

### Levy Economics Institute of Bard College

# **Policy Note**

2018 / 4

# WAGE EMPLOYMENT AND THE PROSPECTS OF WOMEN'S ECONOMIC EMPOWERMENT: SOME LESSONS FROM GHANA AND TANZANIA

THOMAS MASTERSON and AJIT ZACHARIAS

#### Introduction

UN Women describes women's economic empowerment as the "ability to secure decent jobs, accumulate assets, and influence institutions and public policies determining growth and development." In the context of the global South, the first element of this notion of empowerment is often understood as regular wage/salaried jobs in the formal sector or informal sector jobs that closely resemble formal sector jobs. Unfortunately, the currently dominant growth trajectory is only capable of generating such "decent jobs" in magnitudes that fall miserably short of the vast numbers of underemployed and nonemployed women that populate the global South. A crucial question, then, is whether the wage/salaried jobs that are likely to be available, though falling short of qualifying as "decent," can nevertheless serve as vehicles for economic empowerment.

We address this question here from the standpoint of the job-seeking, working-age individual in a household that does not have enough resources to attain a minimal level of consumption—in other words, a household that is consumption-poor. Abstracting from cultural and social barriers

The authors gratefully acknowledge the Hewlett Foundation for its support of their research on Ghana and Tanzania. Research Scholar THOMAS MASTERSON is director of applied micromodeling at the Levy Economics Institute. Senior Scholar AJIT ZACHARIAS is director of the Institute's Distribution of Income and Wealth program.

The Levy Economics Institute is publishing this research with the conviction that it is a constructive and positive contribution to the discussion on relevant policy issues. Neither the Institute's Board of Governors nor its advisers necessarily endorse any proposal made by the authors.

that may prevent a person from taking a job, can such an individual be expected to take a job that they are most likely to get? The answer to this question is not always "yes." For many working-age individuals in consumption-poor households that are employed on the family farm or enterprise, switching to wage employment may compromise the economic returns from the family farm or enterprise. However, for the individual for whom the answer is "yes," is the job economically empowering?

Economic empowerment is a complex concept (for a critical overview, see Kabeer [2016]; see also Duflo [2012] for an alternative perspective). We use two indicators of economic empowerment here. First, we ask whether the individual would be able to move their household to at least a minimal level of consumption via the additional earnings from their new job. Second, we examine whether the individual would be deprived of the time required to meet the minimal needs of care for themselves (personal care), their homes, and their dependents. Obviously, these indicators are, at best, circumstantial evidence and not adequate to capture all of the multifaceted aspects of economic empowerment. Yet, it is also obvious (as made explicit by the adjective "decent" in the UN Women definition) that a job that locks the individual into persistent material deprivation and the gradual depletion of their capacities via overwork should not be regarded as contributing to that person's economic empowerment. It is also hard to conceive of such a job as being conducive to the "accumulation of assets." Freedom from material deprivation and time deficits are thus integral to women's economic empowerment, though they are by no means exhaustive indicators of such empowerment.

We address the nexus between wage employment, consumption poverty, and time deficits in the context of Ghana and Tanzania, based on our recently completed work (Zacharias et al., forthcoming).<sup>3</sup> Both countries are characterized by relatively high levels of female (and male) labor force participation. Furthermore, as we shall see later, in both countries the consumption-poor potential job seekers are predominantly female and currently (under)employed on their family farm. Thus, there is an intimate relationship between women's economic empowerment and the chances a typical consumption-poor household can escape poverty by increasing its number of wage workers. While fully recognizing that economic empowerment is a goal that is pertinent to women and men in a variety of circumstances, we wish to highlight here the prospects of consumption-poor potential job seekers.

## **Consumption Poverty, Time Deficits, and Potential Wage Workers**

To carry out our analysis, we first define "consumption-poor." As has been argued, the official poverty lines are based on a hidden assumption: that households with a poverty-level income either have enough time to perform the requisite tasks of household production (unpaid household activities such as cooking, cleaning, caring for children, etc.) or enough resources to compensate for deficits in household production by purchasing market substitutes (Vickery 1977; Zacharias 2017a). For those households without the requisite time, poverty lines do not represent the minimum amount of resources necessary to avoid material deprivation, because they will have to purchase market substitutes to fill gaps in household production to attain the poverty-level standard. If the hidden assumption behind the official poverty lines were indeed true, there would be no one with time deficits, or all those with time deficits would have enough resources to "buy off" such deficits. Neither assumption holds in practice. <sup>4</sup> To remedy the deficiency, we should add the replacement cost of the time deficit to the poverty line of time deficient households. The replacement cost is the cost of buying goods and services to fill in for the missing household production. We consider an individual consumptionpoor if the individual lives in a household with consumption expenditures that fall below this adjusted poverty line.

Next, we need to define time deficits. A person is considered time-poor if the sum of their hours of employment, required hours of commuting, required minimum hours of household production, and required minimum hours of personal care exceed the amount of physically available time (168 hours per week). We consider a household time-poor if it has at least one time-poor individual. These definitions allow for the possibility that not every person in a time-poor household need be time-poor; as we know, the definition of consumption poverty is a purely household-level definition in that every person in a consumption-poor household is considered to be consumption-poor.

Our definitions of "required minimum hours" are constructed using the same logic that is employed in constructing consumption poverty lines. Required minimum hours of personal care and commuting are derived from the actually observed average hours that individuals spent on personal care and commuting.

The thresholds for household production hours are set at the household level; that is, they refer to the total required weekly hours of household production to be performed by the members of the household, taken together. In principle, the thresholds represent the average amount of household production that is required to subsist at the poverty level of consumption expenditures with few or no purchases of market substitutes for household production. After we estimated the threshold hours of household production, we determined each individual's share in his or her household's actual hours of household production. We assumed that an individual's share of the threshold hours would be equal to that individual's share of the observed total hours of household production.<sup>5</sup> The required hours of household production for the individual were obtained by multiplying their individual share and the threshold number of hours for their household.

The last remaining definition that we need for the purposes of our present analysis serves to identify the individual from the consumption-poor household that is "likely to become a wage worker." These are working-age individuals who are: not employed in any capacity; working for pay (wage or salary) for fewer than 10 hours per week; or working as a self-employed or unpaid family worker on the family farm or business, but whose contribution to their family farm or business falls sufficiently short of their expected wage. While the first two conditions are straightforward to identify from readily available information in household surveys, operationalizing the last condition required the development of a rather complex microsimulation model, to which we turn now.

#### Simulating a Transition to Wage Employment

As we mentioned above, we define three types of working-age individuals as potential wage workers: those that are currently nonemployed; those that are currently engaged in paid work for fewer than 10 hours per week; and those that are currently self-employed or an unpaid family worker. The first type will all receive jobs in our simulation. The second type will only change jobs if the earnings from their simulated job exceed their current actual earnings. For the third type, we compare the new earnings from the simulation to the individual's contribution to their household's farm and nonfarm business income. If the new earnings are at least 75 percent of their current estimated contribution, we consider the individual a

potential wage worker.<sup>7</sup> We assume—very optimistically and in order to evaluate a best-case scenario—that a potential wage worker can get a job that someone with their characteristics (such as age, sex, etc.) is most likely to get in a statistical sense. For the newly employed, the hours of employment and earnings from the new job are estimated via statistical modeling.

Transition into wage employment entails changes in household earnings, time allocated to household production, and time allocated to other production activities. Earnings in the household change as some household member(s) transition from nonemployment and marginal, probably low-paid or unpaid, activities to wage employment. Since these are consumption-poor households, we assume that their marginal propensity to consume is equal to one: that is, the additional earnings are spent entirely on additional consumption. Whether the additional earnings are enough to put the household above our modified consumption poverty line depends on the expected wage and hours of employment, as well as the change in time deficits.

Time deficits of the individuals in the household are allowed to change in the simulation. As some household members move into wage work, it is possible that a smaller share of their time will be allocated to required household production activities, which would have to be compensated for by the other members of the household. In addition, as those who are currently self-employed or unpaid family workers transition to wage employment, the time they spend on productive activities for the family farm or business will be lost. In sum, the hours of employment of the new wage workers in the household and required hours of household production of *all* members of the household could change. Therefore, their time deficits can also change. For the households of the newly employed, statistical modeling is once again used to derive the new pattern of intrahousehold division of household production.

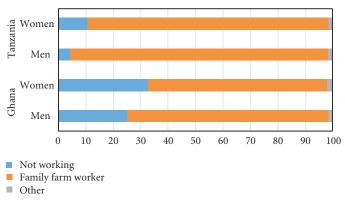
To conclude this very brief summary of a complex simulation model, let us note that the transition to wage employment will result in a revised level of consumption expenditures for the household whose members take up new jobs and potentially revised levels of time deficits for *all* members of such households. The simulated pattern of consumption expenditures and time deficits can be compared against the actually prevailing consumption expenditures and time deficits to assess the effects of wage employment.

It must be carefully noted that this simulation is not an attempt to model a full-employment situation in which all of the job recipients are moved into wage employment as a result of some job-creating policy intervention or process of economic growth. Rather, it is an estimation for each consumption-poor individual and household of the impact on that household of all potential wage workers in that household moving into wage employment. The results we present below are aggregate impacts for regions and types of households and individuals.

#### The Impact of Simulated Wage Employment

We begin by noting that the pool of potential wage employees from consumption-poor households is predominantly female in both countries. In Ghana, 73 percent of the 1.91 million individuals are women. The female percentage is lower in Tanzania, though they make up the majority (55 percent) of the nearly 4.17 million potential wage employees. (Estimates for both countries reported here are from the early 2010s: 2012–13 for Ghana and 2011–12 for Tanzania.) Another noteworthy feature of the pool is that it is relatively young. The youngest group (18 to 25 years) is the largest single age group among the pool of potential employees (35 and 31 percent, respectively, in Ghana and Tanzania). Another crucial feature

**Figure 1** Composition of Potential Wage Employees from Consumption-Poor Households by Actual Employment Status (percent), Ghana and Tanzania



Note: The category "Other" includes wage and salary workers, nonfarm self-employed, and unpaid family workers in nonfarm enterprises. The category "Family farm worker" includes those who identify themselves as "self-employed" and "unpaid family worker" in Ghana, while in Tanzania no such distinction is made in the survey data used in our study.

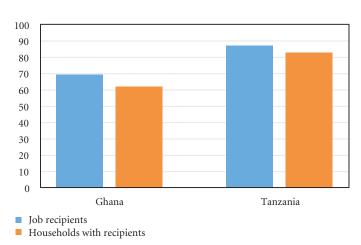
Source: Authors' calculations based on Rios-Avila (2016).

of the pool is that the majority of them are currently employed on their family farm (Figure 1). Only a minority are currently not employed. The size of this minority is much smaller in Tanzania than Ghana—a reflection of the much higher proportion of farm households in the total consumption-poor population in the former. If the consumption-poor households are to lift themselves out of poverty by supplying additional wage workers, adequate job opportunities for women, underemployed family farm workers, and the young appear to be a necessary precondition.

Our simulation is a thought experiment about the impact, on the individuals and their households, of potential job recipients taking up a job that they are most likely to get. Since the thresholds for evaluating the impact on time and consumption poverty are different for each country, it should be noted that direct comparisons of magnitudes such as poverty rates are not appropriate. We present the estimates for both countries here to highlight the qualitative differences and similarities.

How likely are the job recipients and their households to escape consumption poverty? In Ghana, the majority (69 percent) of recipients would be able to escape consumption poverty if adequate wage employment were available to them (Figure 2). The result for Tanzania is also qualitatively the same, although the poverty-reducing impact is more spectacular:

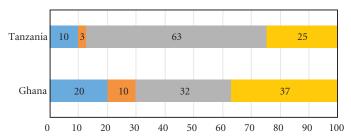
**Figure 2** Simulated Impact of Job Receipt on Consumption Poverty (percent consumption-nonpoor), Ghana and Tanzania



*Note*: "Job recipients" refers to consumption-poor individuals that were assigned wage employment in the simulation.

Source: Authors' calculations based on Masterson, Kim, and Rios-Avila (2016) and Rios-Avila (2016).

Figure 3 Simulated Distribution of Job Recipients by Time and Consumption Poverty (percent), Ghana and Tanzania



- Consumption- and time-poor
- Consumption-poor and time-nonpoor
- Consumption-nonpoor and time-poor
- Consumption- and time-nonpoor

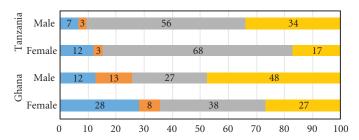
*Note*: "Job recipients" refers to consumption-poor individuals that were assigned wage employment in the simulation. The percentage of time-poor recipients is calculated as the sum of the numbers shown in the blue and grey blocks, while the percentage of consumption-poor recipients is calculated as the sum of the numbers shown in the blue and orange blocks. Percentages may not total 100 due to rounding.

Source: Authors' calculations based on Masterson, Kim, and Rios-Avila (2016) and Rios-Avila (2016).

about 87 percent of recipients would lift themselves out of poverty with adequate wage employment. As we would expect, the impact of additional members of the household being able to find jobs also dramatically reduces the incidence of consumption poverty among these households. Roughly 62 percent and 83 percent of recipient households in Ghana and Tanzania, respectively, are able to escape consumption poverty. Expansion of wage employment represents an important avenue out of consumption poverty even though the type of jobs that become available need not meet all the requirements of "decent" jobs. As is well-known, only a minority of wage and salaried employees in both countries hold what may be characterized as "decent" jobs. Accordingly, the jobs that we assign to our recipients are mostly relatively low-wage jobs in the informal sector.

The picture is less comforting with respect to time deficits. With the new jobs, the majority of recipients (53 percent and 72 percent, respectively, in Ghana and Tanzania) would encounter time deficits (Figure 3). We found that the recipients who remained mired in consumption poverty were far more prone to time deficits than the recipients that escaped consumption poverty via wage employment. About two-thirds of those who remained consumption-poor were also time-poor

**Figure 4** Simulated Distribution of Job Recipients by Sex and Time and Consumption Poverty (percent), Ghana and Tanzania



- Consumption- and time-poor
- Consumption-poor and time-nonpoor
- Consumption-poor and time-poor
- Consumption- and time-nonpoor

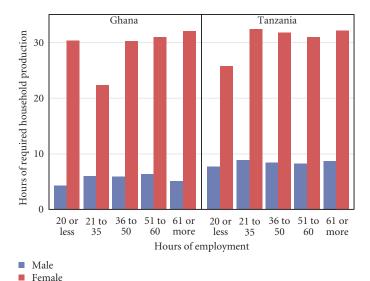
*Note*: "Job recipients" refers to consumption-poor individuals that were assigned wage employment in the simulation. The percentage of time-poor recipients is calculated as the sum of the numbers shown in the blue and grey blocks, while the percentage of consumption-poor recipients is calculated as the sum of the numbers shown in the blue and orange blocks. Percentages may not total 100 due to rounding.

Source: Authors' calculations based on Masterson, Kim, and Rios-Avila (2016) and Rios-Avila (2016).

in Ghana, while the proportion in Tanzania was even higher at roughly three-fourths. Only a minority of job recipients (37 percent and 25 percent, respectively, in Ghana and Tanzania) ended up with neither time nor consumption deficits. Escaping consumption poverty via wage employment entails taking on overwork for the majority of the recipients.

Are there significant gender disparities among recipients in terms of consumption and time deficits? The answer is "yes" for both countries. A larger proportion of female than male recipients would continue to be consumption-poor (36 percent versus 25 percent in Ghana and 15 percent versus 9 percent in Tanzania). In both countries, female recipients were twice as likely as male recipients to be in a household headed by a single female (20 percent versus 10 percent) and female recipients in households headed by single females comprised about 10 percent and 11 percent of all female recipients in Ghana and Tanzania, respectively. The gender gap in earnings and gender-based job segregation, which may in turn be due to the gender differences in educational achievement among recipients in each country, are likely to be the factors behind this disparity. Just under 50 percent and 30 percent of female job recipients in Ghana and Tanzania, respectively, never attended school, compared to 32 percent and 20 percent of their male

**Figure 5** Average Weekly Hours of Required Household Production, by Weekly Hours of Employment and Sex of Job Recipients, Ghana and Tanzania



Source: Authors' calculations based on Rios-Avila (2016).

counterparts. Another type of gender disparity is also apparent among the recipients: the incidence of the double bind of time and consumption poverty is much higher among female than male recipients (28 percent versus 12 percent in Ghana and 16 percent versus 12 percent in Tanzania). On the other hand, male recipients are almost twice as likely as female recipients to end up with neither time nor consumption deficits: 48 percent versus 27 percent in Ghana, and 34 percent versus 17 percent in Tanzania (Figure 4).

There is a pronounced gender disparity in the intrahouse-hold division of household responsibilities, even when hours of employment are similar (Figure 5). This renders women more prone to time deficits than men. In turn, women's higher time poverty rate contributes greatly to the higher incidence of the double bind and lower incidence of neither bind among women than men. On average, female recipients faced weekly hours of required household production that exceeded their male counterparts' hours by a factor of five in Ghana (30 versus 6 hours) and 3.6 in Tanzania (32 versus 9 hours).

#### Conclusion

Overall, if adequate opportunities for wage employment are available, the "added-worker" route holds considerable promise for the elimination of consumption poverty among households that do have members that can become wage workers. However, if the available jobs are similar to those held by people most like the added worker, a substantial proportion of the new wage workers would remain in consumption poverty. In Ghana, they would constitute 31 percent of the recipients of new jobs, while in Tanzania they would make up 13 percent. Furthermore, the majority of the recipients of new jobs—53 percent and 72 percent in Ghana and Tanzania, respectively—would encounter time deficits, indicating that the way out of consumption poverty generally involves overwork and its attendant cumulative depletion of individual capacities.

In addition, the prospects for female added workers are likely to be considerably bleaker than for their male counterparts. Compared to men, a larger proportion of women encountered the double bind of time and consumption deficits and a smaller proportion of them faced neither bind. The reasons behind this are, of course, fundamentally the same as those that affect the currently employed. Gender discrimination, as reflected in occupational segregation and lower pay, is a central aspect of wage employment. Patriarchal structures and institutions that put greater household production responsibilities (and lower educational attainment expectations) on women than men constitute a pervasive form of gender inequality. The requirements of household production that fall upon women are aggravated by persistent underinvestment in social and physical infrastructure (childcare centers, water supply, etc.)—a result of skewed domestic priorities and external constraints on public expenditures. All these factors tend to limit the empowering potential of wage employment for women particularly women in consumption-poor households. This is especially true for women that are single household heads.

We should note that about 58 percent of consumption-poor households in Ghana and 38 percent in Tanzania would remain consumption-poor in spite of the added-worker effect on poverty reduction. The overwhelming majority (roughly 80 percent in both countries) of what we term "hardcore poor" households also encounter time deficits, indicating the pervasive nature of overwork that accompanies consumption poverty. Public action and public policies should foster a development strategy that prioritizes the generation of decent jobs

in sufficient numbers in order to overcome the interlocking disadvantage of time and consumption deficits.

Declaration after declaration by multilateral organizations and national governments have emphasized the importance of decent jobs and full employment—a recent example of this being the Addis Ababa Declaration of 2015. A number of small-scale projects have also been launched specifically in Ghana and Tanzania in the last decade or so. <sup>10</sup> A detailed examination of these efforts falls outside the scope of the current discussion. However, experience teaches us that initiatives that lack long-term commitment of resources and strategic coherence with a larger set of transformative macroeconomic and structural policies, however well-intentioned they may be, are bound to have at best palliative effects and at worst unexpected and counterproductive results.

#### **Notes**

- See http://www.unwomen.org/en/what-we-do/economicempowerment
- 2. The Indian growth experience in the last three decades or so is a striking example of fast GDP growth with little or no growth in employment in the formal sector. See, inter alia, Sengupta Commission (2009, 13–14) and ILO (2016a).
- 3. The sources and methods for constructing the two-dimensional measure of deprivation, Levy Institute Measure of Time and Consumption Poverty, are documented in the cited publication.
- 4. Our previous research has demonstrated that neither assumption holds in practice. See Zacharias, Antonopoulos, and Masterson (2012) for Argentina, Chile, and Mexico; Zacharias, Masterson, and Memis (2014) for Turkey; and Zacharias, Masterson, and Kim (2014) for Korea. Our recently completed research on Ghana and Tanzania also confirms this (Zacharias et al. 2018). For an overview of the main results for the seven countries, see Zacharias (2017b).
- Consider the hypothetical example of a household with only two adults in Tanzania. If the data showed that the adults spent an equal amount of time in household production, we divided the threshold value of 35 hours equally between them.
- 6. See Masterson, Kim, and Rios-Avila (2016) for details.

- 7. The 75 percent value is purely arbitrary. Our motivation is that wage employment is likely to be desirable for the individual for some nonpecuniary reasons (such as being an independent earner working outside of the home), and as a result the individual may be willing to accept wage employment even though the wage may be less than the contribution to the family farm or business. We experimented with some alternative percentages in the vicinity of 75 percent and found that they all led to substantively similar conclusions.
- 8. The percentage of nonpoor households is lower than the percentage of nonpoor recipients because, on average, the recipient households have more than one job recipient: 1.9 and 2.2 in Ghana and Tanzania, respectively. The higher average number of recipients is a major factor behind the higher poverty-reducing impact of wage employment in Tanzania than Ghana.
- 9. We put this term in quotes because it is normally used in the context of studying female labor supply responses during recessions.
- 10. For Ghana, see, e.g., ILO (2012). For Tanzania, see ILO (2016b).

#### References

- Duflo, E. 2012. "Women Empowerment and Economic Development." *Journal of Economic Literature* 50 (4): 1051–79.
- ILO (International Labour Organisation). 2012. "Up-Scaling Local Economic Development: Lessons from the Ghana Decent Work Programme 2011." Turin: International Training Centre of the ILO.
- ——. 2016a. "India Labour Market Update." Geneva: International Labour Organisation.
- ———. 2016b. "Making Decent Work a Reality in Tanzania." Geneva: International Labour Organisation.
- Kabeer, N. 2016. "Gender Equality, Economic Growth, and Women's Agency: The 'Endless Variety' and 'Monotonous Similarity' of Patriarchal Constraints." *Feminist Economics* 22 (1): 295–321.

- Masterson, T., K. Kim, and F. Rios-Avila. 2016. "Simulations of Employment for Individuals in LIMTCP Consumption Poor Households in Tanzania and Ghana, 2012."

  Working Paper No. 871. Annandale-on-Hudson, NY:
  Levy Economics Institute of Bard College. August.
- Rios-Avila, F. 2016. "Quality of Match for Statistical Matches Used in the Development of the Levy Institute Measure of Time and Consumption Poverty (LIMTCP) for Ghana and Tanzania." Working Paper No. 873. Annandale-on-Hudson, NY: Levy Economics Institute of Bard College. September.
- Sengupta Commission. 2009. "The Challenge of Employment in India: An Informal Economy Perspective." Final Report, National Commission for Enterprises in the Unorganised Sector. New Delhi: Government of India.
- Vickery, C. 1977. "The Time-Poor: A New Look at Poverty." *Journal of Human Resources* 12 (1): 27–48.
- Zacharias, A. 2017a. "Measurement of Time and Income Poverty." In Indira Hirway (ed.), *Mainstreaming Unpaid Work: Time-Use Data in Developing Policies*. New Delhi: Oxford University Press.
- 2017b. "How Time Deficits and Hidden Poverty
  Undermine the Sustainable Development Goals."
   Policy Note 2017/4. Annandale-on-Hudson, NY: Levy
  Economics Institute of Bard College. November.
- Zacharias, A., R. Antonopoulos, and T. Masterson. 2012.

  "Why Time Deficits Matter: Implications for the
  Measurement of Poverty." Research Project Report.

  Annandale-on-Hudson, NY: Levy Economics Institute
  of Bard College and United Nations Development
  Programme, August.
- Zacharias, A., T. Masterson, and K. Kim. 2014. "The Measurement of Time and Income Poverty in Korea." Research Project Report. Annandale-on-Hudson, NY: Levy Economics Institute of Bard College. January.
- Zacharias, A., T. Masterson, and E. Memis. 2014. "Time Deficits and Poverty: The Levy Institute Measure of Time and Consumption Poverty for Turkey." Research Project Report. Annandale-on-Hudson, NY: Levy Economics Institute of Bard College. May
- Zacharias, A., T. Masterson, F. Rios-Avila, K. Kim, and T. Khitarishvili. Forthcoming. "The Measurement of Time and Consumption Poverty in Ghana and Tanzania." Research Project Report. Annandale-on-Hudson, NY: Levy Economics Institute of Bard College.