Labor Market

Luis Francisco Gomez Lopez

2022-06-16 12:33:25

Contents

- Please Read Me
- Purpose
- Labor classification of the population
- Labor market indicators
- Labor demand
- Wages
- Labor regulation
- Economic environment and the Company
- Acknowledgments
- References

Please Read Me

- Check the message Welcome greeting published in the News Bulletin Board.
- Dear student please edit your profile uploading a photo where your face is clearly visible.
- The purpose of the virtual meetings is to answer questions and not to make a summary of the study material.
- This presentation is based on (Cardenas 2020, chap. 9)

Purpose

Examine the evolution and characteristics of the supply and demand of labor in Colombia

Labor classification of the population

- To understand the indicators of the labor market from an economic perspective, it is necessary to classify the population from a labor point of view. Initially, the total population of a territory could be included but in practice the **Total Population (TP)** that is included **doesn't** cover (Hussmanns, Mehran, and Varmā 1990, chap. 2):
 - Members of the armed forces because this information is considered secret or because it is not easy to obtain information when its members are in barracks and military areas.
 - Residents in institutions such as people who are not part of the military forces but reside in military facilities, residents of penal or correctional centers and hospital residents.
- In that sense, the **Total Population (TP)** covers the non-institutional civilian population residing in households.

Labor classification of the population

Labor classification of the population in Colombia

Period: April 2022 Total Population (TP) 50.384.974 Working Age Population below Population 15 years (WAP) 11.500.667 38.884.307 I evel Active Inactive Population **Population** (EIP) 24,718,018 14,166,289

> Sources: DANE, Gran Encuesta Integrada de Hogares – GEIH Last update: 2022-06-16

Labor market indicators

- Percentage of the working age population ("Porcentaje de población en edad de trabajar")
 - ${}^{\circ}_{\circ}WAP = \frac{WAP}{PT} \times 100$
- Labor participation rate (LPR) ("Tasa global de participación")
 - $LPR = \frac{EAP}{WAP} \times 100$

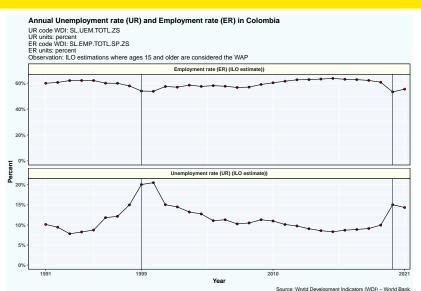
Labor market indicators

- Employment rate (ER) ("Tasa de ocupación")
 - $UR = \frac{E}{WAP} \times 100$
- Unemployment rate (UR) ("Tasa de desempleo")
 - $UR = \frac{U}{EAP} \times 100$
- Underemployment (UER) ("Tasa de subempleo")
 - $UER = \frac{UE}{EAP} \times 100$

Labor demand

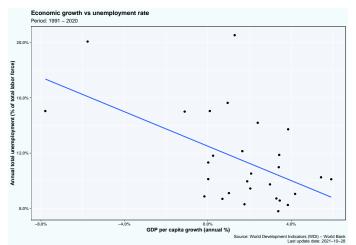
- The labor demand is the process by which the economy generates job vacancies
- How companies decide how many workers to contract?
 - Demand of the products that offer by the company
 - Wages (the price of labor)
 - Labor regulation
 - The costs of other inputs different form labor and used in production
 - The technology used by companies

Labor market indicators

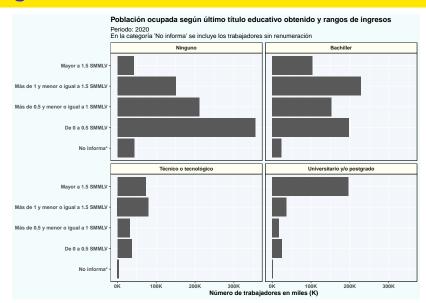


Labor demand

 In times of low economic growth, companies reduce production and therefore hire fewer workers.



Wages



Wages

Mincer equation

- $log_e(w_{it}) = log_e(w_o) + \beta_1 E d_{it} + \beta_2 E x_{it} + \beta_2 E x_{it}^2 + \epsilon_{it}$
 - log_e: natural logarithm
 - w_{it} : wage of individual i in period t
 - w_o: wage without any level of education an experience
 - Ed_{it} : years of education of individual i in period t
 - Ex_{it}: potential experience of individual i in period t which is equal to the age minus the years of education minus six
 - e_{it} : are other components of individual i in period t that might affect the wage

Labor regulation

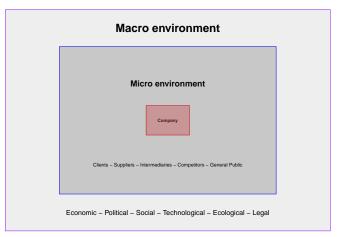
- The labor regulation refers to (Cárdenas Santamaría et al. 2013, p 407):
 - The laws governing labor contracts
 - Laws governing labor relations that empower unions to represent workers collectively
 - Social security laws governing the response to social needs such as unemployment, maternity, old age, disability, death and sickness

Labor regulation

- Resources
 - Calculadora Laboral Mintrabajo
 - https://www.mintrabajo.gov.co/atencion-al-ciudadano/tramites-y-servicios/mi-calculadora

Economic environment and the Company

 Set of economic factors and forces that influence the development of and organization.



Acknowledgments I

- To my family that supports me
- To the taxpayers of Colombia and the UMNG students who pay my salary
- To the Business Science and R4DS Online Learning communities where I learn R
- To the R Core Team, the creators of RStudio IDE and the authors and maintainers of the packages tidyverse, tidyquant, readxl, and tinytex for allowing me to access these tools without paying for a license
- To the Linux kernel community for allowing me the possibility to use some Linux distributions as my main OS without paying for a license

References

- Cardenas, Mauricio. 2020. *Introducción a La Economía Colombiana*. 4th ed. Alfaomega.
- Cárdenas Santamaría, Mauricio, Roberto Junguito, Camilo García, and María Fernanda Rosales. 2013. *Introducción a La Economía Colombiana*. Bogotá, Colombia: Alfaomega.
- Hussmanns, Ralf, Farhad Mehran, and Vijaya Varmā. 1990. Surveys of Economically Active Population, Employment, Unemployment, and Underemployment: An ILO Manual on Concepts and Methods. Geneva: International Labour Office. https://www.ilo.org/global/statistics-and-databases/publications/WCMS_215885/lang--en/index.htm.