Child labour And Schooling in Malawi: Does Mother's Employment Matter?

Masiya, Michael and Mussa, Richard

Malawi Revenue Authority (MRA), University of Malawi

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Michael Masiya [1] Richard Mussa [2]

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Abstract

The study investigated the impact of mother's employment on child labour and schooling in Malawi using the Third Integrated Household Survey (IHS3) dataset. Children aged 5 to 17 were sampled from the dataset and used in the analysis. The study used a series of multivariate probit models with three main dependent variables: child works, child schooling and mother works.The model is estimated using the GHK (Geweke-Hajivassiliou-Keane) smooth recursive simulator. After estimating the model, the study computed correlations of the error terms for the Seemingly Unrelated Regressions (SUR) to note how they affect each other. The results showed that mother's employment is negatively related to child labour but positively related to child schooling. Another finding was the negative relationship between child labour and child schooling. These results did not change when the model was disaggregated to compare the effects for a boy child and girl child. Several sensitivity analyses were also carried out to affirm the results. Based on the results, policy recommendations include promoting female employment programs by the government so that eventually, child labour may decline and schooling may be encouraged.

[1]michaelmasiya@gmail.com
[2]rimussa@gmail.com

1 Introduction

Due to the negative relationship between child's work activities and educational attainment (Assaad, Levison, & Zibani, 2007), nearly all of the world's governments have ratified international human rights conventions which call for the elimination of child labor and the provision of universal primary education. Fulfilling these commitments is of critical importance for development. Since children are more likely to work and not go to school if their parents worked as children, the economic losses associated with child labor and their implications for poverty are often transmitted across generations (Behrman & Knowles, 1999). According to the International Labour Organization (2010), eliminating child labor and putting these children into education would have huge aggregate developmental benefits.

In the Malawi Growth and Development Strategy II (MGDS II, 2012), the Government of Malawi has demonstrated commitment towards improving the education sector in Malawi. Particular attention has also been focused on the girl-child education with the expectation that in a future, gender-balance in various influential roles may be achieved. In essence, the government is trying to increase the influence of women in the society. Eventually, the benefits of this influence of women, especially mothers, trickles down to improvement of the welfare of the children. Mothers' contribution to children's welfare depends on their influence in the household decision-making, which increases with the level of mothers' education (Francavilla & Giannelli, 2007) and ability to generate income through working. It would seem if the mother is employed, this may result in more resources for the household hence no requirement for the child to work and perhaps more time allocated to schooling activities. However, the relationship is not as straightforward.

According to DeGraff and Levison (2009), one would either observe a positive or negative relationship between mother's employment and child employment. Additionally, the relationship between mothers' employment and a child's employment is likely to depend on the sex of the child. If thus, there exists a positive relationship, then we would expect child labour to rise with mother's employment and where the relationship is

negative, less occurrence of child work would be expected if the mother is working. This would have different implications towards child schooling. With increased child labour due to mother's work, one would expect less time would be spent on school activities yet a mother who is working can also better support child's education financially.Such inconclusive inter-relationships have strong policy implications.

While it would be optimal for the government to increase the female labour force participation and ensure gender balance in offering employment opportunities, little is known of the impact that this would have on child labour and schooling. If mother's employment would have a positive relationship to child labour, it means government has to face a tradeoff between curbing child labour and providing employment to women. If there is a negative relationship between child schooling and mother's work, the dilemma of the government would be to either provide more employment to women or improve school attendance.

This is akin to the relationship that exists between inflation and unemployment. Accordingly, without the knowledge of the nature of the relationship that exists between the three variables, the government is bound to make a huge policy miscalculation. Thus, there is a lot of uncertainty surrounding the relationship between child work, child schooling and mother's employment which could have grave policy implications and this empirical study on Malawi will attempt to clear such mist and provide sound policy guidance.

Though the definition of *child labour* is clouded by ambiguities, the paper adopts and modifies a definition by Counts (2002) which defined 'child labourers' as all economically active children below the age of 12, all children aged between 12 to 14 working more than 14 hours a week, and all children below the age of 18 in the worst forms of child labour. As observed by Boyle and Kim (2009), the definition was problematic as some forms of child labour can be below 14 hours yet they could inhibit a child's school attendance, achievement or development in some way. The paper modified the definition by also considering working hours 12, 14, and 16 per week. Additionally, to carter for schooling, we consider ages of

children between 5 to 17. While there exists a distinction between 'child work' and 'child labour' with the latter being used to describe the more harmful aspects of the former, we follow Basu (1999) in overlooking this distinction and adopt the ILO Convention No. 138 in classifying a child as a 'labourer' if she/he is involved in 'economic activity'. While this definition may limit us to activities in wage employment or in household enterprises/family farms, it enables comparison with previous investigations into the subject (Ray & Basu, 2001).

In line with the main objective of the paper,to determine the impact of mother's employment on child labour and schooling, we shall also examine the following:

- The nature of the mother's sector of employment and the impact on child labour and schooling
- How gender of child influences child labour and schooling decisions
- Rural-Urban variations in child labour and schooling decisions

The rest of paper is structured as follows. Section 2 outlines the econometric model, and describes the data, Section 3 presents and discusses the results. Section 4 concludes.

2 Methodology and Data

We estimate a series of multivariate probit models with three main dependent variables: child works, child schooling and mother works. All these are dichotomous variables indicating a decision whether to participate in labour and schooling for the child and work for the mother.

Consider a multivariate probit model with three equations:

$$y^*_{i,m} = \beta'_{i,m} + \varepsilon_{i,m}, \quad \text{where} \quad m = 1, 2, 3 \tag{1}$$

$$y_{i,m} = \begin{cases} 1, & \text{if } y^*_{i,m} > 0 \ ; \\ 0, & \text{otherwise.} \end{cases} \tag{2}$$

Where $y^*_{i,m}$ represents a latent underlying variable linked to $y_{i,m}$ which is a dichotomous variable. Jointly, the assumption is that the errors $\varepsilon_{i,m}$ follow a multivariate normal distribution with zero mean and variance-covariance matrix V with values one on the diagonal and the correlations $p_{k,j} = p_{j,k}$ outside of it. $X_{i,m}$ denotes exogenous variable matrix containing key regressors for this study. The variables will be grouped in these categories: Mother's characteristics (mother's education, mother's age and mother's age squared), Father's characteristics (father works/not), Characteristics of the child (sex of child, child's age), Family economic status variables (Household consumption expenditure and Credit access) and Residence (rural/urban and region).

The model is estimated using the GHK (Geweke-Hajivassiliou-Keane) smooth recursive simulator. After estimating the model, we shall compute correlations of the error terms for the Seemingly Unrelated Regressions (SUR) to note how they affect each other.

The data used for this analysis derive from Malawi's Integrated Household Survey (IHS) conducted by the National Statistical Office (NSO) roughly every 5 years. The study particularly makes use of IHS3 whose survey was carried out in the period of March 2010 to March 2011. Of particular focus to our analysis were children aged 5 to 17 years and their mothers, with the children being the unit of analysis. The total number of 5 to 17 year olds in the full sample is 20, 850. Of these, we exclude individuals if they are neither a child nor adopted child of the household head. This sample exclusion reduces the sample to 19, 408.

3 Results

This Section presents the study findings and interpretation of the results. The section also provides a clear link between the objectives and the findings.

Table 1: Summary Statistics for the Multivariate Probit

	(1) urban		(2) rural	
	mean	sd	mean	sd
child_age	10.738	3.751	10.261	3.640
childsex	0.465	0.499	0.503	0.500
moage	37.341	10.160	37.630	10.207
moage2	1497.439	877.403	1520.172	884.574
edu_yr_mot	2.938	4.806	0.947	2.863
edu_yr_fat	2.859	4.657	1.026	2.942
fatherworkw	0.118	0.322	0.033	0.178
lownlandsize	0.626	0.484	1.048	0.519
hhcons	11.071	0.751	10.413	0.615
lcredit_access	1.528	3.500	1.371	3.198
residence	1.000	0.000	0.000	0.000
region1	0.280	0.449	0.208	0.406
region2	0.374	0.484	0.395	0.489
region3	0.346	0.476	0.396	0.489

3.1 Descriptive Results

Table 1 presents descriptive statistics for the multivariate probit where the variables are grouped in sets representing individual characteristics of the children and their mothers and fathers, family and housing characteristics, family and household demographic composition, and region of residence variables. To avoid redundancy, most of the explanatory variables are not discussed in detail until the results section.

Under characteristics of children, the urban mean age of the child is 11 while the rural mean average is 10 given the age bracket of 5 to 17 years old. The mean for child sex is 0.5 which indicates almost equal numbers of boys and girls within the given age bracket for both rural and urban. The statistics also showed that a mother is on average aged 37 years old for urban and 38 for rural and there is an indication that more mothers in rural than urban areas did not attend school. It can also be noted that less fathers are working compared to those employed since the mean values for father's work are given as 0.1 for urban and 0.03 which are both closer to a value of zero (father is not working). Most households in rural

area own land as compared to the urban areas. Region of residence variables indicate that most of the households are in the southern region with an approximate 40 percent proportion for both rural and urban.

Table 2 shows that the number of children working is higher in the rural than the urban areas and if narrowed down by gender, the overall percentage is higher for boys than girls.

Table 2: Child Labour status by gender

	child works at least 14hrs			
	child not working	**child works**	**Total**	**N**
	%	%	%	
childsex_sub				
Girls	50.4	49.5	50.2	9,533
Boys	49.6	50.5	49.8	9,443
rural_childsex_sub				
Girls	49.9	49.1	49.8	7,953
Boys	50.1	50.9	50.2	8,027
urban_childsex_sub				
Girls	52.8	52.4	52.7	1,580
Boys	47.2	47.6	47.3	1,416
N	2,641	355	2,996	

Source: IHS3

In the rural area, the percentage of boys working is only 0.4 % higher than that of girls and in the urban area 52.4 % of girls are working which is above 47.6 % of boys in the urban area defined within the given age bracket.

Table 3 shows that overall; the number of children enrolled in school is higher for boys than girls. In the rural area, 50.8 % of boys are schooling compared to the percentage of girls (49.2%). A higher percentage of girls are enrolled in school (52.2%) in the urban area higher than the percentage of boys schooling by 4.4%.

Table 3: Child Schooling by gender

	is child attending school?			
	child not schooling	**child schooling**	**Total**	**N**
	%	%	%	
childsex_sub				
Girls	50.3	49.7	50.0	6,804
Boys	49.7	50.3	50.0	6,816
rural_childsex_sub				
Girls	49.9	49.2	49.5	5,529
Boys	50.1	50.8	50.5	5,644
urban_childsex_sub				
Girls	52.0	52.2	52.1	1,275
Boys	48.0	47.8	47.9	1,172
N	1,098	1,349	2,447	

Source: IHS3

Table 4 shows the child's working status by their mother's employment status and it is noted that overall a higher percentage of girls whose mothers are working are also employed. Thus, 54.4% of girls are working compared to the 45.6% of boys whose mothers are also employed. In the rural area, 49.3% of working girls whose mothers are employed is a higher percentage than the rural percentage of boys.

Table 4: Child Working by Mother's employment status

	mother works for a wage			
	Not Employed	**Employed**	**Total**	**N**
	%	%	%	
childlab_sub				
Girls	49.6	54.4	49.7	1,711
Boys	50.4	45.6	50.3	1,731
rural_childlab_sub				
Girls	49.3	52.2	49.3	1,521
Boys	50.7	47.8	50.7	1,563
urban_childlab_sub				
Girls	52.7	63.6	53.1	190
Boys	47.3	36.4	46.9	168
N	347	11	358	

Source: IHS3

Table 5 shows that the total number of children schooling is higher for girls whose mothers are not working (50.5%) and when the mother is employed the percentage is even higher at 52.8%. These differences are reflected the urban areas where a higher percentage of girls schooling (51.6%) is observed for mothers who are not employed while for working mothers, the percentage shoots to 55.9% compared to boys whose mothers are employed.

Table 5: Child Schooling by Mother's working status

	mother works for a wage			
	Not Employed	**Employed**	**Total**	**N**
	%	%	%	
childxul_sub				
Girls	50.5	52.8	50.6	4,063
Boys	49.5	47.2	49.4	3,961
rural_childxul_sub				
Girls	50.3	50.4	50.3	3,363
Boys	49.7	49.6	49.7	3,320
urban_childxul_sub				
Girls	51.6	55.9	52.2	700
Boys	48.4	44.1	47.8	641
N	1,153	188	1,341	

Source: IHS3

In rural areas, the percentages of girls enrolled in school are 50.3% and 50.4% for mothers not working and employed mothers respectively which are higher than the percentages of boys attending school.

3.2 Empirical Results

Table 6 presents the findings of the multivariate probit model of Mother's employment, Child schooling and child labour by disaggregating the effect based on residence.

Table 6: Multivariate probit Model Results

	urban						rural					
	mother works for a wage		is child attending school?		child works:wage		mother works for a wage		is child attending school?		child works:wage	
child's age			-0.019	(0.072)	-0.043	(0.087)			0.092***	(0.025)	0.017	(0.044)
square of child's age			0.000	(0.003)	0.003	(0.004)			-0.004***	(0.001)	-0.001	(0.002)
gender of child			-0.044	(0.081)	-0.020	(0.099)			-0.036	(0.028)	-0.056	(0.049)
mother's education	0.130***	(0.011)	0.027**	(0.009)	-0.015	(0.011)	0.137***	(0.007)	0.015**	(0.005)	0.001	(0.008)
mother's age	0.053	(0.042)	0.042	(0.025)	-0.020	(0.031)	0.064**	(0.022)	0.053***	(0.008)	0.012	(0.017)
square of mother's age	-0.001	(0.001)	-0.000	(0.000)	0.000	(0.000)	-0.001**	(0.000)	-0.001***	(0.000)	-0.000	(0.000)
father works for a wage	0.431*	(0.177)	0.417**	(0.145)	-0.228	(0.175)	0.132	(0.163)	0.401***	(0.086)	-0.679***	(0.173)
father's education	-0.031*	(0.014)	0.020*	(0.010)	0.004	(0.012)	-0.047***	(0.012)	0.006	(0.005)	0.033***	(0.008)
level of individual real annual consumption	-0.006	(0.084)	-0.152*	(0.060)	0.341***	(0.075)	0.146**	(0.051)	-0.173***	(0.024)	0.440***	(0.041)
log of ownlandsize	0.037	(0.118)	0.038	(0.085)	-0.118	(0.103)	-0.397***	(0.065)	0.101***	(0.028)	-0.397***	(0.051)
log of credit_access	-0.027	(0.017)	-0.014	(0.012)	0.002	(0.014)	-0.004	(0.010)	0.008	(0.004)	-0.005	(0.008)
mwregion== 1.0000	-0.276	(0.157)	-0.063	(0.105)	0.060	(0.127)	-0.202*	(0.084)	-0.070	(0.037)	-0.160*	(0.067)
mwregion== 2.0000	0.033	(0.132)	0.030	(0.096)	-0.060	(0.118)	-0.158*	(0.070)	-0.038	(0.032)	-0.133*	(0.056)
Observations	1019						8564					

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

3.2.1 Multivariate Probit Model results

Characteristics of Child

Only in the rural area is the age of a child positively influential in the probability of a child schooling. Thus, as the child approaches the age of 17, there are higher chances of the child attending school. This may be due to the fact that in rural Malawi, children start schooling at an older age than the one recommended. Thus, even as age increases, it is expected that the child will still be schooling. The sex of a child showed no significant influence on the probability of observing the child schooling and working.

Characteristics of the mother

Mothers' years of education have a positive effect on both their own employment and the schooling status of their children in both rural and urban areas. This positive effect of mothers' education on a child's school attendance could indicate the awareness of educated mothers on the importance of schooling their children. However, the mother's level of education has shown no significant impact on child work. In the rural areas, the age of the mother has a positive influence on the probabilities of the mother working and also the child attending school. Based on the negative sign of the square of mother's age, we note that there is decreasing impact. A positive but decreasing effect of mother's age on her own employment is a standard result for women's labor supply (DeGraff & Levison, 2009).

Characteristics of the father

From the results in Table 6 we can see that, in urban Malawi, women whose husbands are employed are more likely to be employed. Additionally, when a father is working, there are high chances of a child attending school in both rural and urban. In rural Malawi, if fathers are employed (as opposed to out of the labor force or unemployed, the reference category), children are less likely to be employed. The latter reflects the the presumption that a father working will ably provide for necessities hence eliminating the need for the child to work as well. The results further show that the more educated the father is, the less likely the mother is to work and the higher the chances of the child attending school. This may be due to the fact that a highly educated father may have adequate resources to support

the family hence less need for the mother to work and trickling down of resources to the education of the child as well. However, in the rural areas, the higher the father's years of schooling, the more likely a child is going to work. This surprising result may represent an effect of better access to job opportunities for children through their educated fathers.

Household Economic Status

The higher the level of individual real annual consumption expenditure, the lower the probability of a child going to school. The result is more significant in the rural area mainly due to the opportunity cost of sending the child to school amidst other household consumption needs. In both the rural and urban areas, higher levels of individual real annual household expenditure are associated with higher chances of a child working and in rural area alone, a mother working. A plausible explanation for this would be higher levels of consumption requiring more resources hence the need for other family members to engage in labour as well. In rural areas, when a household owns land, there are more chances of children at that household attending school and less chances of the mother and the children working. According to Francavilla, Giannelli, and Grilli (2013), this is a pure wealth effect. Indeed, land ownership is associated with more crops, higher yields and farm rentals in the rural areas, characteristic of wealthy families who may have more resources to send children to school. However, this result is in contrast with Basu, Das, and Dutta (2010) who proposed that as a household's land ownership rises, child labor will first rise and then decline, in the manner of an inverted-U.

Region of residence variables

In rural parts of Central and Northern Malawi, mothers and children are less likely to be working compared to the Southern region. This is a surprising result considering that the rural Central is characteristic of high yields of Tobacco. However, the rural South also has vast tea fields where most children work (Gondwe, 2012).

3.2.2 Correlations of the error terms

The correlation structure of the error terms indicates the extent to which unobservables contribute to the probability of observing a certain outcome. The simultaneous model allows us to estimate the covariance between the u-errors of a pair out of the three equations and thus to test more properly the mother-child correlation due to unobservable effects. From table 7, the covariance σ_{12} is significant and estimated as 0.06 for the urban and 0.024 for rural, implying that unobservables that increase the likelihood of mother's employment also increase the likelihood of her child's schooling. This finding is in tandem with the significance of mother's education which was found to have a positive impact on mother's employment and child schooling. Another interesting result is the covariance which is negative and has a value of -0.085 (urban) and -0.008 (rural) implying that unobservables that increase the chances of mother's employment also reduce the probability of her child working. The correlations between child schooling and child labour, -0.795 for urban and -0.645 for rural, means that there are lower chances of a child going to school if they are working.

3.2.3 Sensitivity Analysis

Results for sensitivity analysis are presented in this sub-section. The variations include gender, industry of employment, hours of work and location.

Gender/Sex

In both the rural and urban areas, Table 8 shows that the covariance between mother's employment and child schooling is still positive for a male child and female child just like in the main model. Mother's employment and child labour are negatively correlated only for a female child in the urban areas and a male child in the rural areas. A negative covariance between child labour and child schooling is present in both rural and urban areas for a male and female child.

Hours in wage employment for the past week

From results in Table 9, when the mother and child are both in wage employment, there is a positive correlation between mother's employment and child work for both rural and

urban. In the urban area, the higher the chances of a mother in wage employment, the lower the chances of a child schooling while in the rural area, a positive correlation exists between mother's employment and child schooling. Francavilla et al. (2013) observes that a negative relationship between mothers' employment and children's schooling would appear due to insufficiency of female earnings to allow the schooling of children. Such cases would be typical in the urban area as the sensitivity results suggest so that instead of schooling, children are left idle, or are employed in domestic work to substitute for their mothers, or are employed in market activities. The finding that child labour and schooling are negatively related is maintained in wage employment for both urban and rural.

Primary industry vs other, secondary and tertiary

When the mother and the child are employed for a wage in the primary industry, the results were similar to the multivariate probit model. From Table 10, in both the urban and rural areas, mother's employment positively correlated with child work and yielded a negative covariance with child schooling. A negative correlation was also recorded between child labour and child schooling for both rural and urban areas.

Hours by location

The sensitivity results from varying hours of work in Table 11 showed no difference for all hours as well as between rural and urban areas. Whether a child works for 12, 14 or 16 hours seemed not to change the results across location. A positive correlation was observed between mother's employment and each of child work and child schooling be it in rural or urban areas. A negative covariance was observed between child labour and child schooling for rural and urban across all hours of work.

Hours by sex and location

The sensitivity results remained unchanged when varied by hours, location and sex. As shown in Tables 12, 13 and 14 for both males and females in urban and rural areas working for 12, 14 and 16 hours, a positive covariance was recorded between mother's employment and each of child labour and schooling. The negative correlation between child labour and schooling was also unchanged.

In the next section, we conclude by providing policy direction from the results obtained in this section.

4 Conclusion

4.0.1 Summary of findings and conclusion

This study used a multilevel trivariate probit model to examine the impact of mother's employment on child labour and schooling in Malawi. The study used the Third Integrated Household Survey (IHS3) dataset. The study also examined a disaggregated effect of mother's employment on child labour and schooling for boys and girls. By observing the correlations between the error terms from the three probit models, it was found that child labour and mother's employment are negatively correlated. That is, the unobservables that increase the probability of observing a mother working reduce the chances of observing a child working. Also a negative relationship was found between child labour and child schooling supporting the results found in all the studies discussed in empirical review that examined this relationship. From the error term covariances, it was concuded that mother's employment is positively related to child schooling. This finding was contrary to the findings of all the studies that were examined in literature review under this relationship. When the effect of mother's employment on child labour and schooling was disaggregated for boy and girl child, the relationships between the error terms did not differ from the aggregated effect model. There was no significant difference in the impact of mother's employment for a male child and female child.

4.0.2 Policy Implications

The results show that child labour has a negative impact on child schooling. Thus apart from child labour having adverse physical impact on the child, it has been found to have a negative impact on the child's school attendance. Thus, the need to intensify the fight against child labour as it conflicts with the Millennium development goals of attaining

universal primary school education. The government of Malawi should realize that child labour should not be combated only because of its own nature that it is detrimental physically but also because of its negative impact on education of the child. Together, the negative relationship between mother's employment and child labour and the positive relationship between mother's work and child schooling provide solid ground for new policy considerations. By promoting interventions that ensure that more women in families are employed, the Malawi Government would be killing two birds with one stone. First, this would significantly reduce the extent of child labour and secondly, it would improve school attendance of children be it in rural or urban areas. The government should rigorously engage its campaign for 50:50 representation of women and men in the labour force. This strategy will see more women employed. Also, when the government is carrying out its social cash transfer programmes such as 'Food for Work', the priority should also be given to women in families so that they should also earn more and not require their children to work but be able to support them in their schooling endeavors. Better employment opportunities also arise when one is more educated. This presents another policy dimension whereby the government will indirectly increase chances of females working by encouraging the education of the girl-child. Thus, the government of Malawi should be in the forefront sensitizing citizens and encouraging them on the benefits of educating the girl child. This is a long chain that eventually leads to women being empowered economically and earn income. Even though girls may not attend tertiary institutions, there are other vocational training institutions that provide specialized training that would enable one generate income and be similar in status to the one working. Thus, education is very important in terms of economic empowerment in the future and the benefits will eventually trickle down to the children via reduced child labour and increased child school attendance.

Appendices

A Appendix A: Correlation of Error Terms

Table 7: Correlations of the error terms

	urban	rural
rho21	0.006	0.024
serho21	0.059	0.025
rho31	-0.085	-0.008
serho31	0.072	0.040
rho32	-0.795	-0.645
serho32	0.035	0.023

B Appendix B: Sensitivity Analysis Results

Table 8: Sensitivity: Sex

	urban:M	urban:F	rural:M	rural:F
rho21	0.016	0.070	0.083	0.042
serho21	0.094	0.087	0.035	0.036
rho31	0.020	-0.110	-0.038	0.030
serho31	0.120	0.119	0.062	0.055
rho32	-0.856	-0.768	-0.613	-0.646
serho32	0.057	0.048	0.034	0.032

Table 9: Sensitivity:Hours in wage employment

	urban	rural
rho21	0.071	0.014
serho21	0.059	0.025
rho31	-0.120	0.159
serho31	0.076	0.040
rho32	-0.819	-0.571
serho32	0.040	0.027

Table 10: Sensitivity: Industry

	urban	rural
rho21	0.279	0.038
serho21	0.062	0.025
rho31	-0.256	-0.076
serho31	0.082	0.045
rho32	-0.792	-0.648
serho32	0.037	0.024

Table 11: Sensitivity: Hours by location

	12 Hours		14 Hours		16 Hours	
	urban	rural	urban	rural	urban	rural
rho21	0.167	0.167	0.164	0.155	0.186	0.152
serho21	0.052	0.016	0.052	0.017	0.052	0.017
rho31	0.143	0.314	0.166	0.325	0.174	0.338
serho31	0.061	0.016	0.063	0.017	0.065	0.017
rho32	-0.699	-0.632	-0.688	-0.640	-0.685	-0.628
serho32	0.041	0.012	0.044	0.013	0.045	0.013

Table 12: Sensitivity: Hours by Sex and location (12 Hours)

	urban:M	urban:F	rural:M	rural:F
rho21	0.100	0.121	0.166	0.165
serho21	0.077	0.072	0.023	0.023
rho31	0.172	0.217	0.298	0.312
serho31	0.091	0.086	0.023	0.024
rho32	-0.722	-0.708	-0.619	-0.631
serho32	0.056	0.050	0.018	0.018

Table 13: Sensitivity: Hours by Sex and location (14 Hours)

	urban:M	urban:F	rural:M	rural:F
rho21	0.095	0.127	0.149	0.159
serho21	0.077	0.073	0.023	0.024
rho31	0.227	0.177	0.310	0.320
serho31	0.091	0.094	0.024	0.024
rho32	-0.696	-0.724	-0.633	-0.642
serho32	0.060	0.053	0.018	0.018

Table 14: Sensitivity: Hours by Sex and location (16 Hours)

	urban:M	urban:F	rural:M	rural:F
rho21	0.104	0.180	0.145	0.167
serho21	0.078	0.073	0.024	0.024
rho31	0.236	0.198	0.335	0.328
serho31	0.092	0.098	0.024	0.025
rho32	-0.676	-0.727	-0.623	-0.632
serho32	0.063	0.056	0.019	0.019

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