

# The Women's Empowering-Work Index

By JOCELYN E. FINLAY\*

*In this paper, I propose the development of an indicator of women's work in the context of women's economic empowerment. The Women's Empowering-Work Index (WEWI) measures the economic empowerment of work for women who are in low- and middle-income countries. The index will be a measure of women's work situations, her accumulation of resources from working, and her decision-making power over the use of her income. To construct the index, I apply the Multidimensional Poverty Index approach (Sabina Alkire et al., 2013) used for the women's empowerment in agriculture. This paper documents the development of the WEWI with a theoretical construct of the index and applied to the Living Standards and Measurement Study – Plus in Malawi, Tanzania and Ethiopia for validation. The validity of a parsimonious version will be tested using Demographic and Health Surveys due to this data set's wide geographic coverage and analytic application. This research will contribute to the international development policies of empowering women, reducing gender inequalities and the creation of decent jobs under the Sustainable Development Goals by creating an empirical measure of decent work that incorporates indicators of empowerment and gender equality.*

\* Finlay: Department of Global Health and Population, Harvard TH Chan School of Public Health, Building 1, 12th Floor, 1206B, 665 Huntington Avenue, Boston, MA 02115, USA. (e-mail: [jfinlay@hsph.harvard.edu](mailto:jfinlay@hsph.harvard.edu)). I would like to thank valuable feedback from PAA 2019 participants, ICRW seminar series participants, and the IUSSP Population, Poverty and Inequality 2019 conference participants and Kathleen Beegle for her thoughtful discussion.

The aim of this paper is to develop an individual level indicator of women's labor force participation in the context of women's economic empowerment. In this paper, I construct and validate an index that captures the degree of economic empowerment women gain from their work.

Women's labor force participation as an outcome in the development process has frequently been considered, especially with respect to how labor force participation is impacted by childrearing (David E. Bloom et al., 2007, Damian Clarke, 2018, Jocelyn E Finlay, 2019, Jocelyn E. Finlay and Marlene A. Lee, 2018). However, as researchers and policy makers consider the concept of women's labor force participation current modes of survey questionnaires (Jocelyn E. Finlay et al., 2016), indicator construction and aggregation (Sabina Alkire, Ruth Meinzen-Dick, Amber Peterman, Agnes Quisumbing, Greg Seymour and Ana Vaz, 2013) have been called into question as they frequently do not capture the gendered nature of work. As a result, earnest efforts have started for a revision of how women's labor force participation, or economic activity more broadly, is understood, defined and measured (Isis Gaddis and Stephan Klasen, 2014, Lucca Piccoli, 2017, Sher Verick, 2018, Anne Winkler, 2016).

Not only do we want to know a valid measure of women's labor force participation, but we also want to know if this work is decent and empowering. Women's labor force participation is a poor proxy for women's economic empowerment. Empowerment implies that people have a choice over a feasible set of alternatives, and low-paid, physically intensive work may be no option for people living in poverty, as Kabeer explores in the distress sale of labor (Naila Kabeer, 2012). Following marriage, women can be expected to work on the family farm or business and contribute their productivity and resultant income to the pooled earnings over which she has no control. Different work situations, different modes of earning and differing degrees of control over earnings, can

place women on a scale of the degree of economic empowerment their work offers them (Siwan Anderson and Mukesh Eswaran, 2009).

In this paper, I measure women's labor force participation in the context of economic empowerment to understand if this work is decent, empowering and equitable.

## **I. Study Design**

The Women's Empowering-Work Index (WEWI) has two components, one that measures the level of empowerment with respect to the type of work she does, the type of earnings and her control over her earnings. Second, I also consider the gap, the gender inequality, that women must overcome in the empowerment process so that she may have choice over her work and benefit from her work.

The Women's Empowering-Work Index (WEWI) is springs from the invitation of Alkire *et al* (Sabina Alkire, Ruth Meinzen-Dick, Amber Peterman, Agnes Quisumbing, Greg Seymour and Ana Vaz, 2013) to adapt their "Women's Empowerment Index in Agriculture" with "suitable modification to the indicators of production and resources" to build and test an index that measures the degree of empowerment in women's labor force participation. To do this and keep within the context of the concept of decent work, I also draw on Anderson et al (Siwan Anderson and Mukesh Eswaran, 2009) and their household bargaining model that enables a ranking of how work situations and mode of payment contribute to women's autonomy.

In the theoretical construction of the WEWI, I follow Alkire's (Sabina Alkire, Ruth Meinzen-Dick, Amber Peterman, Agnes Quisumbing, Greg Seymour and Ana Vaz, 2013) negative notation of lack of adequate achievement. Across the domains (situation, earnings, decision-making power over earnings) of the WEWI indicators (who she works for, where she works, type of work, cash earnings, in-

kind earnings, sole/joint/no control over earnings use) form a vector of  $I$ . Each indicator within vector  $I$  can be weighted,  $w$ , according to its relative contribution to the WEWI. An inadequacy score,  $c$ , is computed for each person,  $i$ , as the weighted sum of the indicators of inadequate empowerment. As described in equation (1). Indicators take the value of 0 if the person has adequate empowerment, and the value of 1 if they have inadequate empowerment.

$$c_i = w_1 I_{1i} + w_2 I_{2i} + \dots w_d I_{di} \quad (1)$$

The domains, indicators, weights and adequacy, for the WEWI are critically determined with consideration of the literature. For example, I follow Anderson and Eswaran (Siwan Anderson and Mukesh Eswaran, 2009) for the domains, and Alkire for the threshold adequacy ( Sabina Alkire, Ruth Meinzen-Dick, Amber Peterman, Agnes Quisumbing, Greg Seymour and Ana Vaz, 2013). The author will conduct a thorough review, and reach out to key informants, to determine the ideal theoretical value of the domains, indicators, weights and adequacy.

The inadequacy score,  $c$ , is augmented with the measure of the gender parity index as described by Alkire (Sabina Alkire, Ruth Meinzen-Dick, Amber Peterman, Agnes Quisumbing, Greg Seymour and Ana Vaz, 2013). The authors will continue to review the domains to be included in the gender parity index. Alkire's set of domains in the gender parity mirror those in the inadequacy score. The authors will consider this approach and compare with the inclusion of other measures of gender parity such as age- and education-gap with partner. The aim of the gender parity index,  $g$ , is to capture the gender inequality that hinders the woman's decision-making power over work and earnings, and the average empowerment gap within household,  $j$ , of the primary man,  $M$ , and woman,  $W$ , as in equation (2).

$$g_j = \frac{c_j(i)^M + c_j(i)^W}{1 - c_j(i)^M} \quad (2)$$

To validate the inadequacy score and the gender parity index, I first apply the index to the Living Standards and Measurement Study – Plus in Malawi, Tanzania and Ethiopia. I then test the validity of a parsimonious version of the index as applied to the Demographic and Health Surveys.

## II. Data Source

Living Standards and Measurement Study – Plus<sup>1</sup> is individual-level sex-disaggregated household survey data that includes indicators of work and employment, with a focus on measuring asset ownership and control from a gender perspective. It includes new definitions of work and employment. The Demographic and Health Surveys (Daniel J Corsi et al., 2012) (DHS) are nationally representative household surveys across more than 85 low-and middle-income countries. Consistency in questionnaires and rigorous recoding enables comparable analysis of the repeated cross-sectional data. The focus of the surveys is on women’s reproductive health, and they include a limited set of indicators of women’s labor force participation. Given the broad time and geographical coverage of the DHS, and freely accessible, they are frequently applied to analysis by researchers and policy makers.

## III. Policy Relevance

Empowering women, reducing gender inequalities and the creation of decent jobs are three key objectives of international development policy. The Sustainable Development Goals (SDGs) are a call to action by all countries to promote

<sup>1</sup> <http://surveys.worldbank.org/lsm/programs/lsm-plus>

prosperity while protecting the planet. The third SDG explicitly aims to “achieve gender equality and empower all women and girls”, and the eighth SDG aims to achieve “decent work for all men and women”. The WEWI proposed in this paper will be a measure of whether work is empowering for a woman (or not), and the extent of this empowerment, and this measure is needed to understand progress towards decent work for women.

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