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### INTRODUCTION

This measurement brief has been designed to provide an overview of the existing approaches used for collecting data on women's labor market experiences. More specifically, this measurement brief is concerned with women's paid work, and the collection and use of various types of employment data in relation to measuring women's empowerment. First, we will provide a brief statement of need for understanding the paid employment experiences of women across developing country contexts - emphasizing the Chinese context in this measurement brief. Second, we will review key terminology related to women's employment while highlighting the importance of developing clear and inclusive definitions of work. Third, we will detail the different approaches currently used to count women's paid labor while discussing their methodological strengths and weaknesses. And lastly, we will provide several policy recommendations on how to address paid work for women's and girls' empowerment.

As Donahoe (1999) observes in Population and Development Review, "The recognition that much of women's work in the developing world is overlooked, undercounted, and undervalued is not new. It is well established that in primarily capturing paid employment, statistics on women's work ignore unpaid domestic labor, subsistence production, family farm work, and informal income-generating activities" (p. 543). Accompanying this lack of representation are a number of trends characterizing many developing country contexts, such as the growth of the services sector and transnational industries, increases in women's and maternal employment, changing gender relations and legal landscapes, and more. With this in mind, the need for comprehensive and inclusive measures of women's labor market experiences becomes clear. To date, scholars have relied on a number of definitions for and approaches to characterizing and understanding women's paid labor. In the sections to follow, we will review several of the primary definitions and measurement approaches currently used to measure women's paid work.

## CONCEPTUALIZATION: WHAT IS CONSIDERED PAID WORK?

# **Definitions and Terminology**

There has been considerable variation in the definitions of work used across the literature on women's empowerment. However, comprehensive and inclusive definitions of employment are needed to provide direction for successful data collection efforts in developing country contexts. The typology offered by Benes and Walsh (2018) in Figure 1 provides a useful platform for thinking about conceptualizations of work. By emphasizing the intended destination of productive activities and the types of compensation those activities receive, we can better distinguish paid

work from other types of work. More specifically, we will be concentrating on paid work or "employment" as a form of work for use by others (highlighted in Figure 1).

The International Labour Organization (ILO) provides us with general definitions for work, employment work (i.e., paid work), and jobs/work activities:

• Work consists of "...any activity performed by persons of any sex and age to produce goods or to provide services for use by others or for own use" (ILO, 2013, p. 2).

Figure 1: Forms of Work and the Systems of National Accounts

Intended destination of production	for own final use		for use by others					
Forms of work	Own-use production work		Employment	Other*	Unpaid trainee	Volunteer work		
	of services	of	(work for pay or profit)		work	in market and non-market units	in households producing	
		goods					goods	services
Relation to 2008 SNA		within the SNA production boundary						
	inside the SNA General production boundary							

<sup>\*</sup>Includes compulsory work performed without pay for others, not covered in the draft resolution.

Note: SNA = System of National Accounts.

Source: https://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf

- Employment work refers to "...work performed for others in exchange for pay or profit" (ILO, 2013, p. 3).
- o In contrast to previous standards, "...work activities that contribute to production but are not done in exchange for remuneration, such as own-use production work, volunteer work and unpaid trainee work, are no longer included within the concept of employment" (Benes and Walsh, 2008, p. 9). (For definitions and discussion of own-use production work, volunteer work, and unpaid trainee work, please see the WEDGE mea-surement brief on unpaid work here.)
- A job or work activity "...is defined as a set of tasks and duties performed, or meant to be performed, by one person for a single economic unit" (ILO, 2013, p. 3).
- o "Persons may have one or several jobs. Those in self-employment will have as many jobs as the economic units they own or co-own, irrespective of the number of clients served. In cases of multiple job-holding, the main job is that with the longest hours usually worked, as defined in the international statistical standards on working time" (ILO, 2012, p. 4).
- o The term "work activity" is often regarded as a statistical unit whereas the term "job" is typically used in direct reference to employment (ILO, 2013).
- o Time units "...are used for producing statistics of volume of work in reference to each form of work or to any

combination thereof. These units may be short such as minutes or hours, or long such as half-days, days, weeks or months" (ILO, 2013, p. 4).

As per the findings of the ILO Labour Force Surveys (LFS), we have detailed several key definitions for those who complete paid work that are evidence-based, aligned with the latest standards, and have been implemented. More specifically, Benes and Walsh (2018) have compiled the following definitions that are relevant to employment work:

- Employed Persons: "All those of working age who, during a short reference period, were engaged in any activity to produce goods or provide services in exchange for pay or profit" (p. 10).
  - o In order to ensure the comprehensiveness of employee identification, this category consists of two subcategories in relation to the specified reference period for data collection. Currently, seven days is the accepted and recommended reference period for identifying employment levels of the following two subcategories:
  - Employed Persons "At work": "who worked in a job for at least one hour" (p. 10).
  - Employed Persons "Not at Work": "due to short absence from a job, or to working-time arrangements (such as shift work, flexi-time and compensatory leave for overtime)" (p. 10).

### Challenges

While the above definitions include the latest guidance provided by ILO, it is important to note that cultural differences in meanings and perceptions may affect the inclusivity of these definitions. For example, women who are working as family helpers and are helping to earn a profit may not acknowledge themselves as being employed or at work, and so alternative techniques (e.g., specialized interview training) may need to be used to provide more accurate estimates of paid work in developing countries. Also, given the narrow definition of employment work/ paid work as "...work performed for others in exchange for pay or profit," researchers should be attentive to those segments of the population that are not paid for time spent in productive activities (ILO, 2013, p. 3). Ultimately, the above definitions should be used as a starting point for researching paid work and require researchers to gain a deeper understanding of developing country contexts in order to better understand and capture paid work in those respective contexts.

### CONCEPTUALIZATION: HOW DO WE MEASURE PAID WORK?

Surveys usually adopt one or more of the following methods to measure women's participation in paid labor: 1) directly ask about the respondent's enrollment in profit-generating labor, 2) collect time-use data to capture work-related activities, and 3) ask the respondents to recall work history.

### **Employment Condition Questions**

Directly asking respondents whether they are employed or doing profit-generating work tends to be the most common method for measuring women's participation in paid labor, but the question design varies across surveys. For example, the 2010 baseline survey of the China Family Panel Study (CFPS)<sup>1</sup> asked a simple question, "Do you currently have a job?" In order to have a more accurate measurement of the respondent's labor force participation, many surveys choose to ask multiple questions, focusing especially on capturing information on informal and seasonal jobs. The follow-up waves of the CFPS and the Demographic and Health Survey (DHS)<sup>2</sup> in South Africa both asked a series of questions to capture whether the respondents were running their own businesses or were working for family farms or businesses, and whether they were currently on leave or in off-season. Besides, since not all work entails receipt of cash as payment, the Peruvian National Household Survey on Life Condition and Poverty<sup>3</sup> also asked detailed questions about work that is paid for in kind, instead of cash.

#### Time-use Data

Time-use data, though more widely used for measuring women's unpaid work and labor, is also perceived as a more accurate way of capturing women's participation in paid labor. Many surveys collect time-use data by asking the respondents to recall the amount of time allocated to specific activities during a specific time period. In the 2010 baseline survey of CFPS, the respondents were asked to report the number of hours they were spending on full-time and part-time jobs per day in a typical work-day and off-day during the previous month. Different from the CFPS, the Time Use in Nigerian survey<sup>4</sup> and National Time Use Survey in South Africa<sup>5</sup> asked respondents to keep diaries of their daily activities and record the time taken to complete each of the activities. As compared to the stylized questions, time diaries signify a more favored way of time-use data collection since they provide more accurate information and ensure that all time intervals within the 24-hour frame are accounted for. However, being expensive and time-consuming, the time-use diary method is less widely adopted, especially in developing countries.

# **Work History Data**

Employment history questions have also been used to measure women's labor force participation, especially among seasonal migrant workers, whose current employment status may not necessarily represent their actual participation in paid labor. Both the Mexican Migration Project (MMP)<sup>6</sup> and the Latin American Migration Project (LAMP)<sup>7</sup> have randomly sampled households throughout

<sup>1</sup> see https://opendata.pku.edu.cn/dataverse/CFPS?language=en

<sup>&</sup>lt;sup>2</sup> see <a href="https://dhsprogram.com">https://dhsprogram.com</a>

<sup>&</sup>lt;sup>3</sup> see <a href="https://webinei.inei.gob.pe/anda">https://webinei.inei.gob.pe/anda</a> inei/index.php/catalog/543

see https://unstats.un.org/unsd/demographic/sconcerns/tuse/Country/Nigeri

<sup>&</sup>lt;sup>5</sup> see <a href="https://microdata.worldbank.org/index.php/catalog/914">https://microdata.worldbank.org/index.php/catalog/914</a>

<sup>&</sup>lt;sup>6</sup> see <a href="https://mmp.opr.princeton.edu/home-en.aspx">https://mmp.opr.princeton.edu/home-en.aspx</a>

<sup>&</sup>lt;sup>7</sup> see <a href="https://lamp.opr.princeton.edu/home-en.htm">https://lamp.opr.princeton.edu/home-en.htm</a>

Mexico each winter when seasonal migrants typically return home. Questions were asked to capture the work history of the household head and spouse from the year he/she had enrolled in school or the first job. Information about their business activity history and land management was also collected.

#### **Measurement Assessment**

The quality of data on women's labor force participation depends heavily on the methods of measurement and the questions and instruments that each method adopts. The above-mentioned CFPS data can provide a good illustration of how using different methods and asking different questions may influence the measurement of women's participation in paid labor. The responses to the 2010 baseline survey question "Do you currently have a job?" suggest that only 42 percent of the women over age 15 in the sample were in paid labor (see Figure 2). This is much lower than the female labor force participation rate (LFPR) of 64 percent given by ILO);8 and the estimate of 64 percent given by the Chinese National Bureau of Statistics (CNBS).9 One possible explanation for this discrepancy is that the word "job", or "Gongzuo" in Chinese, may be interpreted as full-time, formal employment with regular pay, by an average respondent. Interestingly, the question, "Have you ever had any formal work experience for more than six successive months?" appears right before the question, "Do you currently have a job?" It is plausible that women who engage in seasonal agricultural work with non-regular or no payment, or those working informally in small businesses, are answering 'No' to this question.

As mentioned above, time-use surveys have always been considered as a relatively more accurate way of capturing women's participation in paid labor. The time-use data in CFPS2010 did greatly increase women's employment rate by about 10 percent to reach 51 percent (see Figure 2). Yet the figure is still much lower than the above-mentioned official LFPR. We speculate that this could be due to three reasons. First, instead of using time diaries, the respondents were only asked to recall the number of hours they had

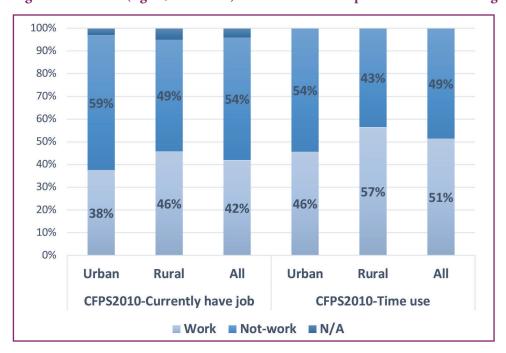


Figure 2: Women's (Age 15 and Over) Labor Force Participation Condition Using CFPS 2010 Data

Source: China Family Panel Studies wave 2010

<sup>8</sup> see https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS?locations=CN

<sup>9</sup> see http://www.stats.gov.cn/tjsj/pcsj/rkpc/6rp/indexch.htm

spent working full- and part-time per day, on an average, during the previous month. Although all income-generating activities were counted as work here, women who did not realize the profit-making nature of their activities or who did not work on a regular basis, especially those engaged in seasonal employment, might not have reported those as work. Second, the time-use data of one typical day during the previous month may not have captured the paid labor of women who were doing seasonal work. Third, there was no room to report secondary activity, which might also have led to the under-reporting of paid labor when women were multi-tasking. Thus, the stylized time-use questions may still have under-estimated the extent of paid labor work.

The employment questions in CFPS were redesigned in wave 2012. Besides the original question of "Do you currently have a job?", the following new series of questions were added:

- 1. Have you worked for at least one hour last week?
- 2. Do you have a job, but you are currently on temporary vacation, sick leave or other vacation, or on-the-job training?
- 3. Will you return to the original job position in a certain period or within six months?

- 4. Are you running your own business which is currently in an off-season, but will resume after a while?
- 5. Is your agricultural work (including cropping, managing orchard, collecting agricultural and forestry products, fish farming, fishing, raising livestock, selling agricultural products in market, etc.) in an off-season?

Using these new questions, we estimate the proportion of women who are currently doing paid work to be 58 percent, as compared to the corresponding figure of 46 percent obtained using the same question from 2010 (see Figure 3). Substantial increases of around 14 percent and 10 percent, in the estimates, are observed among both rural and urban women, respectively. When decomposed by occupational sectors (for which the results are not shown), the majority of the work captured by these new questions (but not by the original single question) pertains to the sectors of "agricultural, forestry and animal husbandry," "salesperson and purchaser", "street cleaners, garbage collectors" and "clothes designers, tailors and sewers." These categories reflect an emerging informal sector that characterizes women's work.

In 2014, CFPS dropped the 2010 question, "Do you currently have a job", and further redesigned the question,

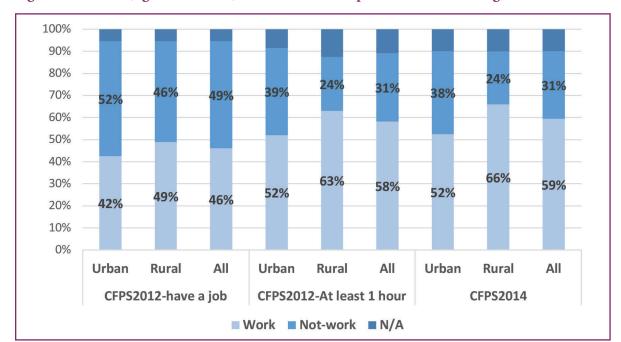


Figure 3: Women's (Age 15 and Over) Labor Force Participation Condition Using CFPS 2012 and 2014 Data

Source: China Family Panel Studies wave 2012 and 2014

"Have you worked for at least one hour last week" as follows: "Including agricultural work, waged job, self-employment and private business (household and unpaid help do not count), have you worked for at least one hour last week?" The other questions remained unchanged. This change of question, combined with the potential increase in data collection quality, led to a further increase in the proportion of women currently doing paid work to 59.41 percent (see Figure 3). After adding the unemployment rate of 1.16 percent (to keep it consistent with the calculation of LFPR), this figure is very close to the estimate of 62.93 percent presented by ILO.

According to the above assessment above, when questions are well-designed, directly asking about the respondents' enrollment in paid labor is an efficient way of making an accurate measurement of women's labor force participation. The key point for good question design is to provide a clear definition for work and paid labor. Given the characteristics of women's labor force participation in China and many other developing countries, the questions should emphasize that agricultural and seasonal work, work for one's own and the family's small business, and work that receives payment in kind, all count as paid work. It is also important to delineate a clear definition for work and paid labor when collecting employment history data. In terms of time-use data, simply asking respondents to recall the time they spend on paid labor during a typical day may lead to an underestimation of women's labor force participation. In order to make good use of the advantages of time-use data, it may be necessary to use time-use diary instruments that allow for the reporting of secondary activities. However, doing so will significantly increase the duration and cost of data collection.

### REFERENCES

Benes, Elisa, and Kieran Walsh (2018). "Measuring Employment in Labour Force Surveys: Main Findings from the ILO LFS Pilot Studies." Geneva: International Labour Organization.

Donahoe, D.A. (1999). "Measuring Women's Work in Developing Countries." Population and Development Review, 25(3), 543-576.

### Challenges

While directly asking questions on the respondents' enrollment in paid labor can facilitate a rather accurate and efficient estimation of women's labor force participation, the challenge lies in designing questions that can properly capture ordinary local women's work characteristics. For example, the definition of work may vary significantly depending on the local context. Informal work and payment in kind may be prevalent in one area but not in another. Besides, work characteristics may change over time. Countries like China are experiencing a rapid expansion of Internet-related sectors such as online retailing and social media influencer economy. In order to capture the diverse and dynamic characteristics of women's labor force participation, careful qualitative studies and pre-testing of survey questions are needed before conducting large-scale data collection.

Similar to the challenge noted in an earlier section of this measurement brief, another challenge of measuring women's labor force participation lies in finding ways to capture women's profit-generating labor when they themselves do not realize or acknowledge it. A woman who sits in a family shop and looks after it may not perceive herself as working for the family business or contributing in profit-making for the family. In such cases, therefore, women may respond negatively to the employment condition questions and report that they did not spend any time in work. Time-use diary instruments can solve this problem, to some extent, if, for instance, "sitting in a family shop" can be post-coded as working. Yet again, the difficulties of executing time-diary data collection may prevent many developing countries from resorting to such solutions.

International Labour Organization (2013). "Resolution I: Resolution Concerning Statistics of Work, Employment and Labour Underutilization." Retrieved from <a href="https://">https://</a> www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/ documents/normativeinstrument/wcms 230304.pdf, Last accessed 13 July 2020.



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This brief is part of a series of measurement briefs prepared by Women's Empowerment: Data for Gender Equality (WEDGE) project undertaken by University of Maryland, College Park. Enhancing women's economic empowerment is a key objective of many public policies and Sustainable Development Goals seek to measure progress in this arena. Measurement briefs developed by WEDGE seek to bridge the gap between theoretical literature on gender and women's lived experiences by evaluating survey based measures of women's economic empowerment and serve as a reference for national statistical agencies as well as students and survey designers.

> Suggested citation: Eric Stone and Xu Yan. 2020. "Measurement Brief: Paid Work" College Park: WEDGE Program, University of Maryland.

Funding for this program is provided by William and Flora Hewlett Foundation.

