

Determinants of Gender Gap in the Labor Force of Afghanistan(2016-2019)

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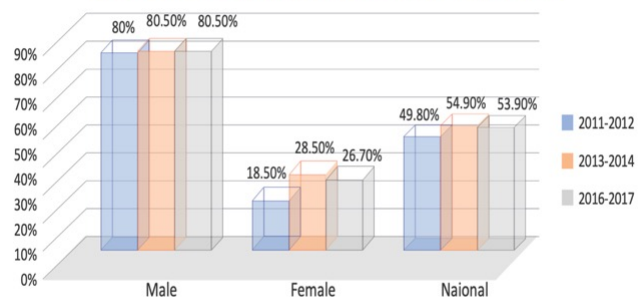
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Introduction

- 21.6% of the adult females employed (2020)
- Less than half of the world's average (of 47.8%)

Figure 2. Labour force participation rates in Afghanistan, 2011-2017



Source: Central Statistics Office of Afghanistan (CSO), 2012; 2014; 2017

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Introduction: Sectoral Segregation in the labor force of Afghanistan

- Large informal sector
- Low literacy rate
- High vulnerable employment
- Manufacturing: carpets and handicrafts



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Introduction

- **Purpose of the study:** Gender equality significant for growth and sustainability of economy. The aim of this research study is to analyze the gender gap in the labor force of Afghanistan.
- **Research Question:** This study is striving to answer the question of what are the determinants of high gender gap in the Afghan labor market?
- **Hypotheses of the study:** Gender gap is mainly driven by women's low level of education, negative social attitudes towards female employment, high fertility rate.

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Summary of Literature Review

Methodology	Vriables	Resutls
Logit probit for dummy LFP, Oaxaca Blinder Decomposition for measuring the gender gap	Eudaction, Income Number of Children Married, Social Attitudes, Location, Age, Age ² , household size	+ Eudaction, Income, Age, Social Attitudes, Location - Number of Children, household size, Age ² , Location

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Methodology

- Logit estimation method: Dummy LFP
- Oaxaca Blinder Decomposition: Measuring the gap between male and female in the labor market

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Methodology (Logit Model)

- $(LFP) = \text{function}(\text{fear_ps}, \text{age}, \text{age}^2, \text{married}, \text{hhsz}, \text{sa_weduc}, \text{years_education}, \text{income}, \text{no_children}, \text{sa_wfp}, \text{rural}, \text{pashtun}, \text{tajik}, \text{uzbek}, \text{other}, u)$
- where:
- LFP: Labor force participation, dummy variable for employment (1 if employed 0 otherwise)
- Fear_ps: dummy variable if the person fears of their personal safety or not (1 if a person has experienced fear of personal safety, 0 otherwise)
- Age and age^2 is the age of the individual
- Married: dummy variable for married 1 as base and single as 0
- Hhsz: measures the household size in terms of how many people are living in one household
- Sa_weduc: dummy for social attitude towards women's education. 1 if supports women education, and 0 otherwise
- Years_education: year of education of individuals

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Methodology (Logit Model)

- Income: categorical variable for different categories of income
- No_children: indicates the number of children in the family
- Sa_wlfp: social attitude towards women labor force participation. 1 if supports women employment and 0 otherwise.
- Rural a dummy variable indicating 1 for rural and 0 for urban
- Pashtun: dummy for Pashtun ethnic group
- Tajik: dummy for Tajik ethnic group
- Uzbek: dummy for Uzbek ethnic group
- Other: dummy for other ethnicities

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Oaxaca Blinder decomposition: based on Ben's paper

$$R = E(Y_A) - E(Y_B)$$

$$Y_\ell = X_\ell' \beta_\ell + \epsilon_\ell, \quad E(\epsilon_\ell) = 0 \quad \ell \in (A, B)$$

$$R = E(Y_A) - E(Y_B) = E(X_A)' \beta_A - E(X_B)' \beta_B$$

$$E(Y_\ell) = E(X_\ell' \beta_\ell + \epsilon_\ell) = E(X_\ell' \beta_\ell) + E(\epsilon_\ell) = E(X_\ell)' \beta_\ell$$

$$E(\beta_\ell) = \beta_\ell \text{ and } E(\epsilon_\ell) = 0$$

$$R = \{E(X_A) - E(X_B)\}' \beta_B + E(X_B)' (\beta_A - \beta_B) + \{E(X_A) - E(X_B)\}' (\beta_A - \beta_B)$$

$$R = E + C + I$$

$$E = \{E(X_A) - E(X_B)\}', \quad C = E(X_B)' (\beta_A - \beta_B)$$

$$I = \{E(X_A) - E(X_B)\}' (\beta_A - \beta_B)$$

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Data

- Asia Foundation's Survey of the Afghan people (2016-2019)
- 51% men and 49% women
- 129,800 individuals were survived during different time periods
- 54329

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Descriptive Statistics

Variable	Obs	Mean	Std.Dev	Min	Max
LFP	54329	0.47	0.49	0	1
Years_Educ	54329	4.73	5.44	0	18
Pashtun	54329	0.40	0.49	0	1
Tajik	54329	0.34	0.47	0	1
Uzbek	54329	0.07	0.25	0	1
Hazara	54329	0.10	0.30	0	1
Other	54329	0.08	0.27	0	1
Income	54329	4.15	1.58	1	9
Rural	54329	0.79	0.40	0	1
Fear_Ps	54329	2.08	1.20	0	4
Gender	54329	0.49	0.49	0	1

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Descriptive Statistics

Variable	Obs	Mean	Std.Dev	Min	Max
Married	54329	0.81	0.39	0	1
SocialAttitud_FE	54329	2.17	0.83	0	3
SocialAttitud_FEd	54329	0.72	0.44	0	1
Age	54329	34.19	11.73	18	65
Age^2	54329	1306.89	896.66	324	4225
Household_size	54329	9.91	4.11	1	58
No_Children	54329	3.69	2.14	0	20

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Data Analysis: LFP, and Gender differences

`. tab LFP`

Do you yourself do any activity that generates money?	Freq.	Percent	Cum.
Yes	25,947	47.79	47.79
No	28,346	52.21	100.00
Total	54,293	100.00	

`. tab LFP if gender==0`

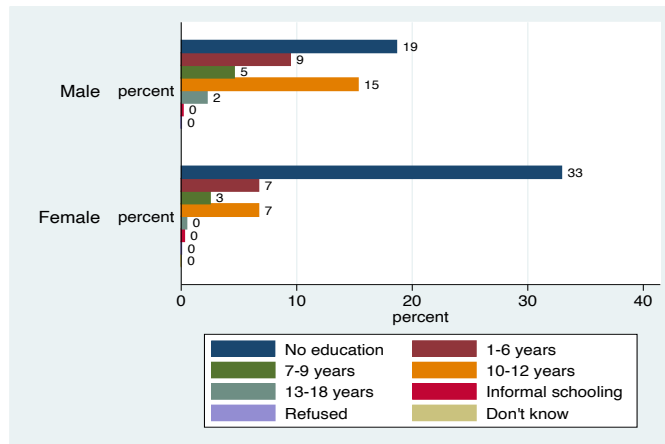
Do you yourself do any activity that generates money?	Freq.	Percent	Cum.
Yes	23,022	84.13	84.13
No	4,342	15.87	100.00
Total	27,364	100.00	

`. tab LFP if gender==1`

Do you yourself do any activity that generates money?	Freq.	Percent	Cum.
Yes	2,925	10.86	10.86
No	24,004	89.14	100.00
Total	26,929	100.00	

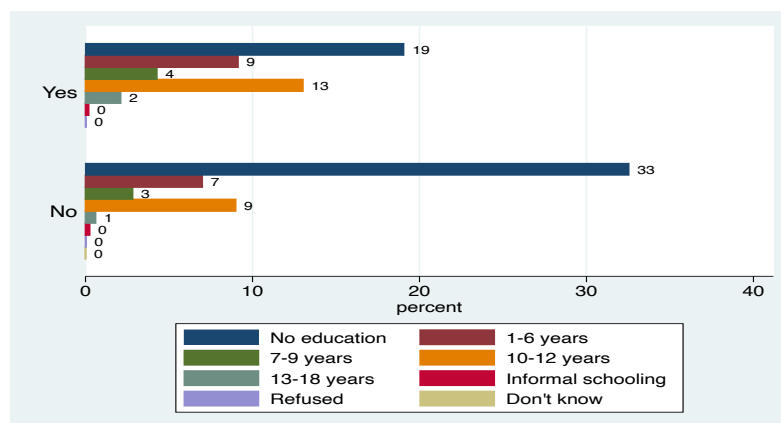
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Gender differences in education



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Education and LFP percentages



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LFP and Location

Geographic Code	Freq.	Percent	Cum.
Rural	43,328	79.75	79.75
Urban	11,001	20.25	100.00
Total	54,329	100.00	

. tab lfp if rural==0

lfp	Freq.	Percent	Cum.
0	6,149	55.89	55.89
1	4,852	44.11	100.00
Total	11,001	100.00	

. tab lfp if rural==1

lfp	Freq.	Percent	Cum.
0	22,233	51.31	51.31
1	21,095	48.69	100.00
Total	43,328	100.00	

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Results

- ❖ + Education, Rural, Income, age, +social attitude towards weduc
- ❖ - Pashtun, Tajik, Married, Number of children, age^2

Expression : Pr(lfp), predict()
 dy/dx w.r.t. : years_educ pashtun tajik uzbek other rural fear_ps married income no_children age1
 agesqrd hhsiz socialattitude_wlfp socialattitude_weduc

	Delta-method				
	dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]
years_educ	.013404	.0004072	32.91	0.000	.0126058 .0142022
pashtun	-.0471733	.0071149	-6.63	0.000	-.0611183 -.0332284
tajik	-.0132551	.0065998	-2.01	0.045	-.0261905 -.0003198
uzbek	.0063444	.0087524	0.72	0.469	-.01081 .0234987
other	.0700109	.007855	8.91	0.000	.0546155 .0854064
rural	.0250607	.0052627	4.76	0.000	.0147459 .0353755
fear_ps	.0066198	.0016618	3.98	0.000	.0033628 .0098768
married	-.0281673	.0106153	-2.65	0.008	-.0489729 -.0073617
income	.0033065	.0013244	2.50	0.013	.0007107 .0059023
no_children	-.0005222	.0011026	-0.47	0.636	-.0026833 .001639
age1	.0074408	.0013234	5.62	0.000	.004847 .0100347
agesqrd	-.0000929	.0000174	-5.33	0.000	-.000127 -.0000587
hhsiz	.0002662	.0005964	0.45	0.655	-.0009028 .0014351
socialattitude_wlfp	.0059325	.0060887	0.97	0.330	-.0060011 .0178662
socialattitude_weduc	.0093222	.0029154	3.20	0.001	.0036081 .0150362

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Problems with Oaxaca Decomposition

- Overstating the impact of discrimination in case of missing important variables
- Doesn't pick up the premarket discrimination
- However, this method let us understand that even if we include all the necessary variables in the model still we cannot fully measure the gap, unless we find the effect of unexplained market indicators such as discrimination in the market as well as negative social attitude towards female education and female labor force participation.

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Thank you!

- Questions?

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