2022

IARIW-TNBS Conference on "Measuring Income, Wealth and Well-being in Africa"

Paper Prepared for the IARIW-TNBS Conference, Arusha, Tanzania, April 14-15, 2022

Gender-specific barriers to occupational choices in Africa
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A. Motivation and objectives

Women's labor force participation rate (LFPR) in Morocco stands at just 23 percent. The corresponding figure in Rwanda is 85 percent. With the LFPR above 70 percent, women's participation in the labor force is also high in Benin and Zambia. The dynamics of LFPR also varies considerably. In the last three decades, there has been almost no change in women's representation in Morocco. At the same time, there has been a 12-percentage point (pp) expansion in Benin. While impressive, this extension pales in comparison to the 19 pp increase in Botswana. These differences stretch to variation in the gender gap in participation. All above estimates are taken from ILOSTAT.

What causes variations in women's LFPR across countries and time? And what gives rise to the gender gap in participation? In general, why do women's occupational decisions differ from men's, and what are their implications for policy? The proposal aims to find the answers to such questions. It will do so by studying long-term changes in occupational choices of women (and men) in multiple African economies. The methodology involves using an equilibrium model of occupational choice in which women face barriers to human capital accumulation and wage discrimination in the labor markets. Besides, social norms and preferences hinder women from pursuing certain occupations, often any market work.

The model helps in accounting for two types of gender gaps observed in the data: wages and occupational shares. Besides the decision to participate, the latter also includes occupational decisions across a menu of available choices. Moreover, the methodology allows for the identification of each factor separately, which has critical policy implications. For instance, in some countries, policies might be needed to address wage discrimination and to remove obstacles to human capital accumulation in others. The model also accounts for self-selection effects, under which wage gaps cease to be robust estimates of occupational frictions. Finally, the study will estimate the aggregate implications of barriers and preferences using the equilibrium model.

Specifically, the proposal will quantitatively analyze the following:
1. Has wage discrimination faced by women decreased? If so, in which occupations and by how much?
2. Have barriers to human capital accumulation gone down for women? If so, in which occupations and by how much?
3. Have preferences towards market participation changed? If so, which occupations have become relatively more preferable?
4. What is the current state of barriers (labor market and human capital accumulation) and preferences?
     a. In which occupations are the two barriers most aggravating? Are the two types correlated?
     b. Which occupations are preferred the least? Are they associated with low/high education?
5. Have the changes in barriers and preferences helped or hindered economic growth?

     The analysis will try and harmonize data from multiple African economies. Therefore, the study can undertake a comparative analysis of the above results across the sample countries. In summary, this research will take a comprehensive look at the gender inequality in educational and labor market outcomes for some African countries. Analyses of this type are scarce for the region.

B. Methodology
     The study will use an occupational choice model in which workers self-select based on their innate talent across a menu of occupations (Roy, 1951). Three exogenous factors – labor market discrimination, barriers to human capital accumulation, and preferences (social norms), cause distortions in occupational decision-making (Hsieh et al., 2019). Hence, actual choices might deviate from ones based on comparative advantage.

     A valuable feature of the model is that it accounts for self-selection mechanism when identifying occupational frictions. It does so by jointly evaluating the occupational shares and wage gaps. Self-selection implies that wage gaps alone are not a robust measure of barriers. Especially, when there is a marked difference in the representation of genders in a particular occupation. For instance, wage parity does not necessarily guarantee an absence of barriers for women in high-paying jobs. If there are too few women compared to men in such occupations, the self-selection channel will ensure that only the most talented women can get through. Hence, their average talent will be higher than that of men. Equal wages will imply a gender-specific return to talent in which women are at a disadvantage.

     The methodology also controls for general equilibrium effects. The increase in the labor force participation of women and their wages can affect men's outcomes. These effects are found

to be quantitatively non-trivial in some Central American economies and the United States (Hsieh et al., 2019; Sinha, 2020).

C. Data

The research will explore 2-3 data repositories to bring in as many African economies under analysis, subject to time constraints. The International Household Survey Network and ILOSTAT host microdata for several decades. While occupational choice data form a crucial component of the analysis, its availability is less concerning. The wage income data, on the other hand, is also vital. Sourcing these will be the primary data challenge.

References
1. Hsieh, Chang‐Tai, Erik Hurst, Charles I. Jones, and Peter J. Klenow. "The allocation of talent and us economic growth." Econometrica 87, no. 5 (2019): 1439-1474.
2. Roy, Andrew Donald. "Some thoughts on the distribution of earnings." Oxford Economic Papers 3, no. 2
(1951): 135-146.
3. Sinha, Rishabh. "Talent allocation and post-reform growth in Central America." Policy Research Working Paper no. WPS 8791, The World Bank, Washington, D.C. (2020).