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## Wage Gap among urban natives and rural-urban migrants in Pakistan

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**1<sup>st</sup> International Conference, CBER IBA**

**Wage Gap among Urban Natives and Rural-Urban Migrants in Pakistan**

Session: IIIA

Sustainable Energy and Urbanization

Location: Lecture Room 1, 12th Floor, Aman Tower

Day 2 - Saturday, 3<sup>rd</sup> April 2021

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Presented by:

Muhammad Umair

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## Introduction

- Pakistan has the highest rate of urbanization among the South Asian economies (WDI, 2020).
- The increasing rural-urban migration increases the labor supply in the labor market and consequently reduces competitive wages.
- More than one-third of the labor force was working in urban areas—one-tenth of the entire labor force was rural-urban migrants (LFS, 2017-18).
- Fewer studies focused wage gap among urban natives and migrant workers, the two dominant groups in the urban labor markets (i.e., China and Vietnam).
- The differences in the educational levels and the working hours lead to the wage gap (Becker, 1985; Mincer & Polachek, 1974).

## Rationale

- Empirical studies
  - Limited studies for China (Lee, 2012; Qu & Zhao, 2017) and Vietnam (Haughton et al., 2018) estimated the wage gap among urban native and rural-urban migrants.
  - Public and private sector pay gap in Pakistan (Hyder & Reilly, 2005).
  - Gender wage gap in Pakistan (Sabir & Aftab, 2007; Ashraf & Ashraf, 1993).
- This study is the first attempt to analyze the wage gap among urban natives and rural-urban migrants in Pakistan.
- The results drawn from this research may highlight the Sustainable Development Goal-8 (SDGs) in Pakistan.



## Literature Review

S.No.	Country	Study	Conclusion
1.	Vietnam	Haughton, Sun, & Loan (2018)	<ul style="list-style-type: none"> <li>In 2009, migrant workers in the two major cities of Vietnam, earned 42 percent less per hour than the resident workers.</li> </ul>
			<ul style="list-style-type: none"> <li>Endowment effect: Attributed 60 percent of the wage gap, rest are the discriminating factors.</li> </ul>
			<ul style="list-style-type: none"> <li>Careful attention to data collection and methodology are particularly important.</li> </ul>
2.	China	Zhang & Wu (2017), Zhang, Sharpe, Li, & Darity (2016), and Lee (2012)	<ul style="list-style-type: none"> <li>Government discriminatory policies could affect occupational segregation.</li> </ul>
			<ul style="list-style-type: none"> <li>Discrimination against migrant workers may aggravate rather than alleviate the labor shortage since it harms the efficiency of the labor market.</li> </ul>
			<ul style="list-style-type: none"> <li>Migrants still face a significant amount of discrimination, but that this varies a lot between cities.</li> </ul>

## Research Question

- Is there any wage gap among urban native and rural-urban migrant workers in Pakistan, based on the differences in the socioeconomic and demographic characteristics, and sectoral employment?

## Data Source, Sample and Variables

- Data: Labour Force Survey (LFS), Pakistan Bureau of Statistics, Government of Pakistan.
- LFS, 2017-18: 34<sup>th</sup> wave is a representative sample of 43,361 households (gender disaggregated, national and provincial level estimates with urban/rural breakdown, four sub samples, each to be enumerated in each quarter).
- The study extracted a sample of 12,302 workers, comprising 10,793 urban natives and 1,509 rural-urban migrant workers from the LFS, 2017-18.

Dependent Variable	Explanatory Variables
Monthly wages (nominal)	• Age
	• Age squared
	• Working hours
	• Gender
	• Marital status
	• Education
	• Sector
	• Occupation



## Econometric Model

*Conditional Quantile regressions:* The study used Conditional Quantile regressions that is the relationship between independent and conditional quantiles of the dependent variables.

*Importance:* It gives a more comprehensive explanation of the stochastic relationships among random variables by a variety of measurements of central tendency and dispersion. They are more robust against outliers.

The study estimated two sets of wage equations for each urban native and rural-urban migrant workers, given by Equation 1 and Equation 2;

$$Q_{Y_u} = Q'_{X_u} \delta_u + \varepsilon_u \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad (1)$$

$$Q_{Y_r} = Q'_{X_r} \delta_r + \varepsilon_r \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad (2)$$

Where  $Q_{Y_u}$  and  $Q_{Y_r}$  are the corresponding monthly wage quantiles of urban natives and rural-urban migrants.  $X$  shows the set of explanatory variables.  $\delta_u$  and  $\delta_r$  are the coefficients of explanatory variables while  $\varepsilon_u$  and  $\varepsilon_r$  are the error terms related to the quantiles for the urban native and rural-urban migrant workers.

## Results

- *Wage Gap*: The average earnings of urban native workers in Pakistan were only five percent higher than their rural-urban counterparts.
- *Educational Wage Gap*: The urban workers with a higher education earned more than the workers with a lower level of education.
- *Distribution of the Gender Wage Gap*: The gender wage gap is higher at lower percentiles. The difference decreases at higher percentiles.
- *Sectoral Wage Gap*: The sectoral analysis shows that urban workers earn higher wages in the industrial and services sectors.
- *Occupationally Segregated Wage Gap*: Occupational segregation indicates the highest earnings for native managers at all percentiles along the distribution.

## **Conclusion and Policy Implications**

- This study is the first attempt with the nationally representative data set to analyze the wage gap among urban native and rural-urban migrants in Pakistan.
- It used LFS, 2017–18, and employed quantile regressions that gives better estimates than Ordinary Least Squares (OLS).
- Highly educated urban workers earn higher salaries supporting the human capital theory.
- Female participation in the rural-urban migrant labor force was disproportionately higher than their urban native peers. The mean wage difference was minimal between male urban natives and migrants.
- Earnings of many urban native and migrant workers are lower than the federal and provincial governments' minimum wages, despite longer working hours than the international standards.
- Services sector is dominant in the urban labor markets.

- The employment by occupation shows most urban natives were craft and related trade workers or elementary workers.
- In comparison, most rural-urban migrants were elementary workers and service and sales workers.
- The job creation and employment opportunities for skilled labor in rural sectors will reduce the wage gap and labor distribution.
- This research suggests implementing federal and provincial non-discriminatory wage laws, particularly those aligned with international labor conventions and protocols.
- SDG 8 (8.5, 8.6, 8.8): The study suggests protecting the labor rights of all workers, particularly females and migrant youth.

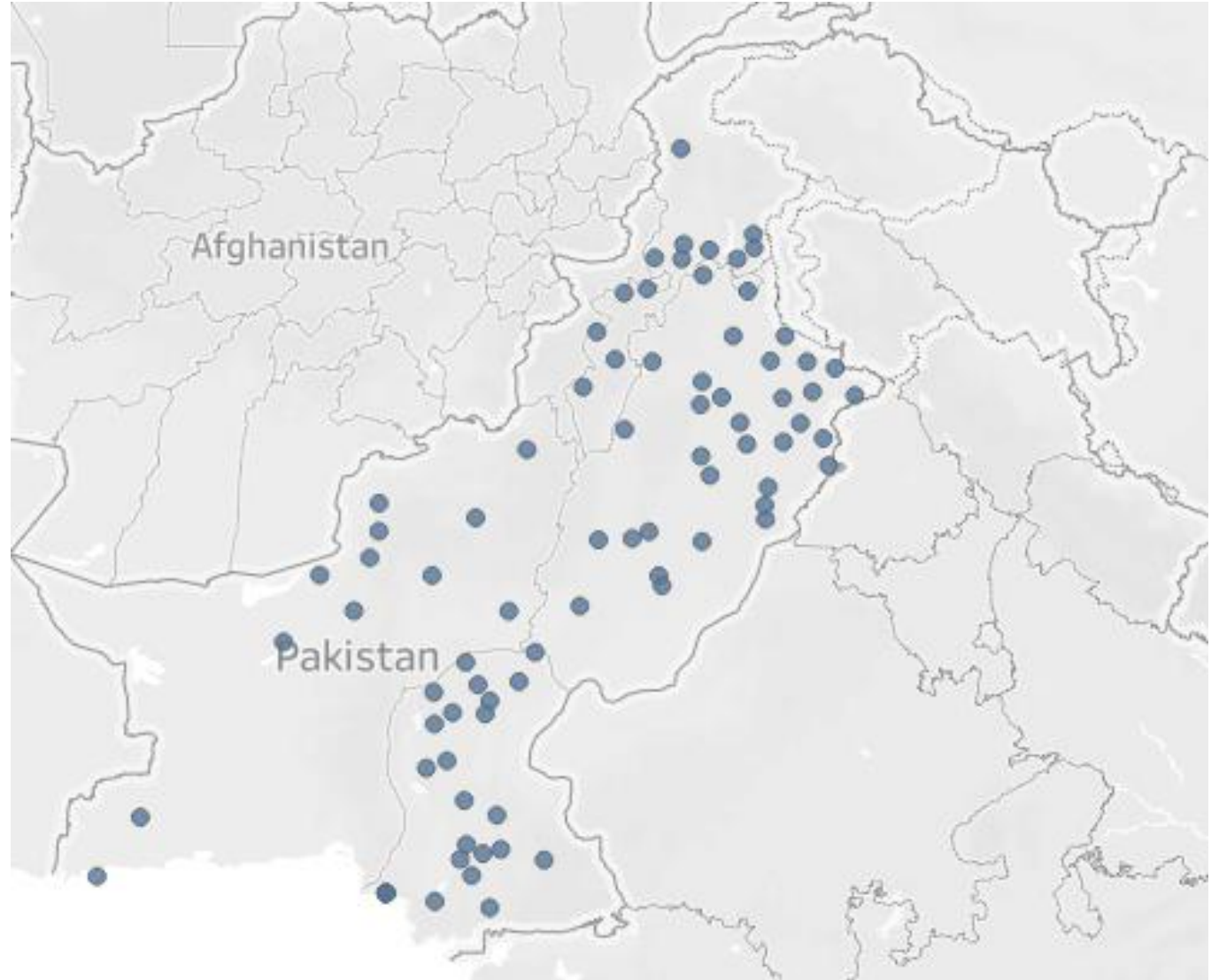
## Limitations

- The statistics of internal migration are eminently underestimated. The data on internal migration lacks a systematic and meticulous collection of migrants' information. Most of the time, the rural-rural and urban-urban movements remain uncaptured (Deshingkar & Grimm, 2005).
- LFS covers the statistics of migrants aged ten years and above, so cautiously consideration of the results and analysis is mandatory that the results are not applicable for the population aged less than ten years.
- The given form of survey data may not reflect the actual situation of internal migration. It does not gather information about the experience of workers in the labor markets.
- The sample questionnaire also lacks information about seasonal migration. It only covers the last movement.

## Spatial Distribution of the urban labor market sample in the LFS

Data Source:  
Pakistan Bureau of Statistics  
(<https://www.pbs.gov.pk/>)

Visualization software:  
Tableau Desktop



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