

# The U-shaped relationship between female labour participation and economic development within countries

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# Outline

- Literature Review
- Research questions
- Econometric model
- Results
- Concluding remarks

# Literature Review

# Literature Review



# Literature Review



NBER WORKING PAPER SERIES

THE U-SHAPED FEMALE  
LABOR FORCE FUNCTION IN  
ECONOMIC DEVELOPMENT AND  
ECONOMIC HISTORY

Claudia Goldin

Working Paper No. 4707

NATIONAL BUREAU OF ECONOMIC RESEARCH  
1050 Massachusetts Avenue  
Cambridge, MA 02138  
April 1994

# Literature Review

- Claudia Goldin (1994) found a U-shaped pattern between female labour participation rates and different levels of economic development across countries.

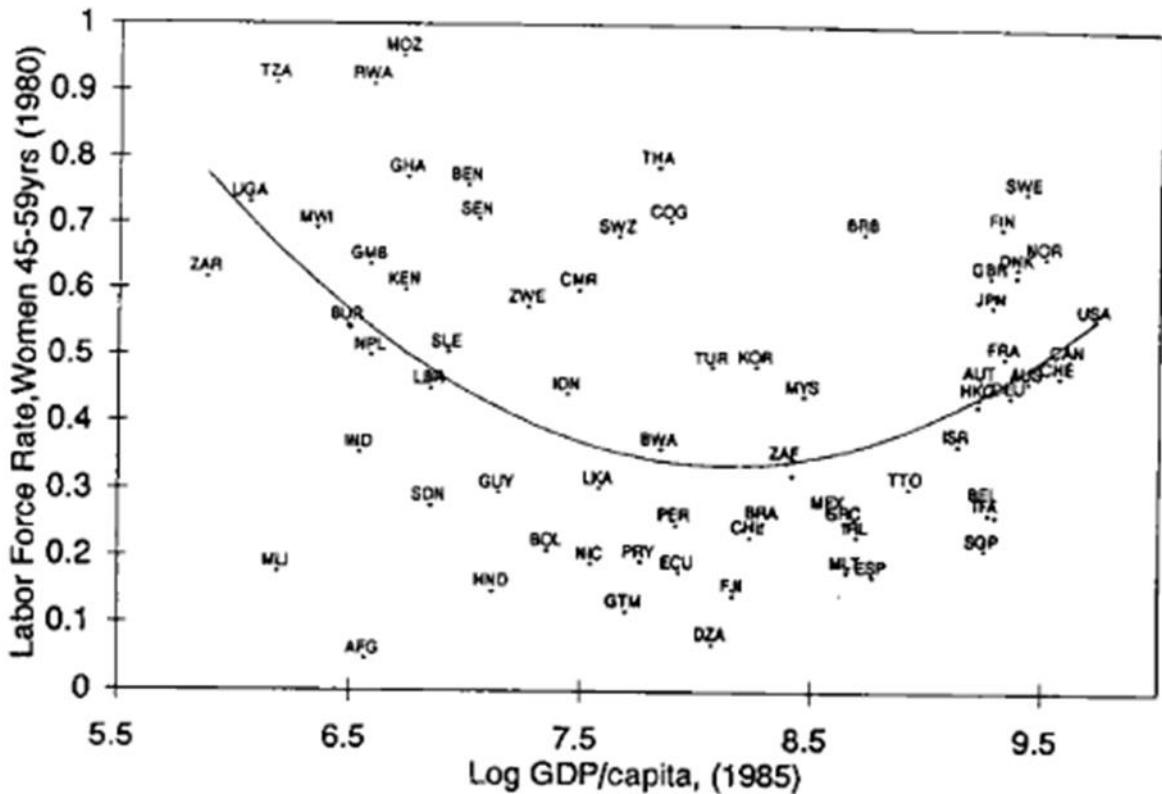


Figure 1: Labor force participation rates for women 45 to 59 years old (c. 1980) and the log of GDP/capita (1985, \$1985)

Source: Goldin (1994)

# Literature Review

According to Goldin's (1994) theory,

- FLPRs are **high** in agricultural countries,
- FLPRs tend to **decline** in industrial countries,
- FLPRs **rise** again in service-oriented countries.
- Why?

# Literature Review

Factors behind high female labour participation rates (FLPRs) in low-income countries, according to Goldin (1994):

- These countries have the lowest levels of economic development worldwide.
- They have high % of jobs in the agricultural sector (as a share of total employment).
  - The agricultural sector at this stage of economic development is labour-intensive.
  - Low investment in agricultural machinery entails high labour demand.
  - Agricultural jobs in family farms are compatible with child rearing.
  - Salaries and productivity rates are extremely low (both in agriculture and non-agricultural activities)
- Fertility rates in low-income countries tend to be the highest.
  - Hence, there is a high dependency ratio within households.

# Literature Review

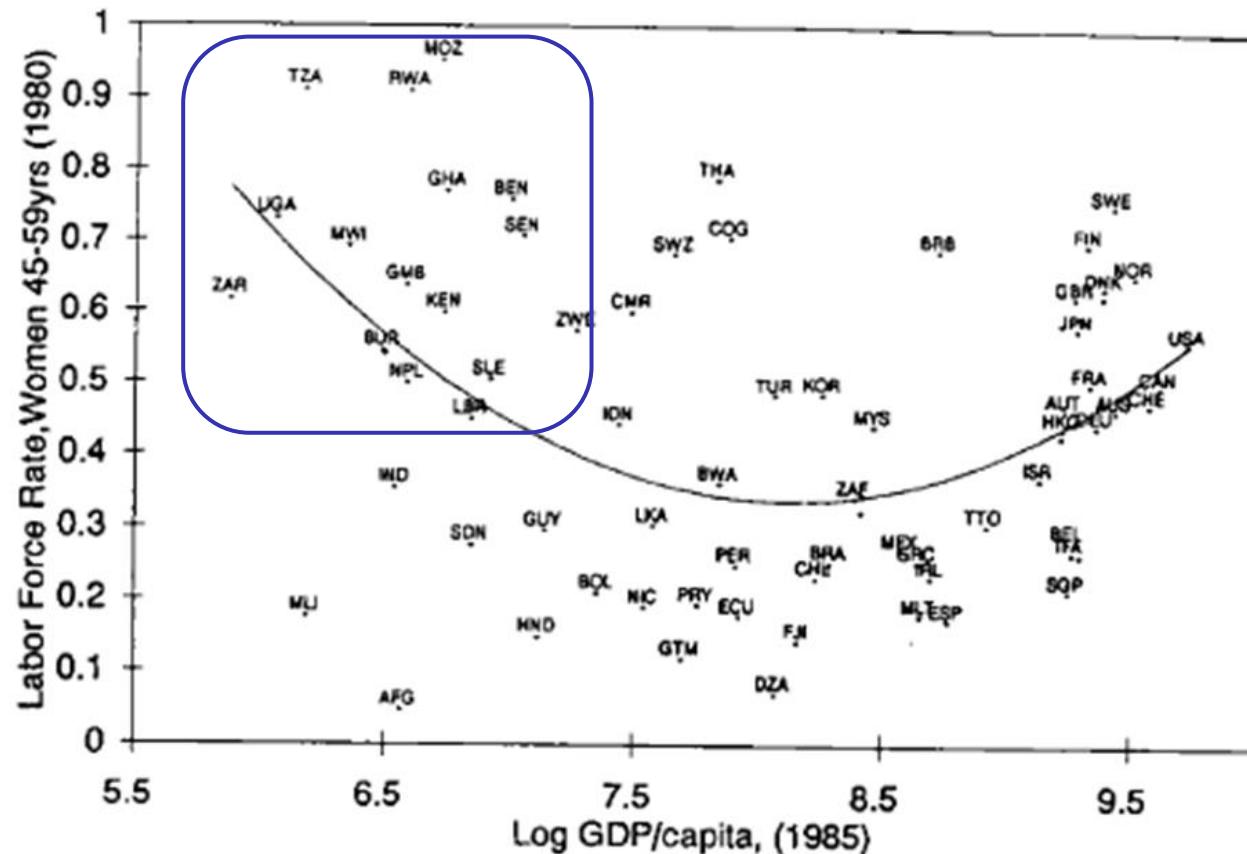


Figure 1: Labor force participation rates for women 45 to 59 years old (c. 1980) and the log of GDP/capita (1985, \$1985)

Source: Goldin (1994)

# Literature Review

Factors behind low female labour participation rates (FLPRs) in middle-income countries, according to Goldin (1994):

- Structural transformation entails an expansion of the industrial sector.
- Several blue-collar jobs are now available in the economy... but are performed by men.
  - Why?
  - Existence of social stigmas towards wives working in blue-collar jobs.
  - Husbands can be judged as negligent if their wives work in physically demanding jobs.
  - Wives can request their husbands to exit the labour market to avoid working in factories.
  - Industrial jobs are incompatible with child rearing.
- Strong income effect, weak substitution effect, and complex labour demand effect.
  - Family income increases due to higher salaries of husbands in industry.
  - Introduction of agricultural machinery decreases labour demand of female workers.
  - Weak substitution effect as there is still a gender gap in education levels between men and women.

# Literature Review

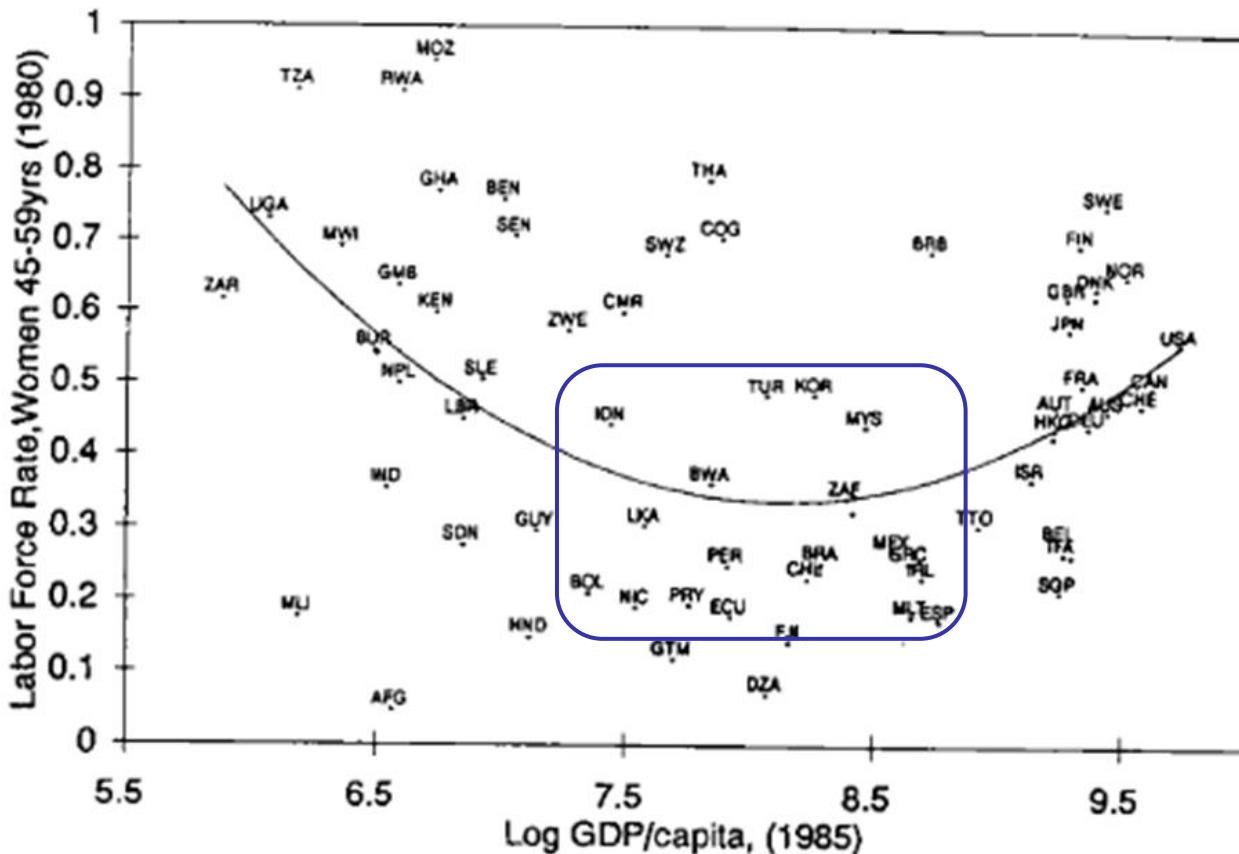


Figure 1: Labor force participation rates for women 45 to 59 years old (c. 1980) and the log of GDP/capita (1985, \$1985)

Source: Goldin (1994)

# Literature Review

Factors behind **high** female labour participation rates (**FLPRs**) in **high-income countries**, according to Goldin (1994):

- At the final stages of economic development, countries experience a service sector expansion.
- Several white-collar jobs are now available... and lots of them are done by women! But why?
  - Lack of social stigmas towards jobs in sales, education, health, and financial services.
  - The gender gap in education levels disappears at this point.
  - White-collar jobs offer better salaries compared to blue-collar jobs.
- The household income effect is now weaker, and the substitution effects is stronger.
- Hence, an expansion of the service sector implies the availability of more white-collar jobs, which women are willing to perform.

# Literature Review

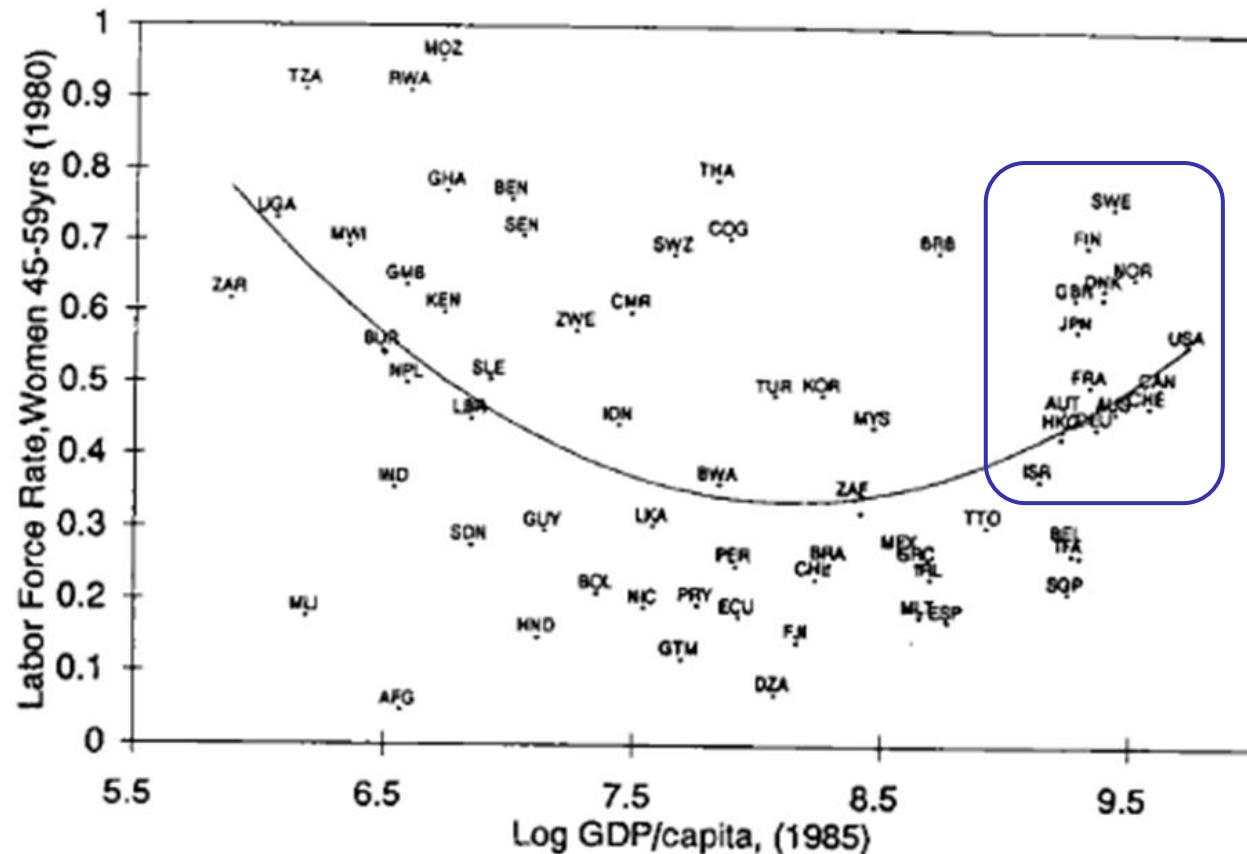


Figure 1: Labor force participation rates for women 45 to 59 years old (c. 1980) and the log of GDP/capita (1985, \$1985)

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# Literature Review

- Several researchers have studied the U-shaped relationship between female labour force participation and different stages of economic development following different approaches:

	Cross-section	Across time
Across Countries		
Within countries		

# Literature Review

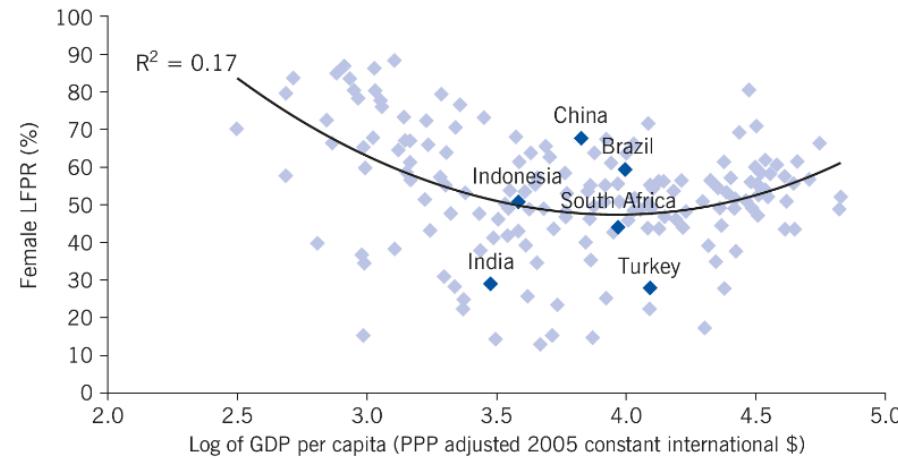
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# Literature Review

## Cross-country analysis using cross-sectional data

Figure 3. Data for 169 countries show a U-shaped relationship—a decline and then a rise in female labor force participation as economies develop (2010)



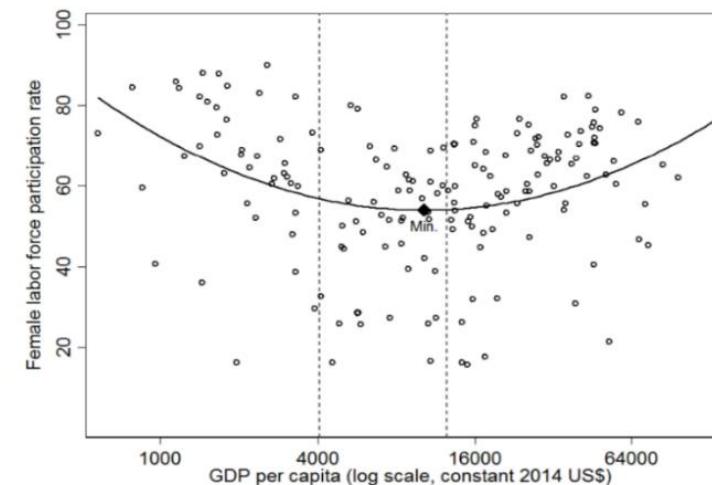
Note: Analysis is based on International Labour Organization estimates for 169 countries, which include a large number of imputed values.

Source: ILO, Key Indicators of the Labour Market, 8th Edition. Online at: [http://www.ilo.org/empelm/what/WCMS\\_114240/lang--en/index.htm](http://www.ilo.org/empelm/what/WCMS_114240/lang--en/index.htm); World Bank, World Development Indicators database. Online at: <http://data.worldbank.org/data-catalog/worlddevelopment-indicators>

IZA  
World of Labor

Obtained from Verick (2014)

Figure 3. Relationship between GDP per capita and female labor force participation rate across countries



Notes: GDP per capita is the purchasing power parity-adjusted value in 2014; female labor force participation is for females age 15–64 and is from the World Bank's World Development Indicators. The vertical lines represent the thresholds between lower and lower-middle-income countries (\$4000 in 2014 dollars), and between lower-middle or upper-middle-income countries (about \$12,500).

Obtained from Heath & Jayachandran (2017)

Evidence supporting the U-shaped hypothesis across countries

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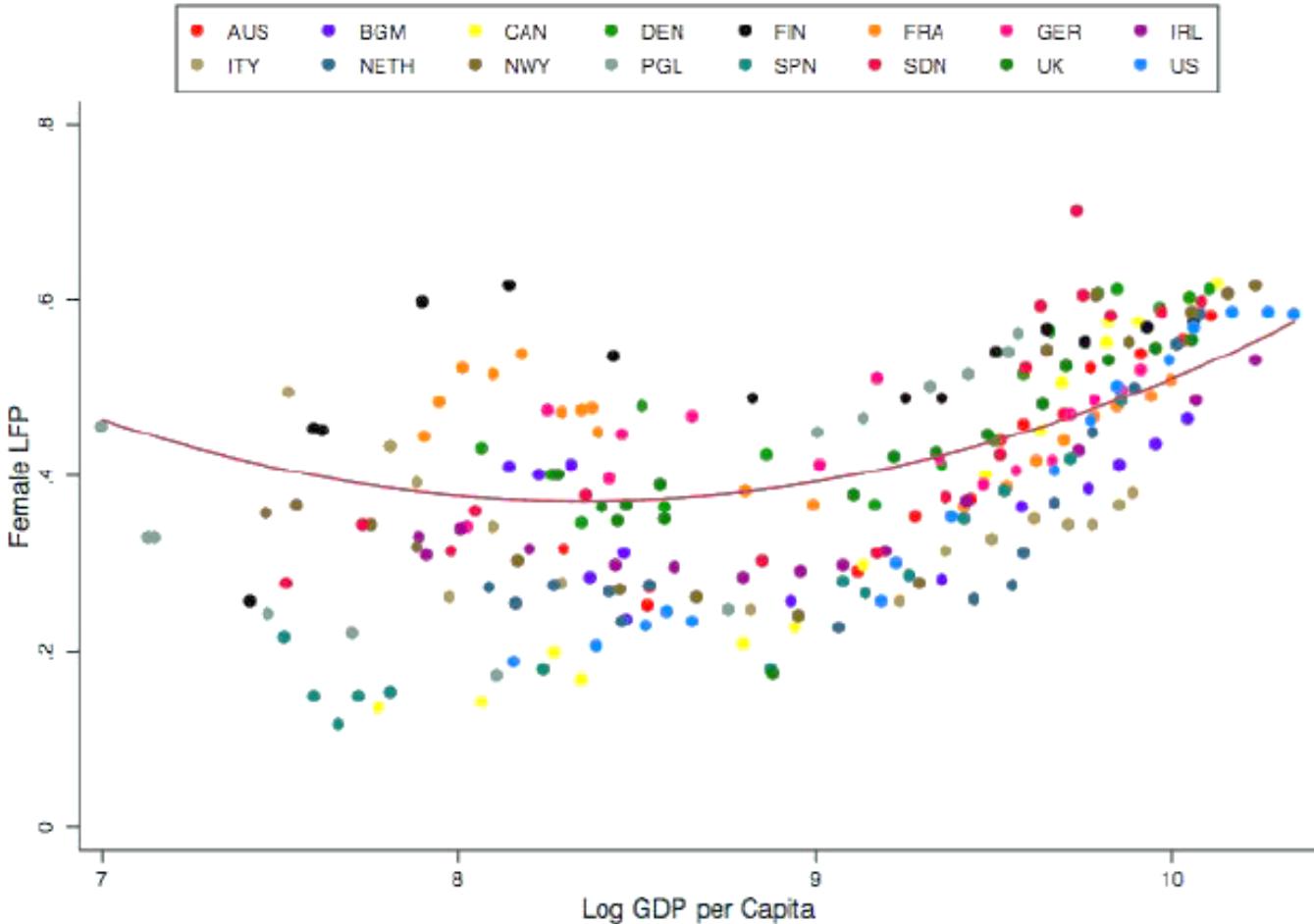
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# Literature Review

- Claudia Olivetti (2013) studied the existence of a U-shaped relationship across countries and across time.

Figure 2: Female labor force participation and economic development: 1890-2005

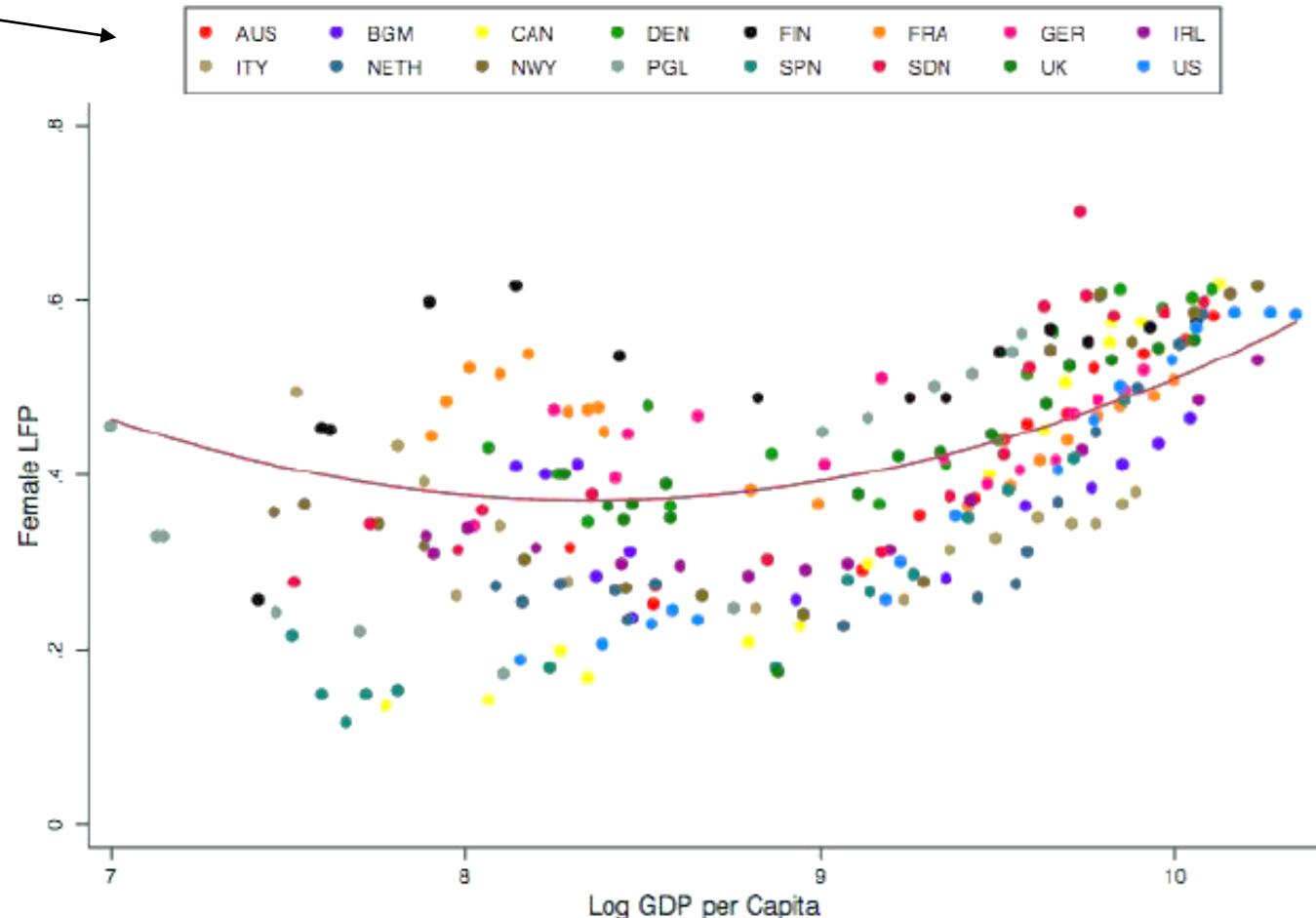


# Literature Review

Figure 2: Female labor force participation and economic development: 1890-2005

Developed countries!

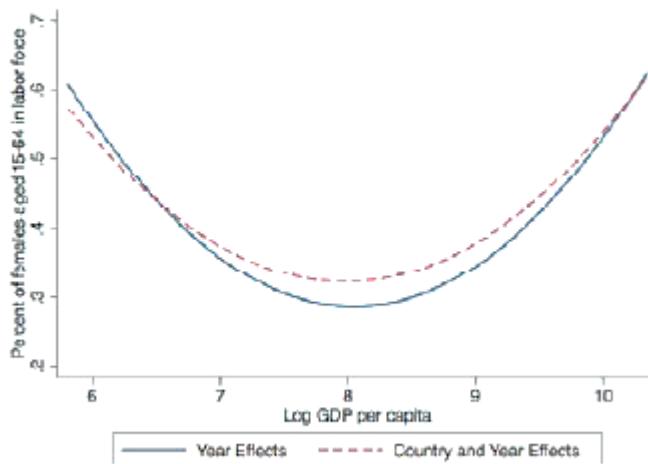
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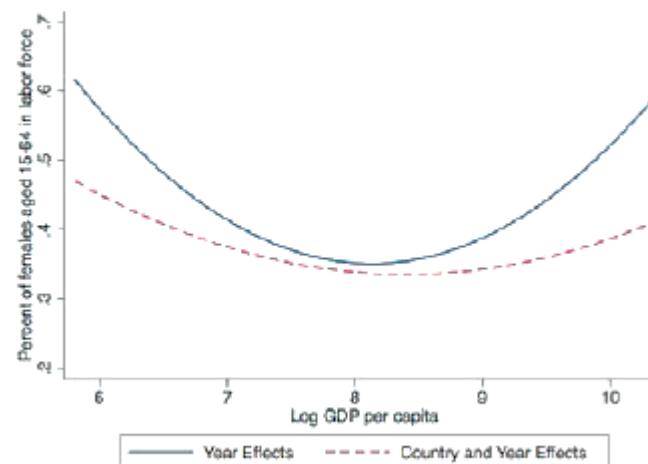
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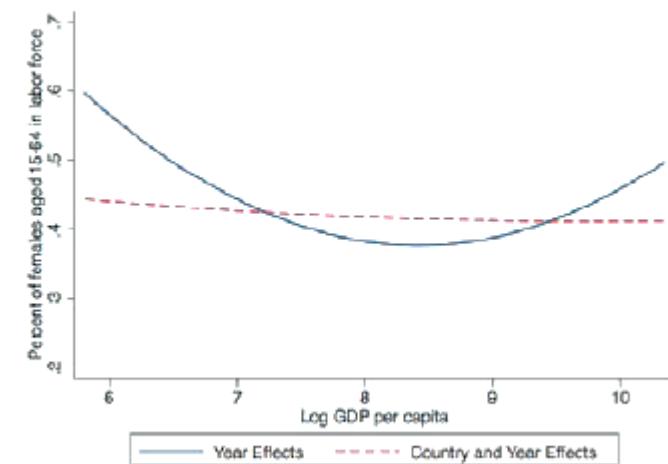
Panel A: 1890-2005, Developed Economies



Panel B: 1950-2005, Full Sample

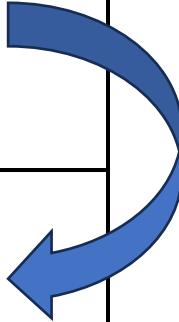


Panel C: 1950-2005, Excludes OECD countries



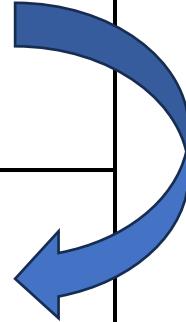
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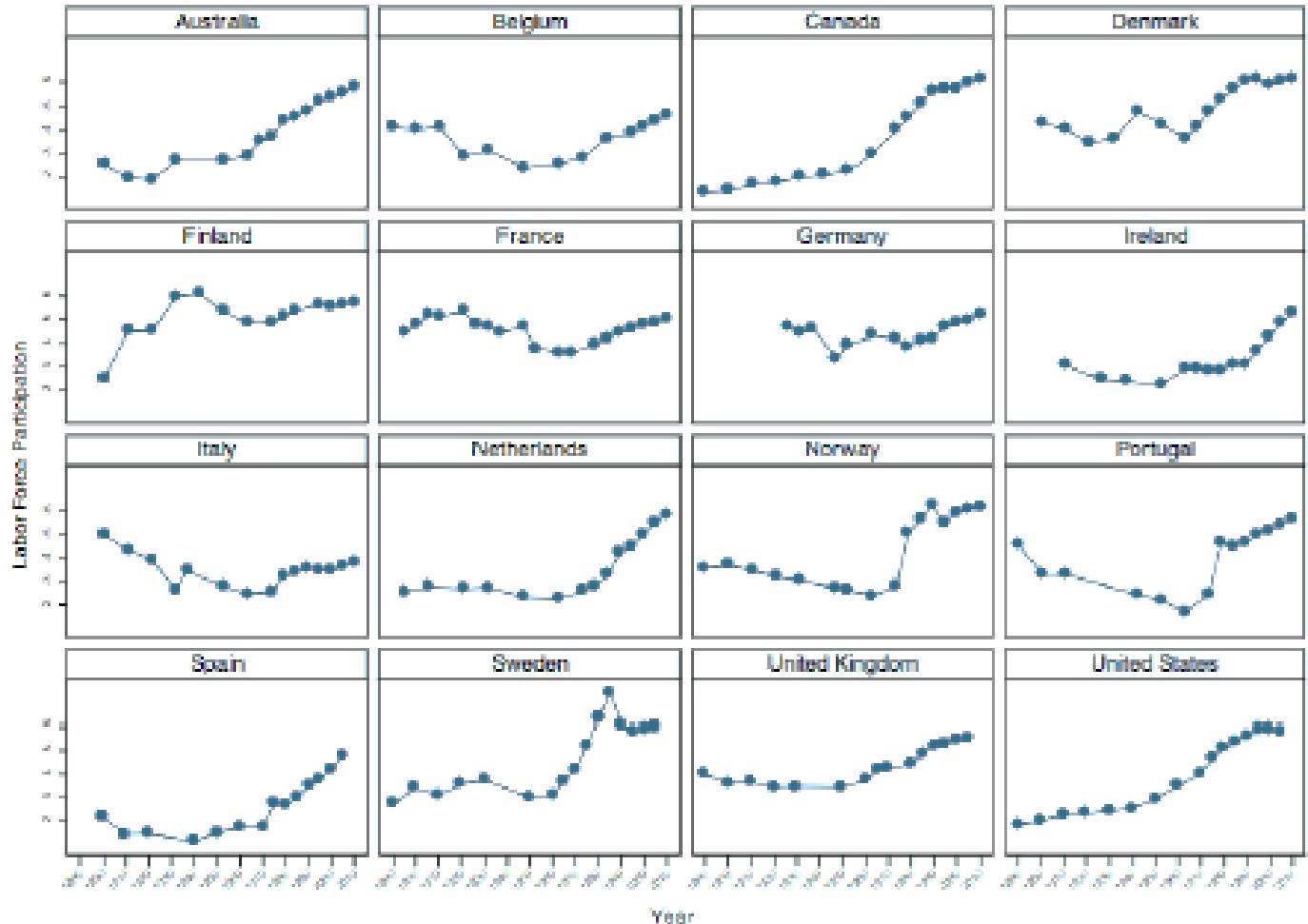
# Literature Review

- Stephan Klasen (2019) argued that the U-shaped hypothesis does not necessarily hold in **within-country studies across time**.
- He presented as an example a study of India by Lahoti and Swaminathan (2016).
- The authors executed a state-level analysis in India using data from 1983 to 2012 to assess the U-shaped hypothesis.
- They analysed the relationship of FLPRs with net state domestic product (NSDP), as well as with sector-specific growth in value-added and employment across the 28 Indian states.
- They did not find evidence to support the U-shaped hypothesis using time-series data.

# Literature Review

- Claudia Olivetti (2013) also showed the trends of FLPRs across time in developed countries.

Figure 1: Trends in female labor force participation, 1890-2005



# Literature Review

- Several researchers have studied the U-shaped relationship between female labour force participation and different stages of economic development following different approaches:

	Cross-section	Across time
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# Literature Review

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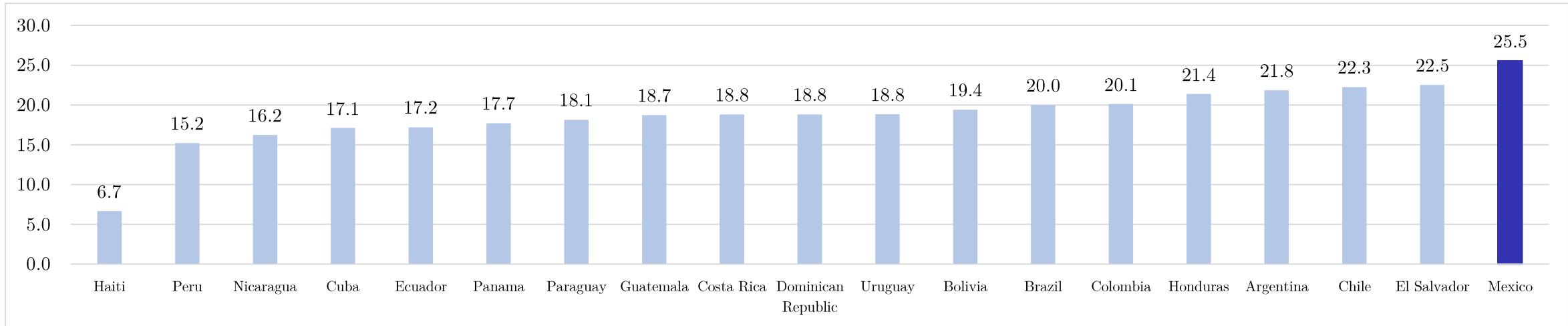
	Cross-section	Across time
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# Literature Review: Identifying the gap

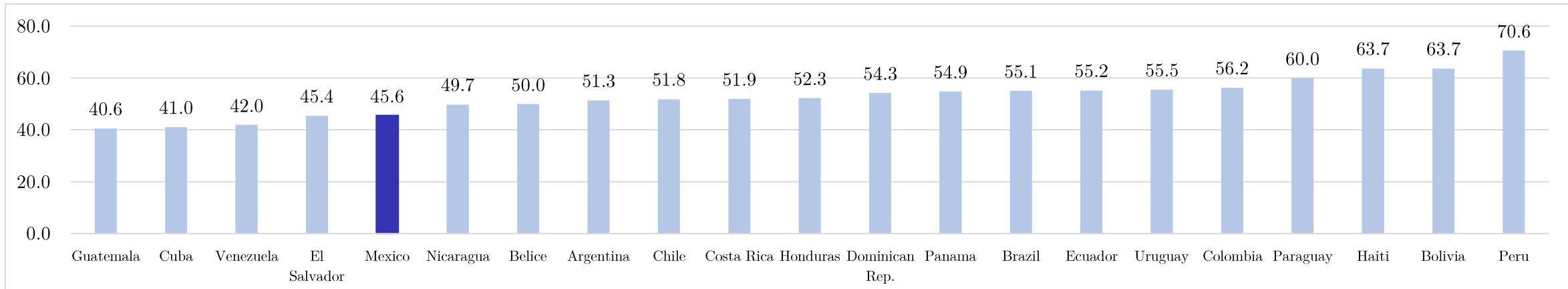
- There is a lack of research papers studying if there is currently a **U-shaped relationship** between female labour participation and different levels of economic development within a country.
- This paper fills this gap in the literature by making a **within-country analysis** of Mexico using **cross-sectional data**.

# Why is Mexico an interesting case study?

Industrial jobs as a share of total employment in Latin American countries (2019)

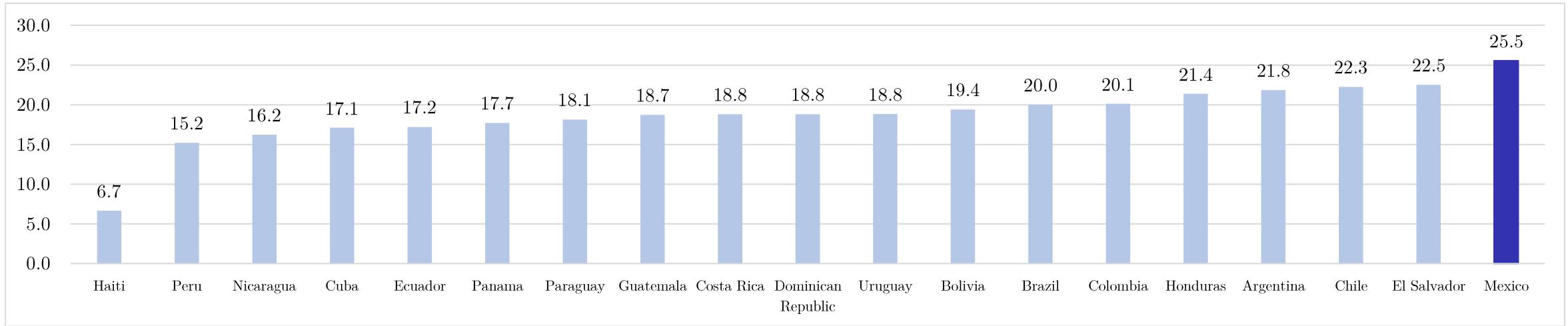


Female labour participation rates in Latin American countries (2019)

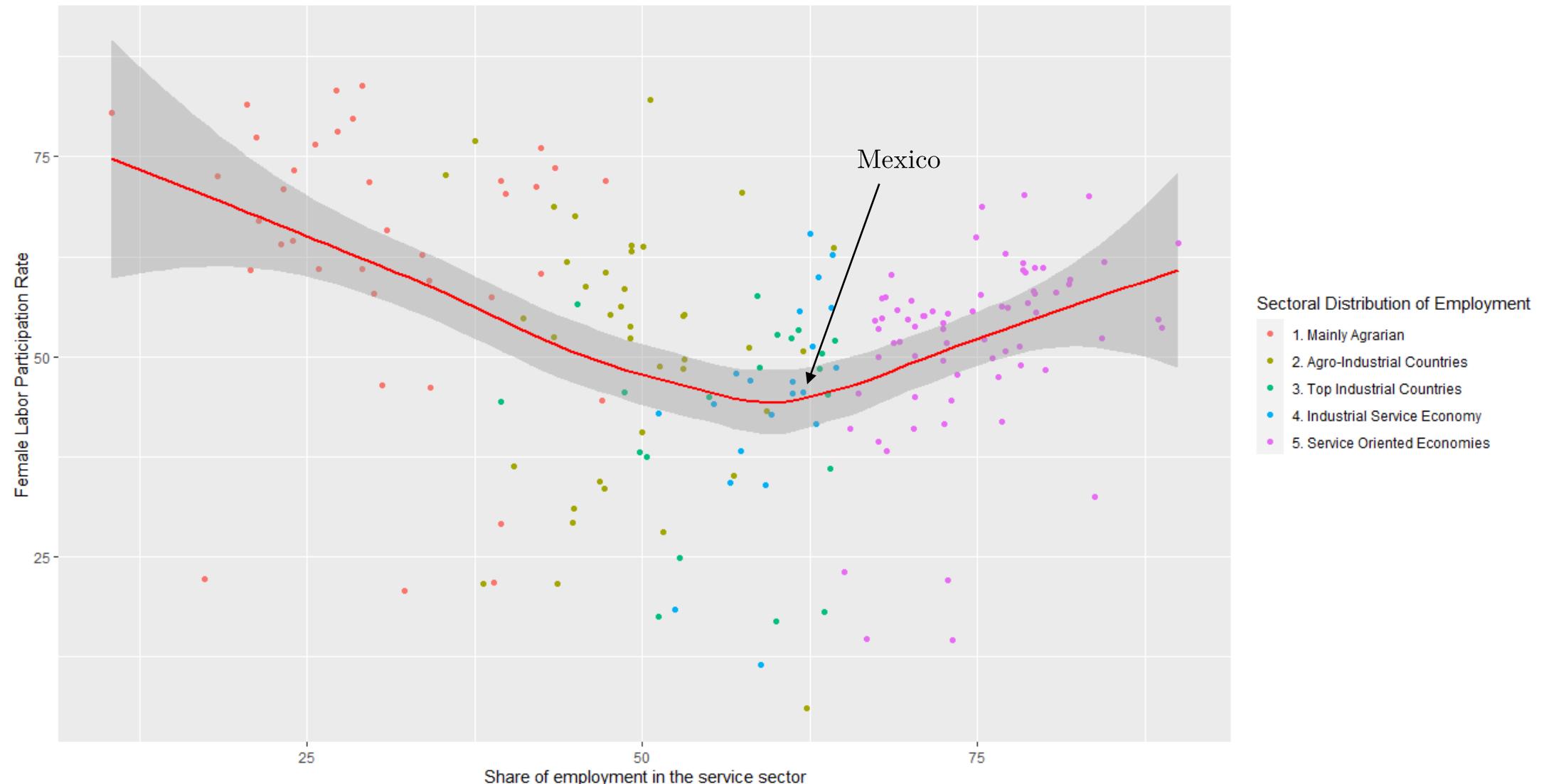


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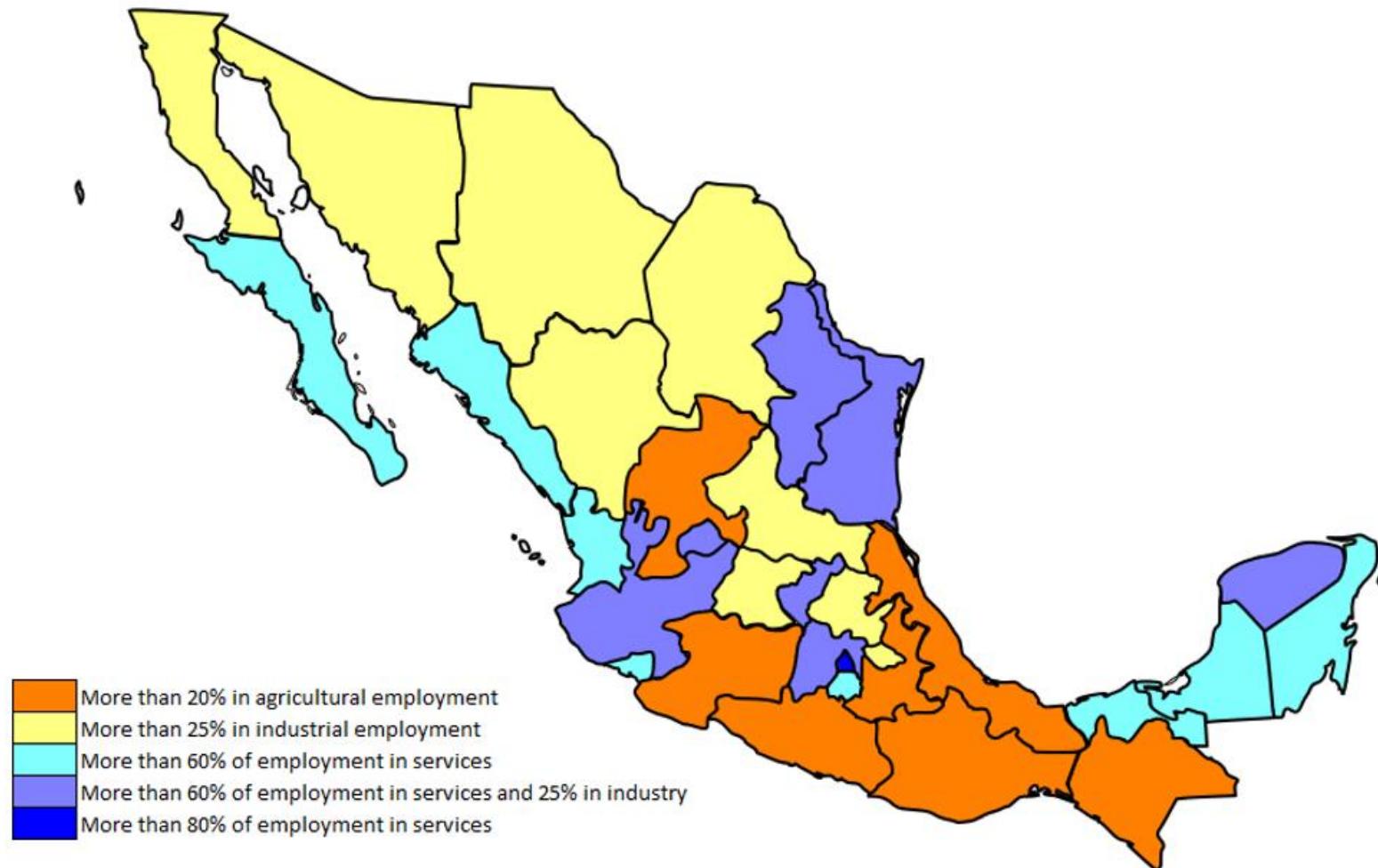


# Why is Mexico an interesting case study?



# Why is Mexico an interesting case study?

Map of the sectoral distribution of employment in Mexican states (1<sup>st</sup> quarter of 2019)



# Research questions

# Research questions

Does Mexican women  
**increase** their likelihood  
of being economically active  
if they are living in  
**agricultural** regions  
of Mexico?

Does Mexican women  
**increase** their likelihood  
of being economically active  
if they are living in  
**service** regions  
of Mexico?

Does Mexican women  
**decrease** their likelihood  
of being economically active  
if they are living in  
**industrial** regions  
of Mexico?

# Econometric model

# Econometric model

$$Y_{i,m,t} = \beta_0 + \beta_1 Share_{s,m,t} + \beta_2 Share_{s,m,t}^2 + \beta_x X'_{i,m,t} + \beta_x HH'_{i,m,t} + \beta_x \vartheta'_{m,t} + \mu_{e,t} + \varepsilon_i$$

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“ $Y$ ” is a binary variable that captures if each **woman** in the sample is part of the economically active population or not.

This is the dependent variable of the model, and it takes value of 1 if a **woman** is economically active, and 0 if they are part of the non-economically active population.

# Econometric model

$$Y_{i,m,t} = \beta_0 + \beta_1 Share_{s,m,t} + \beta_2 Share_{s,m,t}^2 + \beta_x X'_{i,m,t} + \beta_x HH'_{i,m,t} + \beta_x \vartheta'_{m,t} + \mu_{e,t} + \varepsilon_i$$

“*Share*” is the main independent variable of the model, and it captures the percentage of jobs either in agriculture, industry, or services as a share of total employment in each municipality at a given year.

# Econometric model

$$Y_{i,m,t} = \beta_0 + \beta_1 Share_{s,m,t} + \beta_2 Share_{s,m,t}^2 + \beta_x X'_{i,m,t} + \beta_x HH'_{i,m,t} + \beta_x \vartheta'_{m,t} + \mu_{e,t} + \varepsilon_i$$

“*Share*” is the main independent variable of the model, and it captures the percentage of jobs either in agriculture, industry, or services as a share of total employment in each municipality at a given year.

1. Percentage of **agricultural** jobs in each municipality
2. Percentage of **industrial** jobs in each municipality
3. Percentage of **service** jobs in each municipality

# Econometric model

$$Y_{i,m,t} = \beta_0 + \beta_1 Share_{s,m,t} + \beta_2 Share_{s,m,t}^2 + \beta_x X'_{i,m,t} + \beta_x HH'_{i,m,t} + \beta_x \vartheta'_{m,t} + \mu_{e,t} + \varepsilon_i$$

Percentage of agricultural jobs in a given municipality, in a given year.

Percentage of industrial jobs in a given municipality, in a given year.

Percentage of service jobs in a given municipality, in a given year.

# Econometric model

$$Y_{i,m,t} = \beta_0 + \beta_1 Share_{s,m,t} + \beta_2 Share_{s,m,t}^2 + \beta_x X'_{i,m,t} + \beta_x HH'_{i,m,t} + \beta_x \vartheta'_{m,t} + \mu_{e,t} + \varepsilon_i$$

*Share<sup>2</sup>* is the other main independent variable of the model, and it captures the squared values of the percentage of jobs in agriculture, industry, and services at the municipal level.

This variable is included to account for any potential non-linear relationship between female labour participation and the percentage of jobs in any of the three economic sectors.

# Econometric model

$$Y_{i,m,t} = \beta_0 + \boxed{\beta_1} Share_{s,m,t} + \boxed{\beta_2} Share_{s,m,t}^2 + \beta_x X'_{i,m,t} + \beta_x HH'_{i,m,t} + \beta_x \vartheta'_{m,t} + \mu_{e,t} + \varepsilon_i$$

$\beta_1$  and  $\beta_2$  are the coefficients of interest throughout the paper.

They will capture if there is a positive or negative relationship between the percentage of jobs in agriculture, industry or services at the municipal level and the likelihood that a woman is part of the economically active population.

# Econometric model

$$Y_{i,m,t} = \beta_0 + \beta_1 Share_{s,m,t} + \beta_2 Share_{s,m,t}^2 + \beta_x \boxed{X'_{i,m,t}} + \beta_x HH'_{i,m,t} + \beta_x \vartheta'_{m,t} + \mu_{e,t} + \varepsilon_i$$

$X'$  is a vector of potential explanatory variables that control for individual characteristics of each woman in the sample:

- Age
- Age squared
- Marital Status
- Level of education
- Number of kids that each woman in the sample has given birth to

# Econometric model

$$Y_{i,m,t} = \beta_0 + \beta_1 Share_{s,m,t} + \beta_2 Share_{s,m,t}^2 + \beta_x X'_{i,m,t} + \beta_x \boxed{HH'_{i,m,t}} + \beta_x \vartheta'_{m,t} + \mu_{e,t} + \varepsilon_i$$

$HH$  is a vector of control variables that capture different household characteristics, which include:

- Socio-economic stratum of the household
- Number of kids below five years old in the household,
- Total household members,
- Sex of the household head,
- Age of the household head,
- Level of education of the household head.
- Household location: rural or urban
- Population size of the household location

# Econometric model

$$Y_{i,m,t} = \beta_0 + \beta_1 Share_{s,m,t} + \beta_2 Share_{s,m,t}^2 + \beta_x X'_{i,m,t} + \beta_x HH'_{i,m,t} + \beta_x \vartheta'_{m,t} + \mu_{e,t} + \varepsilon_i$$

" $\vartheta$ " is a vector of control variables that capture different characteristics of the municipality where each respondent lives.

- Percentage of women in the municipality that are single
- Percentage of women in the municipality with elementary school or less
- Average age of women in the municipality
- % of people in the municipality that migrated from their city or home-town to keep or maintain their current job

# Econometric model

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- $i \in \{1, \dots, N\}$  is an index for each individual respondent,
- $m \in \{1, \dots, M\}$  is an index for municipalities,
- $t \in \{2005 \text{ 1Q}, 2010 \text{ 1Q}, 2015 \text{ 1Q}, 2019 \text{ 1Q}\}$  is an index for the specific years and quarters considered for this study,
- $s \in \{\text{agriculture, industry, services}\}$  represents the variables that captures the percentage of jobs in each economic sector,
- $e \in \{1, \dots, 32\}$  is an index for the 32 states in Mexico.
- $\mu$  represents the fixed effects included in the model to control for unobserved heterogeneity across time or across Mexican states.
- (The fixed effects considered the first quarter of 2005 and Mexico City as the base categories).

# Results

# Results

VARIABLES	(1) Women	(2) Women	(3) Women	(4) Men	(5) Women	(6) Women	(7) Women	(8) Men	(9) Women	(10) Women	(11) Women	(12) Men
% of agricultural jobs at the municipal level	-0.0090*** (0.0001)	-0.00593*** (0.00045)	0.00065 (0.00089)	0.00079 (0.00094)								
% of agricultural jobs at the municipal level (squared)			-0.00008*** (0.00001)	0.00003** (0.00001)								
% of industrial jobs at the municipal level				0.0034*** (0.0003)	0.00257*** (0.00056)	0.00687*** (0.00157)	-0.00520*** (0.00171)					
% of industrial jobs at the municipal level (squared)					-0.00007*** (0.00002)	0.00006** (0.00003)						
% of service jobs at the municipal level							0.0089*** (0.0001)	0.00490*** (0.00053)	0.01129*** (0.00164)	0.00675*** (0.00149)		
% of service jobs at the municipal level (squared)									-0.00006*** (0.00001)	0.00004*** (0.00001)		
Control variables at the individual level	X	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓
Control variables at the household level	X	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓
Control variables at the municipal level	X	✓	✓	X	X	✓	✓	X	X	✓	✓	X
Year/quarter fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clustered standard errors at the municipal level	X	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓
Constant	-0.0859*** (0.0113)	-3.18415*** (0.17039)	-3.12731*** (0.16905)	-1.16940*** (0.06549)	-0.1650*** (0.0123)	-2.92330*** (0.17564)	-2.96848*** (0.17628)	-1.04266*** (0.06696)	-0.8089*** (0.0161)	-3.29559*** (0.18293)	-3.40730*** (0.18489)	-0.89741*** (0.07056)
Observations	613,153	609,070	609,070	548,764	613,153	609,070	609,070	548,764	613,153	609,070	609,070	548,764
Robust standard errors in parentheses												
*** p<0.01, ** p<0.05, * p<0.1												

# Results

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Control variables at the individual level	X	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓
Control variables at the household level	X	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓
Control variables at the municipal level	X	✓	✓	X	X	✓	✓	X	X	✓	✓	X
Year/quarter fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clustered standard errors at the municipal level	X	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓
Constant	-0.0859*** (0.0113)	-3.18415*** (0.17039)	-3.12731*** (0.16905)	-1.16940*** (0.06549)	-0.1650*** (0.0123)	-2.92330*** (0.17564)	-2.96848*** (0.17628)	-1.04266*** (0.06696)	-0.8089*** (0.0161)	-3.29559*** (0.18293)	-3.40730*** (0.18489)	-0.89741*** (0.07056)
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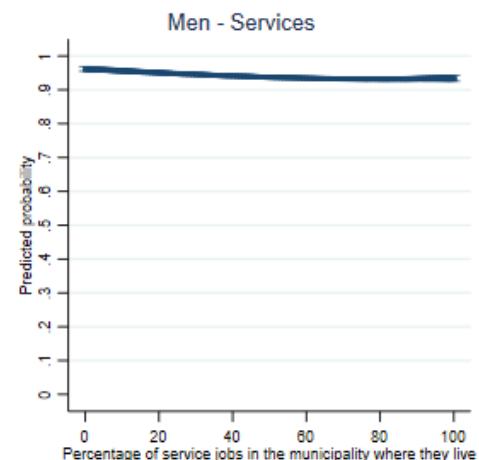
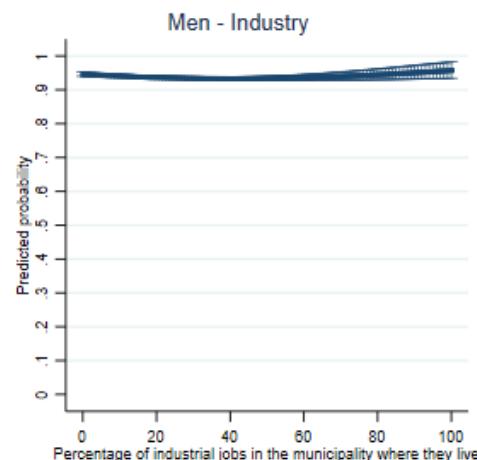
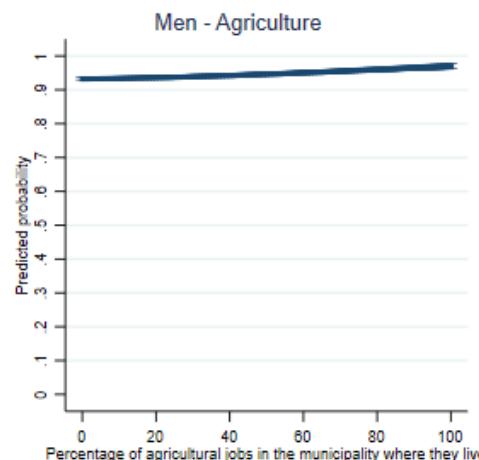
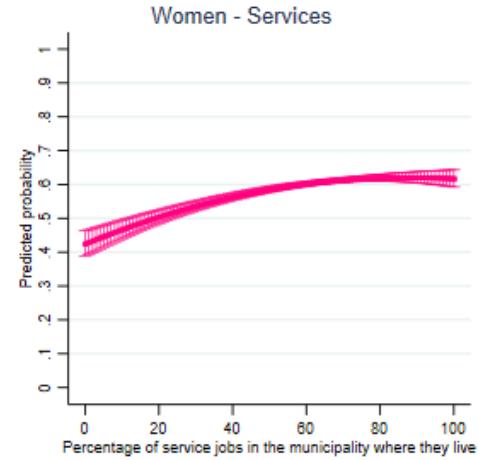
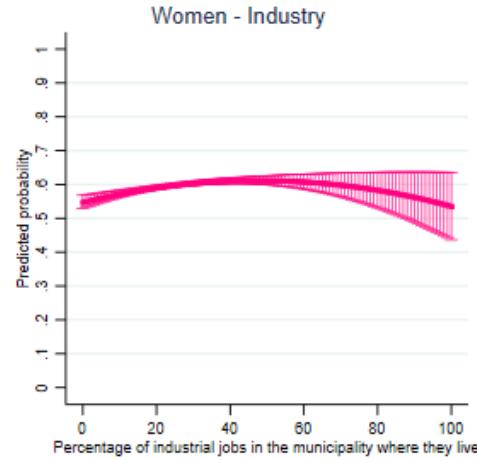
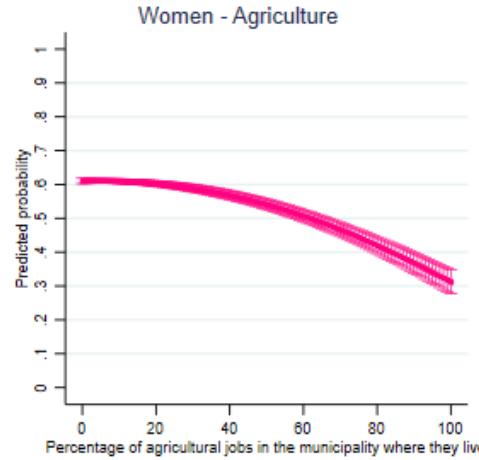
# Results

VARIABLES	(1) Women	(2) Women	(3) Women	(4) Men	(5) Women	(6) Women	(7) Women	(8) Men	(9) Women	(10) Women	(11) Women	(12) Men
% of agricultural jobs at the municipal level	-0.0090*** (0.0001)	-0.00593*** (0.00045)	0.00065 (0.00089)	0.00079 (0.00094)								
% of agricultural jobs at the municipal level (squared)			-0.00008*** (0.00001)	0.00003** (0.00001)								
% of industrial jobs at the municipal level				0.0034*** (0.0003)	0.00257*** (0.00056)	0.00687*** (0.00157)	-0.00520*** (0.00171)					
% of industrial jobs at the municipal level (squared)						-0.00007*** (0.00002)	0.00006** (0.00003)					
% of service jobs at the municipal level							0.0089*** (0.0001)	0.00490*** (0.00053)	0.01129*** (0.00164)	-0.00675*** (0.00149)		
% of service jobs at the municipal level (squared)									-0.00006*** (0.00001)	0.00004*** (0.00001)		
Control variables at the individual level	X	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓
Control variables at the household level	X	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓
Control variables at the municipal level	X	✓	✓	X	X	✓	✓	X	X	✓	✓	X
Year/quarter fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clustered standard errors at the municipal level	X	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓
Constant	-0.0859*** (0.0113)	-3.18415*** (0.17039)	-3.12731*** (0.16905)	-1.16940*** (0.06549)	-0.1650*** (0.0123)	-2.92330*** (0.17564)	-2.96848*** (0.17628)	-1.04266*** (0.06696)	-0.8089*** (0.0161)	-3.29559*** (0.18293)	-3.40730*** (0.18489)	-0.89741*** (0.07056)
Observations	613,153	609,070	609,070	548,764	613,153	609,070	609,070	548,764	613,153	609,070	609,070	548,764
Robust standard errors in parentheses												
*** p<0.01, ** p<0.05, * p<0.1												

# Results: Marginsplot

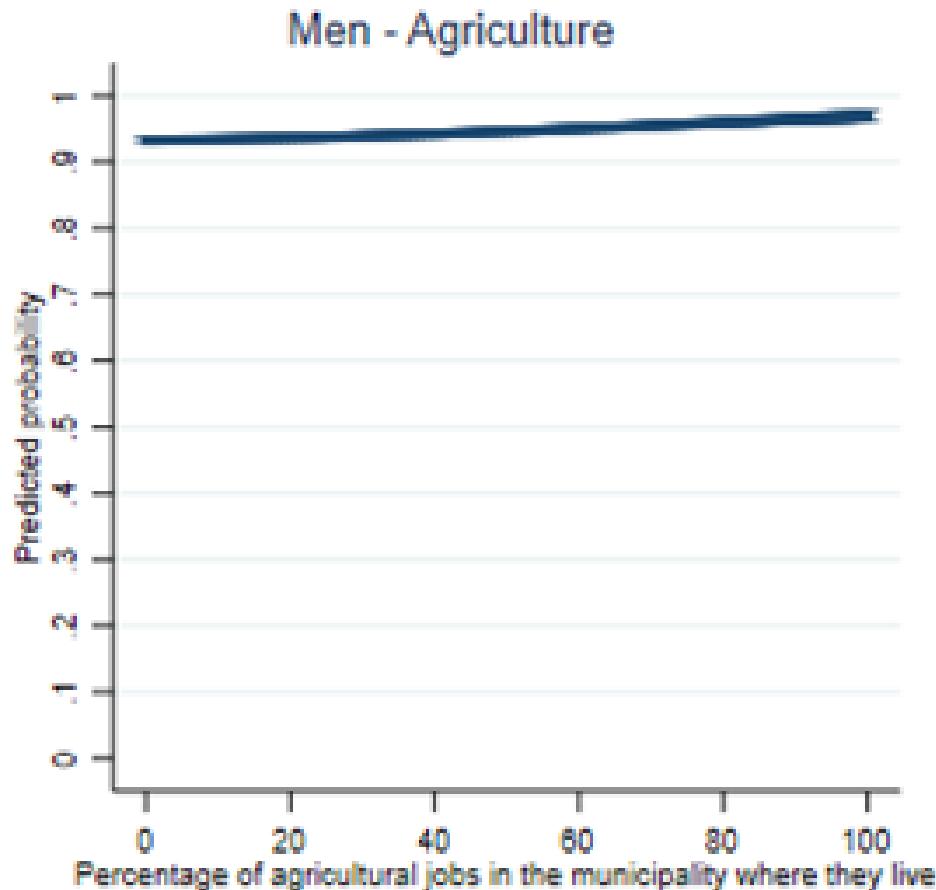
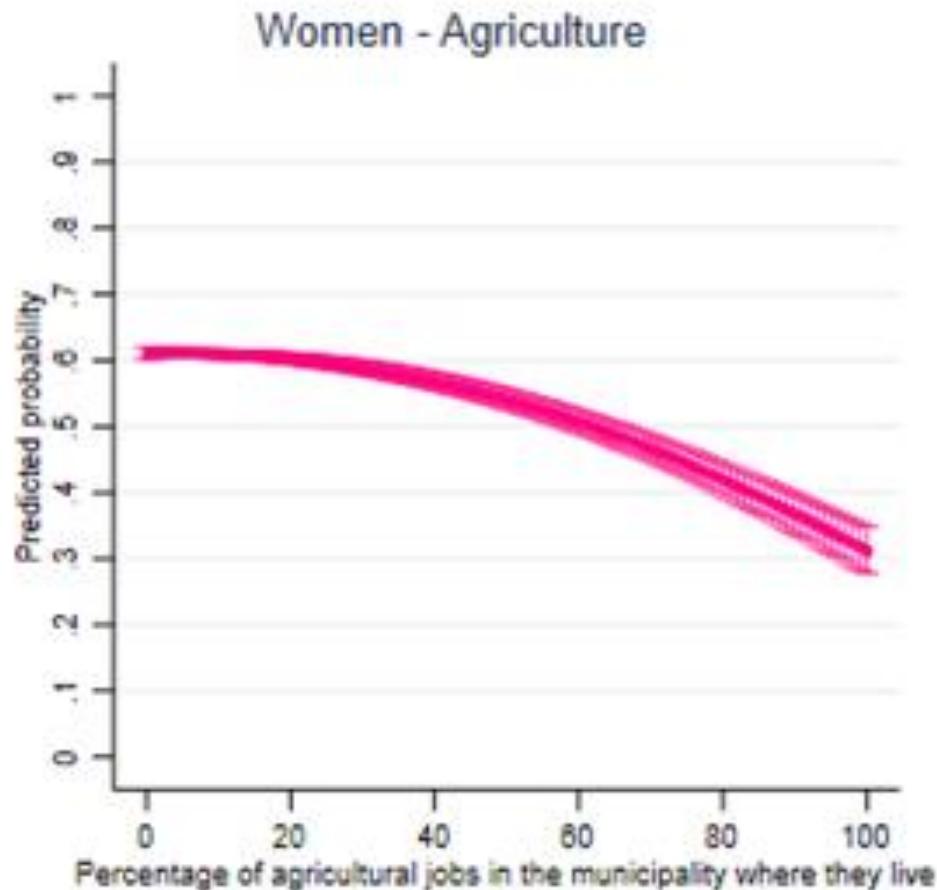
# Results: Marginsplot

Predicted probability that Mexican men and women are economically active depending on the % of agricultural, industrial or service jobs in the municipality where they live



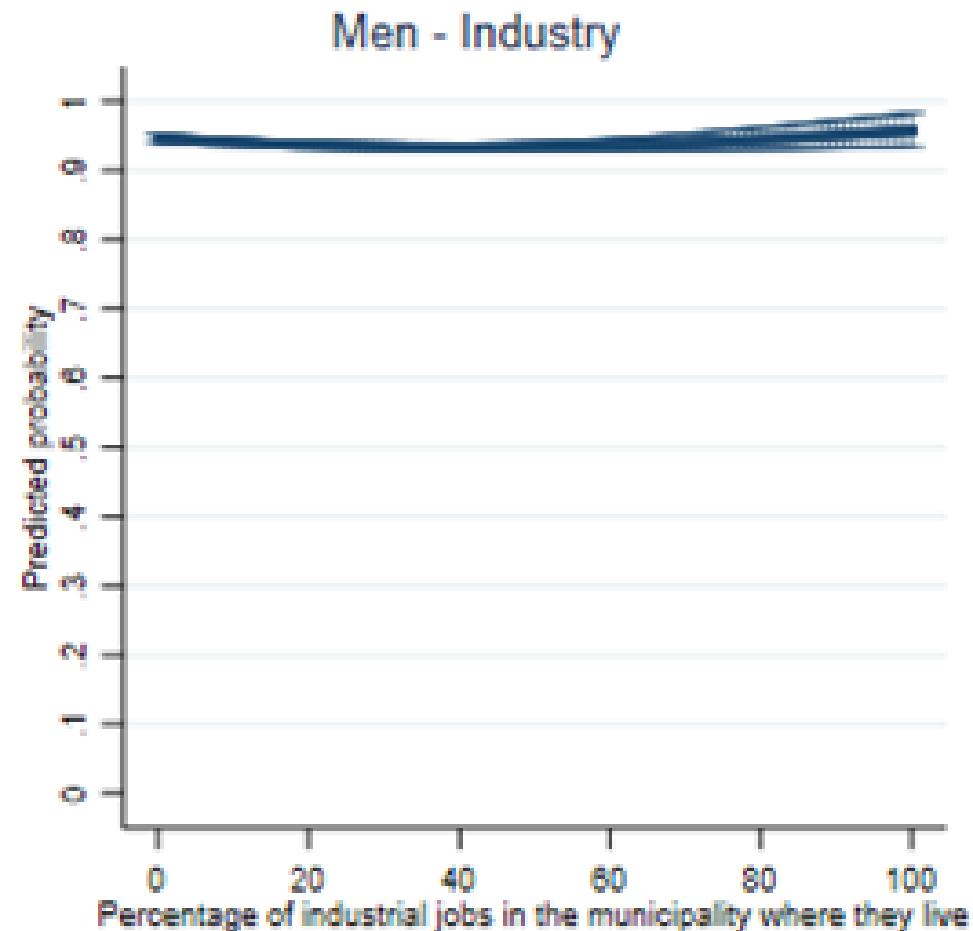
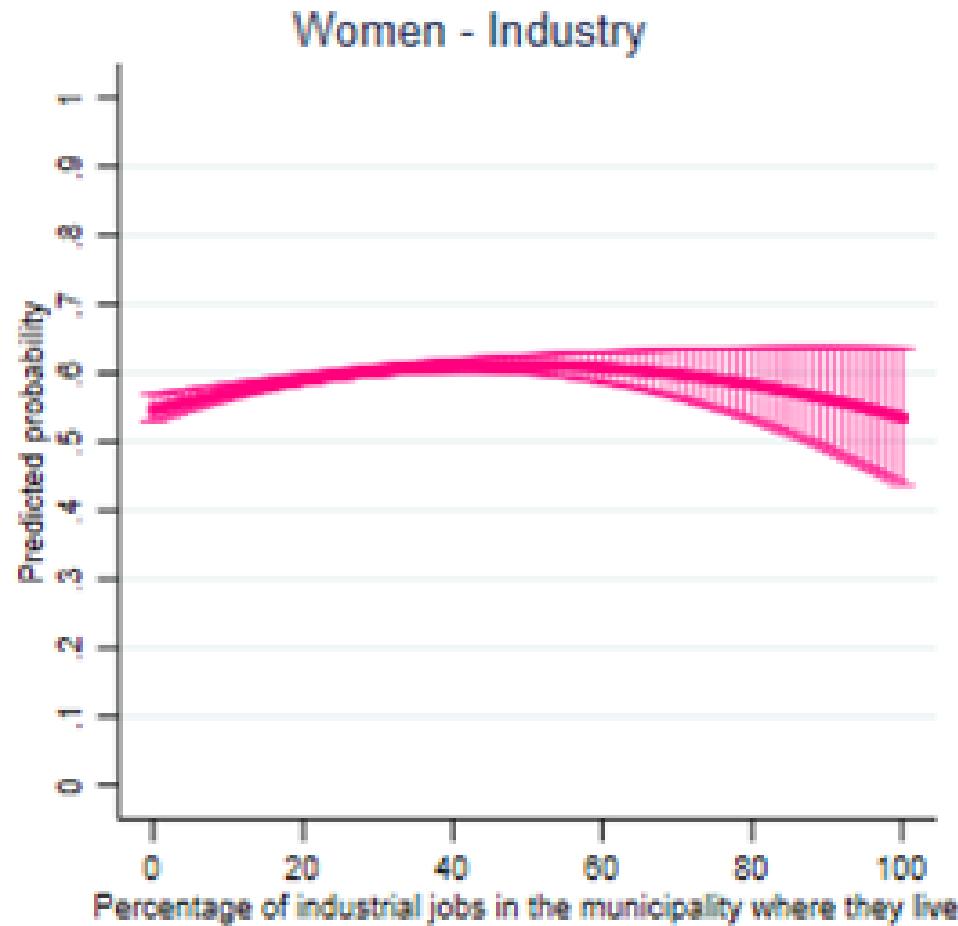
# Results: Marginsplot

Predicted probability that Mexican men and women are economically active depending on the % of agricultural jobs



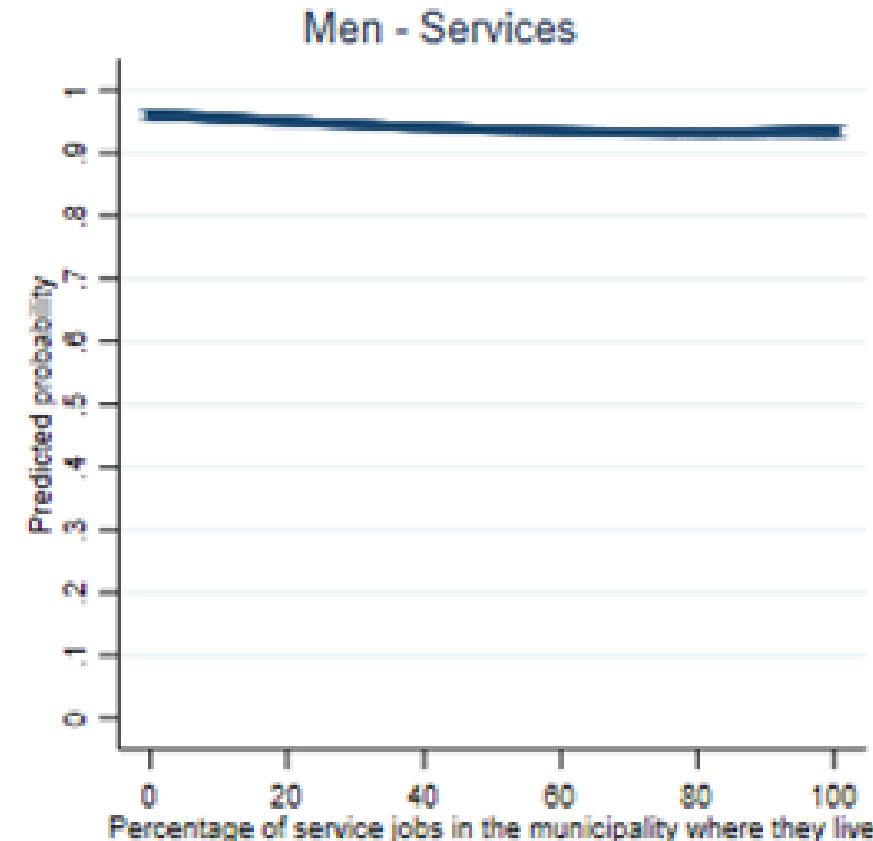
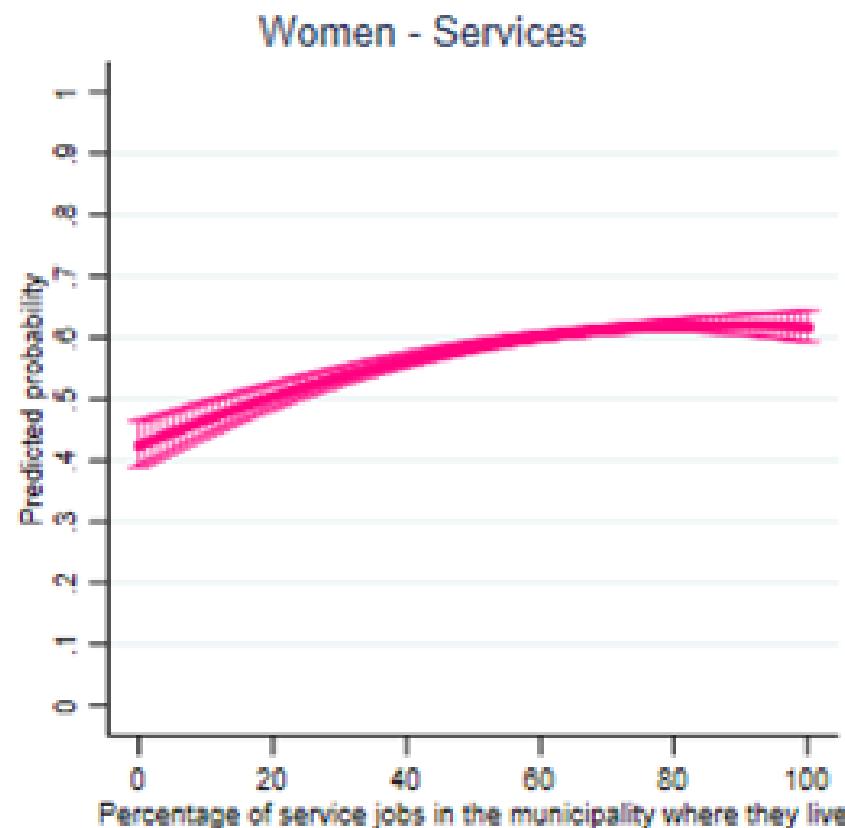
# Results: Marginsplot

Predicted probability that Mexican men and women are economically active depending on the % of industrial jobs



# Results: Marginsplot

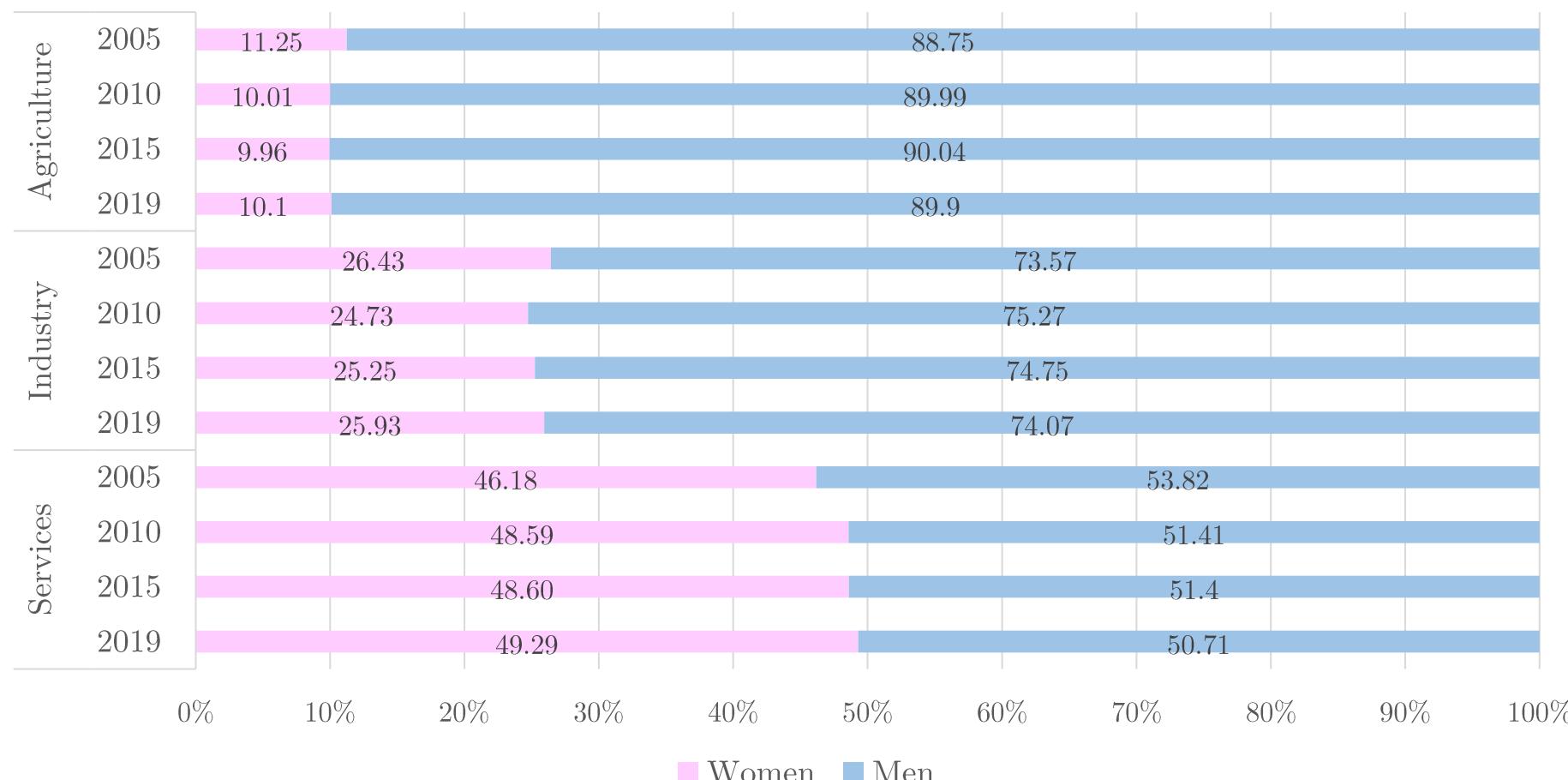
Predicted probability that Mexican men and women are economically active depending on the % of service jobs



# Background data

# Background data

Percentage of men and women in each economic sector

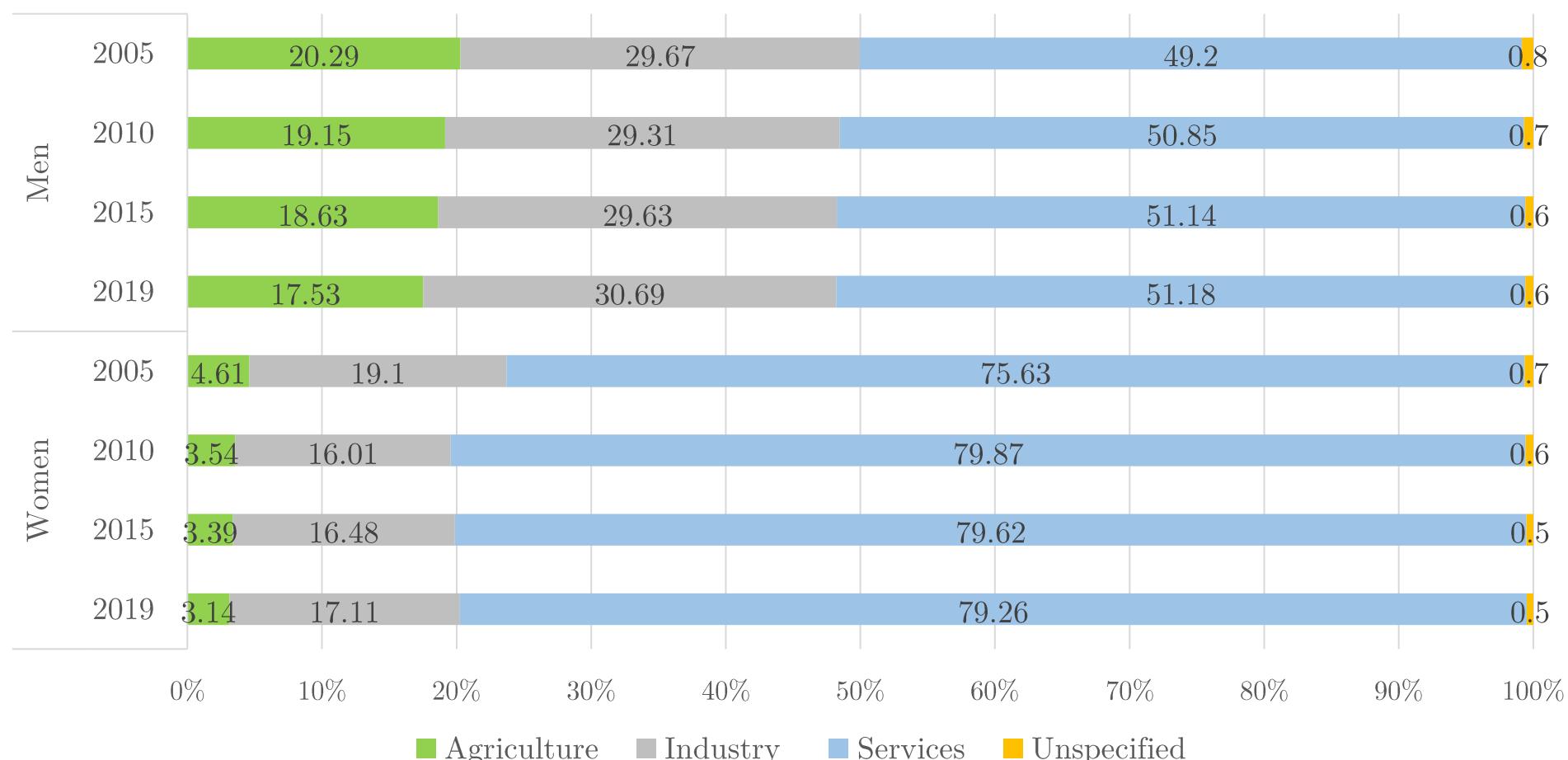


# Background data

- The previous graph is showing that...
- From the total agricultural workforce, 10% are women and 90% are men.
- From the total industrial workforce, 25% are women and 75% are men.
- From the total service workforce, 49% are women and 51% are men.

# Background data

Percentage of Mexicans working in agriculture, industry and services (by sex).

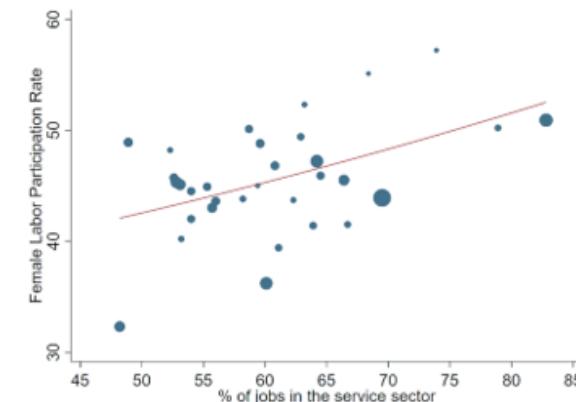
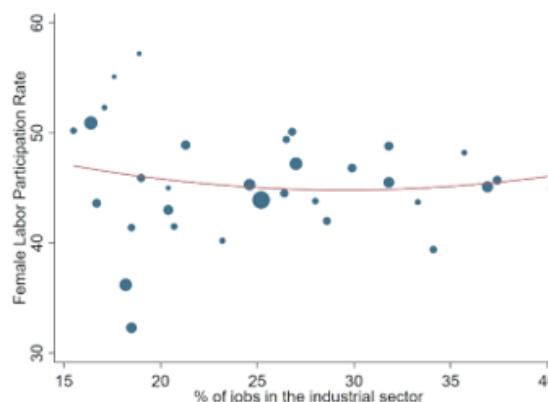
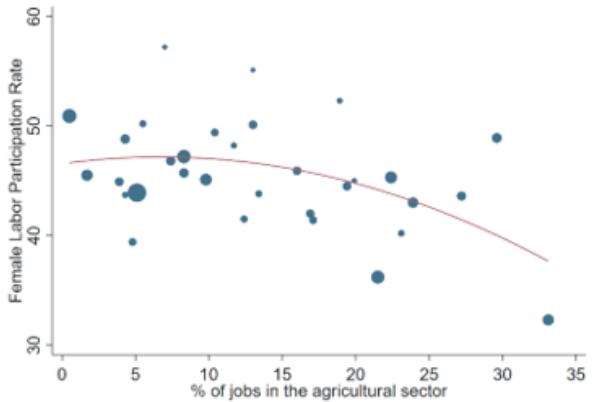


# Background data

- The previous graph is showing that...
- From the total male workforce,  
20% work in agriculture  
30% work in industry  
50% work in services
- From the total female workforce,  
3% work in agriculture  
17% work in industry  
80% work in services

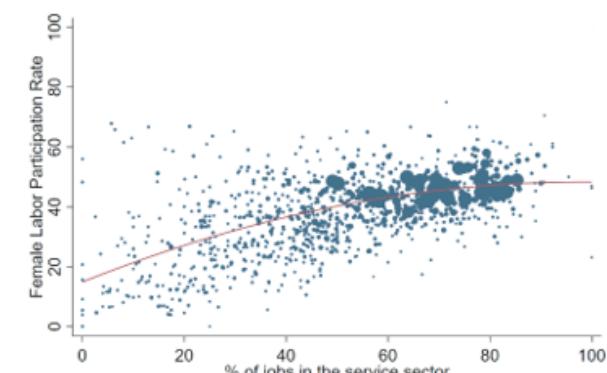
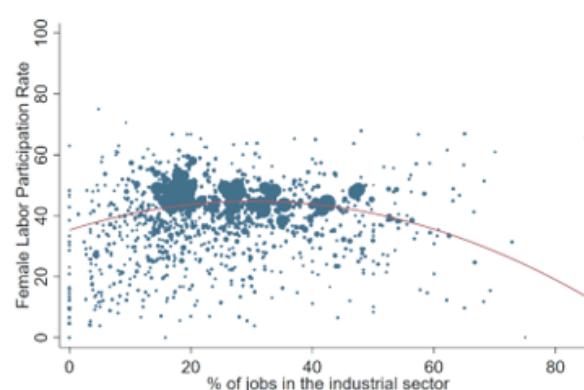
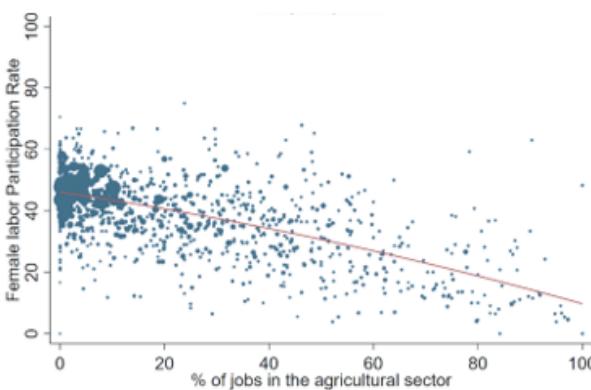
# Background data

FLPR and % of jobs in each economic sector. (Mexican States, 1<sup>st</sup> Quarter of 2019)



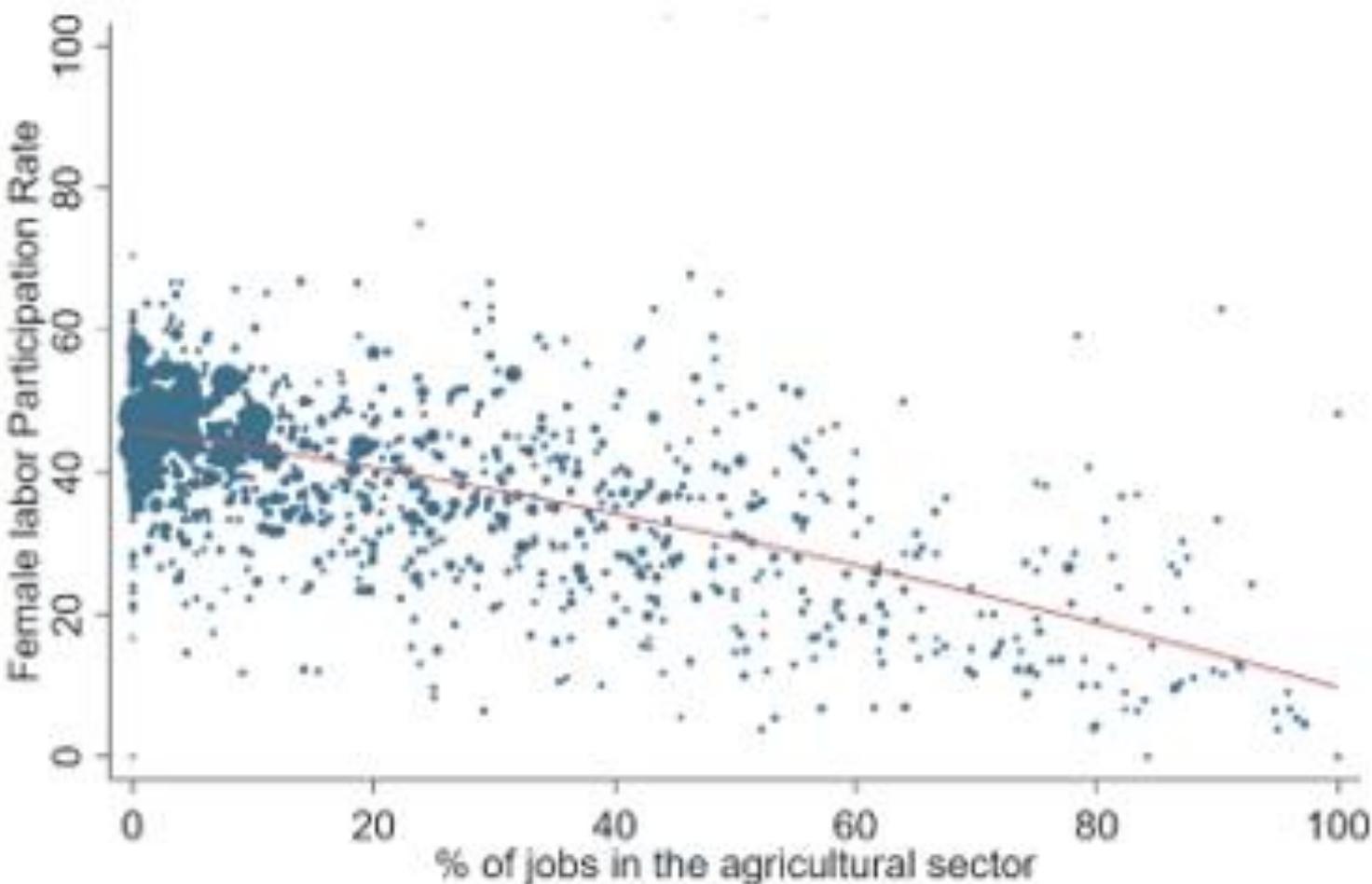
Note: The size of the dots varies depending on the total population in each state.

FLPR and % of jobs in each economic sector. (Mexican municipalities, 1<sup>st</sup> Quarter of 2019)



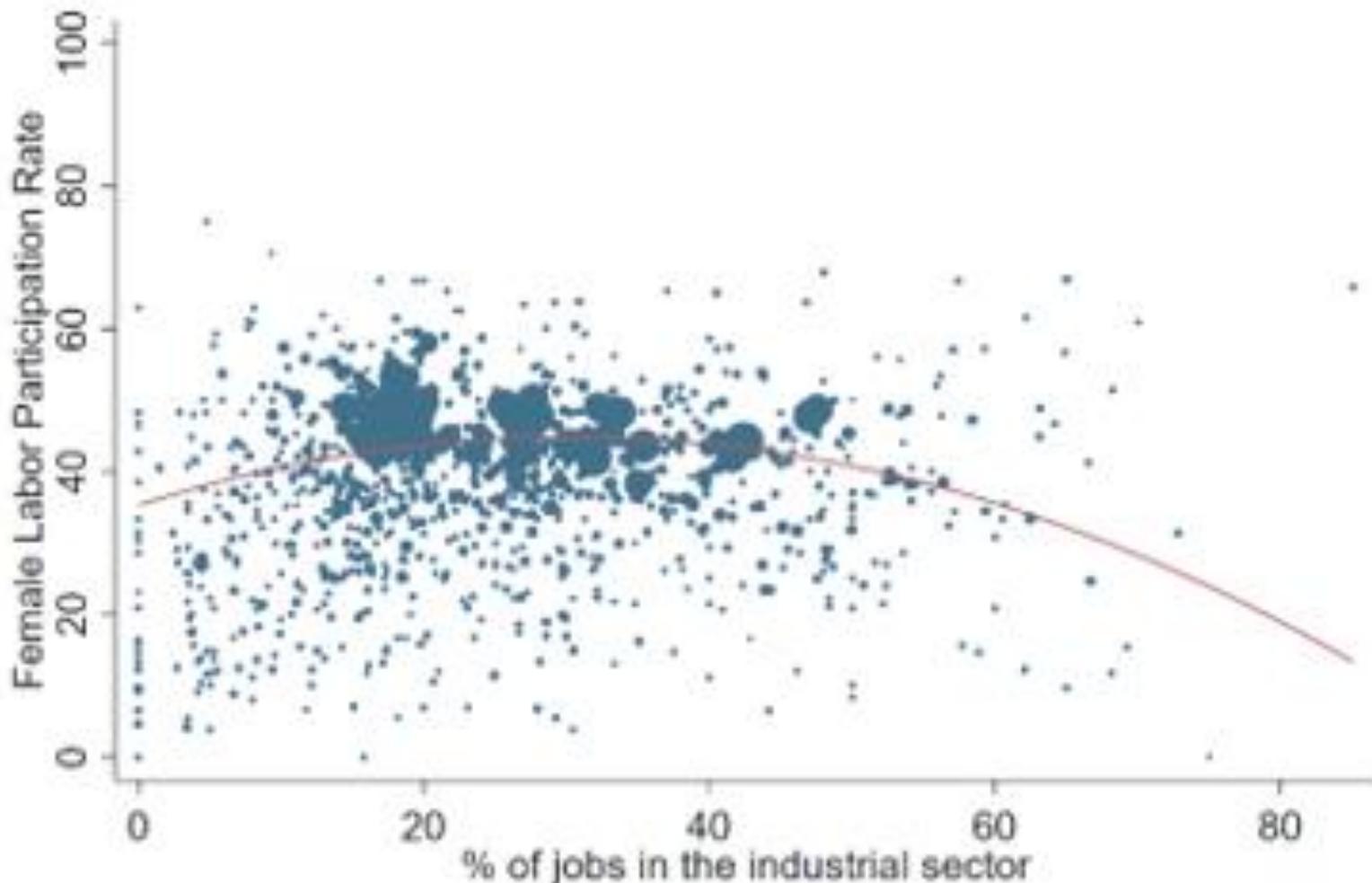
Note: The size of the dots varies depending on the total surveys that were carried out in each municipality.

# Background data



In Mexico,  
the higher the  
percentage of  
agricultural jobs at  
the municipal level,  
the lower the female  
labour participation  
rate.

# Background data



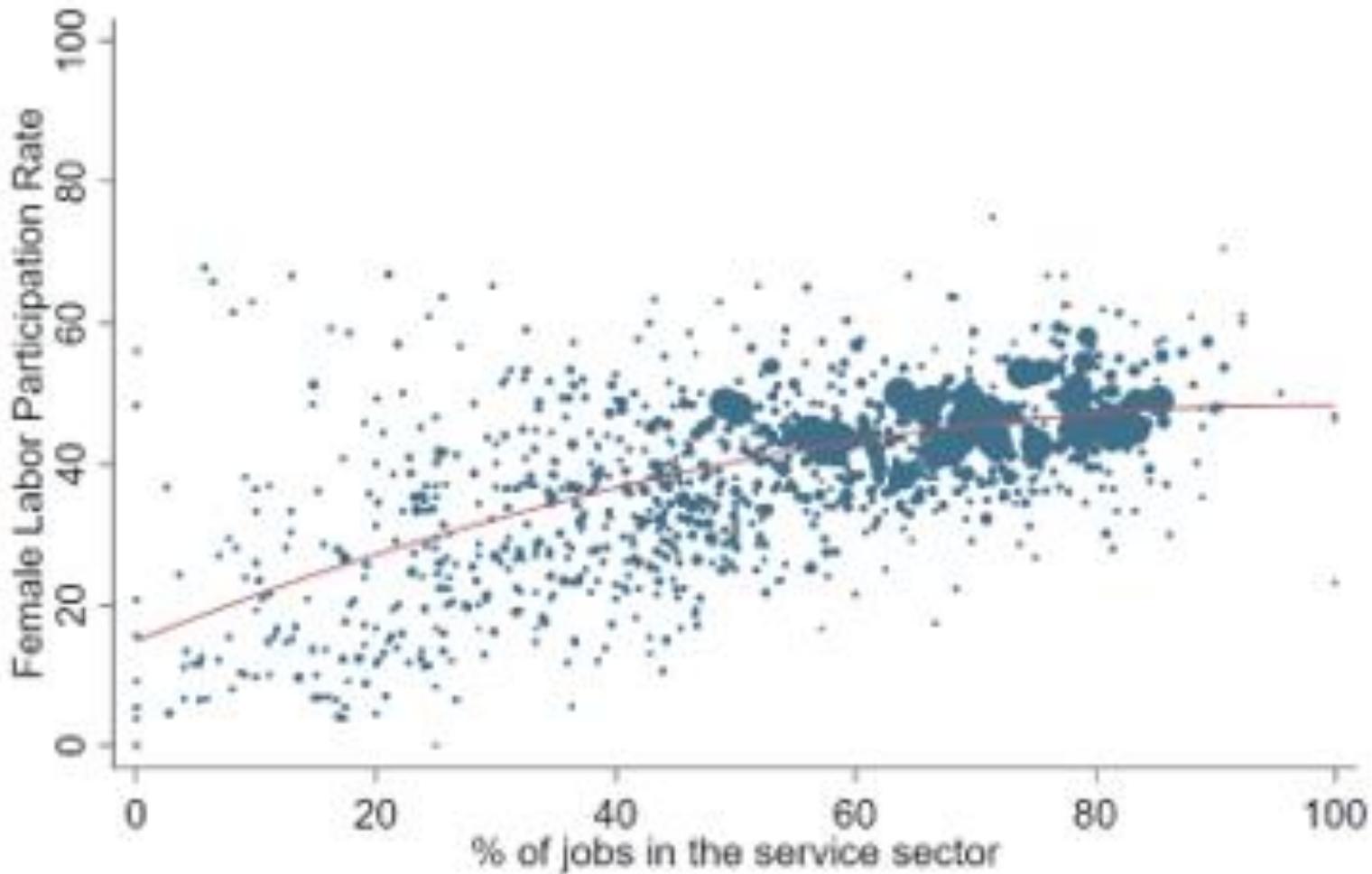
In Mexico,

no evidence indicating that

the higher the percentage of  
jobs in the industrial sector

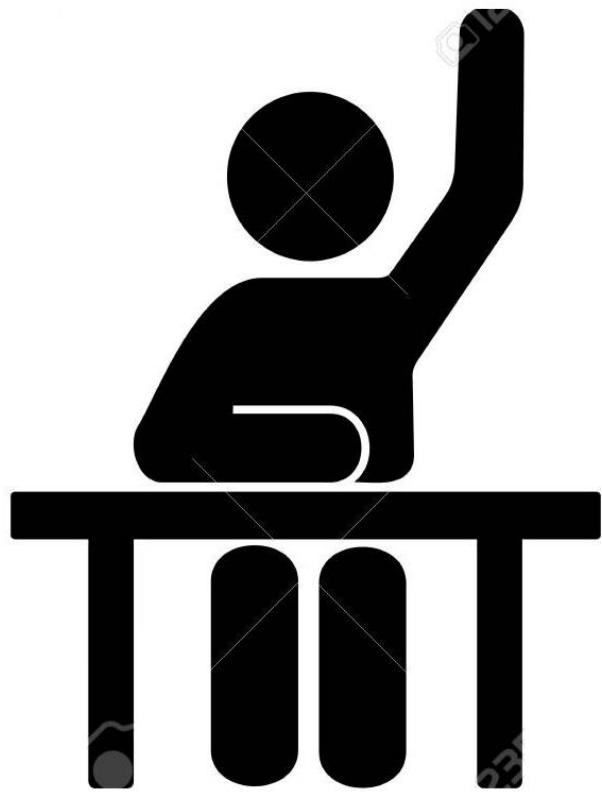
the lower the female labour  
participation rates

# Background data



In Mexico,  
the higher the  
percentage of service  
jobs at the municipal  
level,  
the higher the female  
labour participation  
rate.

# Relevance



Why is this  
relevant?

# Relevance

- Remember Claudia Goldin's theory:
  - FLPRs are high in agricultural countries
  - FLPRs decline in industrial countries
  - FLPRs rise again in service-oriented countries.
- Based on this theory, researchers have been assuming that...
  - FLPRs are high in agricultural regions of the countries.
  - FLPRs are low in industrial regions of the countries.
  - FLPRs are high in service-oriented regions of the countries.

# Relevance

- Remember Claudia Goldin's theory:
  - FLPRs are high in agricultural countries
  - FLPRs decline in industrial countries
  - FLPRs rise again in service-oriented countries.
- Based on this theory, researchers have been assuming that...
  - FLPRs are high in agricultural regions of the countries. ✗
  - FLPRs are low in industrial regions of the countries. ✗
  - FLPRs are high in service-oriented regions of the countries. ✓

# Relevance



Charles Gottlieb <gottlieb.charles@gmail.com>  
To Isaac Lopez Moreno Flores



01/06/2023

I am slightly surprised that FLFP is so low in municipalities with a high share of agricultural employment. In our paper, we find that female participation in low-income countries is high and is driven by female employment in the agricultural sector.

It might be that the poorest municipalities have income levels that correspond to a middle-income rather than a low-income country, thereby locating municipalities in the range of income where female LFP is lowest.

Best,

Charles

# Relevance

Re: New working paper about female labour participation in Mexico



Goldin, Claudia <cgoldin@harvard.edu>  
To Isaac Lopez Moreno Flores



Thu 28/09/2023 19:38

Isaac:

Many thanks for sending this. Since I'm giving a lecture to my class on this topic on Monday, this was perfect timing.  
You should probably add a cite to Claudia Olivetti's piece, which (I think) was the first rigorous test of a fixed-effects model of the U. You can find it on her website. It was around 2015.

Best wishes,  
Claudia

\*\*\*\*\*

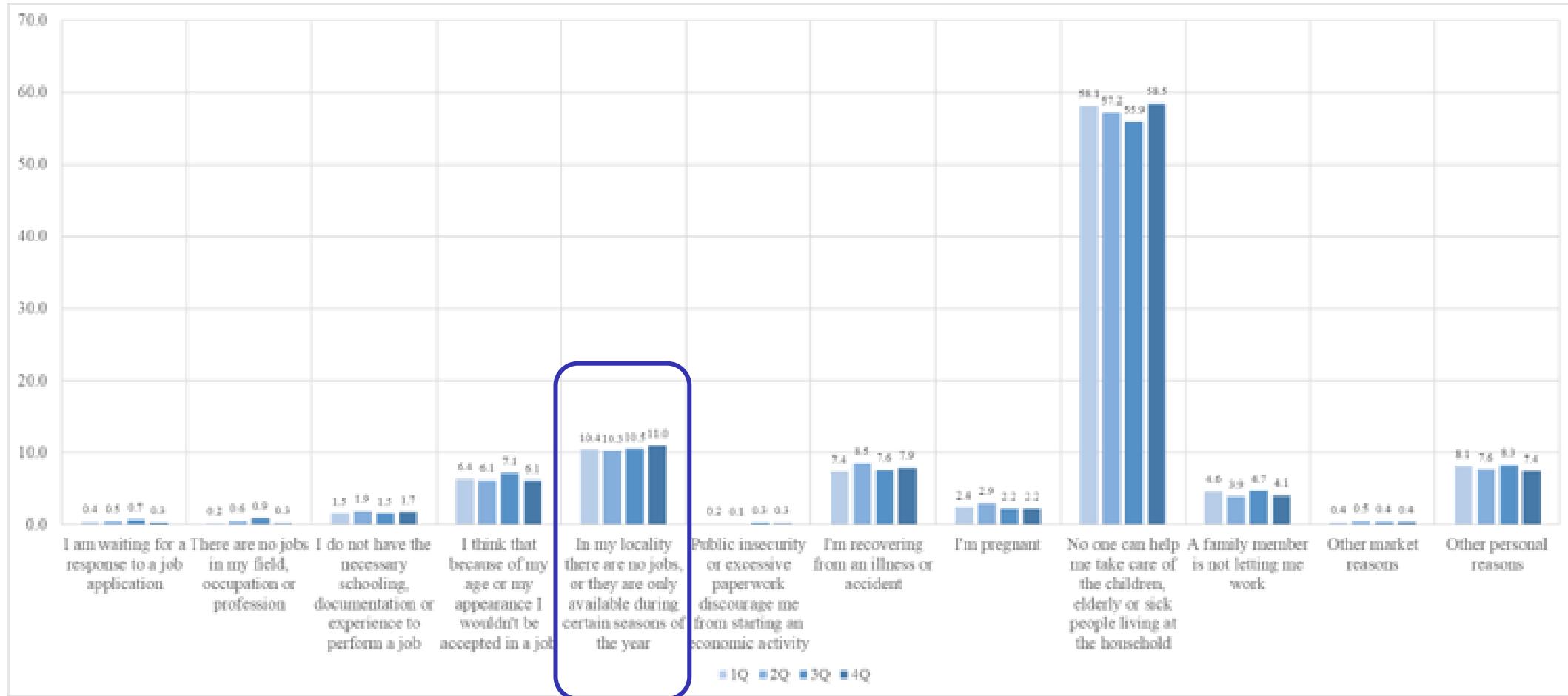
Claudia Goldin  
Henry Lee Professor of Economics  
Lee & Ezpeleta Professorship in the Arts and Sciences  
Harvard University  
<http://scholar.harvard.edu/goldin/home> [scholar.harvard.edu]

# Conclusion

- This paper contradicts the hypothesis that the decline of female labour participation rates (FLPRs) in middle-income countries is due to low engagement of women in industrial jobs.
- Instead, this paper is showing that low FLPRs in Mexico are partially explained by the lack of participation of women in agricultural activities.
- This paper also shows that the lack of participation of women in agriculture might be due to lack of labour demand.

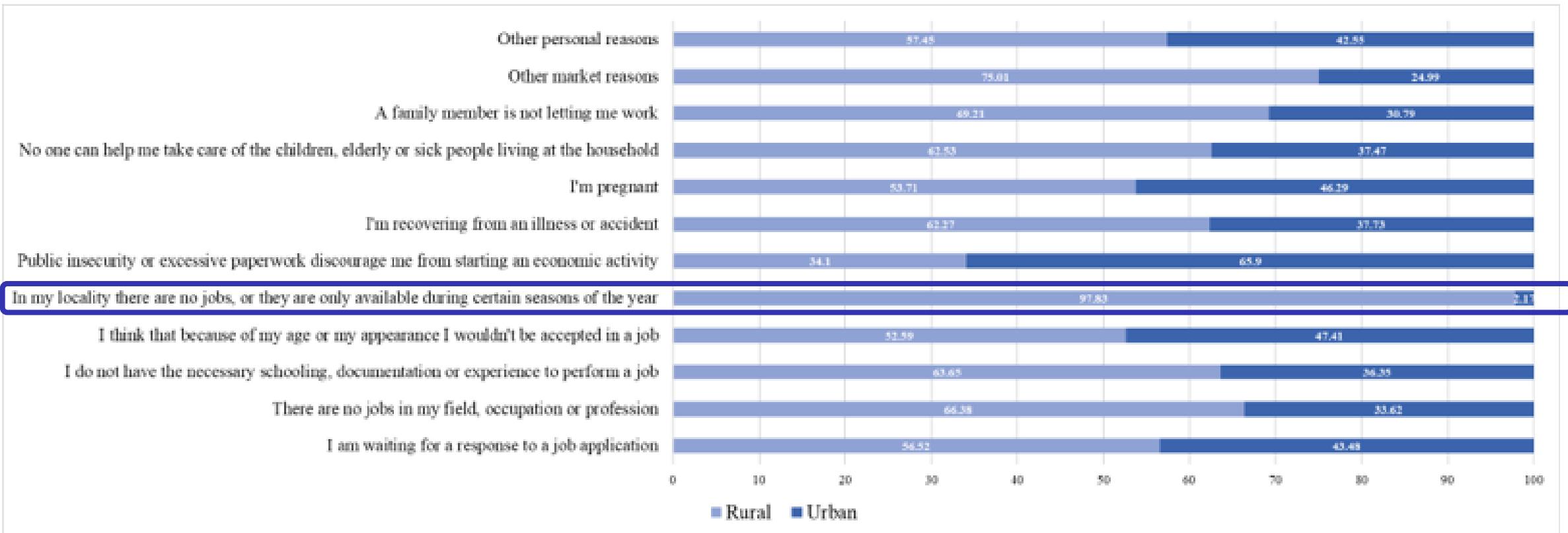
# Lack of labour demand

Figure 1.11 - Reasons for not working among working-age women (18–65) who are engaged in domestic chores, Mexico (2019)



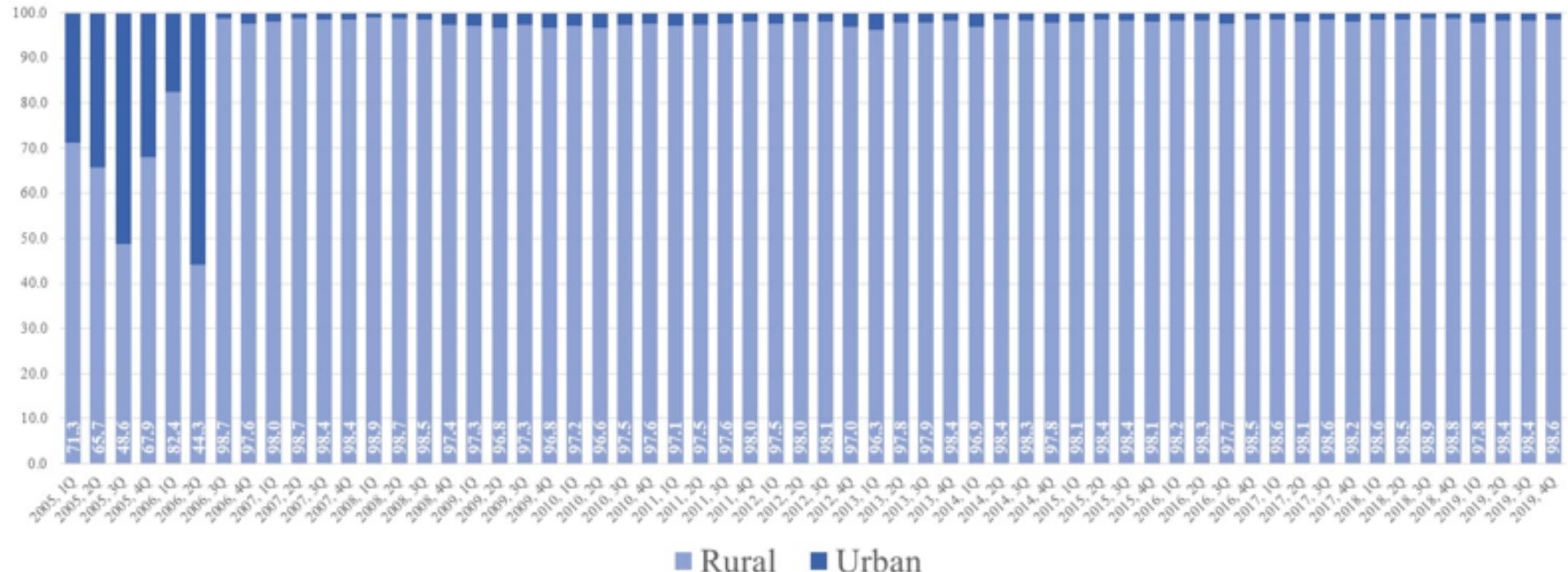
# Lack of labour demand

Figure 1.12 - Reasons for not working among working-age women (18–65) engaged in domestic chores, differentiating by urban and rural areas (Mexico, first quarter of 2019)



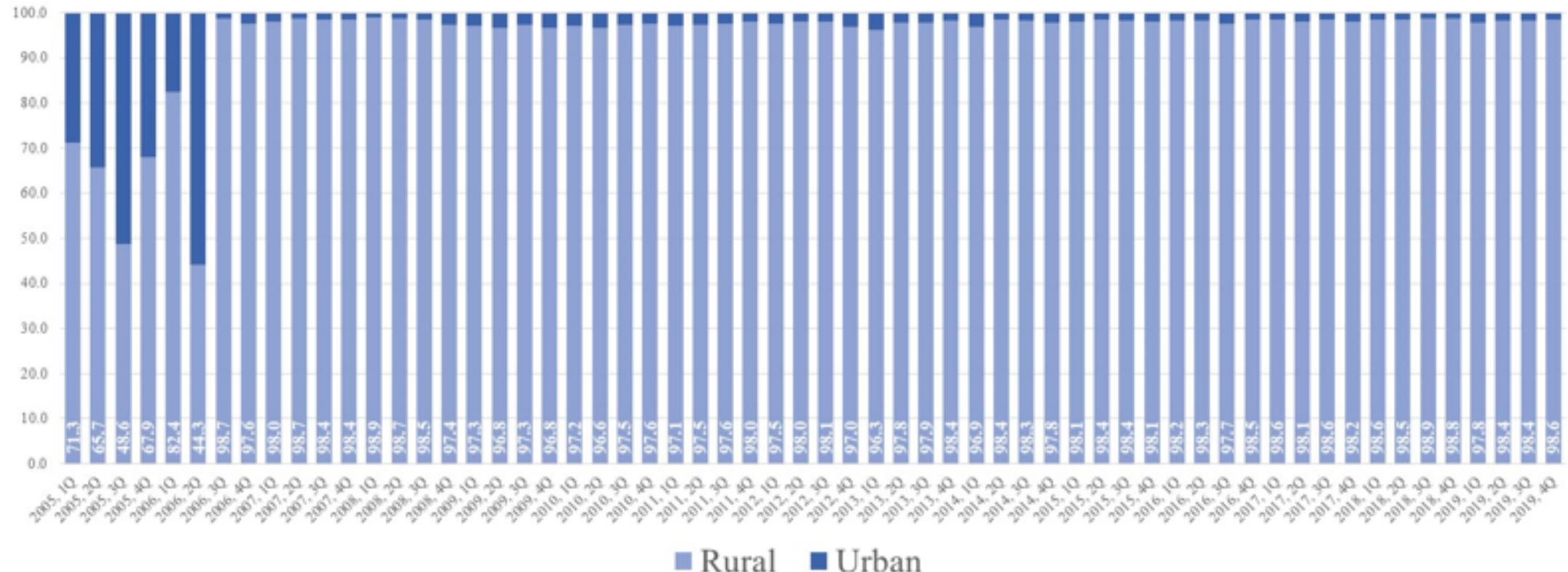
# Lack of labour demand

Figure 1.13 - Non-working women due to lack of labour demand, differentiated by urban and rural areas  
(Mexico, 2005–2019)



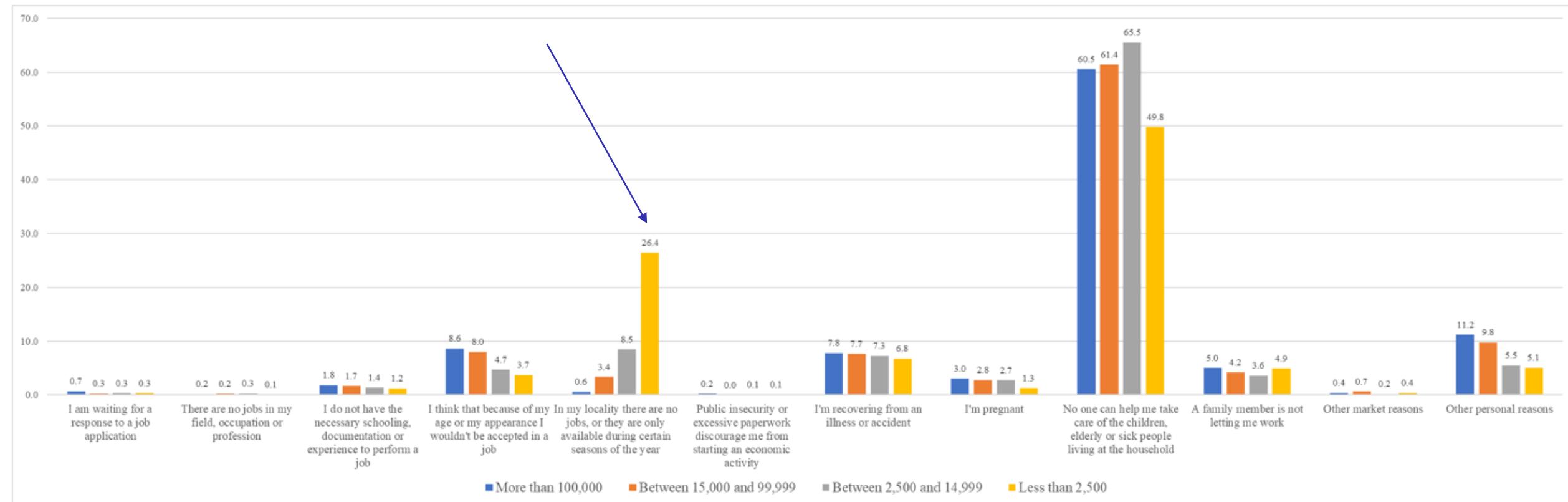
# Lack of labour demand

Figure 1.13 - Non-working women due to lack of labour demand, differentiated by urban and rural areas  
(Mexico, 2005–2019)



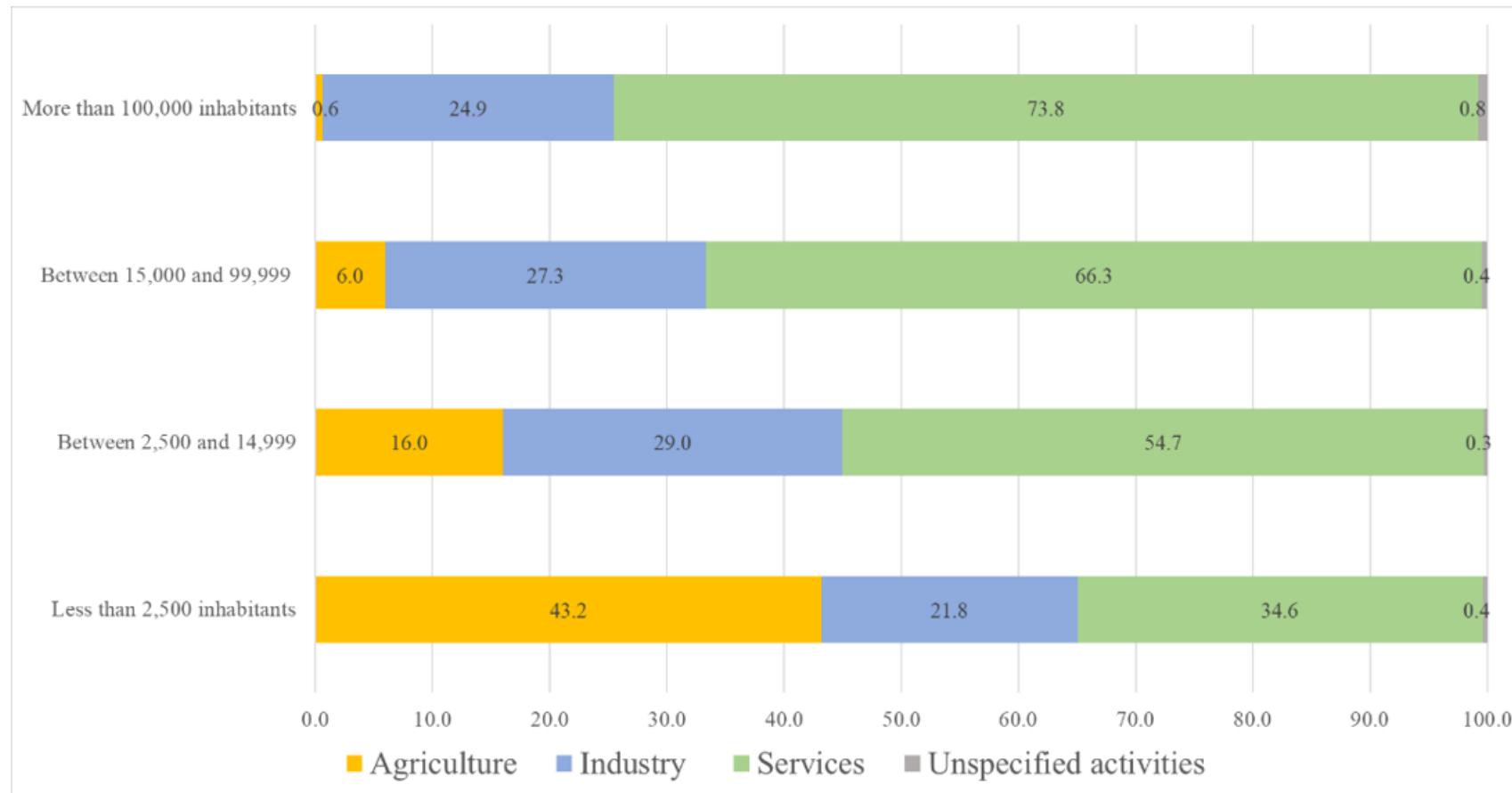
# Lack of labour demand

Figure 1.14 - Reasons for not working among working-age women (18–65) engaged in domestic chores, differentiated by locality size (Mexico, first quarter of 2019)



# Lack of labour demand

Figure 1.15 - Sectoral distribution of employment in relation to the population size of the locality (Mexico, first quarter of 2019)



# Additional material

*Feminist Economics*, 2016

Vol. 22, No. 4, 54–81, <https://dx.doi.org/10.1080/13545701.2016.1172721>

## THE FEMINIZATION U IN SOUTH AFRICA: ECONOMIC STRUCTURE AND WOMEN'S LABOR FORCE PARTICIPATION

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*Leanne Roncolato*

# Additional material

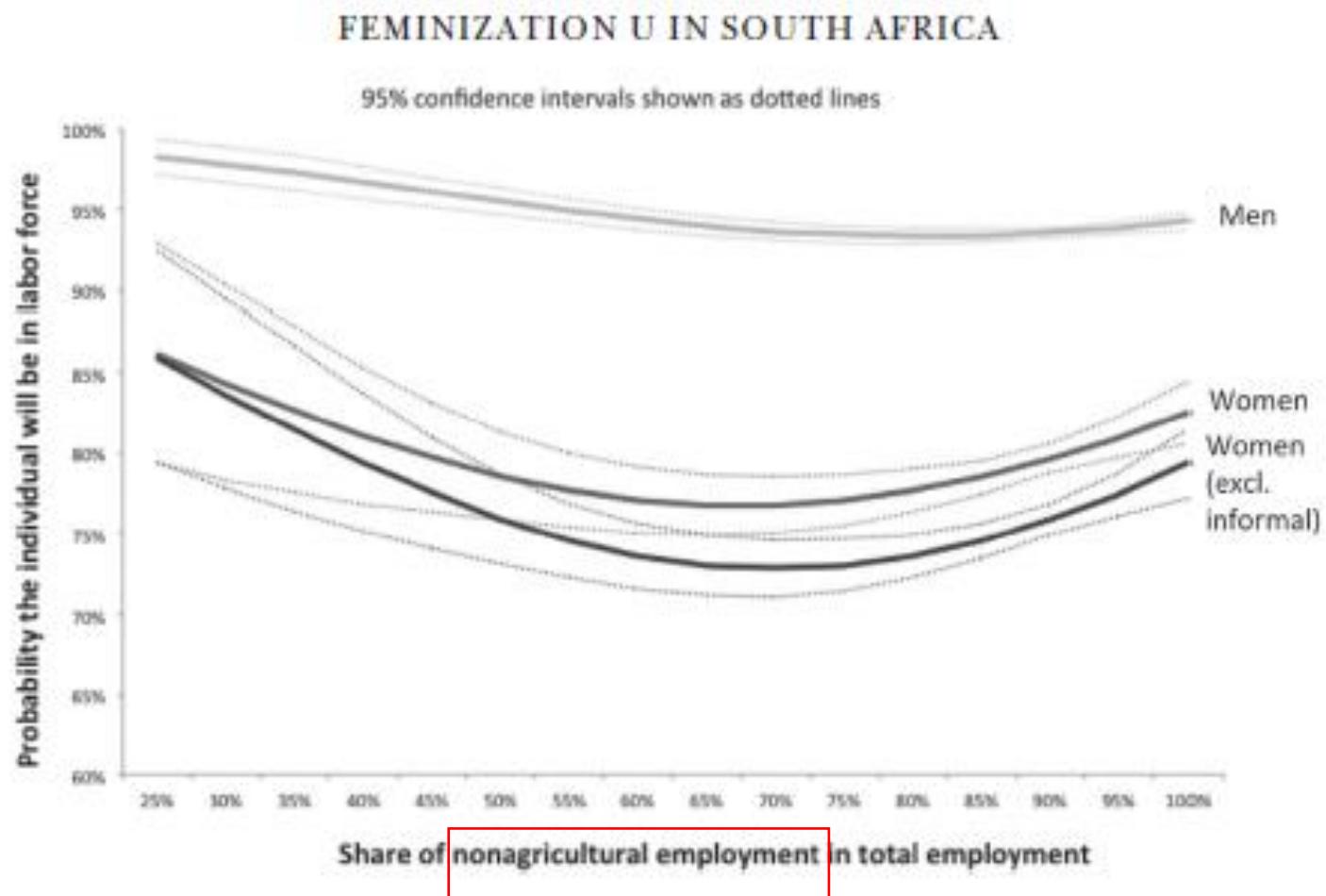
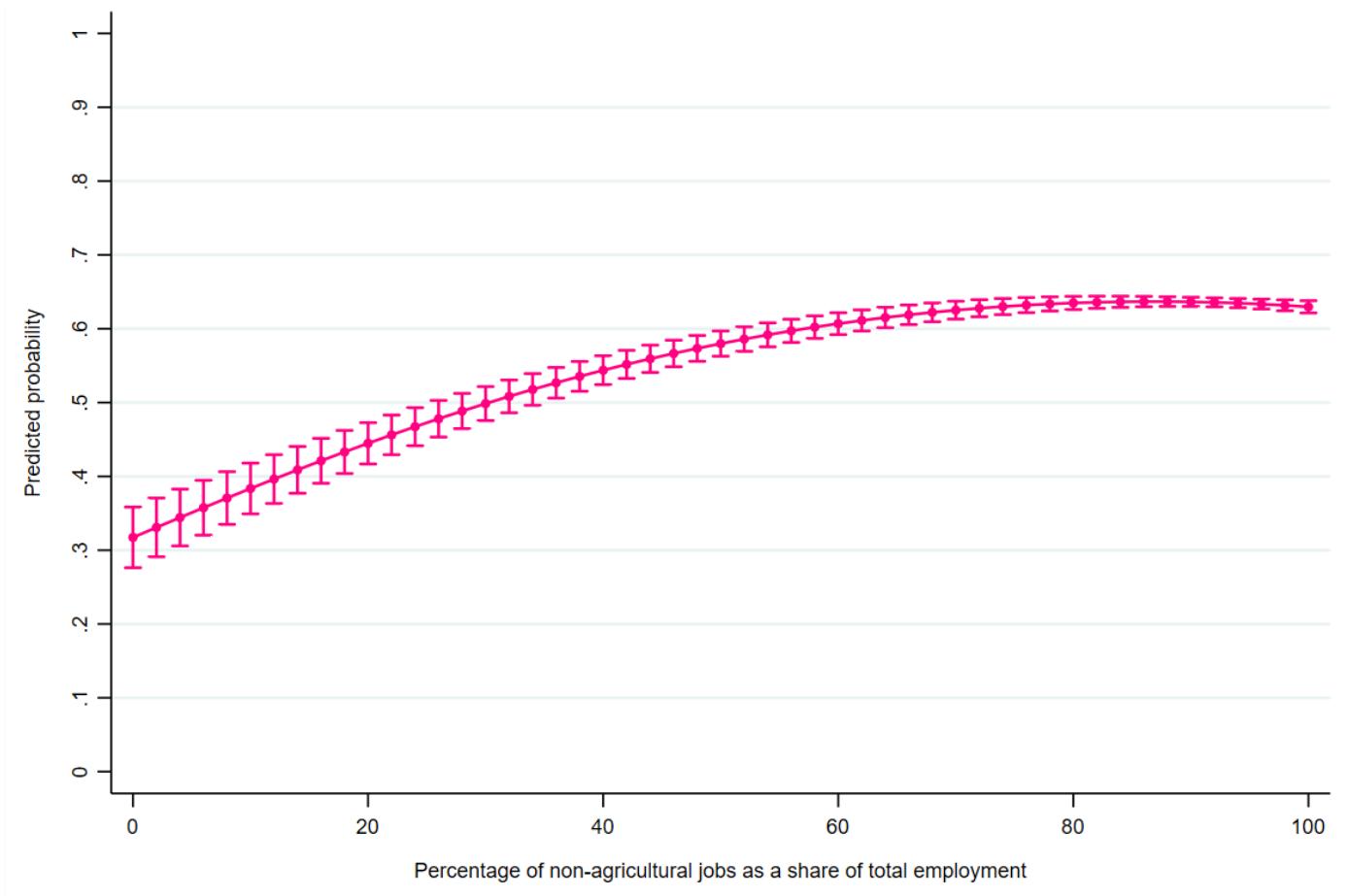


Figure 2 Feminization U (predicted values)

# Additional material

Predicted probability that Mexican women are economically active depending on the share of non-agricultural jobs at the municipal level



# Additional material

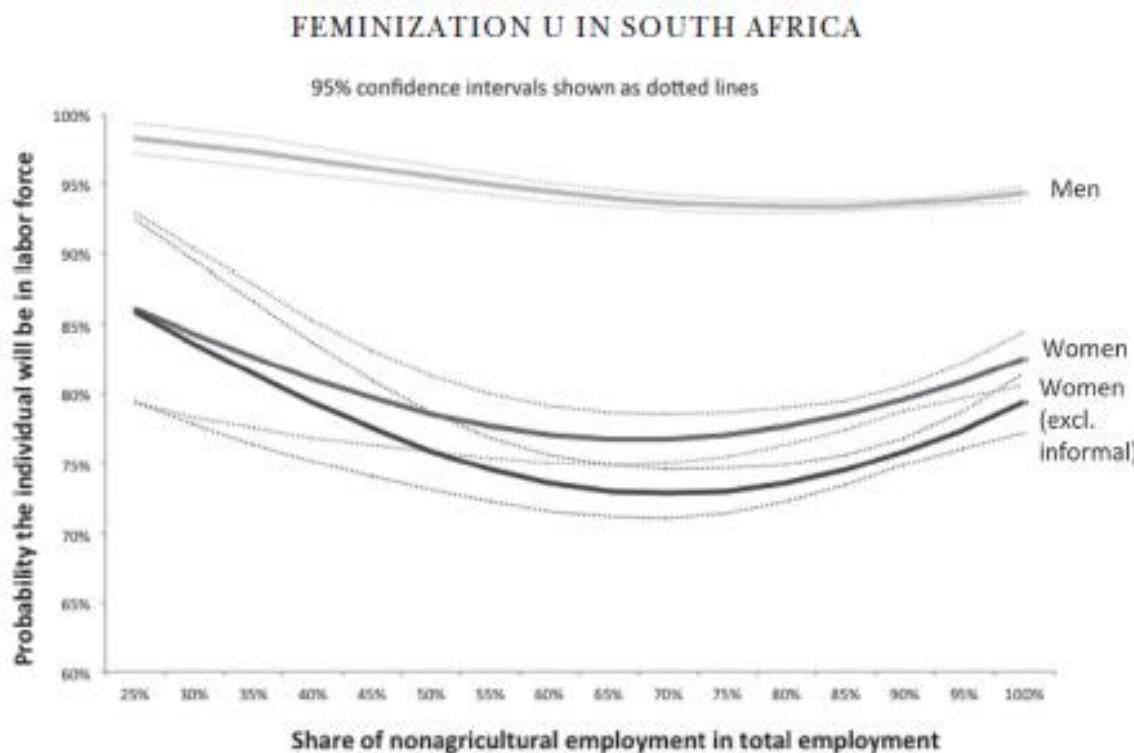
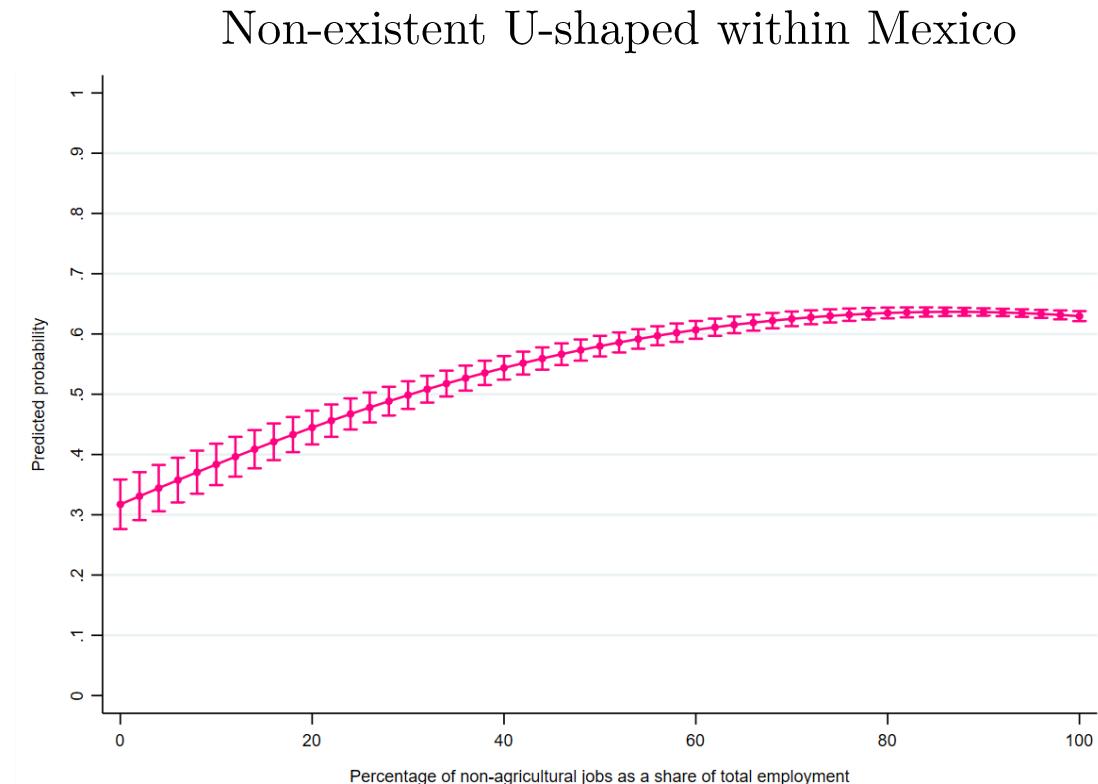


Figure 2 Feminization U (predicted values)



# Questions?

- If you want to read the latest version of the paper, send me an email
- [isaac.lopez-morenoflores@manchester.ac.uk](mailto:isaac.lopez-morenoflores@manchester.ac.uk)