

Part 1: Growth and Poverty in Africa

Growth and Poverty in Africa: An Overview

Arne Bigsten^a and Augustin Kwasi Fosu^b

^aGöteborg University and ^bEconomic Commission for Africa,
United Nations and AERC

In light of the importance of pro-poor growth strategies in reducing the especially high poverty rates in Africa, the present article provides an overview for three pertinent papers. First, it is proposed that an important pro-poor growth strategy would entail a greater focus on the rural sector, paying particular attention to an appropriate institutional setup for attenuating urban-biased policies. Secondly, while recent economic reforms in African countries have not been anti-poor, there is the need to address microeconomic constraints in order to enhance the effectiveness of the macroeconomic reforms undertaken in many African countries. Thirdly, HIV/AIDS has had, and will continue to have, major deleterious impacts on the accumulation of human capital in Africa. This outcome is likely to emanate from substantial reductions in both the demand and supply of human capital, unless there are swift public policy interventions. Meanwhile, in order to guide the optimal reallocation of resources, there is an ardent requirement for detailed data as a basis for more reliable predictions of the adverse effects of the pandemic.

1. Introduction

African countries suffered from severe macroeconomic and structural imbalances, especially by the early 1980s. To revive economic growth, many of these countries entered into structural adjustment programmes aimed at macroeconomic stabilisation and liberalisation of their controlled economies. In spite of these reforms, most of the

countries have continued to experience stagnating per capita incomes and daunting levels of poverty.¹

The starting point of the three papers appearing in Part 1 of the present supplement is that the reforms were insufficient for creating a growth-sustaining environment. All three papers look beyond macroeconomic adjustments in an attempt to identify growth constraints, and to propose economic policy measures intended to address these constraints. For example, Germano Mwabu and Erik Thorbecke argue that the bulk of the poor are in the rural areas, and that development efforts should focus on the rural population. According to the paper by David Sahn and Stephen Younger, we need to look deeper into the microeconomic, structural and institutional constraints on growth and poverty reduction. Finally, the more narrowly focused paper by Nancy Birdsall and Amar Hamoudi examines the impact of the AIDS pandemic on the accumulation and utilisation of human capital in Africa.

2. Why Has the Rural Population Done so Poorly?

The article by Mwabu and Thorbecke, 'Rural Development, Economic Growth and Poverty Reduction in Sub-Saharan Africa', raises two major questions. First, why has development of the rural areas been so poor? Secondly, what policies should be pursued to improve the economic outcomes for the rural population?

The authors' answer to the first question is that there has been an urban bias in policy making, which has contributed to poor infrastructure in the rural sector. In addition, the rural economic environment is characterised by missing or poorly functioning markets. This situation has compelled the farmers to choose diversified subsistence, which has not been an effective basis for growth. More fundamentally, though, what factors have been responsible for such urban bias in policies? The political process might be a culprit (Bates, 1981). More recently, Fosu (2003), for example,

¹ Following Collins and Bosworth (1996), O'Connell and Ndulu (2000) decompose per capita GDP growth in a cross-section of countries by region and period. They find that Africa as a whole has done worse than other regions on all counts, that is, with regard to capital accumulation, human capital accumulation, and productivity growth. Nor did the situation improve in the 1990s, a period in which structural adjustment measures were being implemented in Africa, though with varying degrees of commitment. Meanwhile, at least one-half of the African population is reported to be living in poverty (Ali and Thorbecke, 2000).

argues that in a politically unstable environment, as has been the case in many countries in Africa, governments tend to maintain policies that favour overvalued exchange rates, which are biased toward imports mainly consumed by urban dwellers, but penalise (cash crop) exports produced primarily by the rural sector.

The vast literature on growth processes depicts what aspects of the economic environment are important for growth: macroeconomic stability, the functioning of markets, and an efficient system of institutions and property rights. When it comes to the deeper issues of what leads to the emergence and maintenance of a benevolent economic environment, however, the economic literature is much less certain.

To examine the importance of institutions in economic performance empirically, a number of studies have attempted to estimate reduced-form regressions, where per capita income or its growth by country is regressed directly on various proxies for institutional quality, including political institutions. Often the estimated coefficients for the institutional variables are highly significant. While these results suggest a strong association between economic performance and institutions, they generally do not reveal the direction of causality. More recent literature has attempted to address this causality problem by employing appropriate instruments for the institutional variables (Hall and Jones, 1999; Acemoglu *et al.*, 2001). Although scholars are still groping for explanations about what processes create good institutions, the argument that institutions are fundamental as determinants of other aspects of the economic environment, such as economic policies, appears convincing.

Mwabu and Thorbecke argue in favour of strengthening rural institutions. To the extent that they shape the design of policies, institutions clearly influence the development of the rural sector. Arguably, however, the problems of the rural sector in a deeper sense depend on the character of the fundamental institutions of the country as a whole and not just the rural institutions on which Mwabu and Thorbecke focus. If the big picture in terms of overall national policies is detrimental to growth, then micro-reforms will not be forthcoming; nor will they be effectively implemented, and so will fail to have the expected positive effects on the rural economy.

Another basic variable that has featured in the recent debate is geography as a determinant of African growth (Bloom and Sachs, 1998), but also as a determinant of institutions (Acemoglu *et al.*, 2002).

Though Mwabu and Thorbecke take a somewhat skeptical view of the role of geography as an explanation for the poor performance of African agriculture, droughts, for instance, are frequent in Africa and do have large adverse economic effects when they occur. Agriculture in Africa is relatively risky compared with other regions of the world, due in great part to the vagaries of the weather. Such volatility renders the task of rural or agricultural development more complicated in Africa. For example, in the 'two million' regressions of Sala-i-Martin (1997), one of the few robust variables was the distance to the equator, which had a strong negative effect on incomes. This result suggests that geography matters, and the effect is most likely transmitted via agriculture. Mwabu and Thorbecke indeed acknowledge that the diversity of the African environment makes it harder to come up with effective innovations in agriculture than was the case in Asia.

In discussing factor accumulation in the rural sector, the authors concentrate on investment in human capital. This emphasis may be due to the fact that factor accumulation in rural Africa over the last 50 years has actually occurred mainly in labour and human capital, and only to a very limited extent in physical capital. There are several reasons for the low levels of investment in physical capital. First, the economic environment is very risky (Collier and Gunning, 1999a,b). In response, farmers diversify their production by producing several crops as well as holding their eligible assets primarily in liquid form in order to facilitate the inter-temporal smoothing of consumption. Secondly, land-right systems have made rural investments unnecessarily illiquid (Collier and Gunning, 1999a,b), though Mwabu and Thorbecke argue that land tenure is of limited importance. Thirdly, lumpiness and irreversibility of physical investment in a risky environment with poorly developed credit markets tend to further exacerbate the tilt away from physical investment. Instead, farmers are likely to be locked into low-return, labour-intensive activities. Fourthly, movable wealth may attract violence, thus providing a strong disincentive to accumulate wealth in physical factors of production other than land. Finally, there is the usual high implicit taxation of successful individuals within the extended family system, which is quite dominant in the African setting. Such a tax dissipates the critical mass of funds required for physical capital investment.

The traditional social structures in Africa have evolved in terms of social capital to deal with the risky economic conditions prevalent in rural areas. The family, the village, or some kin group would provide

some form of insurance. Yet, such insurance could also lead to the usual problems of moral hazard, and possibly adverse selection, in rural areas. Apart from the insurance function, traditional units additionally helped with inter-generational transfers and the management of common resources. Thus, although traditional societies have managed to devise coping mechanisms for the rural environment, such mechanisms have, unfortunately, also resulted in minimal investment and specialisation.

Rural productivity growth can be driven by the reallocation of activities from less to more productive farmers; however, this process is constrained by the imperfect land, credit and labour markets. Markets have not been deep or flexible enough to foster an efficient allocation of resources. Smallholders dominate the rural sector, and since the land markets often are poorly developed, the land/labour ratios have to be adjusted via trade in labour. Further, because those markets are likely to be thin, smallholders fail to adjust their factor proportions optimally, resulting in negative efficiency effects. Mwabu and Thorbecke suggest several times in the paper that the functioning of markets must be improved. They do not clearly spell out, though, how this is to be done beyond just enhancing the road infrastructure to integrate markets, fundamentally important though that is.

The small size of networks of rural households also means that learning from others is confined to rather limited groups. Besides, learning-by-doing or innovation across the whole population has not been successful. Mwabu and Thorbecke note that agricultural research has not been contributing much to agricultural growth, despite recent estimates suggesting that such research can be quite productive. The authors fail, however, to discuss why agricultural research is not forthcoming to begin with; nor do they tackle the issues of how or where the research should be developed.

In answering the first question, of why the development of the rural area has been so poor, we may conclude that there are some major underlying structural characteristics that constrain agricultural growth: the high risks, the pattern of social structures that has evolved partly in response to the risky environment, and the poor infrastructure. These constraints need not be limited to the agricultural sector, though. The miniscule size of rural non-agriculture may be explained in no small part by these problems. Thus, if rural development is to be pursued with special attention to the

non-agricultural sector, as Mwabu and Thorbecke additionally advocate, then there is need to address such problems even more stringently. Economic life in Africa is risky, and the effect of this on growth is compounded by weak contract enforcement mechanisms beyond traditional structures, poor infrastructure, and uncertainty about the macroeconomic environment.

3. Policies to Deal with the Rural Growth Constraints

In answering the second question, on the design of appropriate policies for the rural setting, Mwabu and Thorbecke first point to disincentives characteristic of the pre-reform policy environment, such as heavy taxation, which were particularly detrimental to agricultural development (Bates, 1981). Several of these policies have improved recently. Thus, a somewhat harder question to answer is why, in spite of those improvements, have we not seen very much of a sustained supply response?

According to Mwabu and Thorbecke, the structural adjustment programmes mainly focused on 'getting the prices right' and structural reforms were neglected. There has been underprovision of infrastructure such as roads, irrigation, extension, health and education services, and rural credit. It is clear that price reform measures have been implemented much more systematically than structural measures. Thus, the issue is why this is the case. To begin with, price reforms are technically much easier to implement. Despite potential political opposition, the exchange rate can be changed by the stroke of a pen. In contrast, the development and maintenance of a rural transport network take much more organisation and time. It is also easier for a reluctant reformer to drag his feet when it comes to structural reforms, especially in the presence of rent-seeking opportunities associated with the status quo. After all, the failure to act is less obvious. Furthermore, carrying out structural reforms, particularly where infrastructure development must be undertaken, usually requires an expansion of the government budget set. The structural adjustment programmes might also not have taken a sufficient account of location and the limits of spread effects from the urban to the rural areas.

Still, there is an urban bias among national policies. The main point of the Mwabu and Thorbecke paper is that development policy should shift toward making the rural areas a strong anchor. Agriculture and

rural non-agriculture would be the engines of growth in the new strategy. The shift is presented as a 'complete reorientation of development priorities because established patterns of national resource allocation would be abandoned, and economic as well as political mechanisms for greater participation of the populace in the economy would have to be developed'. The lack of emphasis of rural development may perhaps be illustrated by the fact that the sector has traditionally been viewed homogeneously as just an informal sector. However, as Fosu (2001), for instance, has argued, the sector should be delineated into formal as well as the usual informal subsector, with the formal designation comprising both relative large-scale agricultural and non-agricultural components. Such a reclassification would then signal the need to strengthen the rural sector to incorporate the formal subsector. In the final analysis, however, a reallocation of attention toward the rural sector would entail a change in the political process. Thus, understanding the nature of the political economy is essential (Bates and Devarajan, 2000). As discussed above, the nature of elite political instability characteristic of many African countries since independence is such that national policies have favoured the urban elite (Fosu, 2002). If so, then attenuating such instability might be a way to provide a framework for removing the urban bias.

Mwabu and Thorbecke emphasise the need to: undertake land reforms; develop physical infrastructure, such as roads; and provide social infrastructure, such as health and education facilities. In many ways, the package of reforms proposed by the authors fits well within the framework of the 1990 *World Development Report* on poverty, which emphasised the need to pursue a strategy that creates demand for the assets of the poor (land and unskilled labour), builds up the assets of the poor, and provides some safety nets. Similar proposals have also been advanced as a mechanism for reducing spatial inequality in order to better transform growth to poverty reduction in the face of globalisation (Fosu, 2004). Thus, these proposals are not new; however, it is worthwhile to emphasise them, as Mwabu and Thorbecke currently do.

Rural development policy should not only focus on agriculture but also make allowance for measures supporting the non-agricultural rural economy. This is important for the path of structural adjustment that African economies are undergoing (Bigsten, 1985), a point that Mwabu and Thorbecke also stress. The structural changes would then occur within the households and rural areas rather than as a

transfer of whole households from rural agriculture to urban industry. The authors also emphasise the argument that while a strong interdependence exists between the development of the urban and rural economies, the rural sector should be the leading sector.²

A central issue is whether there are incentives for policy makers to pursue sounder economic policies. For example, might externally supported adjustment programmes serve as a disciplining device? It is rather sobering to read the punchline of the review of the political economy of African growth provided by Bates and Devarajan (2000, p. 40): 'Rather than being the primary purpose of politics, policy choice is often better viewed as a by-product'. The point is that the way the competition for power is structured has a major impact on what policies are actually implemented.

The role of rent-seeking behaviour in decision making and its deleterious implications for economic growth in Africa are now well understood in the literature.³ Unfortunately, politics are often played along ethnic lines. As each ethnic group seeks to advance its cause when it is its turn, the life of 'sacred cows' becomes extended, and there are hardly any counterbalancing, neutralising forces. For example, in the face of ethnicity, it becomes difficult for farmers as a group to unite across ethnic groups and demand increased attention for their economic cause.

Finally, it must be noted that broad-based rural development pushes are not new. A couple of decades ago, integrated rural development programmes were in vogue, but they failed and were abandoned. The problem seems to be that rural operations were apparently too complex for the respective governments to run, or that the governments were unwilling to put a sufficiently strong emphasis on these programmes. The rural institutional structures have not changed much since then. Thus, the fundamental question remains: how can these institutions be transformed to achieve a successful outcome from another broad-based rural development scheme?

4. Micro-constraints

In 'Growth and Poverty Reduction in Sub-Saharan Africa:

² Bigsten and Collier (1995) analyse the links between agriculture and the rest of the economy for the case of Kenya.

³ Bigsten and Moene (1996) analyse the effects of rent seeking on growth in Kenya.

Macroeconomic Adjustment and Beyond', Sahn and Younger argue that the adjustment programmes as of the 1980s generally did not affect the poor negatively; rather, they were somewhat beneficial. Reviewing the existing literature, the authors observe that the reforms of trade liberalisation and exchange rate realignment often helped the poor. Nevertheless, since the results of these reforms were generally disappointing, it is imperative to examine the microeconomic constraints.

Sahn and Younger argue that debates about fiscal policy reforms have been too focused on aggregate spending levels, and that the efficacy of expenditures has been neglected. For example, the reforms have short-changed primary and rural services that would benefit the poor. Nonetheless, reviewing the evidence for privatisation, and particularly the liberalisation of agricultural markets as well as the elimination of food subsidies and labour retrenchments, they conclude that the poor did not carry a disproportionate part of the burden of the adjustment measures. Still, there were problems of implementation, and even in the countries that carried out the reform measures properly, the progress in terms of growth and poverty reduction was very slow. Thus, the macroeconomic reforms were not a sufficient basis for growth and poverty reduction. We need to go further and look for institutional weaknesses and structural impediments.

The first area that Sahn and Younger consider is human resource development, particularly the role of education and health services. Education has beneficial productivity impacts in the whole range of economic activities. Furthermore, there is evidence showing that education reduces the vulnerability of households. It endows households with capabilities that enhance their ability to deal with economic as well as policy shocks. Despite this salient nature of education, enrolment rates have stagnated in many African countries.

Why have enrolment figures not improved? First, the budget squeeze has adversely affected the supply of education. Secondly, the low quality and limited returns to poor education have kept the demand for education down. Returns to primary schooling have also fallen in Africa in the recent decades. In addition, as schooling costs are substantial and the poor are liquidity constrained, education investments are likely to be low. Finally, efficient capital markets that can reach the poor have been underdeveloped in Africa. Thus, alternative solutions are called for. The authors suggest that gov-

ernments should seek more innovative ways to subsidise the cost of education.

Achieving better health and nutrition is a goal in itself, but it also has beneficial productivity and growth effects. Households that are affected by a temporary disabling illness often slide into permanent impoverishment. Thus, according to the authors, there is need for further analysis of why the poor do not use more health services.

The second major theme that is highlighted by Sahn and Younger is the vulnerability and uncertainty faced by households, a point that is also stressed by Mwabu and Thorbecke. This is an area that the poor themselves emphasise very strongly in surveys. Unfortunately, there is not much in the way of explicit policies to deal with the problem. In tropical agrarian economies there are considerable risks, and since there is substantial covariance among them, they are hard to handle locally. For instance, if farmers choose to specialise in a more open economic environment afforded by trade liberalisation designed to enhance productivity, they may lose the risk protection provided by diversification. On the other hand, increased openness may make it possible to diversify outside of agriculture and thereby reduce the covariation and risks.

The authors further argue that the liberalisation of agricultural and financial markets has been too limited. Credit markets do not provide a vehicle for consumption smoothing for poor households. More attention therefore needs to be devoted to the capacity of informal insurance to deal with the risks encountered by the poor. To prevent households from being pushed into poverty traps by shocks, the development of market infrastructure and policies that promote access to social insurance networks becomes particularly important.

Households try to deal with risks in various ways. One example is risk avoidance, but since riskier activities often have higher average returns, such a strategy has negative implications for growth. Hence, the reduction of vulnerability, in order to militate against such risk avoidance behaviour, may indeed be growth enhancing. For example, households may respond to a shock by removing their children from school, which can then have negative long-term implications for the poverty of the household. It has been hard to devise efficient insurance schemes for the poor; possibly local schemes could be developed. Access to safe banking would also help the poor to cope with risk.

Thirdly, Sahn and Younger discuss what economists can contribute to the discussion of voice and empowerment. They identify two areas: decentralisation of public services and the use of 'social' funds to allocate public investment. Decentralisation is gathering momentum in Africa, but it is not yet extensively or effectively applied. However, there are examples where it has been possible to substantially increase the resource flow to the local level (Reinikka, 2001). Social funds can decentralise responsibilities and budgetary control to local communities, and this will increase local control over resources, which may then be allocated to preferred activities such as education or health. So far, these experiments have not been very well researched, but they appear to be promising. The institutional structure must be understood, and one has to be careful so that the experiments do not undermine functioning government or private sector activities. Such an allocation mechanism may also lead to a suboptimal outcome in the presence of 'local capture' (Bardhan and Mookherjee, 2000).

Sahn and Younger conclude that the delivery of effective health and education services requires more of a bottom-up approach. There is a need for greater attention to the microeconomic constraints that face Africa's poor, as well as to the socio-economic, natural and institutional environments. The macroeconomic reforms have been useful; however, the market and institutional reforms have not been sufficiently extensive. Complementary measures in these areas are called for. Risk, vulnerability and underinvestment in human resources are serious problems, and the issues of limited access to markets and institutions of the poor have not been adequately addressed. These structural and institutional dimensions are obviously much harder to reform.

5. AIDS and Human Capital

Currently, one of the major constraints on the future growth of African economies is the AIDS pandemic. It has had, and is expected to have, increasingly negative effects on the continent's ability to produce and effectively use education for growth enhancement and poverty reduction. In 'AIDS and the Accumulation and Utilisation of Human Capital in Africa', Hamoudi and Birdsall address this complex problem. They first show that even before the AIDS effects are factored in, Africa lags seriously behind other continents in terms of

educational achievements. They then investigate four channels through which AIDS will affect future outcomes.

First, the epidemic causes the death of adults, many of whom are teachers, with so far a disproportionate share of the AIDS deaths occurring among the relatively skilled. Training for replacements is therefore called for. Hamoudi and Birdsall present a model that predicts the future student–teacher ratio under different scenarios. The results suggest that in many of the severely affected countries it will be almost impossible to maintain the current standards. With a reduced supply of teachers, it is anticipated that teachers' salaries will increase, but that this will exacerbate the budget problem of the government. A cost-minimising strategy might then lead to employing cheaper but less qualified teachers, with the likely implication of diminished quality of education.

Secondly, by shortening the time horizons of the agents investing in education, the incentive to invest in education will be weaker. The authors present econometric evidence indicating that a drop in life expectancy by 10 years will reduce investment in education by 0.8–1.3 years. Demand for education will thus fall substantially.

Thirdly, to the extent that there are externalities associated with the agglomeration of educated individuals, the death of skilled workers will further diminish the contribution of education to growth. The economy may then face multiple equilibria, with the likelihood that the economy settles in a low-level equilibrium where skills are scarce, returns to investment in schooling are small, and the opportunity cost of parents' time is low. Parents may then choose a larger number of children, for whom they provide less schooling. This outcome tends to perpetuate the scarcity of skills, thus militating against the attainment of a critical mass of skills in African countries.

Fourthly, given that education and physical capital are complements, the AIDS pandemic will lead to a reduction in the physical capital stock, thus further reducing growth.

Moreover, the people who die from AIDS normally are ill for an extended period of time, compelling households to run down their assets during this period of morbidity. Thus, assets are kept low because, first, households are deprived of the earnings of the sick member and, second, because the household's resources are depleted in order to care for him/her. Such a state of asset 'consumption' is likely to further result in less investment in children, with long-term adverse consequences for household welfare.

6. Conclusion

The three papers presented in Part 1 of this supplement show that the relationship between growth and poverty is rather complex. While recent literature trumpets the importance of pro-poor growth (e.g., Ravallion and Chen, 2003), much work remains in terms of characterising the phenomenon. The Mwabu and Thorbecke paper suggests that an important pro-poor growth strategy would entail a greater focus on the rural sector, paying particular attention to an appropriate institutional setup for attenuating urban-biased policies. The Sahn and Younger article emphasises the need to address microeconomic constraints in order to enhance the macroeconomic reforms undertaken in many African countries. Finally, with human capital as a salient factor in economic growth and development, and with HIV/AIDS such a menace to health in a number of African countries, substantively analyzing the economic impact of this number-one health threat in Africa should be a major priority. What is needed to advance beyond the current state of knowledge is detailed data that can form a basis for more reliable predictions.

References

- Acemoglu, D., S. Johnson and J.A. Robinson (2001) 'The Colonial Origins of Comparative Development: An Empirical Investigation', *American Economic Review* 91 (5): 1369–1401.
- (2002), 'Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution', *Quarterly Journal of Economics*, 117 (4): 1231–94.
- Ali, A. and E. Thorbecke (2000) 'The State and Path of Poverty in Sub-Saharan Africa: Some Preliminary Results', *Journal of African Economies*, 9 (suppl. 1): 9–40.
- Bardhan, P. and D. Mookherjee (2000) 'Capture and Governance at Local and National Levels', *American Economic Review, Papers and Proceedings*, 90(2): 135–9.
- Bates, R.H. (1981) *Markets and States in Tropical Africa*, Berkeley CA: University of California Press.
- Bates, R.H. and S. Devarajan (2000), 'Political Economy of African Growth', mimeo, Nairobi: AERC.
- Bigsten, A. (1985), 'What do Smallholders do for a Living? Some Evidence from Kenya', in M. Lundahl (ed.), *The Primary Sector in Economic Development*, London; Croom Helm.

- Bigsten, A. and P. Collier (1995), 'Linkages from Agricultural Growth in Kenya', in J.W. Mellor (ed.), *Agriculture on the Road to Industrialization*, Baltimore MD: Johns Hopkins University Press.
- Bigsten, A. and K-O. Moene (1996), 'Growth and Rent Dissipation: The Case of Kenya', *Journal of African Economies*, 5 (2): 177–98.
- Bloom, D.E. and J.D. Sachs (1998), 'Geography, Demography, and Economic Growth in Africa', *Brookings Papers on Economic Activity*, 1998 (2): 207–95.
- Collier, P. and J. Gunning (1999a), 'Explaining African Economic Performance', *Journal of Economic Literature*, 37 (1): 64–111.
- (1999b), 'The Microeconomics of African Growth, 1950–2000', mimeo, Nairobi: AERC.
- Collins, S. and B. Bosworth (1996) 'Economic Growth in East Asia: Accumulation versus Assimilation', *Brookings Papers on Economic Activity*, 2: 135–203.
- Fosu, A.K. (2001) 'International Trade and Labor Market Adjustment in Developing Countries', in D. Greenaway, R. Upward and K. Wakelin (eds), *Trade, Investment, Migration and Labour Market Adjustment*, New York: Palgrave Macmillan, pp. 137–56.
- (2002) 'Transforming Economic Growth to Human Development: The Role of Elite Political Instability', *Oxford Development Studies*, 30(1), 9–19.
- (2003) 'Political Instability and Export Performance', *Journal of Development Studies*, 39 (4): 68–83.
- (2004) 'The Social Impact of Globalization: The Scope for National Policies', forthcoming in E. Lee and M. Vivarelli (eds), *Understanding Globalization, Employment and Poverty Reduction*, New York: Palgrave Macmillan, Ch. 10.
- Hall, R.E. and C.I. Jones (1999), 'Why Do Some Countries Produce so Much More Output per Worker than Others?', *Quarterly Journal of Economics*, 114 (1): 83–116.
- O'Connell, S. and B.J. Ndulu (2000), 'Africa's Growth Experience: A Focus on Sources of Growth', mimeo, Nairobi: AERC.
- Ravallion, M. and S. Chen (2003) 'Measuring Pro-Poor Growth', *Economics Letters*, 78 (1): 93–9.
- Reinikka, R. (2001) 'Recovery in Service Delivery: Evidence from Schools and Health Centers', in R. Reinikka and P. Collier (eds), *Uganda's Recovery: The Role of Farms, Firms, and Government*, Washington DC: World Bank, pp. 343–69.

Sala-I-Martin, X. (1997), 'I Just Ran Two Million Regressions', *American Economic Review*, 87 (2): 179–83.

World Bank (1990), *World Development Report 1990*, Washington DC: World Bank.