ETHIOPIA

Re-Igniting Poverty Reduction in Urban Ethiopia through Inclusive Growth

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Re-Igniting Poverty Reduction in Urban Ethiopia through Inclusive Growth\textsuperscript{1}

1. Stagnation in urban poverty reduction amidst rapid growth in Ethiopia

Ethiopia in the decade up to 2005 has been characterized by robust growth rates of the urban economy, where a still limited share of the population lives.\textsuperscript{2} The urban economy has been estimated to contribute at least half of GDP (53 percent in 2002/03) and to explain a significant part of its growth (60 per cent of national economic growth between 1993 and 2005, World Bank, 2007b). Only an estimated 12.6 percent of the poor live in urban areas and the overwhelming concentration of poverty in rural areas seem unlikely to be reversed in the medium term.

Sustained growth, to be shared among a relatively small part of the population, could have been expected to reduce poverty significantly in urban areas, but this has not been the case (see Table 1, which shows an increase, albeit not statistically significant, of the point estimate).\textsuperscript{3} While poverty incidence remains lower in urban than in rural areas, rural areas have made significant progress and the rural-urban gap in poverty incidence is decreasing.

Table 1: Urban and rural poverty in Ethiopia: 1995/96 and 2004/05

<table>
<thead>
<tr>
<th></th>
<th>Urban areas</th>
<th>Rural areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average consumption</td>
<td>1944</td>
<td>2266</td>
</tr>
<tr>
<td>per equivalent adult</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gini</td>
<td>34</td>
<td>44</td>
</tr>
<tr>
<td>Headcount</td>
<td>33.2</td>
<td>35.1</td>
</tr>
<tr>
<td>Poverty gap</td>
<td>9.9</td>
<td>7.7</td>
</tr>
<tr>
<td>Severity of poverty</td>
<td>4.1</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Source: MOFED 2007. Note uses consumption per equivalent adult in Addis prices and a poverty line equivalent to 1075 birr in real 1995/96 Addis prices.

This discouraging aggregate picture for urban areas hides the differences that have characterized the process of poverty reduction in urban areas, with different dynamics by region and city size. Progress has been uneven, with some regions experiencing a decline in the incidence in urban poverty (SNNP, Tigray) and others experiencing increases (Figure 1).

\textsuperscript{1} This note was prepared by a team led by Caterina Ruggeri Laderchi under the direction of Deepak Mishra and Kathie Krumm, as part of the first phase of the ongoing Ethiopia Programmatic Poverty Update. The team included Elisa Ticci, Alan Sanchez, Phillippe Leite, and Sandu Cojocaru. Mesfin Bezawagaw and Dora Harris provided invaluable help.

\textsuperscript{2} Even a sustained pace of urbanization (estimated at more than 4 percent, UN Population Division, 2007) would result in less than 1/3 of the population residing in urban areas by 2035, up from the current 16 percent.

\textsuperscript{3} In particular, the analysis of how the different groups fared during this period of overall growth shows that the groups around the poverty line (those between the 30\textsuperscript{th} and the 40\textsuperscript{th} percentile) experienced slower and even negative growth, as compared to relatively high growth at the bottom and especially at the top of the distribution. See also Annex.
These changes also affected the distribution of the poor across cities of different types, with the concentration of poor people in the three largest cities (Addis Ababa, Dire Dawa and Harar) increasing from 24 to 27 percent. The increase was driven by Addis, where one in four of the urban poor (and 3 percent of the total poor) now live.

**Figure 1:** Urban poverty incidence and inequality (Gini coefficient) in 2004/05 by its level in 1995/96, by region

While the performance in terms of poverty reduction was heterogeneous across different urban areas, in every region urban inequality increased, though in some regions the increase was much more marked than in others (e.g. Tigray and Dire Dawa; Figure 1). The levels of inequality are higher in larger cities than overall (with for example the highest ratio in the expenditure per equivalent adult between the top and the bottom quintile registered in Addis, where the richest spend 6.6 times what the poorest do). Also the increase in inequality was higher in the largest cities than in other urban contexts, though they were more contained in Addis than in Dire Dawa and Harar.

Standard decomposition analysis shows that if urban growth had been more equally shared poverty reduction would have been significant (by as much as 12.6 percentage points if the distribution had remained the same than in 1995, MOFED 2007). In contrast, a closer look at the microeconomic evidence shows significant changes in the distribution, with the highest growth rates in consumption per capita recorded at the top end of the distribution. Figure 2 illustrates the growth rates in adult equivalent consumption by quintile. It is apparent that the top quintile experienced significantly higher growth across all urban areas. The second quintile, in contrast, grew at a paltry 3 percent over the decade, so that the bottom group “caught up” with the second quintile.

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4 Note that this type of analysis is purely descriptive and routinely performed to compare the relative magnitude of growth and distributional effects in affecting the evolution of poverty. No casual link between the evolution of growth and of inequality can be drawn from this analysis, nor can it be claimed that the same level of growth in income could have been achieved keeping inequality constant (or vice versa).
A similar pattern of growth held across city sizes. As a result of this uneven distribution of growth, the Gini coefficient of inequality increased by 10 percentage points over the decade up to 2004/05, from 0.34 to 0.44. This contrasts greatly with the stability of this measure of inequality in rural areas (around 0.27).

**Figure 2**: Consumption per adult equivalent in 1995 prices by quintile of the urban distribution

![Graph showing consumption per adult equivalent in 1995 prices by quintile of the urban distribution](image)


Rising inequality and an increasing number of poor in urban areas are concerns for the Government as most of the policy efforts, particularly in the decade up to 2005, have been focused on addressing poverty in rural areas. Rural areas benefited from being at the centre of the strategic thrust of Ethiopia’s development strategies, through the pursuit of Agricultural Development Led Industrialization (ADLI) focused on supporting small holder agriculture. Further adding to the rural focus of development policy has been the system of inter-governmental fiscal transfers by which, for example, Addis Ababa, by far the largest urban centre in the country, does not get any federal transfers. Ethiopia’s rural emphasis in poverty reduction stems from the view that the aims are achieved most effectively by channeling resources to the areas where most of the poor are living. Urban poverty reduction seems to have drawn less attention, perhaps from an implicit assumption that greater economic opportunities available in cities would more easily lead to poverty reduction in those areas.

Urban areas, while not having been targeted by special poverty reduction intervention, can offer very challenging living conditions for the poor (for more details see Annex 1). Whereas urban areas do better than rural ones based on indicators of access to services and human development outcomes (both on average and as far as the poor are concerned), indicators of monetary poverty and vulnerability show a less clear cut comparison between rural and urban poverty. The greater reliance on the market (both for income generation and to procure basic necessities) particularly contributes to the vulnerability of the urban poor. In addition, as elsewhere in Africa (Kessides 2007), within urban areas there is great heterogeneity in living conditions, both across the urban spectrum and within cities, so that aggregate urban statistics can lead to an underestimation of the challenges the poor face. In particular, smaller cities where a large share of the urban population lives offer the worst access to services and basic infrastructure to the poor.

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5 An estimated half of the urban population lives in towns with less than 50,000 inhabitants and one third lives in towns with less than 20,000 inhabitants (Muzzini 2008 based on HICE 1999).
Against this background, in this note we look at the medium term trends over the decade up to 2005 that have led to a type of growth which did not translate into poverty reduction. We then discuss policy priorities to address the challenges of making growth more inclusive. The analysis and the policy discussion try also to reflect what has been learnt since 2005, when steps have been taken to rebalance policy priorities towards urban areas. Programs such as the Integrated Housing Development Program, for example, seek to create jobs in urban areas while improving living conditions (see Box 1). Urban areas, however, have also been affected by the recent macro shock more strongly than rural ones (World Bank 2009). As there is no nationally representative household survey to assess these developments, though, we cannot assess their overall poverty impact here.

**Box 1: New efforts to address urban poverty**

Since 2005 the Government has started more actively targeting urban areas in its poverty reduction efforts. A central element of those efforts has been the Integrated Housing Development Program, which aims to increase demand for labour in urban areas by creating cooperatives of workers to produce the building materials and implement the non-structural aspects of construction work. While no national assessment of the impact of the program is available, an assessment of the Addis Ababa Integrated Housing Development Program, which provided the template for the rolling out of the program to other urban areas, highlighted how the design features of the program did not make it very effective at reducing poverty (World Bank 2008). The selection of relatively skilled workers to participate into the program limits the extent to which the poorest workers can participate. Overall, despite some positive distributional effects, such as raising the wages of the lower skilled workers, the AAIHDP is not designed to reach the groups which are most vulnerable or which would be less able to benefit from other opportunities offered in the private sector. Doubts were also raised on the sustainability of the employment creation effects of the program itself.

Other smaller scale projects, such as the creation of cooperatives of street sweepers and garbage collectors, which by design might be able to reach more deprived and excluded groups appear to have had a greater potential to reach the most deprived, but no evidence on their effectiveness is available to date.

Source: World Bank 2008
2. **International evidence on the dynamics of urban inequality and growth**

The high levels of urban inequality in Ethiopia fit well with what is observed in the rest of Sub-Saharan Africa (UN Habitat 2008a), where higher urban inequalities (relative to rural) are twinned with the highest levels of urban poverty incidence in the world. The role of effective access to services and infrastructure has been noted as reinforcing income inequalities, and results for example in the highest levels of education disparities in the world. Further, and possibly because of this high urban inequality, recent analysis emphasized how trends for Sub-Saharan Africa and Latin America, in contrast to those of the rest of the world, have shown lack of progress on urban poverty despite progress in terms of rural poverty (Ravallion, Chen, and Sangraula 2007).

If the *levels* of Ethiopian urban inequality are not surprising given what is observed in the rest of the continent, the international evidence on the *evolution of inequality* as an economy grows is much more heterogeneous, given that the specific growth patterns, policies and institutions a country faces play an important role in mediating the relationship between growth and inequality. This is well illustrated by comparing three Asian economies that experienced rapid structural transformation from a mostly agrarian economy: China, India and Malaysia (Table 2).

Both China and India, which embarked on substantial market reforms aimed at supporting large urban based growth experienced increases in urban inequality (UN Habitat 2008a). China’s powerful growth resulted in extraordinary poverty reduction, though urban inequality grew steadily since 1978, albeit from very low levels. India, which started with urban inequality levels comparable to those recently experienced by China experienced only moderate increases, and by the early part of this decade had stable urban inequality measures, which were only moderately higher than those registered in the 1970s. Malaysia, which started in the early 1970s with high urban inequality, has been able to bring down the urban Gini by 9 percentage points thanks to the introduction of wide-ranging measures aimed at addressing inequality. An important element of the experiences of these three countries, and particularly of China, is that irrespective of what happened to inequality, they experienced sustained poverty reduction as they had the benefits of a large pool of relatively skilled workers, allowing them to engage in an export-led strategy which acted as a central engine of job creation for the poor.

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6 In contrast, in other regions urban inequality does not appear to be systematically higher than rural one (see evidence in Fay and Ruggeri Laderchi 2005 on Latin America, and in World Bank 2004 on Eastern Europe and Central Asia).
Table 2: Urban inequality in 3 growing Asian economies

<table>
<thead>
<tr>
<th>Year</th>
<th>Malaysia</th>
<th>India</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>0.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>0.51</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>0.51</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>0.5</td>
<td>0.34</td>
<td>0.16</td>
</tr>
<tr>
<td>1981</td>
<td>0.49</td>
<td>0.34</td>
<td>0.18</td>
</tr>
<tr>
<td>1984</td>
<td>0.47</td>
<td>0.34</td>
<td>0.2</td>
</tr>
<tr>
<td>1987</td>
<td>0.45</td>
<td>0.36</td>
<td>0.22</td>
</tr>
<tr>
<td>1990</td>
<td>0.45</td>
<td>0.36</td>
<td>0.24</td>
</tr>
<tr>
<td>1993</td>
<td>0.44</td>
<td>0.35</td>
<td>0.26</td>
</tr>
<tr>
<td>1996</td>
<td>0.43</td>
<td>0.35</td>
<td>0.28</td>
</tr>
<tr>
<td>1999</td>
<td>0.42</td>
<td>0.35</td>
<td>0.31</td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td></td>
<td>0.34</td>
</tr>
</tbody>
</table>

Source UN Habitat 2008a

The claim that countries’ experiences with the evolution of inequality are far too heterogeneous to generalize (World Bank 2006) challenges the long held view that it is inevitable that inequality overall, and inequality in urban areas in particular, grows during the development process. This idea was taken to be a stylized fact by the so-called “Kuznets hypothesis” which posits a dualistic economy where labour would move from the low inequality, low productivity rural economy to a high inequality, high productivity urban economy. Internal migration driven by wage differentials in the two contexts would result in an increase of overall inequality as urbanization and urban growth proceeds. This increase would be driven by the urban population weighting more in the aggregate distribution. In addition, increases in inequality would arise from the growing urban inequality as the newly arrived migrants would either “queue” for higher paid formal sector jobs thus resulting in high levels of unemployment, or would start informal activities to make a living.7

Even if international evidence shows that this type of pattern is far from unavoidable, several elements of the dual economy model on which it is based seem to fit the reality of a country such as Ethiopia. The overall weak integration of the rural and urban economy, for example, is shown by a number of indicators such as the limited extent of household diversification into rural non-agricultural activities (Loening et al. 2008), or by the wage differentials for unskilled labour.8 Similarly, in urban areas more than half of employment is informal (World Bank 2007a), and there is a widespread perception that internal migration might be contributing to sustained levels of urban poverty.

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7 Overall inequality was assumed to then start declining when the process of migration would start driving up rural wages, so that rural areas would catch up with urban areas in terms of average income levels.

8 Rural wages are poorly captured by official data set. Anecdotal evidence suggests that rural wages might be around 8 or 9 birr a day, against wages of upward of 15 birr that unskilled laborers can command on construction sites. These numbers, though approximated, provide a rough estimate of pervasive rural-urban differentials.
A closer look at the claims that the increased inequality in urban areas is driven by internal migration alone, by inflating the lower end of the income distribution in urban areas, however, suggests that migration is unlikely to have played a major role in the decade up to 2005. As detailed in Box 2, evidence from the LFS 2005 data suggests that migration is contained (albeit perhaps increasing). A new survey representative of migrants in Addis Ababa provides similar estimates on the size of migration flows and supports the view that migrants’ labour market outcomes are no worse than those of the local population.

**Box 2: Internal migration in Ethiopia and its impact on urban labour markets**

The only nationally representative household survey which provides information on internal migration is the Labour Force Survey. An analysis based on the 1999 LFS (Blunch and Ruggeri Laderchi 2006) highlighted that even if migratory flows to urban areas were limited, there were signs that internal migration could be increasing. From a labour market perspective the paper found that even if migratory flows were very heterogeneous, overall the employment outcomes of migrants were better than for non-migrants – a finding compatible with the better education profile of migrants, and with the fact that those who migrated for employment reasons had a better employment performance than other migrants (say, who migrated for family reasons or following natural disasters in the rural areas). Migrants also faced better returns to their skills, though differences in returns decreased for higher educational levels. The paper also found evidence that while migrants did not appear to “compete” with local workers except for very low levels of education, in general they seemed to be more in competition with each other, possibly also because of the strong networks effects (also documented in the qualitative literature) which both motivate migration and appear to facilitate finding employment.

More recent work based on a special survey representative of migration in Addis only (Ticci et al. 2009) confirmed some of the insights of the work done on LFS data, such as better employment outcomes of migrants vis-à-vis non-migrants, with improvements in their employment as they spend more time in the city and the importance of network effects with individuals who had information prior to their move more likely to end up in wage labour as opposed to self-employment. In addition the survey probed on the matter of registration, which is widely reputed to contribute to reducing internal migration. As many as 70 percent of migrant households had at least one of their members without a registration, 40 percent of which because of problems with local authorities issuing the needed letter of release. While most of migrants were not aware of the difficulties that lack of registration could cause, most of them reported these difficulties would have not influenced their decision to migrate and do not report to have been penalized for the lack of registration in accessing jobs.

Note that the evidence of positive labour market outcomes clearly reflects the strong process of self-selection which characterizes the decision to migrate. Were the various push and pull factors which motivate migration to become stronger, or were some of the obstacles currently faced by internal migrants to become less serious, it could well be that internal migration would warrant concern for its impact on urban poverty and inequality, particularly if measures to create a more inclusive urban economy were not adopted (World Bank 2007a). Focusing on the decade up to 2005, however, it seems unlikely that internal migration played a major role in exacerbating urban inequalities.

Source: Blunch and Ruggeri Laderchi (2006), Ticci et al. (2009)
3. Evidence from Ethiopia on growing inequality in urban areas

To characterize better the sustained rise in urban inequality over the decade up to 2005, in depth microeconomic work has sought to identify the household level factors associated with the growth in inequality. Figure 3 below illustrates the changes in the distribution of per capita consumption. The left hand side panel contrasts the darker line for 2004/05 with the initial distribution (1995/96, the finer line). After a decade fewer individuals found themselves at very low levels of consumption per capita (the darker line shifted to the right) and also a much larger number of people found themselves in the right hand tail. The second panel makes more explicit by how much the consumption per capita of the highest groups leapt ahead of the rest of the distribution by plotting the growth incidence curve (i.e. a curve which shows by how much each centile of the distribution has seen its consumption per capita change over time). While consumption of the poorest 10 percent of the population rose by 20-30 percent, those in between percentiles 11 and 65 saw an increase of about 10-15 percent. It is the sharp increase in the growth rates experienced by the top of the distribution, however, which stands out. Looking across from percentile 65 to the richest group, growth rates appear to accelerate. For richest 10 percent of the population the acceleration becomes even stronger, and consumption growth ranged between 60 and 160 percent.

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9As demographic change was an important candidate for explaining some of the changes witnessed over the period, the distribution of interest for this analysis has been consumption per capita rather than per equivalent adult. As discussed in the Annex the choice of the indicator is non-trivial in terms of measurement as it leads to a different poverty trend. Follow up work will further explore the way demographic change affects poverty trends and the sensitivity of poverty trends to assumptions about equivalence scales.
**Figure 3:** Change in the distribution of household per capita consumption, urban Ethiopia, 1995/96-2004/05. Distribution function and growth incidence curve

Consistent with this large growth at the top of the distribution, inequality indicators which are more sensitive to the top of the distribution (such as the Generalized Entropy index 2, GE2) rose from .25 to 0.63, an increase by 154 percent. In contrast the Gini coefficient (which is sensitive to what happens in the middle of the distribution) rose by 34 percent only (Table 3).
Table 3: Inequality trends – Urban Ethiopia

<table>
<thead>
<tr>
<th>Observed</th>
<th>Urban Population</th>
<th>GE(-1)</th>
<th>GE(0)</th>
<th>GE(1)</th>
<th>GE(2)</th>
<th>Gini</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>12,836,938</td>
<td>795.76</td>
<td>0.2641</td>
<td>0.1884</td>
<td>0.1938</td>
<td>0.2501</td>
</tr>
<tr>
<td>2004</td>
<td>14,095,439</td>
<td>1,129.19</td>
<td>0.4216</td>
<td>0.3422</td>
<td>0.3824</td>
<td>0.6343</td>
</tr>
</tbody>
</table>

This increase in inequality, and particularly the surprising growth experienced by a small portion of the urban population suggest that the key issues to be understood are: (a) what allowed the consumption levels of that small group to grow so significantly, and (b) why other groups and particularly the 50 percent of the urban population which occupies between the 15th and the 65th percentile did not manage to share more into that growth.

A number of counterfactual scenarios have been created following the Bourguignon, Ferreira, Lustig (1998, Box 3) methodology (see Leite, Sanchez and Ruggeri Laderchi 2009 for technical details). These counterfactual scenarios focus on changes in the distribution of education, occupation and fertility (individually and jointly) for some or all members of the households; and, changes in the price (‘return’, ‘cost’) of household characteristics (both endogenous and exogenous).

Note that by definition this analysis is limited to changes in characteristics and returns of characteristics which were measured at the household level in both surveys. The effects of factors which cannot be explicitly modelled but are likely to have played an important role over the period of a decade (e.g. policy reforms which can be expected to influence consumption levels and inequality, but are not captured by household survey data) are factored in as “unobservable factors”. In addition, as our models can be seen as omitting important variables that should be captured but cannot be measured, it is likely that their effect is also captured by the variables they are mostly correlated to. This is particularly relevant in the case of education as the returns to education are likely to capture also the effects of the returns to other complementary factors such as capital.

Box 3: Decomposing changes in urban inequality

Several statistical techniques have been devised to understand the factors associated with changes in measures of inequality at the household level. The Bourguignon, Ferreira, Lustig (1998) technique which has been adapted to analyse the data from the HICE survey focuses on the effects of changes in household characteristics, and particularly human capital endowments, and changes in returns to those characteristics.

This method generalizes the intuition of the Oaxaca Blinder decompositions, but differs from it in two key respects: first it considers the whole distribution of endowments, individual characteristics, and agent behaviors rather than dealing just with averages; secondly it explicitly considers that changes in poverty and inequality are likely driven by factors (such as changes in macro and labour market policies, changes in household demographic composition and migration

10 Technically, this is done by applying the residual distribution of the 2004 model to the 1995 model
patterns, changes in the pattern of economic growth and in the incidence of inflation) whose impacts are not independent, but rather simultaneous.

In common with less sophisticated decompositions techniques this analysis is descriptive – i.e. it focuses on associations as it cannot address causality – and can only focus on variables observed at the household level. In other words, even if we suspect that some of the changes in household characteristics (e.g. changes in the occupation of the head of the household) might be driven by institutional reforms (e.g. expansion of public sector employment linked to the decentralization process) we can only observe the effects of those changes in inequality, without being able to attribute those changes to one particular institutional factor. Evidence from other sources is therefore needed to interpret the findings and place them in context.

The scenarios which were constructed aimed to reflect the main changes revealed by the comparison of the WMS-HICE surveys for 1995/96 and 2004/05, namely that overall the average urban Ethiopian family is smaller, with a higher probability of having a younger, male, head of household, with better educated members, with more of their members working in the formal sector but at the same time with higher levels of unemployment for the head of the household and the spouse. A further important change revealed by the data, and one which appears to have significant effects on the findings, is the redistribution of household location across the major urban areas. Over the decade a greater proportion of urban households appears to be found in the three main cities (Addis Ababa, Dire Dawa and Harar) or in Oromiya and Tigray.

The findings show that:

- Of the household characteristics considered (education, occupation and fertility), changes in the education of the population would have the highest impact on average consumption, despite a similar impact on inequality. Changes in these endowments alone can account for about 13 percent of the overall inequality increase as measured by the Gini, with education playing the largest role.
- Changes in the returns of various household characteristics (and in particular education) also contributed to the rise of inequality, explaining 43 percent of the increase in the Gini index, and an even more marked increase of the GE(2) index. This suggests that the educational expansion led to a more convex structure of the returns to education between 1995 and 2004 reducing returns on the bottom of distribution and increasing them at the top. This would imply a higher premium on higher levels of education over time, as compared to lower educational level.\[12\]

11 For example, the share of head of households without education dropped from 54 to 38 percent, reflecting the massive push in education investment. Among the heads of households there was a marked decrease in the share of self-employed (from 46 to 34 percent), and a rise in wage employment (from 21 to 28 percent), likely driven by the expansion of employment in the public sector driven by the shift towards a decentralized governance model. At the same time, average household size decreased from 4.7 to 4.3, as the share of households with more than 2 children aged 6 or less dropped from 17.3 to 12.8 percent and as the proportion of households with one member rose from 7.9 to 11.3 percent.

12 LFS data show that at least for the part of the decade for which data are available (1999 to 2005) the unemployment rates for those with at least some higher education rose. This seems to suggest that limitations to the supply of tertiary education (which unlike other segments of the education supply was not liberalized) did not play an important role in determining this shift in returns. One could hypothesize that the failure to liberalize resulted in specific skills shortages which drive these very high returns, but the LFS sample of university graduates is too small for this type of disaggregation. Note however that in the latest Investment Climate survey run in 2006 skills shortages rank relatively low as a top constraint for firms making this hypothesis an unlikely candidate as the main driver for the dynamics of returns that were observed.
• The effect of the changes in returns to education becomes stronger when controlling for unobservables. This is consistent with the expansion of some higher value added and skill intensive sectors which used to have a rather narrow base, or with unobservable changes in quality, which are likely given the rapid pace at which the educational system increased.

• Finally, an additional 21 percent of the change in the Gini is accounted for by changes in the exogenous variables which define household characteristics. These include region of residence, age of the head, gender of the head and number of adults per household. The most important of these factors is the reallocation of households across the major urban areas in the country.

Overall, this decomposition can account for 88 percent of the change in Gini and 73 percent of the increase in the GE(2) index, which compares favorably with other published applications of these methods.

These findings provide some important insights on why growth has been so concentrated at the top of the distribution, and in conjunction with the evidence provided by other recent studies they help identify some important policy levers to address the not-inclusive nature of the growth experienced in urban areas. The main factors accounting for the rise in inequality over the decade up to 2005 are changes in the returns to household characteristics, and especially changes in the returns to education. While a large push for universal primary education led to rising educational levels, skills premia also increased significantly. The economic benefits of higher education did not translate, therefore, into as large an economic growth for those at the bottom of the distribution as one would have expected based on the returns to education in 1995.\(^\text{13}\) Issues of access to complementary factors are likely to have exacerbated this trend. More specifically:

• Urban labour markets have not been able to absorb the growing cohort of better skilled (but still relatively low skilled) workers who benefited from increased investment in education, as showed also by the rise in unemployment. Those with higher skills, in contrast, could take advantage of some good jobs opportunities (for example those offered in sectors which grew significantly over the decade such as manufacturing, and financial services and to some extent construction).\(^\text{14}\)

• Restricted entry into high growth sectors might have further exacerbated this trend as entry into these new sectors by new firms is likely to have been hindered by difficulties in accessing credit, and a highly regulated business environment which appears to favor established firms over new ones (World Bank 2007a). The low degree of competition established firms face would have made it possible to continue paying these high skill premia.

• The privatization process which took place especially in the mid-1990s, might have further contributed to the disequalizing effect of changes in returns to education, given...
the premium that public and parastatal jobs offer for the lower skilled (World Bank 2007, a). Those low skilled workers who had to move to private sector jobs would not have been able to command the same levels of wages, while the new job creation by the public sector as part of decentralization\textsuperscript{15} is likely to have created mostly jobs for skilled workers.

- Quality of education is also likely to have played a role in these developments. The lower levels of input per student experienced with the large efforts to arrive at universal primary education have affected the quality of education (World Bank 2005, b), and are likely to have most affected those less successful students who did not continue past primary school. Furthermore, it is possible that at the top end of the educational distribution there has also been an increase in quality, driven by more educational opportunities for tertiary education, particularly with the return of a growing group of successful members of the diaspora.\textsuperscript{16}

In addition to changes in the returns to education, it is notable that our decomposition shows a significant impact of changes in characteristics of urban households that we could not model. In particular, accounting for changes in the distribution of urban households across urban areas significantly improves our ability to account for the differential growth experienced by the top deciles. This suggests that those who were better able to take advantage of location-specific market opportunities moved to those areas, as one would expect if households follow market signals in deciding their location.

Furthermore, the new profile of urban households, and in particular the greater likelihood of being households with younger heads, well educated, living alone or in couples with no children also contributed to increased inequality, as these types of households experienced higher growth rates in consumption per capita.

Note that both these changes improved the fit of our simulations at the top of the distribution, providing further elements to discredit the view that internal migration is dampening the effect of growth in urban poverty by crowding the bottom of the distribution.

4. Making urban growth more inclusive

In the decade up to 2005 growth failed to deliver in terms of poverty reduction in urban areas in Ethiopia, while urban inequality rose. Arguably increases in urban inequality are part of the price to be paid for growth in urban areas as those with better opportunities take advantage of them. This seems to be particularly the case in a context such as Ethiopia where, despite recent efforts, the skills base is still limited by a backlog of unskilled workers who might not be able to be employed in the higher productivity sectors, and where significant spatial inequalities persist.

Yet international evidence shows that there is no set path for inequality to change over time as an economy develops, as well as providing the example of countries like China and India where sustained poverty reduction has been possible despite growing inequality. As many other

\textsuperscript{15} Documented at least between 1995 and 2003 in World Bank 2005
\textsuperscript{16} This group is also likely to have benefitted from having accumulated capital abroad, which allowed it to overcome the credit constraints faced by many other new firms.
countries, especially in East Asia, China and to a lesser extent India, benefitted from having a larger pool of skilled workers to draw on, so that growth provided better livelihoods to the urban poor irrespective of what happened to inequality. Nevertheless, building a more inclusive growth model, and one that delivers on poverty reduction, is possible through policies and institutions that create broader access to economic opportunities.

The particular growth pattern witnessed in urban Ethiopia where only a small group has been capable of reaping very high returns for their skills, and their complementary assets, suggests that three priority areas need to be addressed to make more inclusive both across the distribution and spatially:

1. **Making growth more broad based overall, by increasing access to profitable economic opportunities.** Research on the lessons of pro-poor growth in the 1990s highlighted the importance of a conducive business climate to allow more firms to enter the market and compete, and therefore create jobs (World Bank 2005, a). Conversely, over-regulated factor markets push individuals into informal activities that have no prospects of growth or of providing better jobs for the poor (Steel and Snodgrass 2008). Both these lessons apply well to the case of Ethiopia, where a business climate skewed towards the incumbent concentrates profits in well established firms (World Bank 2009, a), while more than 50 percent of employment is informal.

Rebalancing the business climate should therefore help spread the benefits of growth beyond the upper percentile of the distribution by (a) favoring the entry of new firms which could compete and innovate as well as creating more jobs in the formal private sector and (b) supporting those in the informal economy with the potential to grow, by simplifying processes, reducing the costs and increasing the benefits associated with moving to the formal economy.

Complementary efforts to continue strengthening the human capital base of the labour force, particularly of the poorest groups which are likely to be most affected by quality issues with provision, should further reinforce the effectiveness of these measures in creating a more dynamic demand for urban labour, particularly of those at the bottom of the distribution.

2. **Investing in a more balanced urban structure to support growth and poverty reduction.** Ethiopia stands out in SSA for the extent to which its urban structure is skewed towards Addis, which alone shelters 23 percent of the urban population and is ten times larger than the next city (UN Habitat 2008, b). Strengthening the network of secondary cities would result in both decreased inequality overall and in greater poverty reduction both in urban and in rural areas, by directly addressing the challenges faced by the poor in smaller cities as well as offering more opportunities for diversification into non-agricultural activities to rural dwellers (Loening et al. 2008; Dercon and Hoddinott 2005).
While creating a more balanced urban structure and more effective urban environments involve a complex policy agenda, much has been learnt by recent experiences that can help making cities more supportive for growth and poverty reduction (see Box 4 on the case of land markets).

**Box 4:** Creating inclusive urban environments: the case of land markets

African cities often do not reap fully the benefits of agglomeration that effective cities can offer. People and activities, while concentrated in the same place, lack the benefits of efficient public services, flexible factor markets (particularly land) and of effective urban management. These can be seen as “the basic ingredients” needed by individuals and firms to thrive.

These three elements are intertwined, as suggested by the example of land markets in urban Ethiopia. Both existing systems of formal property rights contribute to massive price distortions and provide windfall gains for those who can acquire land. This deprives local governments of resources which should help provide for urban services and infrastructure. In addition, despite a commitment at regularizing informal housing that has been built to standard, albeit on unregistered or illegal land, there is no policy for upgrading sub-standard housing which is most likely to be occupied by the poor. Regularizing these informal settlements would bring benefit to both local authorities and local inhabitants, as demonstrated in the case of the large scale formalization of illegal settlements which took place in Peru between 1996 and 2001. The economic benefits of the program for the beneficiaries have ranged from greater access to credit (based on the new collateral), increases in value of the properties, partly because there were incentives for improving them; greater availability for market work for individuals who did not have to protect their property. In addition service providers have been able to use the new data on residents for planning service provision and urban development.


3. **Addressing the greater vulnerability of the urban poor.** Integration in the market economy means that the urban poor can benefit from greater opportunities but also that they are more vulnerable to shocks to either the demand for their labour or the supply of the basic necessities they consume. The consequences of these shocks appear to be long-lasting, as urban households are likely to become “trapped” in poverty once their consumption falls (see Annex 1).

Social insurance systems and targeted interventions in urban areas should be developed or strengthened to assist both chronic and transient poor and to prevent irreversible losses. Safety net programs, currently active only in rural areas (though there seems to be evidence that PSNP is also reaching urban recipients), could be extended or designed specifically also for urban areas, though the different characteristics of urban and rural poor require care in adapting their design (see Box 5).
Box 5: The challenges of adapting a rural safety nets program to an urban context

Some characteristics of urban poverty have important design consequences when programs that started as rural social safety net programs are extended to urban areas. Those include:

*The spatial distribution of urban poverty:* urban areas in Ethiopia are characterized by relatively low geographical concentration of the poor (Muzzini 2008), so that geographic or community targeting mechanisms might imply higher errors of exclusion and inclusion in urban than in rural areas.

*The heterogeneity of the urban poor:* urban populations tend to be more heterogeneous than rural ones, and this holds also for the urban poor. The choice of eligibility mechanisms is therefore more difficult as one single criteria is less likely to identify the intended target group. In contrast, self-selection mechanisms might be more cost and targeting effective than in rural areas.

*Different opportunity costs and priorities in urban than in rural areas:* incentive compatible programs require considering that in urban areas opportunity costs of the choices might be different than in rural areas. The conditional cash transfer program “Oportunidades” in Mexico, for example, has lead to different outcomes when it has been expanded from rural to urban areas. Though the targeting mechanisms have been adapted to the different settings, the program has been more effective in terms of educational indicators and less successful in terms of housing improvements in urban than in rural areas. These differentiated effects might be partially explained by higher opportunity cost of labour and higher importance received by housing conditions and security in urban areas (Fay et al. 2005)

*Conditionality.* A number of very successful cash transfer programs have made transfers conditional on certain desirable household behaviors. While the greater geographical proximity to service delivery might make it easier to condition the transfer to child health interventions or schooling, the greater level of access to those services might make those conditions less binding than in rural areas.

Given that a high share of urban population is exposed to transitory poverty, scaling-up of safety net programs could be financially very demanding. A strict prioritization and selection of intervention groups would therefore be necessary. Based on available evidence on their lack of labour market participation and the risk of being in poverty, groups least likely to participate in the labour market or to be accessing good jobs and which therefore ought to be covered in the program would include the least educated, the disabled and female headed households with young children. Further research, however, is needed to define more systematic selection mechanisms and eligibility requirements for well-targeted programs in urban areas.

In addition, the design of safety nets should be coupled with actions designed to enhance the overall resilience of the economic system: such as improving fiscal revenue collection – which represents a pre-condition for improving public social protection system – at the macro level, and strengthening ex-ante coping household strategies, at micro level, and encouraging risk-insurance mechanisms.
References


Annex 1: Methodological aspects of poverty and inequality trends

This note adopts as welfare indicator to capture poverty the same consumption indicator used by official government reports: consumption per equivalent adult in Addis prices (deflated by price indexes collected at 132 locations throughout the country). This data show a stagnation in poverty reduction in urban areas (an increase in the headcount but not statistically significant) and a significant increase in inequality. As noted in the text, in order to model the effects of changes in the urban demography on inequality, a different welfare indicator had to be adopted. Indeed, the adoption of equivalence scales is meant to eliminate the effect of those demographic changes on the welfare indicator.

It is worth noting, however, that by adopting consumption per capita as a welfare indicator a different picture of the dynamics of welfare over time emerges: as shown by Figure 3 in the text the growth incidence curve for the whole distribution shows that for no group was growth negative – hence for a constant poverty line the headcount cannot have increased.

Two important points are raised by this apparent inconsistency in trend analysis:

1. From the methodological point of view measuring poverty on the basis of consumption per adult equivalent is theoretically superior to measuring poverty based on consumption per capita. The poverty trends in table 1 are therefore to be considered as the “true” ones, and poverty reduction in urban areas between 1995 and 2004 should be seen as stagnant. However, as poverty estimates (and in the Ethiopian case also trends) are sensitive to the choice of equivalence scales used (Lanjouw and Ravallion 1999) future work should include sensitivity analysis to the assumptions made when determining equivalence scales.

2. From the substantive point of view, contrasting the two different growth patterns for the various segments of the distribution (and notably the fact that using consumption per equivalent adult leads to negative growth for households between the 30th and the 40th percentile, ie right around where the poverty line is) suggests that households with different composition experienced differential growth rates. Indeed, without a significant reranking of observations it would not be possible for the both patterns to emerge from the data. This is consistent with the importance of changes in the demographic composition of the household in explaining inequality. In separate follow up work the issue of the differential growth rates of household consumption for households of different types and the reasons underlying those changes in household composition will be explored.
Annex 2: Key differences between urban and rural poverty

Urban areas are richer than rural ones, but also much more unequal. As a result the gap in poverty incidence is not very marked. On average urban areas are much richer than rural ones, with average expenditure 1.4 times rural one (Table A.1), a ratio equal to that in 1995. This is also reflected in lower poverty incidence depth and severity of poverty in urban areas vis-à-vis rural ones, and smaller towns doing less well than larger ones. The rural-urban advantage in terms of monetary poverty, however, is less marked, a characteristic that Ethiopia shares with other large African countries and that according to Kessides (2007) makes the poverty profile of SSA strikingly different from the one of other parts of the developing world.

Table 4: Consumption per equivalent adult and poverty indices by area of residence, 2005

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban (total)</th>
<th>Major towns</th>
<th>Small-medium towns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption per equivalent adult</td>
<td>1868</td>
<td>2701</td>
<td>2725</td>
<td>2689</td>
</tr>
<tr>
<td>Per capita consumption</td>
<td>1505</td>
<td>2274</td>
<td>2326</td>
<td>2239</td>
</tr>
<tr>
<td>Headcount poverty rate</td>
<td>39.3</td>
<td>35.1</td>
<td>32.3</td>
<td>37.1</td>
</tr>
<tr>
<td>Poverty gap index</td>
<td>8.5</td>
<td>7.7</td>
<td>6.6</td>
<td>8.4</td>
</tr>
<tr>
<td>Poverty severity index</td>
<td>2.7</td>
<td>2.5</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>Gini index (per adult total expenditure 1995/96 prices)</td>
<td>0.26</td>
<td>0.44</td>
<td>0.45</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Source: 2004/2005 HICE-WMS. Note: Per capita and per adult expenditure are calculated by excluding the top 1% in each population group.

The gap in human development outcomes between rural and urban areas is still very pronounced, albeit the urban advantage in access and outcomes is less for the poor than for the population as whole. Primary enrollments in rural areas are still less than half urban ones, while secondary enrollments are almost five times as low. While the differences in self-reported morbidity are more muted, a much lower share of those who report health issues appear to have sought treatment. These differences persist despite very large efforts in rural areas, for example in building schools (according to the WMS surveys the average distance to a primary school in rural areas decreased from 5.3 to 4 km in the decade up to 2005; against 1.4 to 1.1 in urban areas).

17 Note that even if administrative data show higher levels of enrollment, we have to rely on household survey data (even if old) to disaggregate various indicators by quintile.
Table 5: Snapshot of rural-urban disparities, 2005 (percent)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Rural</th>
<th></th>
<th></th>
<th></th>
<th>Urban</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Botto m quintile</td>
<td>Top quintile</td>
<td>All</td>
<td>Botto m quintile</td>
<td>Top quintile</td>
<td>All</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Net primary enrollment rates</td>
<td>27.1</td>
<td>38.8</td>
<td>32.5</td>
<td>74.2</td>
<td>80.6</td>
<td>77.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net secondary enrollment rates</td>
<td>8.4</td>
<td>10.9</td>
<td>9.0</td>
<td>42.8</td>
<td>45.6</td>
<td>44.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported health problems in the previous two months</td>
<td>23.1</td>
<td>29.4</td>
<td>24.9</td>
<td>17.7</td>
<td>19.6</td>
<td>19.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought health treatment 2</td>
<td>38.8</td>
<td>49.6</td>
<td>44.6</td>
<td>67.6</td>
<td>79.3</td>
<td>73.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to electricity</td>
<td>0.8</td>
<td>2.6</td>
<td>1.3</td>
<td>73.9</td>
<td>81.4</td>
<td>76.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to improved water sources 1</td>
<td>1.0</td>
<td>0.8</td>
<td>0.9</td>
<td>33.1</td>
<td>51.3</td>
<td>42.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 1 Improved water sources include tap inside the house or the compound (private or shared).
2 Health consultancy among people reporting health problems in the previous 2 months.
Source: 2004/2005 WMS-HICES.

In urban areas outcomes improve across richer income groups much more than in rural areas, where access to services acts as a binding constraint for all income groups. Taking the example of stunting, its incidence is higher in rural than in urban areas (53 versus 37 percent) but the urban-rural advantage narrows for the lowest expenditure quintiles (60 versus 45 percent in the bottom quintile). The same pattern holds for the share of households reporting food shortage in the previous 12 months (Figure 1).

Figure 4: Rural-urban disparities across expenditure quintiles for stunting and exposure to food shortages

Source: 2004/2005 WMS-HICE
In line with international evidence smaller urban centers offer the worst living conditions across the urban spectrum, with low access to services typical of rural areas, and some of the negative externalities of higher population density (National Academy of Science 2006). Muzzini (2008) suggested that smaller towns had worst educational attainments, housing conditions and access to improved water supply, water disposal vehicles and electricity, while overcrowding and insecurity of tenure were more severe in major centers. This spatial connotation and differentiation of urban living conditions is largely confirmed by 2004-2005 household survey data. In particular, child malnutrition is more severe in small and medium centers than in large cities (with a stunting incidence of 38 percent, versus 32 in larger cities, and a relative gap constant across expenditure quintiles).

Urban living requires a greater dependence on the market, so that the urban poor are more reliant on purchased items for survival. The literature on urban poverty emphasizes the importance on the different needs of urban living – going to work in a big city, for example, might require spending money on transport, so that achieving the same level of welfare would require higher private monetary costs than in urban areas – and the greater dependence on the market to obtain both income and food. Table X illustrates the point and highlights the differences in consumption patterns between rural and urban areas, with budget shares for key expenditure categories.\(^\text{18}\) The urban population spends a larger part of their total monetary expenditure on food and on transport and communication services than rural households. In rural areas, despite a high share of food which is traded (about 40 percent), spending on housing, water, fuel and power is proportionally higher than in urban settings.

<table>
<thead>
<tr>
<th>Item groupings</th>
<th>All rural</th>
<th>Rural poor</th>
<th>All urban</th>
<th>Urban poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>38.5%</td>
<td>42.0%</td>
<td>48.7%</td>
<td>58.5%</td>
</tr>
<tr>
<td>Cigarettes and Tobacco</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Clothing and Footwear</td>
<td>9.9%</td>
<td>9.5%</td>
<td>7.5%</td>
<td>6.6%</td>
</tr>
<tr>
<td>House Rent, Construction Materials, Water, and Fuel and Power</td>
<td>29.4%</td>
<td>30.9%</td>
<td>16.8%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Furniture, Household Equipment</td>
<td>4.1%</td>
<td>3.6%</td>
<td>5.6%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Medical care and Health</td>
<td>0.7%</td>
<td>0.6%</td>
<td>0.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Transport and Communication</td>
<td>0.9%</td>
<td>0.5%</td>
<td>4.9%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Education, Recreation and Entertainment</td>
<td>1.4%</td>
<td>1.6%</td>
<td>3.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Personal Care</td>
<td>1.8%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Other goods</td>
<td>13.1%</td>
<td>9.6%</td>
<td>10.7%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

\(^{18}\) Those are calculated excluding consumption of self-produced goods (food). This emphasizes the dependence on the monetary economy of the urban poor – a key source of vulnerability as shown by the example of the impact of inflation.
The greater reliance on the cash economy for both income and consumption which characterizes urban areas implies that the urban poor are more vulnerable to market volatility and to macro-economic shocks. At the same time, the urban poor might have a broader array of income sources to rely on as coping strategies and they are likely to be less vulnerable to covariate risks than rural households dependent on agriculture.

The WMS-HICE survey provides some data on household exposure to different types of external shocks in the 12 months prior to the interview. As shown in Figures 2 and 3 for the urban poor idiosyncratic shocks such as illness, death of household members or loss of job have a relative higher importance than covariates risks such as price shocks and bad weather conditions. Job losses are more frequent for urban households, while rural and urban population appear to be equally exposed to price shocks. The data also suggest that, despite a higher reliance on agriculture, exposure to food shocks is higher in smaller centers than in larger urban areas (17 percent versus 11 percent of total population).

**Figure 5 & 6:** Percentage of population in the lowest expenditure quintiles that had experienced shocks in the previous 12 months, by type of shock

Source: 2004 WMS

The survey also provides details on how households cope with shocks. As shown by Figure 4, the urban poor are most likely to rely on cash savings (34 percent against 17 percent of the rural poor) while in rural areas it is more common to rely on sales of household and livestock assets, a strategy adopted by about 60 percent of the poorest population hit by a shock (against 24 percent of the urban poor).

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19 The high vulnerability and exposure of rural households to climatic shocks is also confirmed by other source of data. Based on 2004 Ethiopian Rural Household panel, Dercon et al. (2008) found that the most commonly reported shocks experienced by households between 1999 and 2004 were drought (47 percent), death (43 percent), and illness (28 percent) of household head, spouse or another person. These three events were also reported as the worst shocks (the other categories included economic, political, social, legal and crime shocks). Calvo and Dercon (2007) also estimated that in rural areas rainfall risk has a negative and significant impact on lagged consumption levels, while the impact of illness is not significant (head and spouse’s illness) or lower (others’ illness).

20 This difference increases within poor population: in medium and small towns 25 percent of the poor reported the had been affected by food shortage in the previous 12 months compared to 15 percent of the those living in major cities.
On average, in rural and urban areas, households have equal and substantial probability to fall into extreme poverty (around 34 percent and 32 percent, respectively) but the income-vulnerability link follows a different pattern. Based on evidence from the two panels existing for Ethiopia (Shimeles and Bigsten 2008).

- Approximately 70 percent of households experienced poverty at least once over the decade and only a small percentages of households remained constantly poor during the entire period. Despite this dynamic dimension and mobility out and into poverty, the levels of chronic and persistent poverty in both areas are high, with 37 percent of rural and 40 percent of urban households spending two or more consecutive rounds, out of four, in poverty during 1995–2004.

- In urban areas poverty is more persistent than in rural ones, with lower probability of exiting poverty after a poverty spell, and higher risks of entering poverty again after having exited. The likelihood to escape poverty considerably declines as the duration of poverty spell increases.

- Ranking households by their inter-temporal mean consumption, richer rural households appeared more vulnerable - i.e. they are more likely to be below the poverty line in an given year - than urban ones, while for the lower three deciles the opposite holds (Bigsten and Shimeles 2006). This was interpreted as reflecting the higher exposure to price and weather shocks of agricultural households on one hand, and their ability to subsist on the land at times of distress on the other.

Source: 2004/2005 HICE-WMS

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