Labor Market

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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

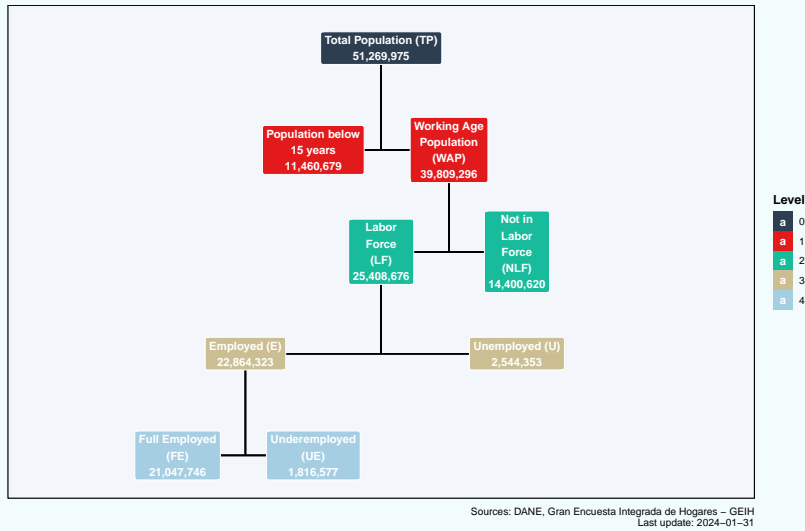Examine the evolution and characteristics of the supply and demand of labor in Colombia

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 in Colombia

Period: December 2023

Total Population (TP)
51,269,975

Population below 15 years
11,460,679

Working Age Population (WAP)
39,809,296

Labor Force (LF)
25,408,676

Not in Labor Force (NLF)
14,400,620

Employed (E)
22,864,323

Unemployed (U)
2,544,353

Full Employed (FE)
21,047,746

Underemployed (UE)
1,816,577

Level
0
1
2
3
4

Sources: DANE, Gran Encuesta Integrada de Hogares – GEIH
Last update: 2024–01–31

Labor market indicators

- **Percentage of the working age population** ("Porcentaje de población en edad de trabajar")

    - $\%WAP = \frac{WAP}{PT} \times 100$

- **Labor participation rate (LPR)** ("Tasa global de participación")

    - $LPR = \frac{LF}{WAP} \times 100$

Labor market indicators

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

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

Annual Unemployment rate (UR) and Employment rate (ER) in Colombia
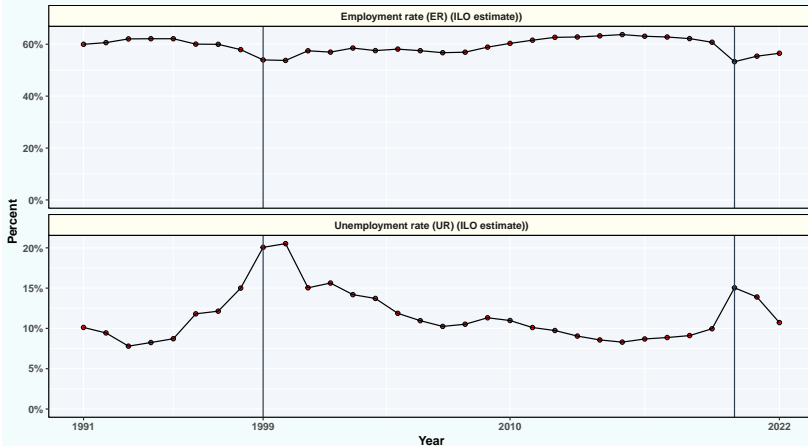UR code WDI: SL.UEM.TOTL.ZS
UR units: percent
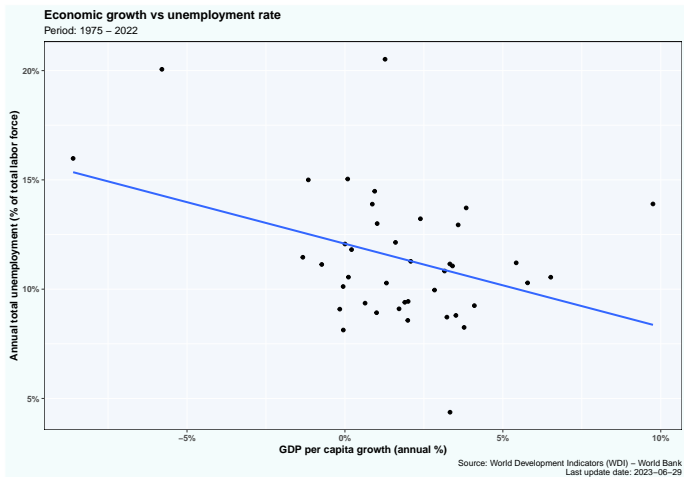ER code WDI: SL.EMP.TOTL.SP.ZS
ER units: percent
Observation: ILO estimations where ages 15 and older are considered the WAP

Source: World Development Indicators (WDI) – World Bank
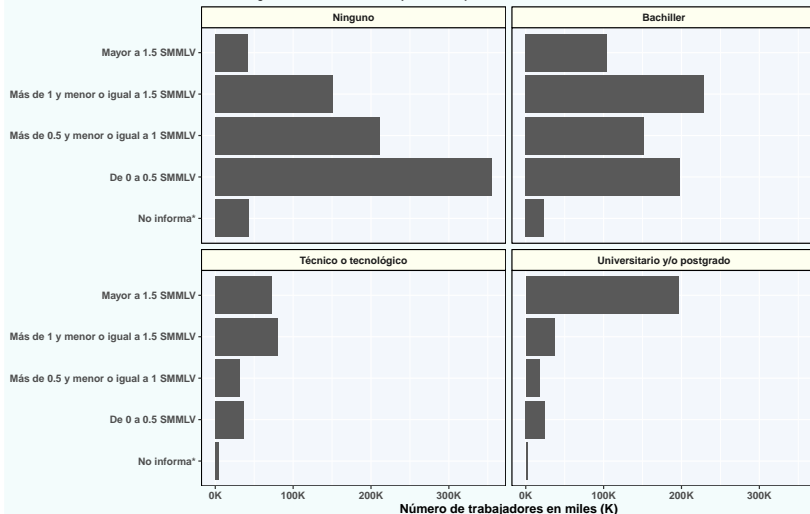Last update date: 2023–12–18

Labor demand

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

Wages

Población ocupada según último título educativo obtenido y rangos de ingresos
Período: 2020
En la categoría 'No informa' se incluye los trabajadores sin renumeración

Wages

- Mincer equation
  - $log_e(w_{it}) = log_e(w_o) + \beta_1 Ed_{it} + \beta_2 Ex_{it} + \beta_2 Ex_{it}^2 + \epsilon_{it}$
    - log_e: natural logarithm
    - w_{it}: wage of individual i in period t
    - w_o: wage without any level of education an experience
    - ϵ_{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
    - ϵ_{it}: are other components of individual i in period t that might affect the wage

Labor regulation

- The labor regulation refers to:
    - 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
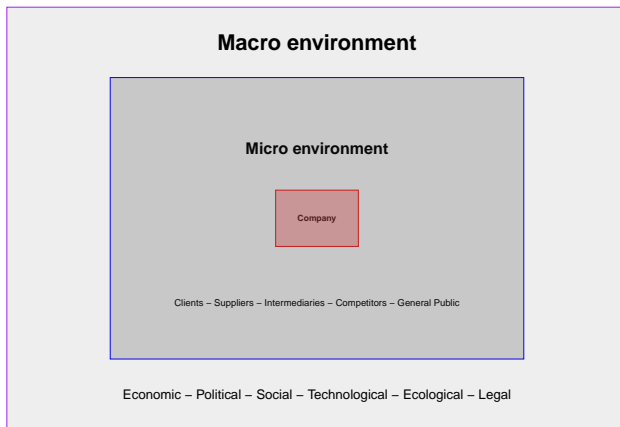
Labor regulation

- 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.

Based on https://foda-dafo.com/

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References I

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