Peru: labour market, wages and monetary policy in the aftermath of Covid-19

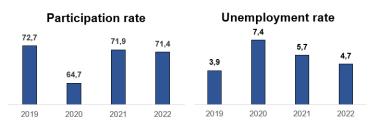
Adrián Armas, Roger Asencios, César Carrera, Renzo Castellares and Alan Ledesma

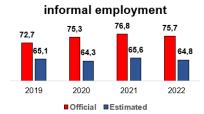
## Summary

- The focus of this paper is the response of wages to an interest rate shock. A distinctive aspect of our study is the segmentation of the labor market into formal and informal sectors.
- We find that the COVID-19 event increased wage sensitivity to an interest rate shock. The initial wage response, both before and after the pandemic, is stronger in the informal sector. However, in the aftermath of COVID-19, the wage response in the formal sector becomes closer to that in the informal sector.

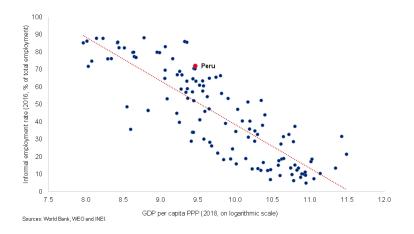
- 1 Labor Market Characteristics in Peru
- 2 Economic Context and Regional Relevance
- 3 Brief literature review, methodology and Analytical Strategy
- 4 Results
- 5 Conclusions

Peru has one of the highest labor participation rates in the region, a low unemployment rate, and a significant informal labor market

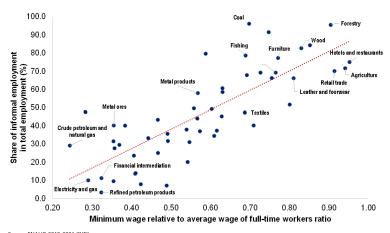




## GDP per capita and informal employment by country



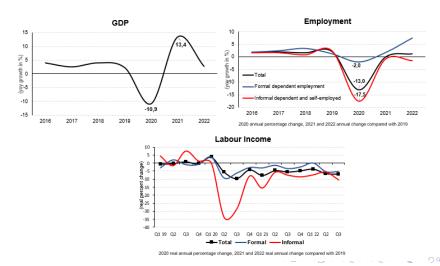
Peru: minimum wage and informal employment by industry



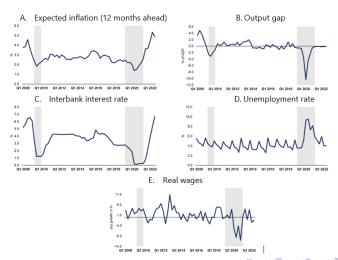
Source: ENAHO 2019-2021 (INEI).

- Peru has one of the highest labour participation rates in the region (71.9 % in 2021), mainly due to a higher participation among women (63 %).
- it has a low unemployment rate due to a large informal labour market and a lack of unemployment insurance.
- Peru have one of the highest informality rates in the region (75.7 %) and above the informality rate that would be expected given Peru's per capita income.
- There is pressure to raise the minimum wage above workers' productivity, which would result in a reduction in formal employment, moving workers with incomes close to the minimum wage into the informal sector.

Peru faced one of the largest GDP contractions in Latin America in 2020 due to severe lockdowns. Informal employment absorbed part of the economic shock but increased vulnerability



In the aftermath of Covid-19, the behaviour of labour markets suggests that agents are more forward-looking compared with the Global Financial Crisis (GFC)

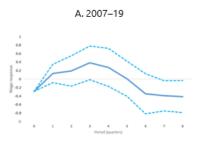


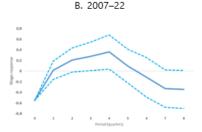
- Mankiw and Reis (2006)). It is possible that workers are inattentive to their surroundings, which also modifies the effectiveness of monetary policy.
- Alberola and Urrutia (2020) and Castillo and Montoro (2012) Informal markets may help to deal with shocks by making it easier to buffer economic activity, but they also weaken the transmission mechanism of monetary policy.
- Coibion et al (2017), Merrino (2022) There is some evidence that a monetary policy shock tends to change the wages received by different types of households.
- Di Giorgi and Gambetti (2017), Coibion et al (2017) and Merrino (2022). Households may experience a decrease in their wages when a contractionary interest rate shock hits the economy. Heterogeneous households respond differently to a shock.

## Data

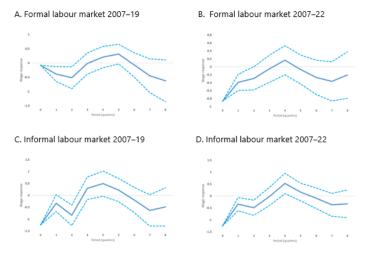
- Quarterly data on wages have been constructed from household surveys (ENAHO) and administrative records; ie the electronic payroll ("Planilla Electronica") compiled by Peru's tax authority (SUNAT).
- For 2007-2022, salaries of formal sector employees are drawn from ENAHO and SUNAT, respectively. For workers in the informal sector, wages are estimated based on ENAHO.
- Aggregate wages are the weighted averages of formal and informal sector wages.

We find that the Covid-19 event made wages more sensitive to an interest rate shock. Moreover, the wage response switches from negative to positive after one year.





After the pandemic, the initial response of wages becomes stronger and gradually disappears. Dynamics for wages in the informal sector seem to be similar before and after the pandemic



- We find that the Covid-19 event made wages more sensitive to an interest rate shock. For aggregate wages, the initial response almost duplicates that in the period prior to the Covid-19 event.
- The effect of an interest rate shock on formal labour market wages usually last three quarters. After the pandemic, the initial response of wages to this type of shock becomes stronger and gradually disappears thereafter.
- On the other hand, dynamics for wages in the informal sector seem to be similar before and after the pandemic.
- Two points to highlight: The initial wage response to an interest rate shock, both before and after the pandemic, is stronger in the informal sector than in the formal labour market; and (ii) in the aftermath of Covid-19, the wage response in the formal sector becomes closer to that in the informal sector.

## Conclusions

■ We emphasise that the Covid shock has affected supply and demand for labour at the same time, so that workers face a new labour market setup. This, over time, is forcing them to be more forward-looking.