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The invisibility of children's paid and unpaid work: implications for Ethiopia's national poverty reduction policy

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Abstract

The complexities of inter-generational and gendered intra-household resource allocations are frequently overlooked in poverty reduction policies. To address this lacuna, this paper focuses on links between macro-development policies and children's paid and unpaid work burden in Ethiopia. Using a mixed methods approach, quantitative household survey data results highlight the importance of household wealth and assets, family composition and access to education services, while the qualitative results underscore the role of culturally-ascribed gendered and age-specific conceptualisations of work, parental attitudes and children's agency. The paper concludes with a discussion of the challenges national development plans need to address to more effectively tackle childhood poverty.

Keywords: children, time use, poverty reduction, macro-micro linkages

1. Introduction¹

The complexities of intra-household dynamics and resource allocations are frequently overlooked in international poverty reduction policy discourse. Debates on how to achieve the Millennium Development Goals—a set of internationally agreed upon targets to reduce world poverty and hunger by 2015—as well as the goals of country-specific Poverty Reduction Strategy Papers (PRSPs)²—largely assume that policies designed to improve aggregate household wealth will automatically enhance the well-being of all household members. However, empirical evidence calls into question the concept of a unitary household and suggests that both within and across countries there is considerable diversity in the gendered and inter-generational distribution of income, assets and labour that mediate the effects of poverty reduction policies (Quisumbing and Maluccio., 2003; Haddad et al., 1996). In particular, changes in productive/paid workforce participation—particularly that of women—often have unforeseen effects on the quantity and quality of care for more vulnerable household members, including children, unless complementary policies are put in place (Folbre, 2001).

In order to contribute to this debate, this paper focuses on links between macro-development policies and childhood poverty in Ethiopia. Given that children (under 18 years) represent 44% of the Ethiopian population and an estimated 39% of those live below the nationally defined absolute poverty line³, this is clearly an area of significant policy importance, but one which is under-analysed. We focus on one key manifestation of childhood poverty-children's paid and unpaid work burden. National statistics estimate that almost half of all Ethiopian children are involved in some form of productive or household work⁴, and for many children work hampers their education. The Ethiopian National Child Labour Survey (2002) found that besides education costs, lack of access to schools and children being considered too young to attend classes, almost one third of all children were not in school due to work reasons (18.7% were expected to help with household chores and 9.5% were expected to generate much-needed household income). These figures notwithstanding, content analyses of Ethiopia's first and second generation PRSPs found that there is minimal reference to children's involvement in work activities (Jones et al., forthcoming). Accordingly this paper analyses the extent to which the policy measures in Ethiopia's first PRSP (2002-2005), especially its core Agricultural Development Led Industrialisation (ADLI)⁵ strategy, influenced the time use of children living in poverty. ADLI's underlying assumption is that because labour is abundant and capital scarce, new livelihood opportunities should be labour-intensive and agriculture-based. However, given imperfect labour and credit markets, high levels of poverty and inaccessibility of schooling, the demand for labour may be met (at least in the short-term) by involving children in either paid or non-paid work. Our hypothesis then is that the promotion of labour-intensive agricultural activities, while augmenting aggregate economic development, could be detrimental to child well-being in the absence of precautionary social risk management measures. In order to create a win-win situation where both national economic development and children's social and economic rights can be realised within the PRSP framework, the paper argues that a detailed understanding of the individual-, family-, community- and policy-level factors affecting decisions about children's time use is required.

2. Theoretical framework

Analyses of children's involvement in work activities and the merits and demerits thereof have generated considerable debate. This work may be broadly categorised by discipline and focus: i) work focusing on the interplay of supply and demand factors for children's labour (largely economists), ii) rights-based analyses that analyse the impact of work activities on the fulfilment of children's multidimensional rights (sociologists, legal scholars), and iii) analyses concerned with the socio-cultural construction of work and its meaning in context-specific cultural systems (anthropologists).⁶ In addition there is iv) an emerging body of literature that seeks to trace macro-micro policy linkages between shifts in macro-economic policies and the incidence of child labour. We briefly discuss each in turn in order to develop a synergistic framework with which to explore the effects of national poverty reduction policies on children's time use.

Assessing supply and demand factors

Children's time use has been analysed using a variety of economic models which focus on the value accrued to households of children's time allocation on schooling and/or labour in the short run, with respect to returns from longer-term investments in human capital and future income streams (Becker, 1965). In this utilitarian approach, the marginal return to income is higher for poorer households, and especially in the context of inefficient credit and labour markets, households often use children's labour to smooth consumption (Becker, 1993). The empirical literature has found however that household decisions are also shaped by an array of intervening variables including: the availability of assets, inputs, credit and insurance; household composition factors, parental education and income levels; and access to community services and infrastructure (Ray, 2003; Shapiro and Tambashe, 2001), as well as so-called 'utility shifters' such as socio-cultural norms, tastes and altruistic motives regarding work and education (Tansel, 1997).

More sophisticated models go beyond the notion of a unitary household and focus on intra-household bargaining (Alderman et al., 1995) where the time children allocate to work is a result of a bargaining process within the household, and where the relative power of each family member depends on her/his contribution to total household resources. Working children, for example, might for example be accorded more authority within the household. However, others (e.g. Tisdell, 2002) argue that children typically have weak bargaining power and may be compelled to sacrifice their future potential in order to meet the household's current challenges. This is particularly the case with girls, as parental investment in girls' schooling is typically lower than for boys (Alderman and King, 1998), and with first-born children (Bredie and Beehary, 1998).

Feminist economists have taken arguments about unequal intra-household distribution of resources and power further, arguing that the definition of 'work' employed by mainstream economists is gender blind as it largely ignores the role of domestic and care work. This has important implications for any analysis of child work on two levels. Macro-economic policies that provide new income-generating opportunities for women may be positive for children's well-being as there is mounting empirical evidence that greater income in women's hands enables them to act on their general preference to invest in their children's well-being (e.g. Hobcraft, 2000). However, without additional community or governmental support, mothers' time spent on income-generation activities may result in a reduction in time devoted to the nutritional, health and educational needs of children and/or greater care-giving responsibilities for older children (Glick, 2002).

Rights-based approaches

Rights-based approaches to child work are concerned with the extent to which children's participation in work activities hinders the fulfilment of four broad categories of rights enshrined in the United Nations Convention on the Rights of the Child (i.e. survival, development, protection and participation). There is a growing consensus that the 'worst forms of child labour'—those that damage children's physical, psychological, social or moral development—should be tackled and eliminated. Bhalotra (2003) argues that, to the extent that poverty pushes children into work and interferes with schooling, child work results in the absence of equality of opportunity in human capital acquisition, and is a mechanism for the intergenerational transmission of poverty. Others (Dehejia and Gatti, 2002; Bourdillon, 2006) argue that we should be concerned about child work not only when it prevents children from realising their right to quality education, but also when it violates their right to leisure, socialising in the community and rest, all of which contribute positively to a child's psychosocial development.

Socio-cultural construction of work

This body of work criticises utilitarian models for their neglect of children's own perspectives on how to meet their development needs (Feeny and Boyden, 2004). It argues that any conceptualisation of children's rights to education, freedom from economic exploitation and leisure in developing countries should incorporate an awareness of context-specific ways of understanding child work, and diverse livelihood strategies adopted to ensure family survival. Work activities that children in some contexts (especially in the North) would not undertake, are not only common but also acceptable and even encouraged in others. In some developing countries participation in work activities is viewed as contributing to children's self-confidence and development, and therefore complementary to formal education (Bourdillon, 2006). Moreover, empirical research also shows that the majority of children are not employed in full-time activities, and that often the time spent on work competes marginally with schooling, albeit more significantly with leisure or study time (Brown *et al.*, 2002).

Macro-micro policy linkages

There is increasing recognition that macro-economic policies may have as significant an impact (or perhaps greater) on childhood poverty as health or education sector initiatives (e.g. Marcus et al., 2003). Analysing the disaggregated effects of macro-policy changes within the household, however, is a challenging endeavour as macro-economic measures that either aggravate or ameliorate aggregate household poverty may have diverse impacts on men and women, girls and boys. Intra-household differences are dependent upon social and legal factors including the gendered composition of the labour market, (un)equal access to credit markets and legal rights regarding land title and inheritance, as well as cultural norms and practices (Ansell, 2005).

Waddington (2004) identifies three key pathways of influence between macro-economic policies and child well-being. First, policies that affect wages and employment opportunities and in turn household labour supply and income, may result in an increasing work burden for children and/or women, with potentially negative consequences for the quantity and quality of caring time. Second, effects on prices of goods and services and in turn household consumption patterns may be of particular concern if they impact children's nutritional intake (Glewwe et al., 2003) and/or families' ability to afford education and healthcare. Lastly, while macro-economic policy changes may result in higher growth in the medium term, shorter-term negative impacts on fiscal revenues (e.g. during periods of fiscal austerity and structural adjustment) may translate into social expenditure cuts. This could in turn have a negative impact on children's access to quality services, especially children from poor rural households.

The framework this paper employs to understand the ways in which children's time use, especially time in work activities, is affected by macro-development policies combines insights from the four theoretical strands of literature discussed above—utilitarian household models, rights-based approaches, socio-cultural constructions of work and macro-micro policy linkages—and is presented in the diagram below. Ethiopia's Agricultural-Development Led Strategy involves promoting labour-intensive income-generating activities and providing credit to improve agriculture productivity and livelihood diversification. The first link in the macro-micro chain of effects therefore focuses on the ways in which these core components of the Agricultural-Development Led Strategy impact households. We hypothesise that there will be three likely effects: i) changes in household labour supply as ADLI promotes greater involvement in productive work among the able-bodied, especially women, ii) changes in household income resulting from greater involvement in paid work, and iii) changes in the household's asset base as ADLI provides access to credit to purchase new livestock and agricultural equipment. The ways in which these changes at the household level in turn impact children's time use are not direct. Instead, they are refracted through a range of pre-existing household

and child characteristics. At the household level these include household composition factors, parental income, education and social capital levels, as well as attitudes towards child schooling. At the individual level, mediating variables include a child's gender, age, birth order and sense of individual agency. In addition, household and individual level choices about children's time use are influenced by the availability of public services and infrastructure in the community, and cultural norms about children's education and work.

Add diagram 1 here

3. Methodology

This paper is part of *Young Lives*, a broader policy research initiative on childhood poverty in developing country contexts. As the research was designed to contribute to policy debates on Ethiopia's national poverty reduction strategy, a mixed methods approach was adopted. Advocacy efforts to improve childhood well-being often rely on the power of numbers to highlight the urgency of the need for 'better' policy frameworks to tackle childhood poverty. However, evidence-based policy efforts also underscore the importance of complementing broad-based survey research and quantitative analysis with the 'thick description' and nuanced insights of qualitative analysis. The latter provides an understanding of the intra-household dynamics and/or social processes behind the numbers, and in the case of participatory research also allows for an understanding of children's experiences and perceptions of various forms of deprivation and vulnerability (Jones and Sumner, 2007).

Combining methods may take place during data collection through simultaneously conducting a household survey and qualitative work in the same sample, or at the data analysis stage (e.g. Shaffer, 2001). We used a sequenced approach to data collection, but an integrated approach to data analysis. *Young Lives* 2002 household survey data was first used to generate hypotheses, which were then explored through qualitative focus group discussions and key informant interviews in a sub-sample of purposefully selected sites. As explained below, more in-depth econometrics analysis was subsequently combined with a thematic analysis of the qualitative data to develop a more comprehensive and complex picture of macro-micro policy linkages.

Quantitative data and econometrics analysis

Our sample included data on 3115 children aged 7 to 17 years from 1999 households collected in 2002 from 20 sentinel sites in five of Ethiopia's most populous regions, namely Addis Ababa, Oromia, Tigray, Amhara and Southern Nations, Nationalities and Peoples (SNNP). Forty percent of the children were from urban areas and sixty percent from rural areas. The sentinel sites over-sampled the poor, but included a degree of variation for comparative purposes.

To determine the factors that affect child schooling and labour, we conducted multivariate regression analyses using a multinomial *logit* model. This model was run separately for rural, urban, male and female children, and children in female- and male-headed households. We compared the effect of child, family and community-level characteristics on "schooling and work", "work only" and "leisure" relative to "schooling only", whereby these categories were considered mutually exclusive. We defined child work as children 7 to 17 years involved in work activities for cash or in-kind payment, and/or unpaid household chores and childcare. We categorised a child as "working only" if s/he is involved in any type of work for at least 14 hours per week⁷, and a child as in school if s/he is currently enrolled in school and spends her/his out-of-school time mainly studying. A child who works after school, and therefore uses his/her leisure and study time on work, is classified as involved in "schooling and work", whereas the main activity of a child is described as 'leisure' if s/he is not enrolled in school and works less than two hours per day.

Qualitative data and analysis

These quantitative findings were complemented by qualitative research carried out in five *Young Lives* sites in February-March 2005.⁸ While the quantitative analysis allowed us to identify broad patterns about children's time use, the qualitative work enabled us to unpack the complexity of household resource allocation processes and to better understand the mediating effects of community socio-cultural norms. One site per *Young Lives* region was selected based on comparable poverty levels, four of which were rural and one urban. Field researchers who were native speakers in the language of the regional sites were provided with a three-day briefing on qualitative research techniques and Save the Children UK approved ethical guidelines for working with children. A combination of focus group discussions (with parents and children), semi-structured in-depth interviews (with children, parents and teachers) and interviews with key informants (school directors and community development workers) were carried out in each site over a four-week period.

Approximately thirty people were interviewed in each site resulting in a total of 146 interviews. After transcribing and translating the taped interviews, the data was analysed using a qualitative data software package, N-Vivo 2. This process was supplemented by a three-day debriefing with the field researchers in which cross-site similarities and differences were discussed in detail.

Regional State	Site name	Site characteristics				
Addis Ababa	Kirkos	Urban shanty town; primary school within close walking				
		distance				
Amhara	Bilbala	Rural; subsistence agriculture; high land degradation; primary				
		school approx. 1 hour by foot				
Oromia	Ibeseta Uduga	Remote rural site; five kilometers to primary school				
SNNP	Wurib	Rural, subsistence agriculture + non-farm activities and				
		temporary urban migration. Primary school approx. 1 hour by				
		foot				
Tigray	Semeha/ Arato	Rural; agriculture, supplemented by food-for-work				
		programmes, stone mining, daily construction work. Primary				
		school less than 1 hour by foot.				

 Table 1
 Sub-sample of qualitative research sites

4. Key findings: determinants of children's time use

This section begins with a discussion of how changes in household income, assets and labour supply—the three main direct effects that our theoretical model suggests ADLI will have at the micro-level—shape children's involvement in work, education and leisure activities.⁹ It then turns to an analysis of the ways in which individual and familial behaviour is refracted through cultural norms and the availability of community infrastructure and public services.

Household wealth

To assess the relationship between household income and children's time allocation on education, work and leisure activities, we used a wealth index as a proxy because the *Young Lives* survey does not collect income data¹⁰. Our quantitative results show an inverted-U relationship (non-linear relationship) between wealth and children combining school and work. An initial increase in wealth raised the likelihood that children would need to combine school and work (rather than concentrate solely on their education), but this declined after reaching a peak at a certain level of wealth in both rural and urban areas. This indicates that at sufficiently high levels of wealth, the probability of children enrolling in school increases because wealthier households are less likely to prioritise children's engagement in work activities at the expense of their schooling. However, until that threshold is reached, children are more likely to combine work and school. One possible explanation for this seemingly unintuitive finding is that rises in household wealth are typically translated into assets that necessitate an increase in the household labour supply. Families must reach a certain comfort zone before they are prepared to substitute family labour for hired labour.

Just as rising household wealth beyond a certain threshold is an important enabling factor in children's school attendance, our regression analysis also found the reverse to be true. In line with the literature (Guarcello et al., 2003), the likelihood of children combining school with work or being involved in work activities increased with the number of events that decreased household welfare. Our qualitative research reinforced this finding in that key informants emphasised that households often relied on their children to work to supplement household income in times of crises such as drought and the death of the breadwinner. In the coffee producing areas of SNNP region, for example, respondents emphasized the problem of school dropouts during the fall in coffee prices in the late 1990s. "When the crisis came, I knew children who had to quit school to take care of their siblings and other household activities, as their parents were forced to take on additional paid work" (community leader). Similarly, in the Northern Ethiopia sites, which have been subject to recurrent droughts in recent years, children were often involved in substituting for their parents in governmental safety net programmes for the poorest. As one Bilbala school teacher pointed out:

Food-for-work schemes involve both parents and children. Some parents send children to work on their behalf to complete mandated terracing or construction work on time. These children are then absent from school but tell us that they cannot eat unless they work.

Asset ownership

The ownership of production assets such as land and livestock can also affect child schooling. Theoretically, one could expect that larger asset holdings would have a positive effect on child schooling by allowing households to forgo earnings from children's involvement in paid work activities. However, in the absence of perfect labour markets, land and livestock ownership could also have the opposite effect (Coulombe, 1998). Owners of land and livestock who are not able to hire productive labour may feel compelled to rely on their children's labour to solve household labour shortages instead of sending their offspring to school.

Our regression analysis results indicated that there was not a statistically significant association between the size of a household's land holdings and children's time use. However, the complementary qualitative research suggested that this finding was masking a more complex set of linkages. Particularly in Amhara and Tigray regions where there are growing problems of land fragmentation and landlessness due to a combination of population pressures and poor quality land, key informants emphasised that while it was true that children often made an important contribution to household agricultural labour, at least land ownership provided a degree of economic security. By contrast, a growing number of families were reported as being compelled to rent or sell their land due to natural disasters and financial strains. Such families were often forced to migrate in search of low paying off-farm work thereby disrupting their children's schooling, and/or to send their children to work on construction sites, sell food in the vicinity of places selling alcohol (simultaneously increasing the risk of sexual harassment, abuse and exploitation) or allow their children, particularly, daughters, to be trafficked to the Middle East.

Cockburn (2001) has argued that different assets have different effects on child labour supply according to their degree of substitution. Increased access to physical assets that require relatively more child labour will tend to increase child labour participation and reduce child schooling and leisure. In the Ethiopian case, we hypothesised that household livestock ownership would have a negative influence on child schooling given that animal herding is culturally deemed as children's work. Both our quantitative and qualitative results supported this argument, indicating a negative relationship between livestock ownership and children's involvement in work. Even richer households who could afford to send their children to school preferred that their offspring herd goats or cattle so the household would not have to forgo scarce resources to pay hired labourers for herding. This was found to be particularly prevalent in Northern Ethiopia where ownership of animals is also traditionally viewed as a status symbol in addition to its economic value.

Credit access

The liquidity constraint hypothesis whereby households are thought to be more likely to rely on children's labour if they lack access to credit (Nielson, 1998; Bhalotra and Heady, 2003), was examined by including household debt as a variable in our regression model. Our quantitative results indicated that children from households with serious debt were more likely to be engaged in activities other than full-time schooling. More in-depth analysis through the qualitative field research revealed that, mainly due to drought-related factors, households who are unable to repay loans to microfinance institutions or money-lenders often rely on children's labour to supplement the family income, even if this comes at the expense of their children dropping out of school.

Another important, but less intuitive dimension of credit access issues that emerged during the qualitative fieldwork, was that because ADLI is promoting credit for additional livestock purchases, it is also compounding pressures on children to be involved in herding activities.

Credit is given for different activities. A person may take loans to buy 5-6 sheep. Although this credit is economically advantageous, it also creates a burden for children who are often absent while taking care of their family's livestock (Bilbala teacher).

The theoretical literature suggests that changes in household income and asset levels brought about by macro-development policy shifts such as ADLI do not affect all families uniformly but are instead shaped by a number of household, individual, socio-cultural and policy factors (e.g. Edmonds and Turk, 2004). We now turn to a discussion of these, beginning with household composition.

Household composition

Household composition emerges as an important determinant of children's time use. The first dimension we consider is children's birth order. Our quantitative results indicate that the presence of older children aged 7 to 17 years decreased the probability of a child's involvement in activities other than full-time schooling, suggesting a labour substitution or birth order effect. This was confirmed by the qualitative findings as the following examples illustrate. A child from Wurib noted: *My brothers help me study and don't expect me to do much household work. Both are government employees.* Similarly, a focus group participant from the same site explained that: *Girls become absent from school and stay at home to cook for siblings, substituting for their mother when she goes somewhere for funerals, mourning etc.*

The burden on older siblings seemed particularly difficult in Kirkos where HIV/AIDS appeared to be more prevalent (or at least more openly discussed) than in other sites. Here we encountered a growing number of AIDS orphans who were shouldering the responsibility for younger siblings.

There was, however, one important exception to the trend of younger child advantage in the case of animal herding. In Semha and Bilbala sites older siblings were able to attend school when the younger children become old enough to take over the herding.

The second dimension of household composition we considered was the gender of the household head. Evidence indicates that because there tends to be a greater concentration of poverty among female headed households (MOFED, 2002) and more household labour constraints, children in female-headed households are more likely to be under greater pressure to work or at least combine school with working activities. To test this, we ran separate regressions for female- and male-headed households. The results, however, showed that the primary gender gap was between demands on girls' versus boys' labour: in both male and female-headed households there were fewer demands on boys' labour. Our qualitative results also found greater pressures on girls to work longer hours, but this depended in part on the type of work in question. Boys were more likely to be engaged in agricultural work (paid or unpaid), especially ploughing, which is typically deemed as male work, and this trend was strongest in female-headed households where boys were often called upon to substitute for adult male labour. The one interesting exception to this pattern was in the case of polygamous families in Uduga. In the local context of large families and multiple wives, children stand to inherit little, if any, land, and thus mothers emphasised the importance of education for their sons as it would be critical for their future livelihood choices.

Parental education

Parental education is another important filter that mediates between the effects of macro-development policy at the household level and children's time use (Bhalotra and Heady, 2003). Our quantitative results indicate that paternal education levels significantly decreased the likelihood that children would be involved in activities other than full-time schooling. Somewhat surprisingly, however, children with better educated mothers (in male and female-headed households) were more likely to work or combine school and work. Our qualitative findings suggested that this was linked to the fact that more educated women are more likely to be involved in productive paid activities outside the house, and in the absence of widely accessible and affordable childcare facilities, need to rely on their children to help manage the execution of their domestic and caring responsibilities.

Caregiver social capital

The role of household social capital—formal and informal relationships of support and trust—has received little attention in analyses of child schooling and labour (Harpham et al., 2005). We hypothesised, however, that social capital may help improve child schooling and reduce children's engagement in labour activities by reducing information asymmetries; raising awareness about the importance of child schooling and the problems associated with child labour; and through its complementary effect on governmental efforts to increase educational access and encourage enrolment. We included four indicators of care-giver social capital in our regression model: cognitive social capital (sense of trust in one's community); the number of organisations which provide social support; citizenship (involvement in collective action); and absolute structural social capital (organized group membership). Structural social capital and social support had significant effects, but cognitive social capital and citizenship were statistically insignificant.

The number of organisations from which a household receives social support decreased the likelihood of children remaining idle, but not their involvement in work activities. Findings from the qualitative research in Amhara and Tigray regions suggest that this could be because social support is commonly provided in the form of food-for-work programmes, which often involve children working alongside their parents. The likelihood of children being involved in labour only instead of school declines, however, as caregivers' absolute structural social capital increases, suggesting that group membership may play a facilitating role in promoting children's education.

Children's characteristics

Children's age and gender emerged as important mediating factors in determining the relative balance of time spent on schooling, work or leisure activities. Our quantitative results found that boys were less likely than girls to combine work and schooling or to be engaged in work only.¹¹ Boys were also more likely to be involved in 'leisure' activities only compared to their female counterparts. When we investigated these differences in greater depth through the complementary qualitative work, we found that when both domestic and non-paid work are factored in, girls' work burden was considerable.¹² As Table 2 shows, there is a marked division in the types of activities in which girls and boys are predominantly engaged, with boys more engaged in farm and market work, and girls more active in household chores and childcare tasks.

Girls' responsibility for sibling care was a dominant theme in all research sites. A women only focus group discussion in Awassa highlighted the high level reliance on daughters in poor households.

If they have female children, they give the responsibility of the house to them and they go to the market. However, if they are capable of hiring some one, they do so accordingly.

Responsibility for younger siblings and their safety also starts at an early age. One mother in Jimma noted for example:

I leave her [the 4 year old] with the elder one, who is 7 years old. Our house is located up there in the highland and there are wild animals which attack our crops so someone needs to be around to keep an eye on her while I'm working.

Not surprisingly, the age of the child also had a significant impact on child schooling and work, with older children more likely to be involved in work activities. By contrast, the probability of a child being engaged solely in 'leisure' declines with age. Our qualitative findings confirmed this trend, with younger children often noting that older siblings were shouldering more of the family work burden. A grade 3 student from Wurib noted:

My brother...also works on farms because my father has died. He goes to school only three days a week. He encourages me to study hard.

Even so, in all research sites we found that children started work as young as four or five years of age both because household survival in a non-technological, largely rural society, is highly labour-intensive and includes children's work roles as normal.

In the village no one eats without working. There is always something to be done by children as early as 3 years of age...If a boy is above 3, tending sheep and cattle is his job; girls help with household chores such as making coffee and gathering firewood.

Activity	Culturally prescribed gender roles					
1.On-farm activities	Boys	Girls	Both	Predominantly boys	Predominantly Girls	
Ploughing / Digging				Х		
Weeding			х			
Harvesting				Х		
Planting			Х			
Irrigation			Х			
Herding			х			
Fodder collection	х					
2. Non-farm activities						
Construction work				Х		
Mini-bus conductors	х					
Household maids		х				
Restaurant staff			х			
Garage apprenticeships	х					
Porters				Х		
Shoe shining				Х		
Loading pack animals				Х		
Street vending					Х	
Stone crushing	х					
Collecting rock salt	х					
Collecting firewood/ dung to sell					Х	
Sex-related work					Х	
3. Household chores						
Collecting firewood			х			
House-cleaning and plastering		Х				
Fetching water			х			
Cleaning			х			
Cooking		х				
Childcare					Х	

Table 2Gender differences in child work activities

Children's agency

Although household and community-level factors play a significant role in constraining children's time allocation decisions, our qualitative research findings nevertheless highlighted the important role of children's agency. Interestingly, children's concerns about school quality emerged as more salient in the decision-making process than those related to children's work experiences. This is in part a reflection of the dearth of resources in Ethiopian schools, especially as the focus of recent policy implementation has been on educational expansion, rather than improvements in educational quality. A number of child respondents across the research sites pointed out that their schools lacked libraries, laboratories and pedagogical centres. They also complained about excessively large class sizes, few desks, poor sanitary facilities and a lack of drinking water.¹³ The scarcity of desks and chairs was widespread and many children had to fight for desks or to sit on dusty floors. As one Ibseta student noted:

There are no chairs in the school so we sit on stones. Sitting on stones brings us diseases – we hate them. This situation makes [us] unhappy here in school.

Similarly, drinking water was often scarce: *There is no water. There is water only at break time. But it is the older students who drink it; at other times it is locked* (Wurib student). Children in Bilbala and Wurib also noted that toilets were often in a poor state: *"The little kids are afraid of the toilets"* and *"Most of the time the latrines are not clean"*.

Textbooks also had to be shared among students. Sometimes, as one student from Wurib noted: *"There aren't enough books...8 or 10 students get just one book"*.

Children's reluctance to go to school was also linked to experiences of violence and discrimination in the classroom. Without being specifically prompted about experiences of bullying or abuse, children (both current students and drop-outs) listed violence as one of the main reasons for disliking school. In a focus group discussion with out-of-school children in Bilbala, one boy explained that: *"Education is bad. I don't like to go to school; the grown-ups beat me. I like to be a shepherd"*. Similarly, a girl from SNNP focused on bullying by other students: *"When I was a small girl boys used to beat me. But now if it happened I would go to the police"*.

Teacher discrimination based on students' family connections and wealth status was also mentioned as a problem. A female student from Kirkos highlighted the unjust treatment of students: *If one is related to a teacher, whatever that student does in class they don't beat him. If I sleep in class the teacher beats me, but if her favourite student does she doesn't beat him.*

Our qualitative results also suggested that combining household chores and school takes a greater toll on children than the quantitative results would indicate. High achieving students emphasised that they were only able to juggle these competing time pressures due to careful planning and studying late into the night. For others, however, the balance was more taxing. One child from Wurib noted that his brother struggles to do well in school because of household responsibilities:

My brother works on farms because my father has died. He goes to school only three days a week. He encourages me to study hard and says 'you should score better than me' as he attends class than me.

Although children were less forthcoming about the positive incentives that shaped their schooling decisions, sibling role models and good scholastic performance emerged as important themes. For example, a student from Bilbala emphasised the importance of sibling success being a powerful motivating force: "*Education is good for me. I want to be like Kebede* [an elder brother attending secondary school]". A high achiever from Ibseta similarly explained that: "*People say I am a competent student. I have never been absent from school. I work and study by plan*" (boy).

Cultural norms

A key variable that the quantitative analysis was unable to capture but emerged clearly through the qualitative research was the importance of cultural norms in shaping parental attitudes towards child work and schooling. For a significant number of parents, child involvement in household or paid labour was seen as a natural, unavoidable responsibility:

If children do not respect our orders to work at home or in the field after school, then we will deny them lunch or dinner. So they soon realise that they will be hungry unless they work (Bilbala mother).

I do not see the benefit of education and I want my daughter to stay at home and help her mother instead (Wurib father).

There also appears to be a widely socially sanctioned view that child work is important in terms of contributing to the pool of family labour and skills acquisition: "*Children are helping parents, in the meantime they are learning necessary life skills, which they will make use of in the future. So it does them little harm*" (Bilbala community leader).

However, it is important to note, that attitudes in some communities are gradually changing in response to new policy initiatives that create positive incentives, especially for girls' education. These include free tutoring after school and on weekends for girl students, and an affirmative action programmes for girls who complete grade 8 to have preferential access to employment opportunities in local government offices. A number of parent key informants emphasized that these new developments had played a significant role in their decision to support their daughters' education.

There was however a divergence among urban parents: here positive attitudes towards child work were focused more on avoiding adolescent delinquency. A number of urban respondents stated that they preferred involving children in labour activities rather than having them idle and courting trouble on the streets. One teenage girl from Kirkos noted: *Little children aged 6 and 7 are employed in the garages because their families prefer to keep them busy instead of seeing them on the streets*.

Likewise, a teacher from Kirkos argued that: *Children in the streets would not be there if parents controlled them better. Engaging them in work is better than letting them be on the streets.*

Community infrastructure

The availability of schools in nearby areas has been identified as an important determinant of child schooling and labour decisions (Glewwe, 1999). We included the mean distance to public and private primary schools in our model. The results indicated that school distance had a negative impact on the probability of a child combining schooling with work, but an insignificant effect on being engaged in work only. These findings were reinforced by the qualitative results. For example, a parent from Bilbala admitted that he was persuaded to send his son to school because of the presence of a well-attended nearby school: "*He could learn as there is school nearby and all the children go there. I saw my friends sending their children to school and I followed suit*".

Similarly, a teacher noted that more over-age children were starting schooling due to greater access to primary schools:

Children should officially start school at seven. However, there are now 16-year old children starting school with 7-year old kids. Parents' attitudes and declining school distance largely account for this change (Bilbala).

One important advantage of closer schools is linked to cost savings. Not only do parents have to spend less on transportation, but they also avoid the added costs of accommodation and food for children living outside the family home. The positive association between child schooling and school availability is particularly strong in the case of girls as parents had previously been reluctant to send daughters to distant schools because of safety concerns and fears of a potential loss of family honour. As the head of the Women's Association in Semha/Arato noted:

It is hard to send girls very far for further education because we are scared of rape...if we cannot find any one to go with them, they won't go to school.

5. Conclusions and Policy Challenges

Overall our results underscore the importance of giving due consideration to intra-household allocations of resources and responsibilities when developing poverty reduction policy strategies. More specifically, our findings suggest that the following policy challenges need to be addressed if national development frameworks are also to tackle important manifestations of childhood poverty, especially children's paid and unpaid work burdens:

Child-targeted policies

Education costs incurred by parents emerged as a major obstacle for children's education particularly for rural children and girls. One possible policy solution suggested by international best practice could be cash transfers to promote child schooling in higher grades rather than food-for-work programmes which typically involve children and parents (Barrientos and De Jong, 2006). In the case of older children, developing employment training programmes for secondary school students that would enhance future employment prospects could provide an incentive to households to continue to invest in their children's education. In this vein, the recent affirmative action programme providing girls who complete grade 8 preferential access to local government employment, which emerged as an important incentive from our qualitative findings, could be evaluated and potentially scaled up.

Because children's involvement in labour activities will remain a reality in at least the short- to medium-term for many impoverished families, child labour guidelines could be developed in order to raise awareness about the potentially negative effects on child wellbeing among local authorities, employers and parents. The focus of these guidelines should be on eliminating the most harmful forms of child work, while simultaneously providing positive incentive structures to facilitate children's access to education. This could include scaling up the availability of 'bridge schools' for school drop-outs to enable children to re-enter the school system. Caution, however, needs to be taken that the guidelines do not indirectly result in employers ceasing to employ children and young people living in poverty so that they are compelled to enter more exploitative forms of work. Moreover, given that our research highlighted the way that attitudes towards child work and education also reflect culturally specific norms about rights, duties and intra-group expectations, it is critical that such guidelines do not result in the imposition of an external normative point of view but instead take into account cultural norms and values. While at the national level, the Ministry of Labour and Social Affairs' Action Plan for Ethiopian Children could provide such guidance, given the variation across regions that our qualitative research suggested, it would also be important to tailor regional state action plans to suit sub-national specificities.¹⁴

Household-targeted policies

Other measures to offset the negative income effects of reducing child labour could include the introduction of diverse types of credit programmes, such as credit for labour so that families could replace child labour with hired labour or credit programmes targeted specifically at covering educational expenses. Here important lessons could be learned from Andhra Pradesh, India's self-help group scheme where women members receive access to credit on condition that their children are in school and not involved in child labour (Jones et al., 2007).

In order to address the negative spillover effects of labour-intensive agriculture on children's time use, labour-saving policy improvements will need to focus on modernizing farming and household technologies in order to reduce children's, especially girls', substitution in such work. This could include initiatives to improve access to water, introducing modern stoves that save energy and reduce the need for time-consuming fuel wood collection, and the introduction of simple farm technology such as better ploughs. Livestock-raising patterns could also be rationalized (e.g. introducing indoor livestock farming, community-shared livestock herding where households pool resources to care for livestock on a rotational basis or pay for hired adult labour or communal fodder production) in order to reduce the demand for child involvement. Given the widespread involvement of older children, especially girls, in childcare for younger siblings, implementing affordable community childcare

arrangements or preschool services to relieve older children of substituting for their mothers' care work should be prioritized and adequately resourced.

Community-level policy responses

Recent governmental efforts to mobilize communities to tackle low school enrolment and dropout rates appear to be having a positive influence on community attitudes towards education. However, our research suggests that careful monitoring of such practices is necessary to ensure that pressures to contribute financially or in-kind to school expansion do not become overly burdensome and lead to a backlash against efforts to universalize primary education. In light of the positive role that caregiver social capital plays in promoting child education and reducing child work, local governments might usefully coordinate efforts with popular community organisations, such as local religious organisations and women's savings groups, which could play an important information sharing and peer persuasion role.

Other community level infrastructural improvements that could contribute to a reduction in children's work burden include fuel-saving mechanisms and/or alternative energy sources to reduce reliance on firewood collection; constructing wells and piped water sources in all villages to reduce the distance to water sources and developing better public transport systems to reduce children's involvement in transporting pack animals to market. Better transport would also reduce the amount of time care-givers involved in petty trade need to be away from home and in turn lessen older siblings care work burden.

School-targeted policies

Improving school availability in rural areas emerged as another important policy challenge as distance to school negatively affects school attendance and is a particularly important factor in parental decisions to send daughters to school. Steps should also be taken to ensure adequate investment in school resources and infrastructure given that poor school quality undermines children's enthusiasm for education.

Appendix 1

Determinants	of	child	schooling	and	work ¹	

	Schooling & work	Work only	Leisure ²
Child age (years)	0.055**	0.161***	-0.084**
	(2.21)	(5.49)	(2.39)
Dummy for a male child	-0.788***	-0.768***	-0.202
	(7.50)	(6.13)	(1.63)
Dummy for male headed HH	-0.168	0.228	0.110
	(1.05)	(1.08)	(0.54)
Mother's years of schooling	0.023	0.078***	0.019
	(1.12)	(2.73)	(0.61)
Father's years of schooling	-0.026	-0.017	-0.098***
	(1.48)	(0.76)	(3.80)
Number of male children below 7 years old	-0.174*	-0.245**	-0.057
	(1.95)	(2.27)	(0.55)
Number of female children below 7 years old	-0.140	-0.056	-0.201*
	(1.57)	(0.54)	(1.90)
Number of male household members >17 years old	-0.148**	0.001	-0.147
	(2.02)	(0.01)	(1.47)
Number of female household members >17 years old	-0.150*	-0.406***	-0.205*
	(1.91)	(3.55)	(1.86)
Number of older children between 7&17 years	-0.211***	-0.080	0.225***
	(3.66)	(1.16)	(3.67)
Number of younger children between 7 & 17 years	-0.030	-0.440***	-0.135
	(0.47)	(5.52)	(1.42)
Dummy for urban residence	-0.769***	-0.957***	-0.815***
	(3.67)	(3.80)	(3.44)
Dummy for Amhara Region	1.787***	1.291***	-0.904**
	(7.22)	(3.75)	(2.42)
Dummy for Oromia Region	0.279	0.157	-0.606*
	(1.30)	(0.48)	(1.93)
Dummy for SNNP Region	0.616***	0.638**	0.253
	(3.41)	(2.17)	(0.91)
Dummy for Tigray Region	-0.897***	-0.306	-0.523
	(3.63)	(0.89)	(1.57)
Wealth index constructed from consumer durables	2.530**	-5.753***	-5.557***
	(1.99)	(3.72)	(3.40)
Wealth index squared	-1.267	6.926***	3.499
	(0.70)	(2.88)	(1.18)
Land owned (hectares)	0.152	0.164	0.035
	(1.52)	(1.58)	(0.31)
Mean distance (km) to public and private primary schools	-0.058*	-0.019	-0.056
	(1.85)	(0.57)	(1.47)
Total number of livestock owned	0.131**	0.166***	0.031
	(2.47)	(2.74)	(0.52)
Number of events that decreases the HH welfare	0.024	0.072**	-0.004
	(0.76)	(1.97)	(0.10)
Caregiver cognitive social capital	0.085	0.031	0.123
	(1.34)	(0.41)	(1.54)
Absolute structural social capital	0.032	-0.119*	-0.072
	(0.58)	(1.76)	(1.10)
Number of organizations providing social support	0.017	0.042	0.083**
	(0.54)	(1.13)	(2.24)
Caregiver participation in community collective action	-0.073	-0.085	-0.094
activities			
	(1.01)	(1.00)	(1.09)
Dummy for household head being divorced	-0.831***	-0.099	-0.141
	(3.06)	(0.33)	(0.45)
Relationship to index child (1 if brother/sister; 0 otherwise)	0.231	0.836	-29.486
	(0.34)	(0.97)	(0.00)
Dummy for a household being in serious debt	0.426***	0.662***	0.172
	(3.60)	(4.89)	(1.23)
Constant	-0.399	-1.301**	1.785***
	(0.90)	(2.27)	(3.08)
Observations	2845	2845	2845

Absolute value of z statistics in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%

 1 Estimated coefficient from multinomial logit model with schooling only as a base category. 2 We define 'leisure' as less than two hours spent on work activities per day and/or no schooling.

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² PRSPs are multi-year national development plans informed by a national consultation process that low income countries need to commit to in order to receive donor funding.

³ The absolute poverty line is defined as 2200 kilo calories per adult per day.

⁴ The 2001 Central Statistics Authority National Child Labour Survey found 44.7% of children were involved in work activities (paid or unpaid) for an average 33 hours per week.

⁵ A key pillar of the PRSP, ADLI accords priority to agricultural sector development as a means to encourage longer-term industrialisation.

⁶ This section draws on Pereznieto and Escobal, 2006.

⁷ We follow the UNCRC definition which identifies child labourers as all persons under 18 years engaged in labour market or household activities which may interfere with their development. By explicitly considering both paid and unpaid domestic and extra-household work, we avoid the gender bias of the International Labour Organisation (ILO) definition, which arbitrarily assigns less weight to domestic-based work (14 hours per week of productive work versus 28 hours of household-based work).

⁸ We framed key informant interview questions so as to minimise problems of memory recall.

⁹ See Appendix 1. We ran six other separate regressions for boys and girls, rural and urban children and maleand female-headed households, but due to space constraints they are not reported here. As we are dealing with cross-sectional data, we made a robust estimation to handle problems of heteroscedasticity. We also calculated a condition index to check for multi-collinearity in the regression, which was 28.43, indicating that multicollinearity was not a problem. For all the regressions, we estimated the odds ratio, marginal effect and predicted value, but only report results from the odds ratio here.

¹⁰ This is due to pragmatic considerations regarding survey length.

¹¹ 32.2% of primary school girls combine school and work activities cf. 23.0% of boys. Secondary school boys are almost twice as likely to be in school but not working (39.4% cf. 23.0%), whereas twice as many girls as boys have work as their main activity (28.0% cf. 14.2%).

¹² Girls were significantly more involved in child care activities (52% compared to 31% of boys).

¹³ Student-teacher ratios per classroom ranged from 45 in Semha/Arato to 122 in Uduga.

¹⁴ We are grateful to an anonymous reviewer for emphasising this point.