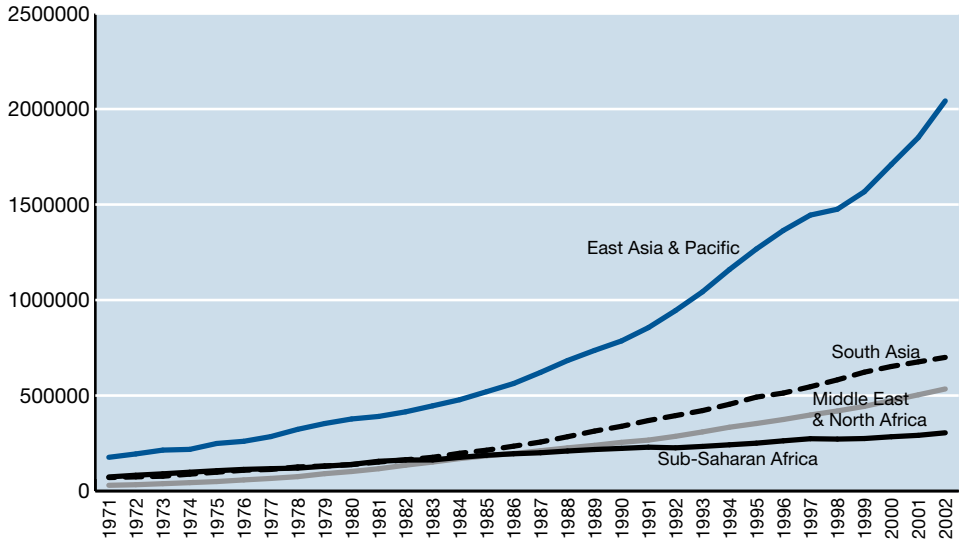
Land-locked African countries, in particular, suffer from high transport costs and transport delays through customs and legal and illegal roadblocks. Regional integration is especially important for land-locked countries since they depend on the efficiency of the transport and customs systems of the transit country. More needs to be done by African countries at the political level in order to harmonize cross-border regulations, customs and administration, improve infrastructure and speed up the process of regional integration. It is important to note here that efforts by RECs, such as the Common Market for Eastern and Southern Africa (COMESA), to facilitate customs clearance and abolish visa requirements among member States will facilitate border-crossing and foster trade.

Overall, infrastructure has improved in Africa over the last few decades, though most of these improvements are due to innovations in the telecommunication sector. Telecommunication coverage has significantly improved in SSA from 6.9 subscribers

per 1000 people in 1975 to 61.9 subscribers in 2003. Improvements in road infrastructure are mixed. Between 1990 and 1999, SSA's total road network has expanded from 1.107 million km to 1.488 million km. However, a few large countries (namely Nigeria and South Africa) accounted for the bulk of this expansion, while in some countries such as Angola and Zimbabwe, road infrastructure has been depleted. Electricity production in SSA quadrupled between 1970 and 2002, but energy supply still fell short of demand and improvements have been relatively small compared to improvements in other sub-regions (see figure 4.8).

"Infrastructure improvements in Africa over the last few decades are due to innovations in the telecommunication sector"

Figure 4.8
Energy production in Sub-Saharan Africa and other sub-regions, 1971-2002 (million kwh)



***Source**: World Development Indicators 2005*

Good energy supply is critical for economic transformation. Inability to provide reliable energy services has been a major constraint on export diversification and development of the manufacturing sector in many African countries (UNECA 2004a). Energy consumption varies by activity and some activities are more energy dependent than others. Many of the African countries that have reached meaningful levels of economic transformation (e.g. Lesotho, Mauritius and Tunisia) started with the manufacturing of textiles, which is a highly energy-consuming process. Energy consumption increases from yarn to fabric finishing and from synthetic to natural fibres (Schmidt 1999).

The role of industrial and trade policy

Lack of sound industrial and trade policies is among the major reasons why Africa has not been able to attract the type of capital flows that has more potential to promote economic transformation. Attracting capital flows to sectors such as manufacturing or exportable services requires deliberate policy decisions that change the incentive structure for investors. Good policies and institutions can be as much a pull-factor for FDI as natural resource endowment (Asiedu 2006).

In East Asia, substantial capital flows followed effective trade and industrialization strategies, resulting in improved business environment, policies, institutions and infrastructure (Aryeetey et al. 2003). Before the economic take-off of East Asia around the mid-1980s, Africa received more capital inflows relative to GDP than East Asia.[5] However, capital flows to East Asia more than doubled in the 1990s compared to the 1980s. Success in trade and industrialization strategies, together with increased capital flows, boosted growth and economic transformation in East Asia.

> *Attracting capital flows to manufacturing or exportable services requires a change in the incentive structure for investors*

In contrast, trade and industrialization strategies failed in many African countries, accounting partly for the weak growth performance on the continent (Soludo et al 2004).[6] Earlier attempts to promote economic growth and transformation in Africa through import substitution strategies (ISSs) were unsuccessful (box 4.1). Due to small domestic market size and poor governance, ISSs failed to promote competitive industries and most established firms could only survive on direct and indirect government subsidies. The cost of the support to these industries contributed to unsustainable external and domestic debt levels that led to exchange-rate depreciation and high inflation rates in many African countries.

The SAPs adopted by many African countries in the 1980s and 1990s to resolve these imbalances were focused almost exclusively on macroeconomic stabilization and trade liberalization with no clear industrial policy. A major deficiency in these SAPs were is that they left accumulation and growth to market forces without adequate attention to shortcomings in markets, institutions and physical and human capital (UNCTAD 2000). Consequently, freeing markets and privatization of public enterprises did not generate adequate private investment to expand output and employment. While macroeconomic stability improved in many countries, Africa's share in global exports saw a sharp fall from 4.1 per cent in 1980 to 1.6 per cent in 2000 before recovering to 2.3 per cent in 2003 thanks to oil and mineral exports. Likewise, Africa's share in world trade dropped from 8 per cent in 1980 to 1.3 per cent in 2000 and then rose to 2.3 per cent in 2003. More importantly, Africa's share in manufactured exports remained close to zero.

5 Total capital flows to Africa amounted to 112.7 per cent of capital flows to East Asia in 1970-1979, 97 per cent in 1980-1989, 37.6 per cent in 1990-1999 and 55 per cent in 2000-2003.

6 Per capita GDP growth has been below 1 per cent in Africa compared to over 5 per cent in East Asia.

Box 4.1
Import substitution strategies (ISSs) and Africa's failed transformation

From independence to the early 1980s, most African countries adopted ISSs aiming at producing consumer goods and moving towards producing intermediate and capital goods. ISSs were accompanied by restrictive policies, including complex systems of tariff and non-tariff protection, as well as exchange control and import licensing.

Initially, ISSs boosted manufacturing output relative to GDP and led to increased industrial employment. During the 1970s, Africa maintained an average annual rate of industrial growth of 5.5 per cent, but the industrial growth rate declined to 2.5 per cent during 1980-1984 and 0.4 per cent in 1985-1987.

Eventually, ISSs failed because of economic mismanagement and policy problems. The production of final goods relied heavily on imported inputs, adding to the recurrent balance-of-payments deficits. Small domestic markets did not generate sufficient demand for emerging industries to grow and take advantage of economies of scale. Instead of increasing the productivity of new industries, the strategies generated rent-seeking behaviour by firms that were insulated from international competition.

***Source**: UNECA (2004b).*

Options for industrial and trade policy to foster economic transformation

"Industrial and trade policy can improve the competitiveness of local industry and attract foreign investment"

Industrial and trade policy can stimulate economic growth and transformation by assisting new industries to emerge, improving the competitiveness of local industry and attracting foreign investment in industry. In particular, trade liberalization can promote economic transformation through shifts in domestic demand and private investment in favour of domestic industries – as a result of real exchange rate changes and removal of import restrictions and non-tariff barriers. Also, trade liberalization can encourage manufacturing and exports by reducing the waste stemming from rent-seeking behaviour and reforming the system of import and export licensing as well as the general institutional environment (Rodrik 2000). Improved institutional and policy environment would reduce costs, create comparative advantages for new industries, and lead to reallocation of resources in favour of more competitive industries.

As noted above, incoherent industrial and trade policies, compounded by control regimes and structural constraints, have led to meagre gains from trade liberalization and the slow economic transformation in Africa.[7] Africa needs coherent strategies and market-based reforms to address both demand- and supply-side constraints to industrialization and economic transformation. Industrial policy experiences in East Asia, in particular, provide a framework in which many African countries might be able to

7 Fosu and O'Connell (2006) argue that avoiding anti-growth syndromes, including control regimes, adverse redistribution, unsustainable public spending and State failure, could have boosted Africa's growth by between 1 and 2.5 percentage points.

design and implement successful industrial strategies. However, it would be too simplistic to advise African countries to replicate these experiences, given the differences between the conditions that prevailed in East Asia in the 1970s and 1980s compared to those in Africa today.

The process of industrialization in East Asia, like that in Africa, began with ISSs and gradually shifted to export promotion through a combination of policy, institutional and structural reforms. Policy choices aimed at promoting a stable macroeconomic environment, high education levels, efficient financial systems, and openness to foreign trade, were combined with selective interventions that included an export push, directed credit, and selective promotion of industries in East Asia.

Multiple policy tools may be needed for pursuing domestic and international goals at the same time

These policies worked within an institutional framework that was characterized by technocratic insulation from direct political pressure, high-quality civil service, and sound monitoring. This resulted in fast accumulation and efficient allocation of physical and human capital, improved mobilization of domestic and external resources, high returns on investment, and rapid technical progress through importation and adoption of technology (Aryeetey et al 2003). Large investments in human capital and new technologies brought about significant gains in productivity and international competitiveness in East Asia, where governments employed export promotion strategies that were regularly audited and reviewed according to well defined targets.

In addition to creating a sound macroeconomic environment, improved infrastructure and adequate incentive structure, the success of industrialization in Africa will require measures that promote entrepreneurship and address market failures. Entrepreneurial skills including accounting and management skills, risk-taking and the ability to perceive and exploit profitable opportunities are essential for starting and operating a successful firm (Noland and Pack 2003).

Firm surveys in Tanzania, Uganda and Zimbabwe show that an entrepreneurial attitude is the key to successful businesses (Trulsson 1999). Most of sampled firms were started because the business owner saw a good business opportunity. Entrepreneurship may partly be promoted through centralized technical support, by incorporating entrepreneurial skills in high school and university curricula and through training (UNECA 2005).

Depending on their specific endowments and opportunities, individual countries need to explore possibilities for industrial policy to accelerate growth through research and development (R&D) or output-subsidization schemes aimed at supporting new product development, innovation and growth.[8] The appropriate policy response could vary from export subsidies to export tax if price competition rather than quantity competition is assumed. Multiple policy tools may be needed for pursuing domestic and international goals at the same time. Since policy interventions involve costs, governments have to carefully weigh all possible alternatives for using scarce resources. However, the success of industrial policy will critically depend on the government's

8 Grossman and Helpman (1991) cited by Noland and Pack (2003).

human and financial resource capacity to implement and sustain the various components of the industrialization programme (Noland and Pack 2003:19).

In Nigeria, the lack of coherent and sustained strategies constrained economic growth and transformation

4.4 Experiences of capital flows and economic transformation in Africa

This section examines the experiences of Mauritius and Tunisia with the aim of highlighting the role of capital flows in their relative success in economic transformation compared to the rest of Africa. It also examines the experience of Nigeria, where lack of coherent and sustained strategies constrained economic growth and transformation despite its substantial endowment in natural resources. Table 4.4 summarizes indicators of economic growth and transformation in the three countries.

Table 4.4
Indicators of economic growth and transformation in Tunisia, Mauritius and Nigeria, 1970-2003

	Tunisia		Mauritius		Nigeria	
	1970-74	**2000-03**	**1970-74**	**2000-03**	**1970-74**	**2000-03**
Real GDP per capita (2000 $US)	976	2121	1667*	3974	386	338
Agriculture value added (% of GDP)	19.3	11.6	20.7	6.4	37.3	29.2
Industry value added (% of GDP)	21.9	28.7	26.0	31.1	22.3	46.2
Manufacturing value added (% of GDP)	9.2	18.3	15.3	23.1	3.7	4.1
Services value added (% of GDP)	58.8	59.7	53.3	62.5	40.4	24.6
Manufacture exports (% of merchandise exports)	19.9	80.2	5.0	75.3	0.5	0.2
Total capital flows (% of GDP)	9.8	8.4	3.5*	5.0	2.5	8.4

***Source**: World Development Indicators 2005. * Figures are for 1975-1989.*

Tunisia

Tunisia undertook many institutional and economic policy reforms in the last three decades which were aimed at opening up the economy, encouraging economic diversification and enhancing competitiveness (OECD and ADB 2005). Sound macroeconomic management, with small external debt in Tunisia, resulted in low and stable inflation and in an effective exchange rate regime (Elbadawi and Kamar 2005). A favourable business environment, strengthening of the financial sector, modern infrastructure, and human resource development strategies through education and training underpinned market-oriented reforms. Currently, Tunisia ranks 58th worldwide and 4th in Africa in terms of ease of doing business (World Bank 2006). Trade

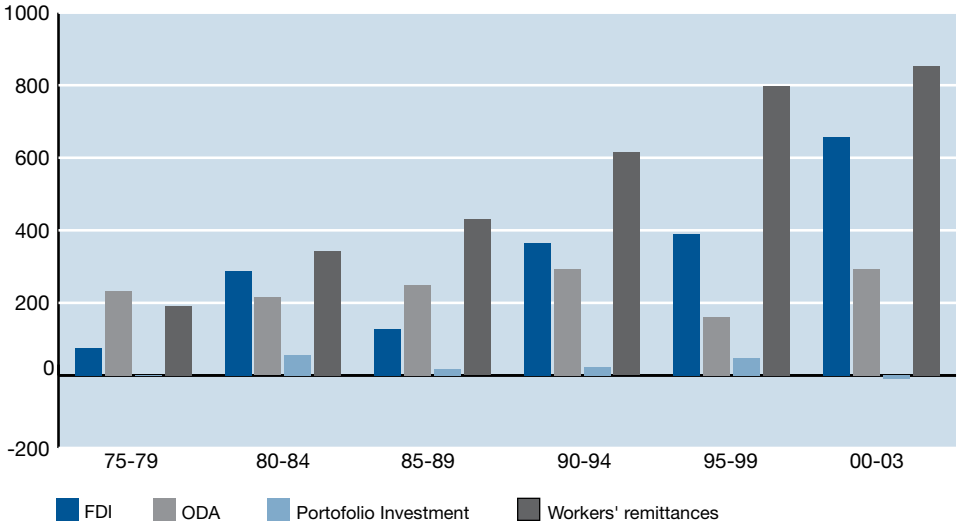
liberalization benefited from Tunisia's central position in North Africa, proximity and access to EU markets and industrial policies that encourage technology transfer and adoption, creativity and innovation.

Between 1970 and 2003, Tunisia's real per capita income grew at an average rate of about 3 per cent (table 4.4). This growth was associated with a steady, though slow, reduction in the share of agriculture in GDP. The share of industry rose from 22 per cent in 1970-1974 to 32 per cent ten years later, but declined to an average of 29 per cent during 2000-2003. A significant feature of structural change in Tunisia was the rise in industrial employment from 34.3 per cent of total employment in 1962-1969 to 45 per cent in 1995-2000. At the same time, agricultural employment declined from 45.9 per cent of total employment to 23 per cent (Ayadi et al 2005). Services and other sectors, including a booming tourist industry, accounted for the largest share in Tunisia's GDP in 1970-2003.

Manufacturing is the only sub-sector that experienced a sustained upward trend since 1970, increasing from 20 per cent of merchandise exports in 1970-1974 to 80 per cent in 2000-2003. This represents a remarkable success compared to Africa's average of 22 per cent during the same period. Despite signs of increasing importance, industry and manufacturing does not yet play a dominant role in Tunisia's economy.

As Tunisia's economy developed, capital inflows continued to rise at a high rate. The composition of these flows also changed over time in favour of private capital, especially FDI separate from workers' remittances (figure 4.9). However, portfolio investment flows remain very small, reflecting the underdevelopment of equity markets in Tunisia. The trend of overall private flows to Tunisia mirrors the East Asian experience in that substantial increases in capital flows seem to follow improvements in policies, institutions and physical and human infrastructure in an open export-oriented economy.

Figure 4.9
Average capital flows to Tunisia ($US million)



***Source**: World Development Indicators 2005*

"Further structural reforms are needed for Tunisia to improve the business environment and industrial competitiveness"

Over 2,600 foreign or jointly-owned firms operated in Tunisia in 2004, providing 243,000 jobs.[9] These firms operate predominantly in manufacturing in the areas of electrical and electronic products, automotive components, plastic and textile industries, leather and footwear, agricultural and food industry, packaging, ICT and tourism. They export 85 per cent of their output, mostly to Europe.

Policies to promote private sector development, expand markets, and harness resources to increase investment rates and productivity were associated with relatively high saving and investment rates in Tunisia compared to other African countries. Although these rates are lower than the rates that prevailed in East Asia during the same period, sustained growth reduced poverty in Tunisia to a level comparable to that in the best performing East Asian countries: Tunisia's poverty rate dropped from over 20 per cent in 1980 to 4 per cent in 2000 (Ayadi et al 2005).

Diversification strategies enabled Tunisia to cope with unfavourable changes in the external environment, such as high oil prices, and consecutive droughts in the early years of the millennium decade.[10] However, further structural reforms are needed for Tunisia to improve the business environment and industrial competitiveness and promote resource mobilization and investment.

9 FDI Magazine at www.fdimagazine.com/news/printpage.php/aid/1349/Taleoftunisiantransformation. [Date accessed: 02-01-2006].

10 Tunisia is an oil producer but it is still a net oil importer.

Mauritius

Mauritius has substantially transformed its economy, moving from a nearly single-good economy based on sugar to a more diversified economy based on manufactured exports and services. Over time, the share of agriculture in GDP decreased significantly, from 20.7 per cent in 1970-1974 to 6.4 per cent in 2000-2003, while the share of industry rose from 26 per cent to 31 per cent (table 4.4).

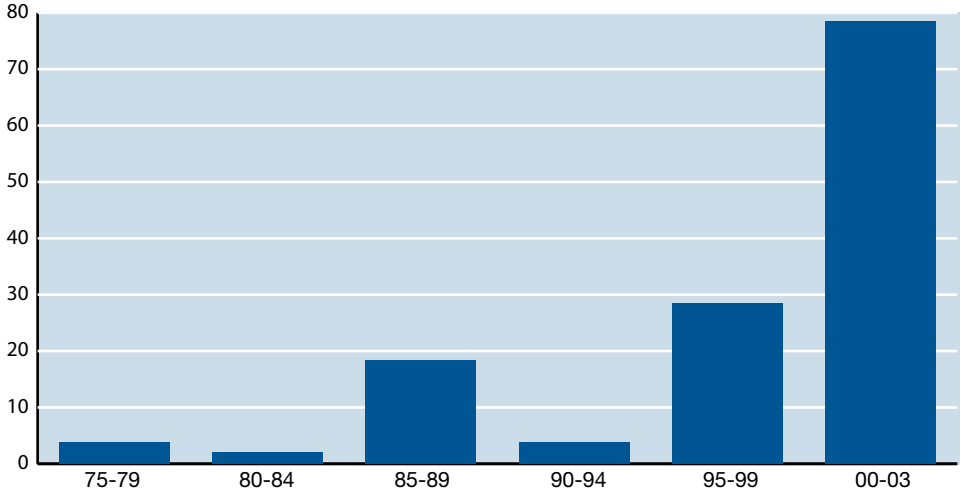
Mauritius has substantially transformed its economy, moving from a nearly single-good economy to a more diversified economy

The economic transformation of Mauritius was not influenced by capital flows, but capital flows increased after Mauritius had developed its manufacturing sector. Investment in export-processing zones (EPZs) was at the beginning dominated by domestic capital. The boom in sugar prices in the early 1970s led to substantial windfall gains. Sugar companies used unanticipated profits to invest in joint ventures with foreign investors in EPZs, taking advantage of promising conditions such as tax holidays and duty-free imports.

Mauritius had several growth phases, starting with the sugar-boom driven growth of the 1970s. The take-off phase started during this period with the establishment of EPZs and government programmes to improve human capital. Education was made free at all levels in 1976 and health services were significantly improved (Nath and Madhoo 2003). Mauritius started to stabilize the economy and expanded export-led industries after 1983. The new strategy led to an average per capita growth rate of 6.6 per cent between 1985 and 1989 (Nath and Madhoo 2003). After 1989, Mauritius further diversified its economic base with tourism becoming another pillar of the economic transformation strategy.

Mauritius received substantial FDI starting from the mid-1990s (figure 4.10). In 1989, an offshore centre was set up, attracting more than $4 billion of offshore funds. At the same time, the Stock Exchange of Mauritius (SEM) started to operate, setting the stage for further capital mobilization (Nath and Madhoo 2003). FDI increased from an average of $2 million between 1985 and 1989 to $78.4 million in 2000-2003.

Figure 4.10
Foreign direct investment in Mauritius (BoP, current million of $US)



***Source**: World Development Indicators 2005*

"Mauritius needs to diversify further in order to remain competitive"

As a result of successful reforms, Mauritius was classified as the most competitive economy in Africa in 1998 (Nath and Madhoo 2003). Currently, Mauritius ranks twenty-third worldwide and first in Africa in terms of ease of doing business (World Bank 2006). The essence of Mauritius's success has been a gradual and targeted openness associated with strong tax and other incentives to promote trade (Subramanian and Roy 2001).

In addition to good policies and democratic culture and practice since independence, with strong participatory institutions, Mauritius has benefited from its cultural diversity and geographic proximity to China. This proximity has attracted large FDI from China (Subramanian and Roy 2001). Moreover, many Chinese manufacturing producers moved to Mauritius in order to circumvent export quotas imposed on Chinese firms operating in China through trade agreements between the latter and other countries such as the United States.

However, Mauritius' economy has now reached a point where it has to diversify further in order to remain competitive. Increasing wages in Mauritius and stiff competition from Asia are threatening the textile sector's competitiveness. The economy also suffers from high unemployment (which reached 11 per cent in 2004-2005) and a large public debt (71.8 per cent of GDP in 2004-2005). The Government plans to attract greater private capital flows through privatization of parastatal enterprises in the sugar and textile sectors. The Government also plans to continue to focus on investment in education and telecommunication in order to further transform the economy to a service-oriented economy. The success of these efforts hinges on the ability of the Government to manage its high budget deficits.

Nigeria

Nigeria provides an example of a country which, because of policy failures, failed to achieve sustainable growth and economic transformation despite substantial FDI inflows combined with a sound human capital base. This failure stemmed from the rent-seeking and predatory behaviour of past regimes (Asadurian et al 2006; Herbst and Soludo 2001).

The Nigerian economy was dependent on agriculture until the early 1970s when oil revenues began to rise. The 1970s oil boom spurred massive government spending and investment in public sector projects and supported import substitution industrialization that depended heavily on imported inputs. Overvaluation of the exchange rate and expansion of expenditures on non-tradable goods undermined competitiveness of agricultural and manufactured goods.

The collapse of oil prices in the early 1980s and decreased oil exports, due to a cut in the OPEC production quota for Nigeria, led to a sharp decline in government revenue and a sizeable current account and fiscal deficits (Herbst and Soludo 2001: 657). These imbalances caused a decline in foreign-exchange reserves and an increase in external debt from 5 per cent of GDP in 1980 to 23 per cent in 1985. Real per capita income fell from $386 in 1970-1974 to $335 in 1980-1985 and remained almost stagnant ever since (table 4.4).

The share of industry in GDP more than doubled between 1970-1974 and 2000-2003 with notable fluctuations due largely to changes in oil prices and revenue. At the same time, the contribution of manufacturing to GDP fell sharply from a peak of 9 per cent in 1980-1984 to 4.1 per cent in 2000-2003. The share of agriculture in GDP fluctuated around 30 per cent, but that of the services sector declined rapidly from 40 per cent in 1970-1974 to about 24 per cent in 1990-2003. Contraction of the services sector in Nigeria contrasts sharply with the situation in developing countries in general and reflects the poor state of infrastructure, unfavourable business environment and other factors that hampered foreign as well domestic investment in this sector.

Following huge macroeconomic imbalances in 1981-1986, patchy economic policy in Nigeria concentrated on structural adjustment throughout 1986-2000, with limited scope for growth and transformation. In general, the broad objectives of the reform programmes were to restructure and diversify the economy; promote sustainable non-inflationary growth; reduce unproductive public investment, improve public sector's efficiency, and enhance the growth potential of the private sector (Herbst and Soludo 2001). These objectives were to be realized through a realistic exchange rate policy coupled with liberalization of external trade and the payments system, appropriate market-based pricing policies, reduction in administrative controls, and rationalization and restructuring of public expenditure and customs tariffs (Herbst and Soludo 2001).

The reforms were largely unsuccessful because of poor policy design, inappropriate sequencing, and lack of political will (Herbst and Soludo 2001; Asadurian et al. 2006). Consequently, the economy continued to depend on oil and agriculture, while privatization strategies failed to spur private sector development.

Further reforms as well as more time are needed for recent policy reforms to generate growth and transformation in Nigeria

With the return to civilian rule in 1999, Nigeria adopted a comprehensive plan aimed at achieving macroeconomic stability, reducing poverty and combating corruption (OECD and ADB 2005). Since 2000, policy reforms have been relatively more successful in reducing imbalances and in stabilizing the economy. Recently, high oil prices and improvements in the macroeconomic environment have led to higher GDP growth rates. Currently Nigeria ranks ninty fourth worldwide and ninth in Africa in terms of ease of doing business (World Bank 2006).

Further reforms as well as more time are needed for recent policy reforms to generate growth and transformation in Nigeria. Indeed, while democratization and liberalization processes have created a more favourable business environment, severe constraints continue to hamper private-sector development. These constraints include infrastructure deficiency (especially unreliable power supply), inadequate access to financing, insecurity, weak institutions, ill-defined property rights and enforcement of contracts and the unstable macroeconomic environment (OECD and ADB 2005: 373).

The above country examples clearly illustrate the good policies needed for an economy to move from commodity dependence to a wider base, dominated by manufacturing and services. Both Mauritius and Tunisia are relatively resource-poor compared with Nigeria. Yet, they achieved a state of economic transformation that will take Nigeria years to achieve. Initial economic transformation through manufacturing in Mauritius and Tunisia spurred further transformation through services. Conversely, inability to transform through manufacturing in Nigeria was accompanied with contraction in services. Many other African countries, e.g. Algeria and Libya, had both greater resources and similar or better trade opportunities than Mauritius and Tunisia. However, they failed to use them to trigger economic transformation, mainly because of the lack of sound macroeconomic policies and industrial strategies.

4.5 Conclusion and policy recommendations

Capital flows are neither a necessary nor a sufficient condition to trigger economic transformation. Lack of economic transformation in Africa is due to a combination of shortcomings in policy, institutions and physical and human infrastructure. Overcoming these constraints is important for economic transformation, which is critical for attaining sustainable growth and reducing Africa's vulnerability to shocks. The analysis of the links between capital flows and economic transformation in Africa indicates that:

- Capital flows to Africa during the last four decades have not been accompanied by economic transformation. In countries such as Mauritius and Tunisia, with relatively greater degrees of economic transformation, structural change was not due to capital flows but rather to a combination of sound policies and reforms that attracted domestic and foreign investment into sectors that were more conducive to export promotion and economic diversification;
- For most of the time, ODA has been the most important source of capital inflows to Africa. However, ODA flows to Africa have been largely channelled to primary education and other services with very little flow to infrastructure. ODA, in its current structure, has had limited impact on economic transformation. Higher flexibility in donor policy to ensure a more balanced and productive allocation of ODA flows among various sectors would enhance the effects of ODA on economic transformation;
- FDI to SSA is mainly directed to extractive sectors, especially oil and minerals. Such FDI will not induce economic transformation unless revenues from oil and minerals are adequately used to develop infrastructure and institutions and to spur investment in other sectors;
- Portfolio flows to Africa are unlikely to affect economic transformation as they are quite small in volume and go to countries with more diversified economies and active capital markets; and
- Research indicates that remittances have been largely driven by the motive to support family consumption and have had little impact on economic transformation.

"As the policy environment improves, private capital flows are likely to follow with a greater impact on growth and economic transformation"

The absence of a notable relationship between capital flows and structural change in Africa is attributable to lack of appropriate policies to influence the nature and allocation of these flows. As the policy environment improves, private capital flows are likely to follow with a greater impact on growth and economic transformation through productivity enhancement, technology transfer, greater access to foreign markets and reallocation of resources in favour of more competitive sectors.

To promote structural transformation and maximize the contribution of capital flows to this process, Africa needs to:

- Mainstream economic transformation objectives in industrial and trade policies as well as in overall development strategies, and actively design and implement measures to initiate and maintain industrialization to ensure structural transformation. However, in some special cases, it might be more feasible for countries to pursue structural transformation through the services sector rather than industry;
- Maximize the role of capital flows in economic transformation within a holistic industrial policy framework, which effectively addresses problems of market failures and promotes entrepreneurship. Appropriate interventions to

enhance the impact of capital flows on economic transformation might be country-specific;

- Ensure that trade liberalization strategies are supported by measures that build trade capacity and raise productivity and competitiveness through technology transfer and adoption;
- Develop a sound human capital base to enhance absorptive capacity and spillover effects from FDI;
- Upgrade the physical infrastructure, which presently hampers economic transformation. With a good human capital base and sufficient infrastructure, Africa could attract the type of capital flows, namely non-extractive FDI, that are more likely to promote economic transformation; and
- Enhance regional integration, which can be a major boost to industrialization by facilitating intra-regional movement of capital and labour and expanding markets for local producers.

References

Aryeetey, E., Court, J. Nissanke, M. and B. Weder (eds.) 2003. "*Asia and Africa in the Global Economy.*" Tokyo, Japan: United Nations University Press.

Asadurian, T., Nnadozie, E. and L. Wantcheon. 2006. "Transfer Dependence and Regional Disparities in Nigerian Federalism." In Wallack, J. and T. N. Srinivasan (eds.) "*Federalism and Economic Reforms: International Perspectives.*" New York: Cambridge University Press.

Asiedu, E. 2006. "Foreign Direct Investment in Africa." The *World Economy,* Vol. 29 (1): 63-78.

AU, (the African Union) and UNECA (United Nations Economic Commission for Africa). 2005. "*Transport and the Millennium Development Gaols in Africa.*" Mimeo, February 2005.

Ayadi, M., Boulil, G., Lahouel, M. and P. Montigny. 2005. "*Pro-Poor Growth in Tunisia*". Paris, France: International Development and Strategies Publications.

Balasubramanyam, V.N.; Salisu, M. and D. Dapsoford. 1999. "Foreign Direct Investment as an Engine of Growth." *Journal of International Trade and Economic Development*, 8 (1): 27-40.

Berthelemy, J. and L. Soderling. 2002. "Will There Be New Emerging-Market Economies in Africa by the Year 2020?" IMF Working Paper WP/02/131.

Berthelemy, J. and L. Soderling. 2001. "The Role of Capital Accumulation, Adjustment and Structural Change for Economic Take-off: Empirical Evidence from African Growth Episodes." *World Development*, 29 (2): 323-343.

Carkovic, M. and R. Levine. 2002. "Does Foreign Direct Investment Accelerate Economic Growth?" University of Minnesota, mimeo.

Chowdhury, A. and G. Mavrotas. 2006. "FDI and Growth: What Causes What?" *The World Economy,* Vol. 29(1): 9-20.

Collier, P. 2003. "Primary Commodity Dependence and Africa's Future." In Pleskovic, B. and N. Stern "*The New Reform Agenda."* The World Bank. Washington, D.C.

Elbadawi, I. And B. Kamar. 2005. "The Great Debate on Exchange Rate Regimes: Why should the MENA Region Care?" Paper presented at the 12th Economic Research Forum Conference, 17-21 December, Cairo, Egypt.

Erixon, F. 2005. "*Aid and Development: Will It Work This Time*?" London: International Policy Network.

Fosu, A. 1996. "Primary Exports and Economic Growth in developing Countries." *The World Economy* 19 (4): 465-475.

Fosu, A. 1990. "Exports Composition and the Impact of Exports on Economic Growth of Developing Economies." *Economics Letters* 34 (1): 67-71.

Fosu, A, and S. O'Connell. 2006. "Explaining African Economic growth: The Role of Anti-Growth Syndromes." In Bourguignon, F. and B. Poleskovic (eds.) "*Growth and Integration.*" Proceedings of Annual World Bank Conference on Development Economics. The World Bank, Washington, D.C.

Herbst, J. and C. Soludo. 2001. "Nigeria", In Devarajan, S., Dollar, D. and T. Holmgren (eds.) "*Aid and Reforms in Africa: Lessons from Ten Case Studies.*" The World Bank. Washington, D.C.

Hoeffler, A. 2000. "The Augmented Solow Model and the African Growth Debate." *CID Working Paper* No. 36. Center for International Development. Harvard University.

Laplagne, P., Treadgold, M. and J. Baldr. 2001. "A Model of Aid Impact in Some South Pacific Microstates." *World Development*. 29(2): 365-385.

Lim, E. 2001. "Determinants of and the Relation Between Foreign Direct Investment and Growth: A summary of the Recent Literature." *IMF Working Paper* WP/01/175. Washington, D.C. USA

Nath, S. and Y. Madhoo. 2003. "Explaining African Economic Growth Performance: The Case of Mauritius." Interim Report on Mauritius Case Study for the African Economic Research Consortium Project "Explaining African Economic Growth Performance". March 2003.

Ndulu, B. and S. A. O'Connell. 2005. "Policy Plus: African Growth Performance 1960-2000." Paper presented at the plenary session on Explaining African Economic Growth. African Economic Research Consortium, Nairobi, May 2005.

Ndulu, B. and S. A. O'Connell. 2003. "*Revised Collins/Bosworth Growth Accounting Decompositions*." Explaining African Economic Growth Project. African Economic Research Consortium. Nairobi, Kenya.

Noland, M. and H. Pack. 2003. "*Industrial Policy in an Era of Globalization: lessons from Asia.*" Institute for International Economics, Washington, D.C.

O'Connell, S. and B. Ndulu. 2000. "*Africa's Growth Experience: a Focus on Sources of Growth*." Explaining African Economic Growth Project. African Economic Research Consortium. Nairobi, Kenya.

OECD and ADB. 2005. "*African Economic Outlook 2005."* OECD publications.

Pritchett, L. 1996. "Where has all the Education Gone?" *World Bank Policy Research Working Paper* No. 1581, Washington, D.C.

Rodrik, D. 2000. "*Trade Policy Reform as Institutional Reform.*" Harvard University, mimeo.

Subramanian, A. and D. Roy. 2001. "Who can Explain the Mauritian Miracle? Meade, Romer, Sachs, or Rodrik?" IMF Working Paper WP/01/116, Washington, D.C.

Trulsson, P. 1999. "Managing Growth: Perspectives on Achieving Small Enterprise Growth in Tanzania, Uganda and Zimbabwe." Working Paper PMD-4. International Labour Organization, Action Programme on Productivity Improvement, Competitiveness and Quality Jobs in Developing Countries, Geneva.

UNCTAD. 2005 "*Economic Development in Africa: Rethinking the Role of Foreign Direct Investment*." Geneva.

_____. 2002. "*Review of Maritime Transport 2002*." Geneva.

_____. 2000. "*Capital Flows and Growth in Africa*", Geneva.

UNDP (United Nations Development Programme). 2006. "Human Development Report

_____. 2005: Online Statistics." http://hdr.undp.org/statistics/data/ [accessed: 20 June 2006]

UNECA. 2005. *The Economic Report on Africa 2005: Meeting the Challenges of Unemployment and Poverty Reduction in Africa*. Addis Ababa, Ethiopia.

_____. 2004a. "*The Economic Report on Africa 2004: Unlocking Africa's Trade Potential*." Addis Ababa, Ethiopia.

_____. 2004b. "*Assessing Regional Integration in Africa*", ECA Policy Research Report, Addis Ababa.

_____.2004c. "*Scoring African Leadership for Better Health.*" Addis Ababa, Ethiopia.

World Bank. 2006 "*Doing Business in 2006.*" Washington, D. C.

_____. 2005. *World Development Indicators*. Washington, D.C.