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POLICY BRIEF

RISING PRODUCTIVITY OF CAPITAL: THE UNTOLD STORY OF AFRICA'S RECENT GROWTH*

As a result of Africa's relatively good economic performance over the past two decades, there is the view that the continent has reached a turning point in its development history and is poised to play a more significant role in the world economy in the medium to long term. Yet not much is known about the nature and character of the continent's recent growth. This policy brief identifies the rising productivity of capital in Africa as an important characteristic of recent growth that has not been discussed in the literature and offers policy recommendations on how to sustain and improve upon the progress that has been made in this area.

Key points

- Africa's recent growth has gone hand in hand with a significant increase in the productivity of capital
- The productivity of capital in Africa in the period 2000–2011 was much higher than those of developing countries in America and slightly higher than those of Asia
- Although there has been an improvement in the efficiency of total investment, compared to the private sector the efficiency of public investment is still relatively low

Introduction

The twenty-first century began with high hopes and bright prospects for economic development in Africa, prompting some analysts to suggest that it would be the African century. This optimism emanates from the fact that the economic growth performance of most countries in the continent over the past decade has been good, relative to Africa's historical growth performance and also relative to the average growth rate for the global economy. As shown in table 1, the average annual growth rate of real output increased from 1.8 per cent in the period 1980–1989, to 2.6 per cent in 1990–2000 and 5.3 per cent in the period 2000–2010.

Notwithstanding the euphoria associated with Africa's recent growth and the growing literature on the subject, not much is known about the nature and characteristics of this growth, apart from the widely acknowledged fact that on the supply side it has been driven mostly by services, and on the demand side it has been driven by high domestic demand associated with an increase in commodity prices. Against this backdrop, unpacking Africa's growth story is of crucial importance in understanding how to move the continent's development agenda forward. This policy brief highlights one of the features of Africa's recent growth – namely the rising productivity of capital – and offer suggestions on how to sustain as well as improve upon the progress that has been made in this area over the past two decades.

Table 1
Average annual growth rates of real output
(Percentage)

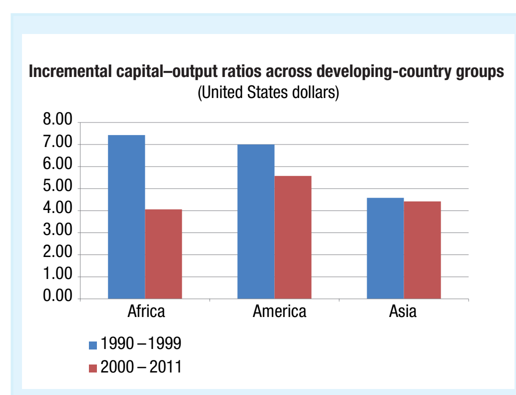
	1970–1980	1980–1989	1990–2000	2000–2010	2008–2012
World	3.80	3.26	2.82	2.77	1.65
Developing economies	5.80	3.53	4.89	6.07	5.17
Africa	4.22	1.81	2.62	5.28	3.79
America	5.97	1.76	3.12	3.64	3.02
Asia:	6.18	5.34	6.24	7.13	6.09
Eastern Asia	7.80	9.66	8.13	8.30	7.20
Oceania	2.86	3.79	2.38	2.87	3.41

Source: UNCTAD, 2014. *Economic Development in Africa Report 2014: Catalysing Investment for Transformative Growth in Africa.* (New York and Geneva, United Nations publication).

*The ideas and issues discussed in this policy brief are based on information in the UNCTAD *Economic Development in Africa Report 2014* subtitled *Catalysing Investment for Transformative Growth in Africa*.

Recent growth and the productivity of capital in Africa

An interesting and crucial fact on Africa's recent growth which has not been identified and emphasized in the literature until now is the fact that recent growth has gone hand in hand with a significant increase in the productivity of capital. Increases in the productivity of capital are important because they are an essential source of growth, as well as a major determinant of competitiveness. Such increases enhance Africa's ability to compete and integrate into the global economy. The incremental capital–output ratio (which measures the degree of inefficiency in the use of capital) declined from 7.4 over the period 1990–1999, to 4.1 in the period 2000-2011 (see figure). This means that producing an additional unit of output in Africa required $4.1 in 2000–2011 compared to $7.4 of capital in 1990–1999 – a reduction of almost half.



Source: UNCTAD, 2014. *Economic Development in Africa Report 2014: Catalysing Investment for Transformative Growth in Africa.* (New York and Geneva, United Nations publication).

The evidence also indicates that compared to other developing-country groups, the productivity of capital in Africa in the period 2000–2011 was much higher than those of developing countries in America and slightly higher than those of Asia. This represents a big shift compared to the 1990s, when capital was less productive in Africa than in other developing-country groups. Some of the factors that have contributed to productivity increases in Africa over the past decade include improvements in infrastructure, relatively better access to technology and policy reforms that reduced the transaction costs linked to production, trade and investment.

While there has been a significant improvement in the productivity of capital at the aggregate level, it should be noted that there were 22 countries in the continent for which the productivity of capital either did not change or declined between 1990–1999 and 2000–2011 (table 2). Furthermore, there is some evidence that the efficiency of public investment in Africa is low despite the observed increase in the productivity of aggregate capital. These facts indicate that more efforts will be needed by African countries to sustain or improve upon the recent increases in the productivity of aggregate capital.

Policies to sustain and improve upon recent increases in the productivity of capital in Africa

If Africa is to sustain and improve upon the recent increase in the productivity of aggregate capital, it will have to put in place policy measures to increase the efficiency of both private and public investments. Enhancing the efficiency of private investment in Africa requires easing binding constraints that are affecting the competitiveness of enterprises. These include skills shortages, poor infrastructure, low access to finance and high costs of factor inputs. It also requires firms targeting investments in sectors with higher value addition. Some of these issues cannot be effectively addressed without public investments in both hard and soft infrastructure. And this calls for strengthening efforts to mobilize domestic resources and also use them more efficiently. It will also require improving the quality of public investments to reduce waste and maximize the impact of existing investments. The evidence indicates that, although there has been an improvement in the efficiency of total investment, compared to the private sector the efficiency of public investment is still relatively low. This requires urgent attention since it creates waste and tends to weaken the link between public and private capital. Some policies for achieving this objective are discussed below.

Make project selection and delivery better

Poor project selection and inefficiencies in project delivery due largely to weak technical expertise, limited information and poor governance are some of the factors that account for the low productivity of public investments in Africa. Projects are often poorly

conceived and do not have a clear metric in the sense that they do not address clearly defined needs. In addition, project evaluation tends to be done in isolation rather than as part of a broader effort to achieve national development goals. Significant delays are also encountered in project delivery due in part to regulatory bottlenecks. In this regard, shortening the time it takes for project permit approvals and land acquisition would result in significant savings that could be used to address other development needs. There is a need for African Governments to address these weaknesses in public investment management in order to enhance the productivity of such investments and fully reap their benefits. The establishment of an independent and transparent approach for project evaluation, prioritization and decision-making is necessary to avoid project decisions being driven by political exigency. Building public sector capacity, particularly in using robust project selection and evaluation methods, and project delivery, is also important.

Get more value out of existing infrastructure

In Africa, there tends to be more focus on new infrastructure projects than on getting more value out of existing infrastructure assets through more efficient use and better maintenance of such assets. There are significant savings to be made from improved asset utilization in Africa. For example, a recent study indicates that electric power transmission and distribution losses in Africa were about 12 per cent of output in 2010. There is also direct loss of time and productivity due to traffic congestion, which by one estimate is as high as $8 billion per year in Cairo, $19 billion in Lagos, $0.89 billion in Dar es Salaam and $0.57 billion in Nairobi. Reducing these inefficiencies, for example through better project management and implementation, should be on the priority list of African Governments in the short to medium term.

Another factor that makes it challenging to get more value out of existing infrastructure assets in Africa is poor maintenance of assets due largely to inadequate provision for infrastructure maintenance in African national budgets. This lack of adequate funding for maintenance reduces the lives and productive value of public investments, resulting in waste and inefficiency, which is unfortunate given the limited resources that countries have at their disposal. One study suggests that if African countries had spent $12 billion on road maintenance in the 1990s they would have saved $45 billion in reconstruction costs. African Governments should pay more attention to infrastructure maintenance through earmarking increased resources for such projects in the national budget. This would, however, require mainstreaming maintenance more effectively into infrastructure planning and development.

Make more targeted public investments

Given the limited financial resources available to African Governments, there is a need for better targeting of public investments to enhance their impact. The focus of public investment should be on lifting the most binding constraints to development. Within infrastructure, for example, the focus should be on energy and transport which have been identified as the critical factors inhibiting the development of productive capacities in the region. Other infrastructure areas such as telecommunications are important but they are not as constraining as energy and transport. Over the past decade, there has been an increase in private sector participation in infrastructure in Africa. But most of the new investments are in telecommunications, with very little going to energy and transport, which have more binding constraints to the development of productive activities in the continent. Refocusing public investment in areas such as energy and transport, where it has been difficult to get adequate private sector participation, will go a long way towards enhancing the impact of such investments. Better targeting of public investment may require Governments to make a distinction between productivity-enhancing and utility-enhancing public investment, and to allocate more public expenditure towards the first category. Productivity-enhancing investments such as infrastructure are important drivers of transformative growth and should be accorded priority in allocation of public expenditures. Utility-enhancing investments such as expenditures on national defence and parks, for example, are useful but do not make any direct contribution to economic transformation and so should have less priority in budget allocations.

Table 2
Incremental capital–output ratios in African countries, 1990–2011

	1990–1999	2000–2011
Algeria	16.31	7.45
Angola	17.58	1.26
Benin	3.32	5
Botswana	4.17	5.68
Burkina Faso	4.44	3.68
Burundi	-16.84	4.54
Cameroon	11.98	5.35
Cape Verde	6.19	6.39
Central African Republic	6.17	7.14
Chad	3.35	3.14
Comoros	10.99	5.62
Congo	34.77	6.6
Côte d'Ivoire	4.15	27.12
Democratic Republic of the Congo	-1.5	3.68
Djibouti	11.81	4.12
Egypt	3.95	3.81
Equatorial Guinea	3.2	2.46
Eritrea	3.16	35.5
Ethiopia	2.43	2.68
Gabon	8.44	11.59
Gambia	6.46	6.83
Ghana	3.28	3.13
Guinea	7.01	10.79
Guinea-Bissau	23.85	3.16
Kenya	7.11	4.69
Lesotho	14.22	7.6
Liberia	24.56	2.92
Libya	5.81	-9.14
Madagascar	7.6	7.94
Malawi	6.27	3.84
Mali	4.4	4.01
Mauritania	4.9	6.62
Mauritius	5.25	5.31
Morocco	8.38	6.16
Mozambique	3.16	2.69
Namibia	4.69	4.79
Niger	4.7	5.68
Nigeria	3.95	1.03
Rwanda	5.23	2.18
Sao Tome and Principe	34.65	5.59
Senegal	5.97	6.06
Seychelles	5.29	11.5
Sierra Leone	-1	1.61
Somalia	-7.24	6.94
South Africa	11.72	5.03
South Sudan		
Sudan	2.29	2.7
Swaziland	4.73	6.67
Togo	5.94	7.54
Tunisia	4.86	5.9
Uganda	2.3	3.02
United Republic of Tanzania	5.95	3.62
Zambia	42.17	4.05
Zimbabwe	1.58	-27.06

Source: UNCTAD, 2014. *Economic Development in Africa Report 2014: Catalysing Investment for Transformative Growth in Africa.* (New York and Geneva, United Nations publication).
Note: A higher incremental capital–output ratio implies lower productivity of capital.

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