

EMPLOYMENT IN SUB-SAHARAN AFRICA

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INTRODUCTION: LESSONS FOR SUB-SAHARAN AFRICA FROM THE EAST ASIAN EXPERIENCE

One of the characteristics of poverty-alleviating growth is its high employment intensity. The poor are better endowed with labor than any other resource. The most direct contribution that economic growth can make to poverty reduction is to create productive and remunerative employment as rapidly as possible. Other policies – the redistribution of assets in favor of the poor like an egalitarian land reform and endowing the poor with greater human capital – undoubtedly facilitate poverty reduction. But typically these measures help poverty reduction by increasing the opportunity for more and more productive employment, not by creating alternative routes to escape poverty independent of employment.

Rapid poverty reduction through high and highly employment-intensive growth is best illustrated by the experience of the East Asian pioneers. Employment intensity of growth is measured by the output elasticity of employment (OEE), the ratio of proportionate growth in employment to proportionate growth in value added. For a developing country characterized by a large subsistence sector the measurement of this elasticity for traditional sectors like agriculture and informal services is difficult because employment is hard to measure meaningfully. Nor is a high elasticity for such sectors always desirable as economic development should lead to a relative and ultimately absolute fall in employment in these activities. The output elasticity of employment in industries and modern services should however be high enough to permit a gradual transfer of employment from the low-productivity traditional sectors to high-productivity industries and services. In the Republic of Korea, to illustrate with reference to an East Asian country for which estimates are easily available, the OEE in industries was

approximately 0.7 during the 1970s. Assuming that this was the OEE for the entire modern sector which at the time probably employed half the labor force and achieved something like 10 to 12 per cent annual growth, the annual labor absorption in these sectors alone accounted for 3.5 to 4 per cent of the entire employed labor force, close to twice the annual increase in labor supply. The result was a dramatic restructuring of the composition of employment away from agriculture and other traditional activities and an annual growth in the real wage rate that matched the annual growth in per capita GDP. Wide access to human capital helped the process by steadily contributing to increased productivity of labor. It was not growth by itself but also its high employment intensity that explains the continued equality of income distribution and the extraordinarily rapid poverty reduction. Some of the contemporary cases of equally or even more rapid growth, as in China and India, have failed to prevent rising inequality for reasons of which the low OEE is a very important one.

What can one say about Sub-Saharan Africa (SSA)'s performance in making growth adequately employment intensive in the cases where growth has occurred and its potential performance in doing so if and when growth takes place in the rest of the region? Of the 42 SSA countries that each has a million or more people, seven are reported to have achieved an annual average growth in GDP of more than 5 per cent during the decade 1996-2006 and two have averaged more than 7 per cent annual growth.¹ Were these cases of growth sufficiently intensive in productive and remunerative employment to enable rapid enough a reduction in poverty? How has the employment consequence of slower growth elsewhere affected the welfare of the poor?

Attempts to find answers to such questions are severely constrained by the limitation imposed by the inadequacy of employment data. ILO's documentation shows that during the period between 1990 and 2005 only 24 of the 42 countries had any kind of employment survey; only ten had more than one survey during this period; and only 11 had such a survey during the period since 2000. Mauritius and South Africa are the only countries with regular annual surveys in recent years.

¹ These in descending order of growth rate are Mozambique, Angola, Rwanda, Botswana, Burkina Faso, Uganda and Sudan. These notes will avoid detailed citing of data sources. Data on growth are from World Bank sources mostly published in the *World Development Indicators* and the data on labor force and employment are from the ILO mostly shown in a recent report, *African Employment Trends*, Geneva April 2007. The latter also shows annual growth rates in GDP during 1996-2006.

Estimates and projections of *labor force* are available from the ILO for most countries. While they shed useful light on aspects of employment characteristics and problems, they are of limited value in dealing with the issues under review.

A further problem is with the quality of the data that are available. As discussed below, attempts at understanding the employment consequences of growth have often proved frustrating due to the doubtful quality of the employment data.

*SOME FEATURES OF SSA'S LABOR FORCE
AND EMPLOYMENT CHARACTERISTICS*

Some of the important features of SSA's labor force and employment characteristics can be highlighted by comparing them with those of the largest contemporary developing regions, South Asia and East Asia (noting that East Asia in this comparison refers to contemporary developing East Asia which excludes the East Asian pioneers whose experience is described above):

	SSA	South Asia	East Asia & Pacific
Population below 15	43.5	33.4	30.0
Labor Force Participation Rate	74.2	59.7	74.2
Unemployment Rate	9.8	5.4	4.2
Employment to Population Ratio	37.8	37.6	49.8
Labor Force Growth 1990-2005 Annual Rate	2.55	1.96	1.45

The first notable point is the very high labor force participation rate (LFPR) – the ratio of labor force to population 15 year and above – in SSA. It is as high as in East Asia and higher than in any other developing region of the world. When it comes to the proportion of population that is in employment, and its inverse the dependency ratio, the above advantage is offset by two factors: the unfavorable age distribution resulting in a much higher proportion of population below working-age group; and a much higher rate of open unemployment. Vis-à-vis South Asia SSA's much-higher LFPR rate is

completely offset by the above two factors resulting in the same ratio of employment to population. Vis-à-vis East Asia SSA's equally high LFPR results in a ratio of employment to population which is nearly a quarter lower due to the same two factors. Labor force in SSA also increased at a significantly faster rate than in either of the two Asian regions during the decade and a half since 1990. Its labor force grew at a significantly faster rate than the rate of growth in the labor force in the rest of the developing world taken together and in the low-income countries taken together although not as fast as the labor force in Latin America or the Middle East and North Africa regions. The high overall LFPR in SSA is associated with a high female LFPR which is higher than in any other developing region except East Asia and is nearly two-thirds higher than in South Asia.

The above comparison between SSA and the other developing regions needs to be qualified in view of the great difference within the SSA countries in the labor force and employment characteristics, something that does not seem to prevail within either of the Asian regions. These differences principally occur between the relatively high-income Southern African countries like South Africa, Namibia, Botswana, Lesotho and Swaziland on the one hand and most of the rest of the countries, especially the poorer-than-average countries, of which countries like Tanzania and Uganda are typical illustrations.²

The high LFPR, mentioned above, is not characteristic of the higher-income countries in Southern Africa and Mauritius: it is 53 per cent in Namibia, 55 per cent in Botswana, 61 per cent in South Africa, 57 per cent in Lesotho, 49 per cent in Swaziland and 59 per cent in Mauritius. In contrast LFPR is 87 per cent in Tanzania and Malawi, 83 per cent in Uganda, Mozambique and Niger and more than 91 per cent in Burundi. The biggest source of the difference seems to be the much lower LFPR in the 15-24 age group for the higher-income countries, perhaps signifying a much greater enrolment in secondary and tertiary education in these countries than in the rest. It is worth noting that the difference in LFPR between the two groups of countries is not due to any gender difference in LFPR. Once the higher-income countries are excluded the LFPR for the

² Of the other two relatively high-income SSA countries, Gabon and Mauritius, the former seems closer to the second group while the latter seems closer to the former group with respect to labor force and employment characteristics.

remaining, poor SSA countries would be higher than shown in the table above, higher than in East Asia.

Another difference between the above higher-income SSA countries and the rest is the very high unemployment rate in the former (31 per cent in Namibia, 27 per cent in South Africa, 19 per cent in Botswana, 25 per cent in Swaziland and 39 per cent in Lesotho) as compared to the latter (3 per cent in Uganda and 5 per cent in Tanzania). This is certainly due to very different labor market conditions in the two groups of countries. A correlate of the above difference between the two groups is their difference with respect to the ratio of wage-and-salary employment to total employment: it is very high in the higher-income countries ((83 per cent in Botswana, 82 per cent in South Africa, 80 per cent in Mauritius and 62 per cent in Namibia) and very low in the poorer countries (7 per cent in Tanzania and 15 per cent in Uganda). Self employment and family labor can hide unemployment far better than a labor market dominated by wage labor.

Combining the above differences in LFPR and unemployment one gets a dramatic difference in employment to working-age population ratio between the two groups: it is only 37 per cent in Namibia, 45 per cent in South Africa and Botswana and 32 per cent in Lesotho as compared to 83 per cent in Tanzania and 81 per cent in Uganda.

Thus, with the exception of a handful of the higher-income countries in Southern Africa and Mauritius, the rest of SSA is generally characterized by a very high LFPR, low open unemployment, low incidence of wage employment, a high incidence of self employment and employment in family enterprise and a very high overall ratio of employment to working-age population. The latter is higher than what it is in most other developing regions.

Much of employment in these countries is characterized by low productivity and low remuneration. Estimates of working poor - the ratio of those workers who have less than PPP\$1 per day as the proportion of all employed workers – are available from the ILO. This ratio for SSA is far higher than in the other developing regions: 55 per cent as compared to 12 per cent in East Asia, 11 per cent in South-East Asia and the Pacific, 34 per cent in South Asia, 11 per cent in Latin America and 3 per cent in the Middle East. The ratio is as high as 89 per cent in Uganda and 80 per cent in Nigeria.

*THE MEANING OF EMPLOYMENT INTENSIVE GROWTH
FOR POVERTY REDUCTION IN SSA*

What does employment-intensive growth mean given the labor force and employment characteristics in the poorer SSA countries? It would clearly not make sense to try to seek a further increase in the LFPR which is already too high. There is also a rather limited scope for reducing the rate of open unemployment which is already quite low. Indeed it would be natural for the LFPR to decline with economic progress as secondary and tertiary enrolment increase. In the longer run, demographic change induced by fertility decline, could change the age distribution of the population and bring down the dependency ratio even with a decline in the LFPR.

The focus of employment-intensive growth instead should be on improving the productivity and remunerability of employment for the working poor. The classic path for the achievement of this is a structural change in the composition of output and employment. Most of the working poor are concentrated in low-productivity traditional activities like agriculture and rudimentary informal activities. As noted earlier, one of the lessons of the experience of the East Asian pioneers is that a rapid growth of industries and modern services with high OEEs facilitates the process both by increasing the proportion of workers employed in activities with higher levels of productivity and remuneration and by helping to increase the productivity of the declining proportion, and ultimately the declining absolute number, of workers who are left behind in agriculture and other traditional activities.

The World Bank estimates the share of agriculture in GDP in 2005 to be only 17 per cent while the ILO estimates the share of agriculture in employment to be 63 per cent in the SSA. The spread between the two may be even greater for the poorer SSA countries. This is probably the highest spread between employment and output shares of agriculture of all the regions of the world economy.³ Available estimates suggest that the ratio of agriculture's share of employment to its share of output in the SSA has increased

³ This spread has also been very high, and growing over time, in contemporary East Asia because of the strongly discriminatory policies against agriculture practiced in, but not only, China, the overwhelmingly dominant economy in the region. But while the ratio of employment share to output share in East Asia's agriculture in recent years has been about 3, it is 3.7 for SSA if one can trust the available output and employment data.

over the last decade and longer. Furthermore, the shares of industries in both output and employment have fallen over the similar period. The share of services in total employment has increased; but little is known about the kind of services which account for increased shares of employment.

Productivity per agricultural worker in the SSA is lowest among all the developing regions. It is 40 per cent lower than in East Asia (to remind again, contemporary East Asia, excluding the pioneers) and 14 per cent lower than in South Asia despite the fact that arable land per agricultural worker is probably twice as high in the SSA as in East Asia and two-thirds as much more as in South Asia. The explanation must lie in various degrees on policy and institutional failures that specialists talk about in discussing the persistent stagnation of the region. But one reason that stands out is the dismally low level of infrastructure and input use: of all the developing regions the SSA has the lowest irrigation intensity, the lowest rate of fertilizer use and the lowest transportation density. Another important factor explaining low agricultural revenue per worker that may be very important in many SSA countries is the agricultural protection practiced by the advanced industrial countries. If the above two obstacles are reversed agriculture in the SSA should be able to improve the income of the workers to a point that would substantially reduce the proportion of working poor in the sector. Indeed without these changes it is hard to conceive that the solution to the problem of poverty in agriculture can be tackled sufficiently quickly by the transfer of labor out to industries and services alone.

There is however no alternative to an accelerated industrial growth with a high OEE for the sector. The current share of agriculture's employment is inconsistent with a meaningful level of development. The elasticity of industries with respect to GDP in the SSA has been less than one for the period 1990 to 2005. In particular, the growth in *manufacturing* industries has significantly lagged behind the admittedly anemic overall economic growth. During the 1990s the elasticity of manufacturing value added with respect to GDP was 0.76. While overall GDP growth rate increased during the first half decade of the 21st century, the elasticity of manufacturing value added with respect to GDP actually fell further to 0.6. The share of manufacturing in GDP has fallen from 17 per cent in 1990 to 14 per cent in 2005. Without a reversal of this relative

deindustrialization poverty reduction through employment-intensive growth will remain beyond the reach of the region.

THE SSA EXPERIENCE OF EMPLOYMENT-INTENSITY OF GROWTH

How employment intensive has growth been in those SSA countries which have achieved decent growth in recent years? Mozambique and Angola are the two fastest growing countries which have averaged respectively 7.6 and 7.4 per cent annual GDP growth in the decade leading to 2006. Mozambique is also the only SSA country of substantial size in which manufacturing industries grew faster than GDP both during the 1990s and the first half of the 21st century. In Angola manufacturing industries absolutely declined during the 1990s but grew faster than GDP during the first half of the 21st century. It would be very useful to know if the East Asian kind of growth-employment-poverty reduction nexus has been working in these countries. Unfortunately even less is known about employment characteristics of these two countries than the rest of the SSA; the ILO source cited above reports that none of them had an employment survey since 1990.

The ILO has carried out a number of country case studies to demonstrate that high OEE makes growth more poverty alleviating. Two African countries, Ethiopia and Uganda, have been included in these case studies.⁴ Uganda averaged 7.1 per cent annual growth during the 1990s and 5.6 per cent in the first five years of the 21st century. Ethiopia emerged from a long period of stagnation and misrule in the early 1990s and has averaged an annual growth of 4.4 per cent in the decade ending in 2006. What do the two case studies tell us?⁵

⁴ These are respectively chapters 7 and 10 in Rizwanul Islam (ed.), *Fighting Poverty: The Development-Employment Link*, Lynne Rienner Publishers, Boulder and London, 2006.

⁵ The summaries that follow are based on the case studies and are largely derived from A. R. Khan, *Growth, Employment and Poverty: An Analysis of the Vital Nexus Based on Some Recent UNDP and ILO/SIDA Studies*, Issues in Employment and Poverty Discussion Paper 19, ILO, Geneva, October 2005. In addition to these two, the ILO has also made a case study of Mozambique, but, in the absence of overall and sectoral employment data, it takes a micro-economic approach, based on household level data, to determine the importance of access to employment for poverty reduction (as expected, the answer is in the affirmative). It does not provide estimates of employment intensity of growth. See T. Bruck and K. van den Broeck, *Growth, Employment and Poverty in Mozambique*, Issues in Employment and Poverty Discussion Paper 21, January 2006.

Ethiopia

Ethiopia stagnated during the 1980s, the decade preceding the emergence of the new regime, with an annual average GDP growth of just 2.3 per cent, below the rate of population growth, estimated to have been above 2.5 per cent. During the 1990s, following extensive economic reform, growth became faster at an annual average rate of 4.6 per cent. In per capita terms, this translated to just over 2 per cent annual growth in income. That this rate of growth was inadequate for poverty reduction is evident from the fact that between 1995/96 and 1999/2000, the only period over which poverty estimates are reported in the case study, per capita real consumption in rural Ethiopia actually fell by 4 per cent and per capita real urban consumption increased by just 3 per cent. The poverty outcome was actually determined by the change in the distribution of income and consumption: rural Gini ratios fell a little and the incidence of rural poverty, by all the standard measures, fell a little. Urban Gini ratios increased, substantially for consumption expenditure, and urban poverty increased. At the national level there was no appreciable change in the incidence of poverty.⁶ It is noteworthy that the poverty outcome would have been far more favorable if the growth rate in per capita consumption was the same as the growth rate in per capita GDP. In Ethiopia the incremental share of the government in GDP was higher than its average share for well known imperatives and so might have been the share of business. The incremental share of the households was inevitably less than their average share.

Employment data are available at discrete intervals and they do not coincide with the pre-reform or post-reform periods. Between 1984 and 1994 employment increased at a rapid annual rate of 5.9 per cent, at similar rate across sectors, far outpacing the rate of output growth. During 1994-99, roughly coinciding with the period over which poverty estimates are available, employment growth for the economy as a whole was dismal, -0.6 per cent per year. The largest sector of employment, agriculture and allied activities, recorded a -2.9 per cent annual change in employment. For a number of reasons these

⁶ The case study calls the official estimate of the slight decline in rural poverty “a statistical myth” since “the growth rate of real agricultural per capita output has been negative and real per capita rural income has declined”.

employment data seem implausible. Poverty data show that for the farming population the incidence of poverty declined between 1995/96 and 1999/2000. It is hard to imagine this happening with a large decline in employment. It is also difficult to imagine where all the laid-off “workers” in agriculture went. The “allied activities” seem to indicate much of the informal rural employment categories. It is possible that the sources of employment data at the two points were not comparable.

Employment in manufacturing, reported by separate annual data source, recorded an annual trend growth of 1.8 per cent during 1992/93 to 1999/2000. During the same period, the annual trend growth in manufacturing output was 5 per cent. These indicate a “trend” estimate of the gross output elasticity of employment of 0.36 which must be considered low for a labor abundant economy like Ethiopia.

Uganda

The Uganda case study analyzes the relationship among growth, employment and poverty over the period between 1992 and 2002. During this period Uganda attained close to 6 per cent annual growth in GDP. Uganda’s growth was poverty alleviating until the turn of the century. Between 1992/3 and 1999/2000, six distinct annual observations record steady decline in the incidence of poverty. In the early years of the new millennium – between 1999/2000 and 2002/3 – this trend was reversed, with a rise in the incidence of poverty in both rural and urban areas.

The immediate explanation is that growth in the new millennium slowed down, and, more significantly, the inequality in the distribution of income, which had remained steady during the 1990s, registered a fairly sharp rise by 2002/3. Thus the poverty-alleviating character of growth during the 1990s appears to have been due largely to its avoidance of increased inequality.

The attempt of the study to link growth to poverty reduction via the employment performance of the economy has not been successful due to the poor quality of employment data. “Comparable” data on employment are available only for 1992/3 and 1997 and these data too suffer from a lack of standardization of the amount of work time per worker. These data show that over this period agriculture’s share of employment

increased, industry's share fell and services' share increased. Over the period employment in agriculture increased at 7.86 per cent per year and real value added increased at 3.54 per cent per year, indicating an OEE of 2.22. On the same basis the elasticity turns out to be 0.42 for industries, 1.04 for services and 1.06 for the economy as a whole. Except for industries, output per worker fell everywhere, drastically so in agriculture, while output per person increased significantly. It is almost certain that these extraordinary estimates are due to the lack of comparability of the average intensity of work per person in agriculture and traditional services over time. If one takes the estimates literally then one must conclude that over time an average agricultural household of a given size was allocating more individuals to the labor force causing strong diminishing returns which sharply reduced the output per worker but still allowed the output per person to rise.

While the elasticity estimates for agriculture and services are not enlightening, it is unlikely that industrial employment estimates, largely in a wage-based market environment, would suffer from these problems. One would thus conclude that Uganda's industries were not particularly employment intensive, a fact that is confirmed by the detailed, and often erratic, estimates of these elasticities for individual manufacturing industries reported by the study. It also seems likely that agriculture absorbed a lot of labor, if not at the stratospheric rate suggested by the data.

Be that as it may, it seems fairly certain that the "agricultural" population increased at least at the same rate as the growth of aggregate population. This would imply that output per person in agriculture increased very little. The study reports poverty incidence by the occupational sector of the head of the household. It shows a significant decline in the incidence of poverty over the period for the agricultural households. How could that be consistent with very modest, if any, increase in output per person? The explanation seems to lie in an improvement in agriculture's terms of trade brought about by the rising export prices of agricultural crops during this period. Indeed, the study reports a much faster reduction in poverty among households dependent on cash crops than among households dependent on food crops. One of the major explanations of the reversal of poverty reduction in the early 21st century is the adverse movement in export prices of agricultural crops during that period.

Thus Uganda's poverty-alleviating growth during the 1990s is largely due to a reasonably rapid income growth in agriculture, facilitated by a modest rate of growth in physical output per capita and an improvement in terms of trade; stable inequality; and large-scale labor absorption in the sector, possibly including ancillary services. Industrial growth was rapid, but not highly labor intensive. This limited the prospect for migration of labor out of agriculture. Even without the benefit of large-scale emigration, agriculture experienced significant poverty reduction as long as its rising income continued to be distributed with unchanged inequality. The process came to an end when the rate of income growth slowed down and inequality increased. It would have been interesting to disentangle the details of the story behind the distribution of income and the role that employment had in it if adequate data were available.

The two case studies show that employment data are not sufficiently reliable to provide useful estimates of OEE especially for agriculture and possibly for services as well. The SSA countries need to improve the quality of employment data. Periodic labor force surveys should be instituted in all the countries.

It however seems unlikely that data on industrial employment suffer from as many problems of measurement as employment in other sectors. Thus one should take these estimates more seriously than the estimates for the other sectors. In both the countries for which case studies are available the industrial OEE was low, far lower than what it was in the East Asian pioneers at comparable levels of development.

The case studies do not analyze why the industrial OEEs are low. Was it because industries in pre-reform period suffered from the widely-observed phenomenon of "excess employment" which reforms got rid of partially or completely? Was it because the incentive system is biased against appropriate labor intensity? One needs to find out in order to start judging if the restoration of growth in the SSA would make growth sufficiently poverty alleviating by making it adequately employment intensive.

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