CHAPTER 1

Poverty, Inequality and household Welfare

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

KEY MESSAGES

POVERTY, INEQUALITY
AND HOUSEHOLD WELFARE

- The two decades preceding the COVID-19 pandemic were characterized by unprecedented economic growth, followed by a significant slowdown starting in 2013. The economic expansion was pro-poor, which allowed significant progress in poverty reduction. Between 2004 and 2019, poverty in Peru dropped 38.5 percentage points, although most gains corresponded to the period between early 2000s and 2013.

- The COVID-19 shock erased a decade of progress, as the economy contracted by 11 percent and poverty increased by 10 percentage points. The losses evidenced the fragility of the previous social gains and call for course corrections aimed at recovering economic growth and shielding the social progress derived from this growth.

- This chapter analyzes the progress in monetary and nonmonetary dimensions of poverty, focusing on the two decades before the COVID-19 crisis and on the years of the crisis. Monetary poverty and inequality are characterized, as well as the access to, distribution, and quality of basic services. The chapter also delves into the Peruvian labor market, which is the main contributor to poverty reduction of the past decade, but also one of the biggest sources of the recent fragility of social gains.

- The analysis shows that poverty has become an urban phenomenon, particularly after the COVID crisis, with more than two-thirds of the poor living in urban centers. The urban poor have significantly lower levels of productive assets (human capital, financial capital, land) and access to services/markets than the nonpoor.

- Over the long-term, Peruvian households experienced a significant improvement in nonmonetary welfare indicators, such as the official unsatisfied basic need (UBN) measure. There has also been considerable progress in access to services, particularly access to piped water and access to electricity, with access to sanitation lagging. However, despite the progress, access to a package of basic goods is low, uneven, and of low quality.

- Labor market outcomes – which in the past two decades contributed to 86 percent of the decline in poverty – face structural weaknesses, such as high informality and low productivity, in the effort to continue performing as a driver of poverty reduction.

- Moving forward, Peru needs to focus on policies to restore growth, such as incentivizing the scale-up of firms and prioritizing investments in high-growth-potential sectors. The country should also support Peruvian households in becoming more resilient to future shocks by designing more adaptative and universal social protection systems.

1.1. From the golden years to turbulent times: Progress in poverty and household welfare

Pre-COVID Trends in monetary poverty, inequality, and the middle class

Before the COVID-19 crisis, the Peruvian economy experienced two decades of unprecedented economic growth that doubled gross domestic product (GDP) per capita, though there was a significant slowdown starting in 2013. While the region averaged a 3.6 percent real GDP growth rate between 2004 and 2021, Peru registered an average real GDP growth of 6.6 percent, and GDP per capita doubled to S/zzz17,012 (Figure 1, panel a). The outstanding economic performance was explained by successful macrostructural reforms, support for monetary and fiscal policy, and favorable exogenous conditions due to the commodity price boom, which was coupled with significant net inflows of foreign direct investment (FDI).[1] The end of the commodity boom, the slowdown in China, and the decrease in private investment due to the absence of new large-scale mining projects caused a slowdown of the Peruvian economy starting in 2012. From 2013 to 2019, average real GDP growth was 3.1 percent, and it went down to 2.2 percent in 2019. The deterioration of the terms of trade (−20 percent between 2011 and 2015) revealed the high vulnerability of the economy to external shocks driven by limited diversification.[2] It is estimated that, in the last 15 years, external factors have explained 54 percent of GDP growth variability.[3]

The expansion of the economy pre-COVID was pro-poor, with higher growth of the welfare of households in the bottom 40 percent, which supported a reduction in income inequality.[4] Over the 2004–13 period average per capita household consumption growth of the poorest 40 was 6.2 percent in comparison with an annualized average growth of 4.9 percent (Figure 1, panel b). As a result of the slowdown, between 2013 and 2019 average per capita expenditure grew almost at the same rate as the rate among the bottom 40, at 1.6 percent and 1.8 percent, respectively. Similarly, per capita household income grew at a higher rate among the lower percentiles of the income distribution than at the higher percentiles, as shown by the downward slope of the growth incidence curve (Figure 1, panel c).[5] Pro-poor income growth mostly occurred in the period between 2004 and 2013 and among the urban population (Figure 1, panel c and Figure 1, panel d). Peru's Gini coefficient went from 0.50 in 2004 to 0.42 in 2019, a more pronounced reduction than in the rest of the region.[6] The Gini in Latin America and the Caribbean went from 0.55 to 0.52 in the same period (Figure 2, panel b).

4. Income inequality is measured with the Gini coefficient of the per capita household income, based on SEDLAC's income definition and data.

5. Growth Incidence Curves are based on per capita household income, as per SEDLACs income definition and data.

6. Although the Peruvian Household Survey reveals a decrease in inequality, little is known about the concentration of income in the highest 99th percentile of the income distribution over time. This is because people in the highest percentiles tend to under-report their income in these surveys (Yamada et al, 2012). Using National Accounts and Blanchet et al (2019) methodology to correct ENAHO, the Gini index increases from 0.48 to 0.63. Moreover, the concentration of total income by the top 10% increases from 35% to 53% after adjustment while the concentration of the top 0.1% increases from 2.6% to 11.6%.

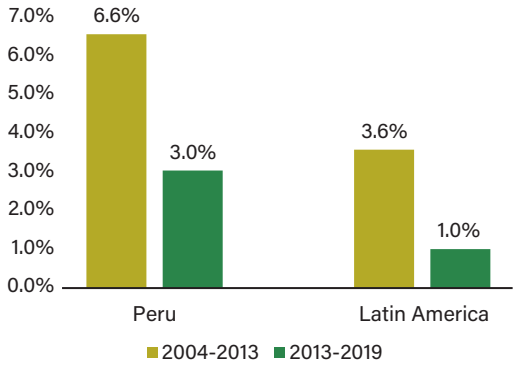
1. Several structural reforms were implemented such as the adoption of a fiscal rule, inflation targeting and autonomy of the Central Bank, flexibility of the exchange rate, trade and financial opening and legal framework for foreign and private investment, among others. Accordingly, the country signed key trade agreements such as those with the United States (2006), Japan (2011) and the European Union (2012). The main policies implemented in the 1990s included autonomy of the Central Bank, flexibility of the exchange rate and trade and financial opening. During that period, prices of commodities significantly increased, favoring mineral exports. As a result, private sector increased its contribution to economic growth and private investment participation in GDP increased from 12% of GDP in 1993 to 18% in 2019. Furthermore, net FDI inflows in 2019 amounted to almost US$6.8 billion (2.8 percent o f GDP), equivalent to 8 times the 2000 levels (World Bank, 2022).

2. Castilla, 2021.

3. MEF, 2019.

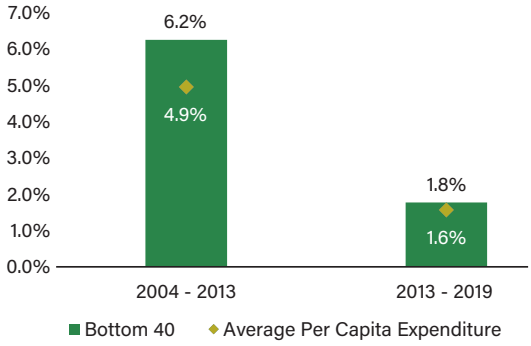
Figure 1. Economic growth and Poverty reduction in Peru and Latin America, 2004-2021

a. Average annualized GDP growth rate, Peru vs Latin America and Caribbean, 2004-2019



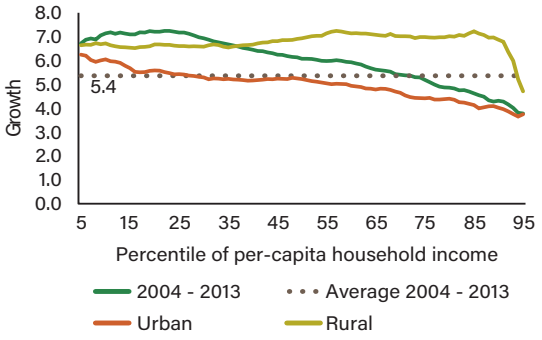
Source: Banco Central de Reserva del Peru (BCRP) and WBG Indicators.

b. Average annualized growth rate in per capita expenditure, bottom 40 and the mean, 2004-2019



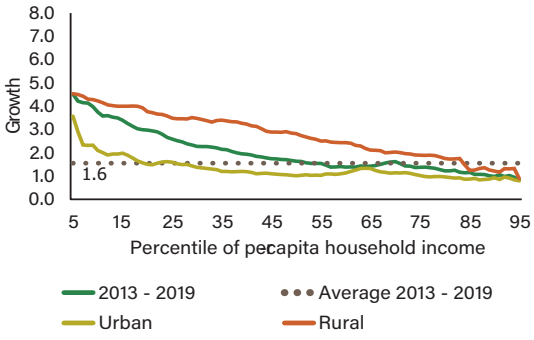
Source: National Household Survey (ENAHO) by Instituto Nacional de Estadistica (INEI).

c. Growth incidence curves (GICs) at the national, urban and rural level, 2004 - 2013



Source: Own calculation using SEDLAC data and income definitions
Note: GICs are calculated as the annualized growth rate of per capita income for every percentile of the income distribution between 2004 and 2013.

d. Growth incidence curves (GICs) at the national, urban and rural level, 2013 -2019



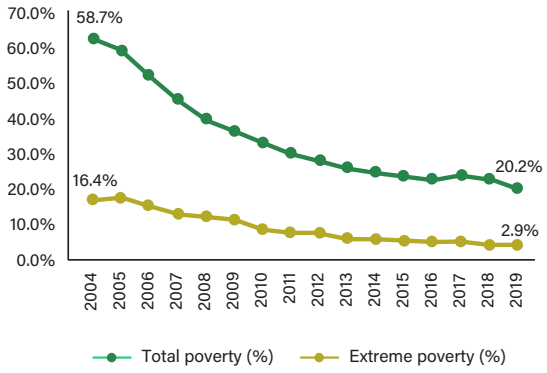
Source: Own calculation using SEDLAC data and income definitions
Note: GICs are calculated as the annualized growth rate of per capita income for every percentile of the income distribution between 2013 and 2019.

Economic growth and lower inequality contributed to better living conditions with both the poverty rate and extreme poverty rate declining significantly between 2004 and 2019. The official poverty rate declined from 58.7 percent in 2004 to 20.2 in 2019, although most gains correspond to the period between early 2000s to 2013.[7] Peru went from having almost two-thirds of its population under poverty in 2004 to a rate of 23.9 percent in 2013, dropping an unprecedented 34.8 percentage points. Poverty was decreasing at an average of 3.8 percentage points per year. However, from 2013 onward, poverty and inequality reduction slowed, even before the COVID-19 pandemic. In the following six years between 2013 and 2019, poverty decreased only 3.7 percentage points, to 20.2 percent. Following this path, extreme poverty decreased the most during 2004–13, from 16.4 percent to 4.7 percent (11.7 percentage points). During 2013–19 it dropped an additional 1.9 percentage points to 2.9 percent.

In comparison with the rest of the region, poverty rates in Peru over the 2004–19 period went from above average to average. In the early 2000s, Peru's poverty rate was 12 percentage points above the average level of Latin America and the Caribbean region (according to the international poverty line of US$6.85 per day, 2017 purchasing power parity [PPP]). By 2019, the country had caught up to the rest of the region at a poverty level of around 29 percent. In addition, Peru was among the top countries with respect to poverty reduction-to-GDP growth elasticities, with an average elasticity of −1.29 for the period between 2004 and 2019.[8]

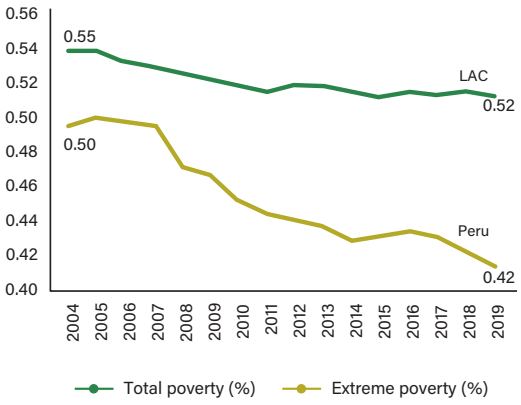
Figure 2. National Poverty and Inequality trends in Peru, 2004 – 2019

a. National Poverty and Extreme Poverty rates, 2004-2019 (as a percentage of total population, National Poverty Lines)



Source: INEI –ENAHO
Note: National poverty is caluclated based on the percentage of population whose per capita monetarized expenditure are below the national poverty line.

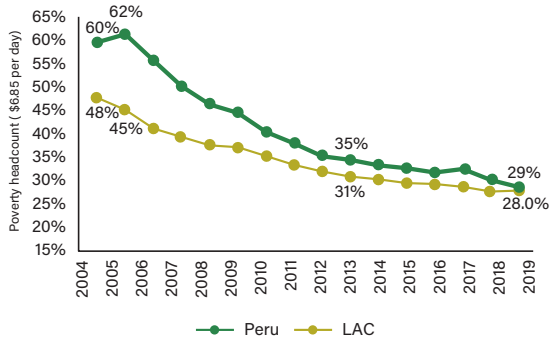
b. Gini coefficient in Peru vs LAC, 2004 – 2019



Source: World Bank LAC Stats Team using SEDLAC data.
Note: Gini coefficient is calculated based on per capital household income, using SEDLAC's income definition.

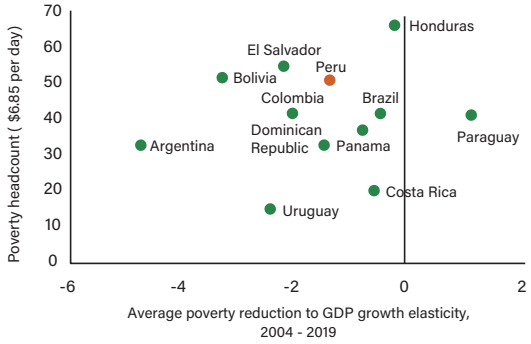
7. Peru uses household consumption per capita and monetary poverty lines to measure poverty and extreme poverty. The poverty and extreme poverty lines are constructed based on the minimum cost of acquiring a food basket necessary to achieve adequate living conditions, and this basket varies by geographic region as well as by rural and urban situations. The national poverty line in local currency for 2021 was 378 soles per capita per month and the national extreme poverty line was 201 soles per capita per month.
8. For every additional percentage point of GDP growth in the economy, Peru's poverty reduces in 1.29 percent.

c. Poverty using international line ($6.85 per day) in Peru vs LAC, 2004 – 2019



Source: WBG Indicators

d. Poverty to growth elasticities by country in LAC, 2004 – 2019



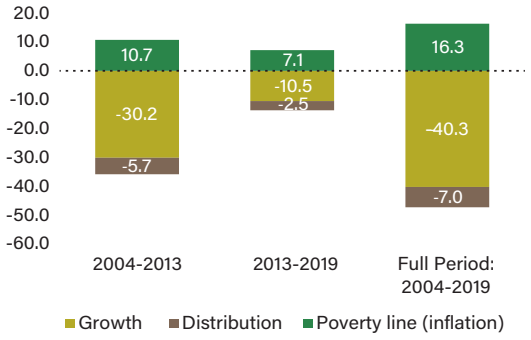
Source: Own elaboration using WBG Indicators

The middle class more than doubled pre-COVID. Based on the middle-class definition of living with a daily income between US$14 and US$81 (2017 PPP), this indicator rose from 14 percent in 2004 to 34 percent in 2019. While real per capita annual spending in the poorest decile increased by 107.1 percent between 2004 and 2021, annual spending in the richest decile increased by 15.4 percent. By 2019 according to the national line, 46 percent of the population was considered nonvulnerable.[9] This also meant a significantadvance from 2004, whereby only 21 percent of the population was nonvulnerable.

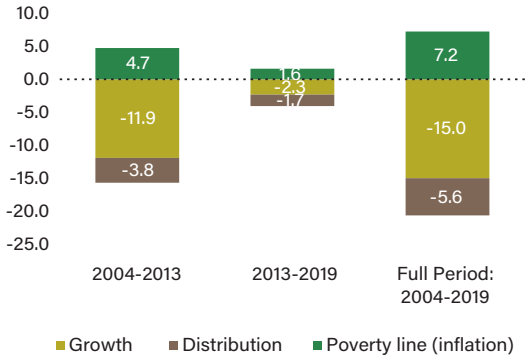
Economic growth was the main factor behind poverty reduction, with the rest explained by better redistribution. Estimates of the direct impact of economic growth (driven by income), changes in the shape of the income distribution, and changes in the cost of the consumption basket due to inflation show that 85.1 percent of the reduction in poverty (following the US$6.85 / day line) between 2004 and 2019 was explained by economic growth, while the remaining 14.9 percent was explained by redistribution. Finally, the rise in prices that increased the value of the poverty line counteracted poverty reduction over this period. Furthermore, as Figure 4 reflects, those years in which the economy grew at its slowest pace were also the years in which poverty was little reduced.

Figura 3. Relative contribution of growth and redistribution on poverty reduction 2004 –2019

a. Change in Poverty ($6.85 /day)



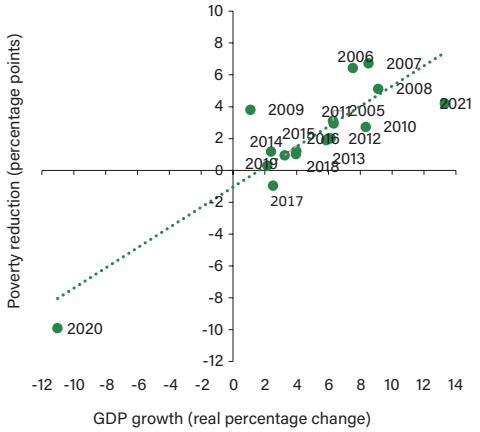
b. Change in Poverty ($2.15 /day)



Source: Own estimations using the Shorrocks-Kolenikov decomposition, SEDLAC data and 2017 International Poverty Lines.

9. INEI, 2020. Vulnerable and non-vulnerable population defined by INEI are those who live in households whose per capita expenditure is sufficient to purchase a food and non-food basket (housing, clothing, education, health, transportation, etc.). The vulnerable are those at risk of falling into poverty in the face of any change in economic conditions. This is mainly because this population does not accumulate savings to prevent and face difficult or unexpected events.

Figure 4. GDP growth and poverty reduction, 2005–21
real change, percentage points



Source: Estimates based on INEI-Enaho data.

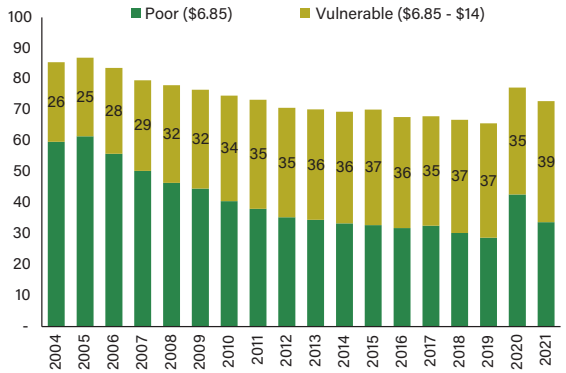
Monetary poverty, inequality, and the middle class after COVID

Long-term improvements in household welfare came to a sudden halt in 2020 with the COVID-19 pandemic, which contracted the economy by 11 percent and caused poverty to increase by 10 percentage points. The economy contracted 11 percent in 2020, its biggest fall in the last 30 years and the biggest fall registered in any country in Latin America during that year. Peru was the country with one of the highest number of deaths per capita in the world, at a rate of 6,000 people per million.[10] The crisis eliminated more than one decade of progress in poverty reduction in the span of a year. In 2020, the national poverty rate increased to 30.1 percent, a level equivalent to 2010. Extreme poverty also increased from 2.9 percent in 2019 to 5.1 percent in 2020.

Two years after the beginning of the pandemic, economic activity appears to have recovered but at the expense of higher poverty rates driven by lower labor incomes and the overall lower quality of employment. GDP grew at a 13.3 percent rate in 2021 and is estimated to have reached 2.7 percent in 2022, getting back to the 2019 rate. Despite economic recovery, poverty did not recover to pre-pandemic levels, reaching 25.9 percent in 2021, a level comparable with that of 2012. Extreme poverty in 2021 decreased to 4.1 percent—the same level as in 2015. Moreover, between 2019 and 2021 informality went from 72.7 percent to 76.8 percent, which represents 693,500 new informal jobs. Furthermore, average monthly labor income was on average 5 percent lower in 2021 than the pre-pandemic level, and expenditure was on average 3 percent lower in 2021 than the pre-pandemic level.

In addition to higher poverty, the COVID-19 crisis also impacted the middle class, who transitioned into poverty and to the vulnerable group.[11] The percent of the middle class, measured by the international lines (US$14–US$81 a day, 2017 PPP), went from 33.7 percent in 2019 to 22.4 percent in 2020 and 26.7 percent in 2021. The vulnerable class, measure by the international lines (US$6.85–US$14 a day, 2017 PPP), first shrank from 37.0 percent to 34.6 percent between 2019 and 2020, indicating a transition to poverty, and then grew to 39.2 percent in 2021 (Figure 5), its highest level since 2004.

Figura 5. Poor (US$6.85) and Vulnerable (US$6.85 - US$14), 2004 – 2021

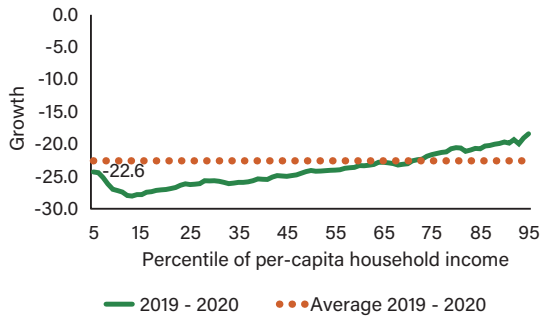


Source: Poverty and vulnerability estimates using SEDLAC (CEDLAS and the World Bank).

10. More details on the incidence of COVID-19-related death in Chapter 2.unexpected events.
11. The vulnerable group is defined as the population whose per capita family income lies between $6.85 and $14 a day, according to the 2017 International Lines. Per capita family income is estimated using SEDLACs definition and data.

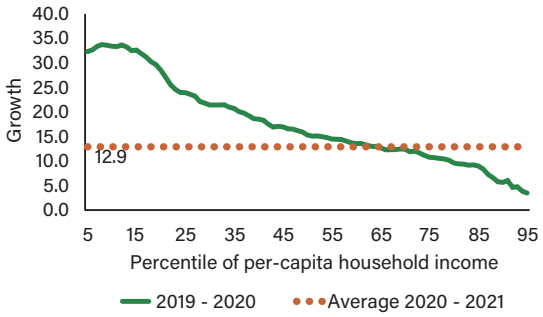
The COVID-19 crisis widened inequalities in 2020 by affecting more the income of those in the lower end of the distribution, while the recovery was pro-poor. The Gini coefficient increased from 0.416 to 0.438 between 2019 and 2020. Moreover, the annualized income growth of those at the lower end of the distribution suffered a greater fall than those at the top of the income distribution, as suggested by the upward trend of the growth incidence curve (Figure 6). In contrast, the start of the recovery has been pro-poor, with the recovery of employment among the poor and given the government transfers. In 2021, annualized income growth was higher among the poor than among those at the top of the distribution (Figure 7). As a result, the Gini coefficient dropped to 0.403, a level below the pre-pandemic level. Although the current state is one of less inequality, it is a worse situation than before the pandemic, as labor income is on average lower for all and poverty is higher.

Figura 6. Growth Incidence Curve, 2019 - 2020



Source: Own calculation using SEDLAC data and income definitions
Note: GICs are calculated as the annualized growth rate of per capita income for every percentile of the income distribution between 2019 and 2020.

Figura 7. Growth Incidence Curve, 2020 - 2021

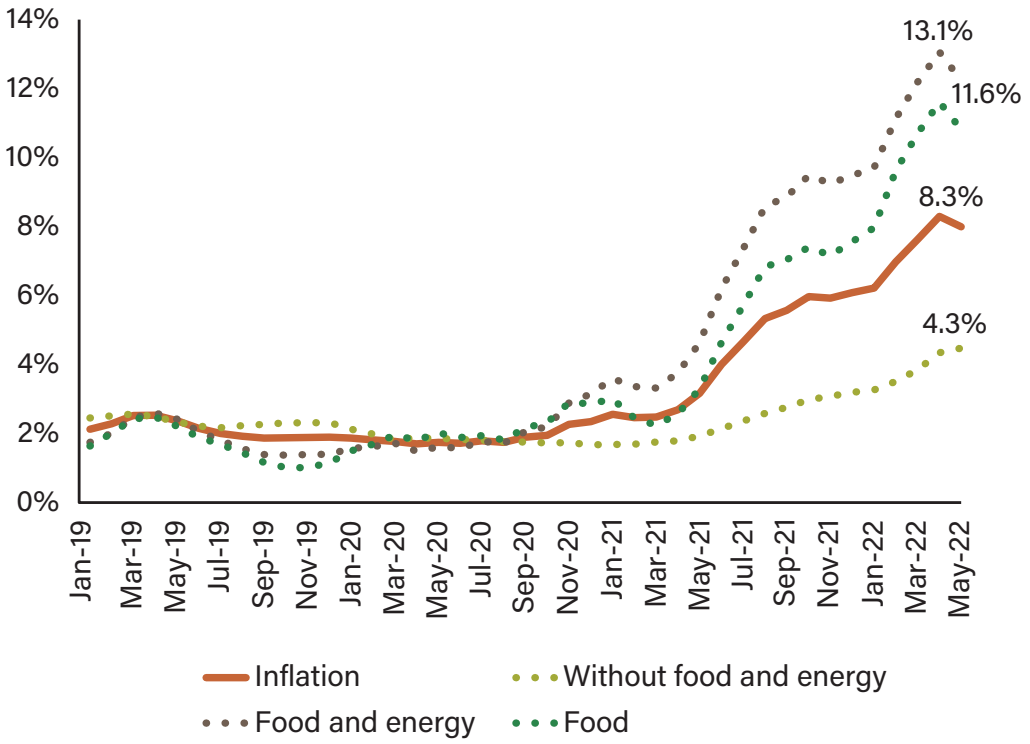


Source: Own calculation using SEDLAC data and income definitions
Note: GICs are calculated as the annualized growth rate of per capita income for every percentile of the income distribution between 2020 and 2021.

The recovery from the COVID-19 crisis has been hindered by external shocks, such as the war in Ukraine, associated with the highest inflation in over 30 years and likely higher poverty rates. The rise in prices in Peru started in mid-2021, as a result of the sizable increase in liquidity to counteract the fall in demand during the COVID-19 crisis. Inflation was exacerbated in 2022 because of the war in Ukraine. The increase in prices has had a significant impact on Peru's economy. Inflation in May 2022 was 8.3 percent, the highest rate in the past 30 years. Most of this inflation comes from food and energy. Food inflation was 11.6 percent, and energy inflation was 22.0 percent (Figure 8). [12] Followed by political instability, the government has not been able to mitigate the increase in prices. In addition, Peru is not an oil producer, and its supply chains are complex, leaving it at a worse situation than its peer countries. Inflation eroded Peruvian's disposable income. Estimates from 2021 suggest that additional inflation had a direct negative effect on poverty reduction of 1.4 percentage points (using the National Poverty Line, see estimates in Box 1).

12. BCRP, Reporte de inflación, June 2022.

Figure 8. CPI Inflation by components (year over year percentage change)



Source: BCRP, 2022

According to estimates for 2022, additional inflation may have hampered prospects of poverty reduction by 2 percentage points. It is possible to estimate the deviation of the trajectory of poverty reduction in 2022 with respect to pre-Ukraine war estimates based on multiple inputs including: GDP growth rate and population projections, inflation estimates, and historic employment and income elasticities. Based on this approach, Peru would be among those in the region with the highest headcount variation due to inflation, only below Nicaragua, Colombia and Paraguay (Figure 9). Roadblocks and protests also likely worsened the food crisis and eroded economic opportunity. Moreover, political uncertainty continues to delay the economic recovery because of the absence of reforms needed to raise employment and investments. Under these circumstances, poverty rates may not reach pre-pandemic levels before 2025 (see more details of the results and methodology in Box 1).

Box 1. Poverty impacts of additional inflation

Additional inflation observed during 2021 is estimated to have moved an additional 400,000 people into poverty. By contrasting the per capita 2021 family expenditure outcomes with the 2020 poverty line augmented by 2 percent inflation (average inflation of the 2017-19 period), it is possible to identify the individuals who would not have fallen under the poverty line if inflation had remained in its target range. Under a 2020 inflation scenario, national poverty in 2021 would have been 1.4 percentage points lower than the actual number. In rural areas, poverty would have been 2.1 percentage points lower (Table 1).

Table 1. National poverty with and without inflation, 2021

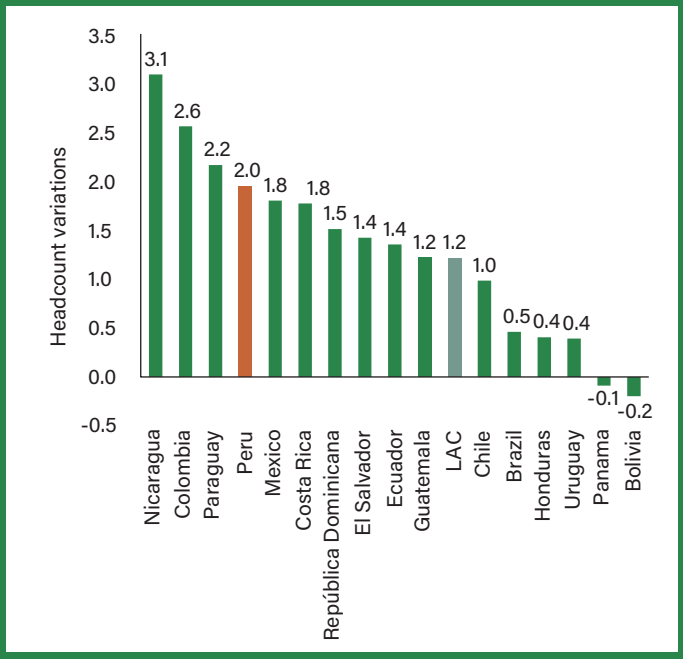
PERU - Poverty 2021

	2021 (1)	2021 without inflation (2)	2021 without additional inflation (3)	Diff (p.p) (1) - (3)
National	25.9%	23.4%	24.5%	1.4%
Urban	22.3%	20.2%	21.2%	1.1%
Rural	39.7%	36.1%	37.6%	2.1%

Source: Own estimation based on ENAHO 2020 and 2021.

Based on GDP growth rates, inflation forecasts, population projections, and past sectoral growth-employment elasticities, it is possible to provide an estimate of deviation of the trajectory of poverty reduction in 2022 with respect to the pre-Ukraine war period. Based on this approach, it is estimated that Peru would have had a poverty reduction of 2 percentage points lower in the absence of additional inflation in 2022. From the countries considered in the analysis, Peru ranks fourth as the country with the highest headcount variation impact due to inflation (Figure 9).

Figure 9. Expected headcount variations (US$6.85), 2022 with vs without inflation crisis (percentage points)



Source: World Bank 2023

Higher inflation caused downward social mobility along the entire income distribution. Estimates show that 1.2 million people suffered from social downward mobility.[a] A little over half of them went from vulnerable (between US$6.85/day and US$14/day) to poor (less than US$6.85/day), and the remaining transitioned from middle class (between US$14 and US$81/day) to vulnerable. The new poor and vulnerable were more likely to live in urban areas than their counterparts, as well as be headed by women, have higher educational attainment, be less informal, and more likely to be salaried workers (Table 2).

Table 2. Profile of the New Poor and New Vulnerable from additional inflation

	New Poor	Old Poor	New Vulnerable	Old Vulnerable
Population	659,363	12,342,131	506,466	11,849,001
Household Characteristics				
Area: Urban	82.0	61.4	93.4	87.0
Household size	4.9	4.7	4.1	4.4
Dependency	40.4	42.7	28.9	34.4
Household head				
Age (mean)	50.0	50.0	52.2	52.0
Male (%)	60.3	66.1	64.3	62.7
Education level (%)				
Low Skilled	55.0	64.7	36.8	49.3
High Skilled	45.0	35.3	63.2	50.7
Inactivity (%)	8.2	10.1	8.2	9.8
Employment (%)	90.5	87.3	90.2	88.5
Salaried	46.9	26.7	55.5	48.2
Self-employed	46.9	69.8	43.3	50.1
Unpaid	3.8	3.5	1.3	1.6
Agriculture	31.0	56.6	11.4	24.0
Industry	20.9	11.9	21.9	20.7
Services	48.1	31.5	66.7	55.2
Unemployment (%)	1.3	2.6	1.6	1.7
Informality (%)	78.5	90.8	64.0	74.8

Source: World Bank 2023.
Note: Estimates based on microsimulation for 2022. The new poor and vulnerable are identified using **estimates** of additional inflation and the SEDLAC dataset. Version March 2023.

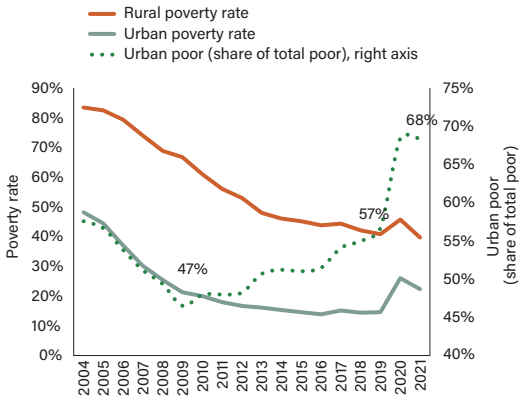
a. Estimates using SEDLAC data and the 2017 PPP international poverty lines.

Spatial disparities in poverty reduction

Despite faster poverty reduction in rural areas over the last two decades, poverty incidence in rural areas was almost 1.8 times higher than in urban areas in 2021. Poverty incidence in rural areas fell from 83.4 percent in 2004 to 39.7 in 2021 (43.7 percentage points), while poverty in urban areas went from 48.2 to 22.3 percent in the same period (25.9 percentage points). Likewise, in the same period the extreme poverty rate in rural areas fell from 41.6 to 12.1 percent, while in urban areas it decreased from 5.7 to 2.1 percent.

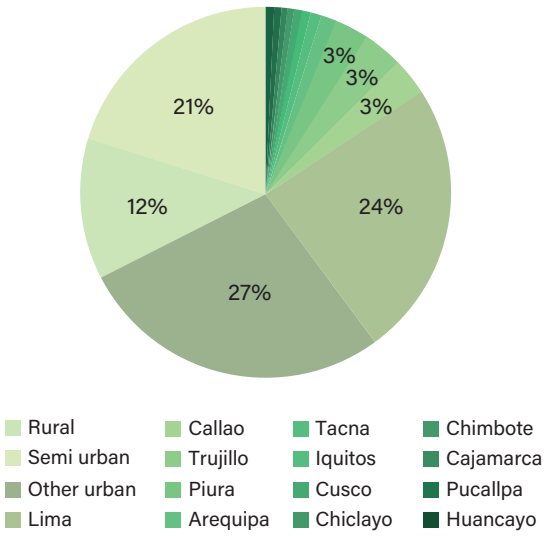
Poverty has become an urban phenomenon, particularly after the COVID crisis, with more than two-thirds of the poor living in urban centers. In 2004, the share of the poor living in urban areas was 57.6 percent. In 2008–13, this balance shifted, and more than half of the poor lived in rural areas. From 2013 onwards, Peru experienced an urbanization of poverty as the share of poor living in urban areas has been constantly increasing. By 2019, before the COVID-19 pandemic, urban areas accounted for 56.7 percent of total poor, and this proportion significantly increased after the crisis to 68.7 percent in 2021 (Figure 10). This is consistent with the fact that higher population density in urban areas meant a higher risk of contagion and a greater need for containment measures. In fact, rural poverty has already recovered, and it is urban poverty that is driving the setback in poverty reduction. Moreover, urban poverty is concentrated in Lima (24 percent of the poor), and, together with the 12 next biggest cities in the country, they contain 40 percent of all the poor population (Figure 11). The urbanization of poverty and concentration in pockets in urban districts call for an updated strategy to eradicate poverty. The slowdown of economic activity, external shocks, low productivity, and high informality in labor markets, as well as domestic and international migration are among the main correlates of such an increase in urban poverty and vulnerability (see for example Box 2).

Figure 10. The urbanization of poverty: poverty by area, 2004–21



Source: INEI-Enaho.

Figure 11. Share of the poor, by urban-rural area, 2021



Note: Data on the poor by district are derived from small area estimates using ENAHO 2017 and 2021 and the 2017 census. Districts are grouped at the city level among the 13 biggest cities. The remaining districts are grouped in other urban areas, semiurban areas, and rural areas as defined by INEI.

Box 2. Venezuelan migration in Peru

About 6.8 million Venezuelans left their country escaping from an economic, social, and political crisis, and this has become the second largest external displacement crisis in the world.[13] Peru is the second country in the region that has embraced more Venezuelan migrants and refugees, after Colombia, and the first in number of refugee applicants. It is estimated that 1.4 million Venezuelan migrants and refugees were living in Peru in 2022.[14] The immigrant and refugee population settled mostly in coastal regions, and about 84 percent are concentrated in Lima and Callao.

The inflow of Venezuelan migrants and refugees represented a major challenge for the provision of public services, particularly in areas with higher concentrations of migrants. In response, public education and health systems had to employ targeted efforts to meet the increased demand. In 2019, it was estimated that the public education system would require 118,000 additional spaces to teach Venezuelan students, of which only 35,000 were incorporated at that time.

Registered Venezuelan immigrants and refugees arriving to Peru have, on average, a higher educational level compared with Peruvians. However, their entry in the labor market has occurred in disadvantaged conditions and with a degree of skills mismatch (according to results from the 2018 Survey for Venezuelans Living in Peru, ENPOVE).[a] Venezuelan workers earned around 37 percent less per hour, compared with Peruvian workers performing similar functions. Most of the dependent workers did not have a contract and worked in small businesses. As a result, they did not have employment-based health insurance. The vulnerability of their jobs was mainly explained by their migration status and their limited ability to validate their educational degrees.

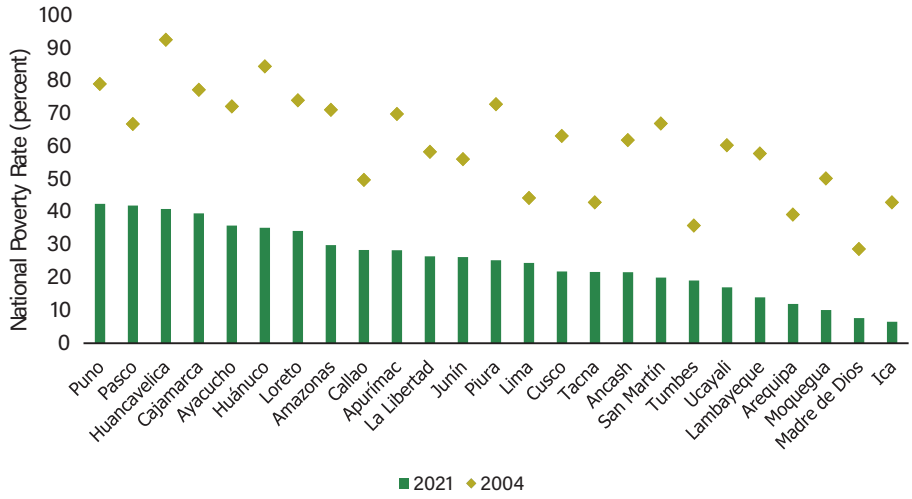
Venezuelan immigrants and refugees appeared to have been harder hit by the pandemic than Peruvians. The concentration of Venezuelan immigrants and refugees in urban areas increased their exposure to COVID-19. Likewise, the higher incidence of poverty and smaller productive asset base before the pandemic among these people (18 percent compared with 13 percent among Peruvians in comparable regions) limited their coping mechanisms. Moreover, Venezuelan immigrants and refugees faced the pandemic under more vulnerable labor and living conditions and less access to health insurance. Furthermore, they were not eligible to benefit from governmental policy responses (cash transfers) to protect them against the income shocks of the COVID-19 crisis.

Although poverty rates are significantly lower today in all Peruvian regions than two decades ago, the process of poverty reduction across regions has been uneven and the pandemic has meant a setback for most regions. Most regions halved their poverty in the period between 2004 and 2021 (Figure 12). In 2021, one Peruvian in four was poor, but geographic analysis shows a heterogenous incidence. In Cajamarca, Huancavelica, Pasco, and Puno, poverty was around 40 percent, while, in Ica, Moquegua, and Arequipa, it was only 11 percent. These trends are observed in income as well. In 2021, while monthly average labor income in Lima amounted to S/1,429, it was only S/663 in Huancavelica, one of the

13. BCRP, Reporte de inflación, June 2022.
14. UNCHR, 2022.
a. Survey Directed to the Venezuelan Population Residing in the Country (ENPOVE).

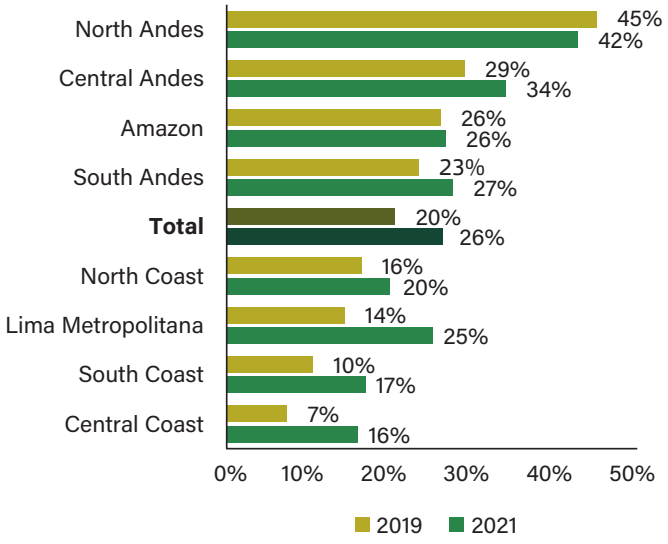
poorest regions in the country. Moreover, because of the pandemic, in 2021 most of the regions registered higher poverty rates compared with 2019, and one Peruvian in four was poor, but a geographic analysis shows differences across the country. In the North and Central Andes, poverty was 42 and 32 percent, respectively, while, in the Central and South Coast, it was only around 17 percent. In Lima, it was 25 percent. In addition, in all regions except for the Northern Andes, the poverty was greater in 2021 than in 2019 (Figure 13).

Figure 12. National poverty at regional level, 2004-2021 (as percentage of total population)



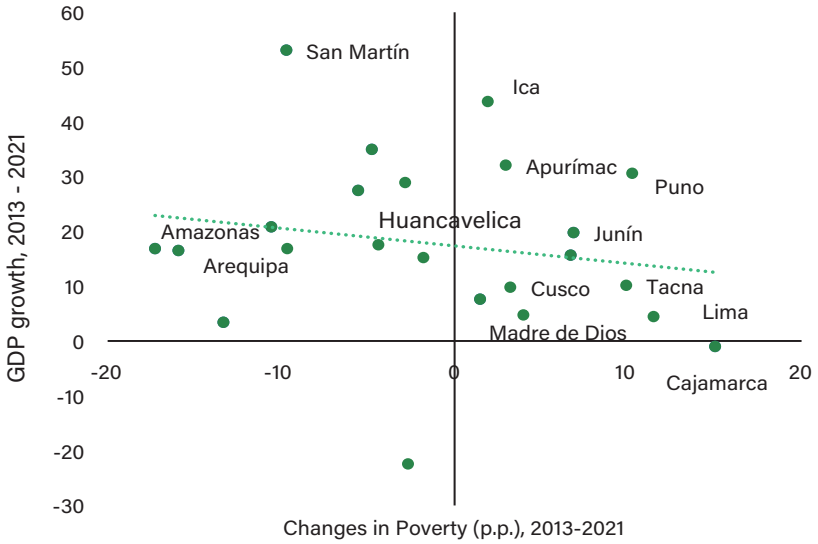
Source: INEI-Enaho.

Figure 13. National poverty by natural region, 2019–21 (as percent of total population)



Source: INEI-Enaho.

Figure 14. Changes in poverty reduction and GDP growth, 2013 - 2021



Source: INEI – Enaho.
Note: Apurimac is excluded from the graph because it is an outlier: growth between 2013 and 2021 was 180 percent, and poverty reduction was 14 percentage points.

Overall, there has been a process of poverty (and extreme poverty) convergence across regions in Peru, but progress has stalled since 2015. In Huancavelica, extreme poverty decreased 56 percentage points, going from 66 percent to 10 percent. In Huánuco, extreme poverty dropped by 45 points, with rates going from 51 percent in 2004 to 6 percent in 2021. Despite the decrease, Huancavelica still ranks third in terms of extreme poverty rates in 2021, and Huánuco eighth across the 25 regions, showcasing the persistence of poverty in these regions. Between 2009 and 2015, regions with higher poverty rates were experiencing the biggest reductions in poverty. However, in the second half of the decade, this pattern stalled, with most regions experiencing stagnation in subnational convergence, and few even experiencing an increase in poverty incidence (Figure 15 and Figure 16).

Figure 15. Poverty reduction at the regional level vs initial poverty conditions, 2004 - 2013

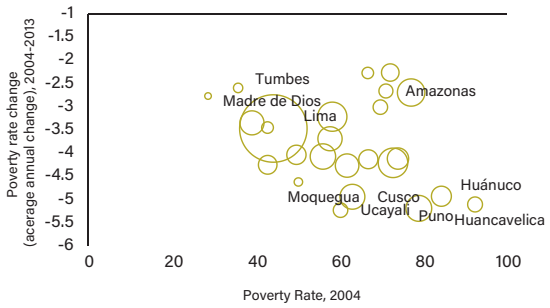
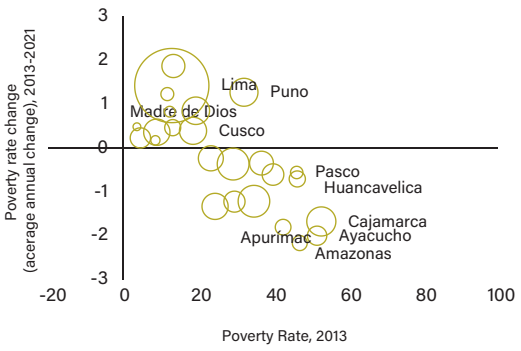


Figure 16. Poverty reduction at the regional level vs initial poverty conditions, 2013 - 2021



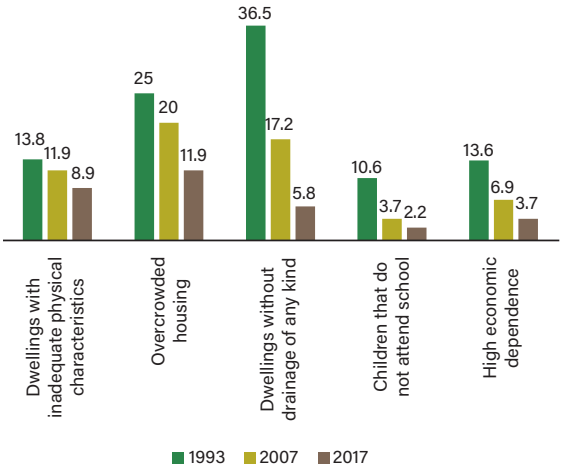
Source: Based on INEI - Enaho.
Notes: bubble size represents the size of the population. The graph shows in the x-axis the starting point in terms of poverty rate, and in the y-axis the change over the period (negative changes or below zero in the x-axis means a decline in poverty).

1.2. Progress in non-monetary dimensions of poverty

Over the long-term, Peruvian households experienced a significant improvement in nonmonetary welfare indicators such as the official unsatisfied basic need (UBN) measure. The UBN approach, derived from microdata of the population census, considers a set of indicators that captures the lack of access to basic services and infrastructure, such as adequate housing, sanitation, and education.[15] The share of individuals with at least one UBN fell from 56.8 percent in 1993 to 40.7 in 2007 and 25.3 in 2017. Moreover, it has decreased across almost all districts over the past 30 years. In particular, from 1993 to 2007, the median of UBN poverty at the district level went from 87.1 to 62.6 percent and reached 35.3 percent in 2017. Furthermore, in both periods, the most populous districts seem to register the lowest levels of the UBN measure.

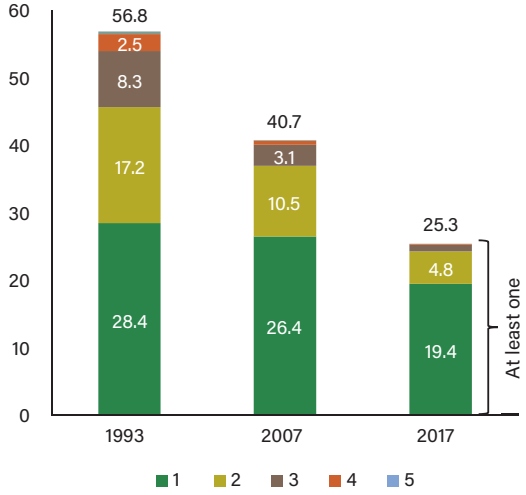
All indicators of the official UBN measure have improved over the past two decades, with most households today not having any social deprivation considered by the UBN index. On one hand, as shown in Figure 17, the deprivation that registered the most notable improvement was the lack of sewerage services, which fell by 30.7 percentage points from 1993 to 2017 to 5.8 percent. Moreover, overcrowding is the deprivation with the highest incidence as it affected 11.9 percent of the population in 2017, followed by dwellings with inadequate physical characteristics, which has an incidence of 8.9 percent. On the other hand, the decomposition in terms of number of deprivations shows that the share of the population with only one deprivation fell from 28.4 percent in 1993 to 19.4 percent in 2017. In the same period, the proportion of the population with two deprivations decreased from 17.2 to only 4.8 percent, and, in 2017, the incidence of more than three deprivations was at only 1 percent at most (Figure 18).

Figure 17. Evolution of Unsatisfied Basic Needs by type of deprivation, 1993-2007-2017



Source: Own elaboration based on data from INEI.

Figure 18. Decomposition of UBN measurement by number of social deprivations

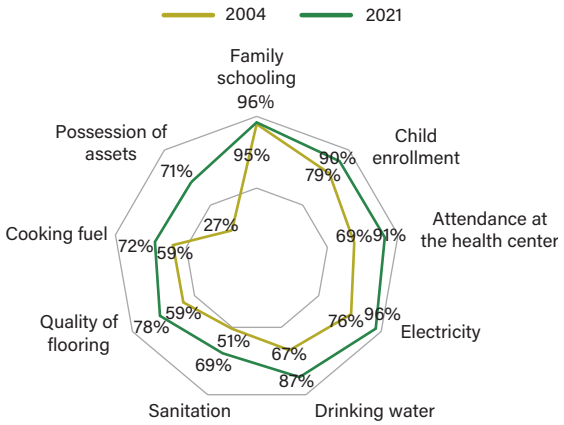


Note: Under this approach, poverty measures the proportion of the population that has at least one unsatisfied basic need, however it also provides the decomposition by number of deprivations.
Source: INEI – UBN poverty estimates for 1993, 2007 and 2017 based on Census data.

15. According to the methodology of poverty under the UBN, the poor are defined as the population that does not meet with minimum levels of well-being in any of the following five indicators: i) lives in poor housing (i.e. precarious materials), ii) lives in an overcrowded dwelling (i.e. more than 3–4 people per room), iii) lives in a dwelling without sanitation, iv) children ages 6–12 that do not attend school, and v) lives in a household whose head has completed less than three years of schooling and in which there are four or more members for every person employed, or nobody is employed.

There has also been considerable progress in access to services, particularly access to piped water and access to electricity, with access to sanitation lagging. Between 2004 and 2021, households went from having 67 to 87 percent of safe water, measured by the availability of piped water at home. Access to electricity also increased, from 76 to 96 percent. Access to sanitation, measured by household flush toilet ownership, also improved over the period, but access remains low, at around 70 percent (Figure 19). Finally, the proportion of households where at least one member had access to the internet went from 2 to 49 percent.

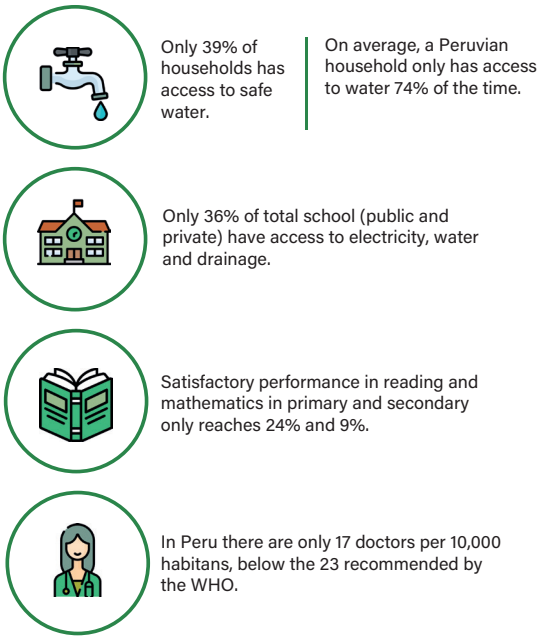
Figure 19. Access to services of the Multidimensional Poverty Index, 2004 – 2021



Source: Estimations based on INEI-Enaho.

However, the low quality of services undermines the improvements in access. For example, quality in the access to water and electricity poses a significant challenge due to interrupted coverage and electricity outages. Only 39 percent of households have access to safe water.[16] Furthermore, an average Peruvian household only has access to water 74 percent of the time.[17] Regarding power outages, 39 percent of households suffer from power interruptions. In a typical month, 65 percent of those households report two or more interruptions, and the average duration of the outages was 11 hours.[18] Quality in health services, proxied by the number of doctors per 10,000 inhabitants, is only 17 doctors, below the 23 recommended by the World Health Organization. Quality in education, measured by the percent of children and youth with satisfactory performance in reading and mathematics, is as low as 24 percent in primary school and 9 percent in secondary school (Figure 20).

Figure 20. Quality of access to water, education, and health care



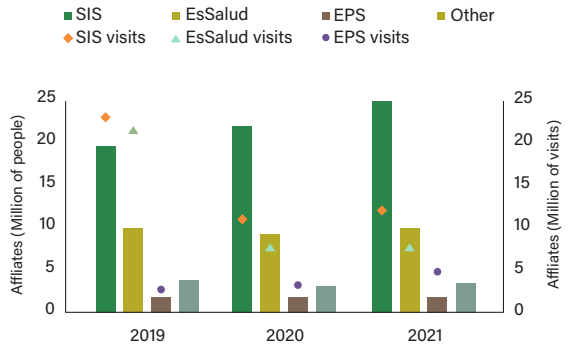
Source: INEI-ENAPRES 2021, MINSA 2021, MINEDU-ECE 2019.

Moreover, the collapse of the health care system exacerbated by the pandemic reflects its previous fragility. Before the pandemic, the number of visits to the SIS health system (a government noncontributory system) was similar to the number of visits to the EsSalud system (a contributory health system for formal sector

16. Percentage of households with access to water services with the presence of free residual chlorine greater than or equal to 0.5mg/l.
17. INEI, Indicadores de Resultados de los Programas Presupuestales 2021, 2021.
18. INEI, Indicadores de Electrificación, 2020.

workers). However, the number of affiliates of the SIS system is twice the number of affiliates of EsSalud. As a result, EsSalud had trouble meeting the health needs of its affiliates. During the pandemic, visits to these health systems declined significantly because of the collapse of the systems, which were overwhelmed by COVID-19 cases. Visits did not recover in 2021. The household surveys also report this reduction in addressing health issues. Before the pandemic, 45 percent of the population that required care did not visit a health center; by 2021, the number had climbed to 55 percent. A significant share of the population relies on pharmacies to respond to health care problems instead of visiting recognized health care providers.

Figure 21. Health insurance coverage and care, 2019–21
million of people, million of visits in right axis

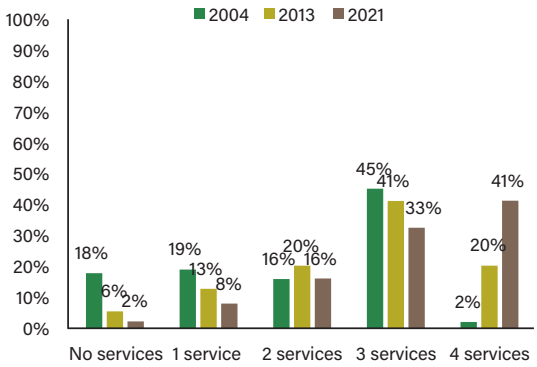


Source: SUSALUD.
Note: Other includes armed forces, self-insurance, prepagas, and insurance companies.

Likewise, the gap in terms of access to basic access services is still significant, and only two Peruvian households in five have access to piped water, sanitation, electricity, and the internet. Peru still lags in access to basic services, especially if this is considered as a package of necessary services. Only 41 percent of households in the country have access to all four of these services. Although most Peruvians have access to at least three services, there are still around 26 percent of households that have access to only two or fewer (Figure 22). Moreover, low quality characterizes the provision of basic services. For instance, although access to water is relatively high, there are still gaps in the continuity of supply.

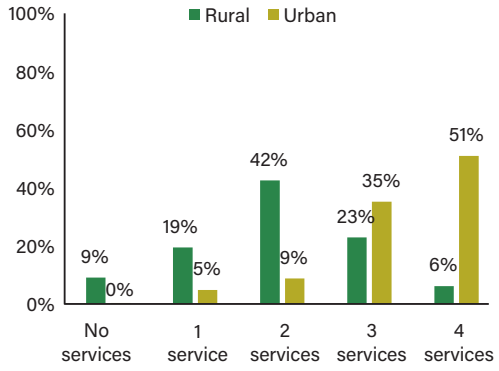
There are also significant geographical disparities in access to basic services, with more than half of urban households, but only 6 percent of rural households having access to all basic services. While, in urban areas, 51 percent of households have access to all four services, only 6 percent of households in rural areas have access to this complete package (Figure 23). Most of the population in rural areas have access to between two and three of these services, but there is a significant portion of the population (28 percent) that only has access to one or none of these services. Disparities are also common across regions. For instance, even though 85 percent of dwellings have access to drinking water, sanitation, and electricity in Lima (including the Lima Metropolitan Area and Callao), this proportion is only 29 percent in Ucayali.

Figure 22. Percentage of households with access to service packages, 2004, 2013, 2021



Source: INEI - Enaho

Figure 23. Percentage of households with access to service packages by area, 2021

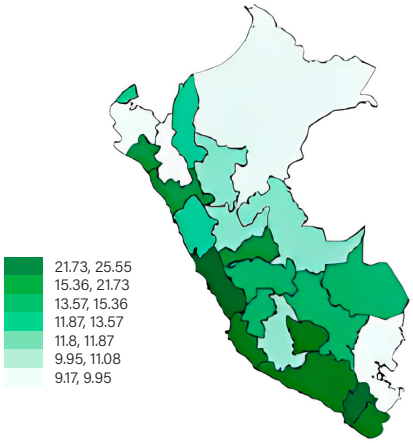


Source: INEI - Enaho

Similar to differences in access to services, territorial inequalities are also high in terms of the quality of services. For example, while the national average of number of hours per day with access to water is 17.8, it is less than 8.0 hours per day in Loreto and Tumbes regions.[19] Likewise, in Pucusana, a district located in the Lima Metropolitan Area, at almost an hour from the center of the capital, 76 percent of the dwellings have four hours or less per day of water provision.[20] Regarding the quality of health services, in Lima, there are 23.4 doctors per 10,000 inhabitants, at the rate recommended by WHO, and similar to the average in Chile, Colombia, and Mexico. However, other regions in the country are lagging. In Piura, for example, there are only 9.2 doctors per 10,000 inhabitants (Map 1).[21] Regarding the quality of education, the performance of children in primary school in Lima is at 30 percent and at 45.9 percent in Tacna. In contrast, the share falls to only 3.8 percent in Loreto. In secondary school, in Lima only 14.4 percent of youth have a satisfactory performance in reading and mathematics, while in Tacna the share goes up to 21.1 percent and in Loreto the share goes down to 1 percent (Map 2).

19. ENAPRES, 2021.
20. INEI, 2017.
21. MINSA.

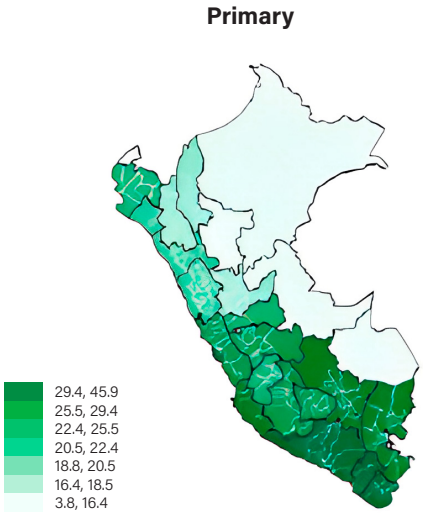
Map 1. Doctors per 10,000 habitants by region, 2021 (percentage of total population)



Source: Minsa.

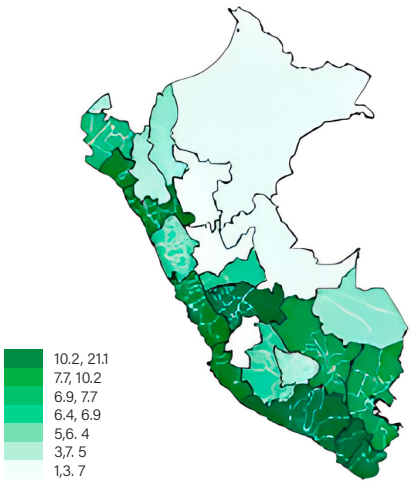
Map 2. Satisfactory performance in both reading and mathematics, 2019

%



Source: ESCALE (Estadística de la Calidad Educativa) (dashboard), Unidad de Estadística Educativa, Ministerio de Educación, Lima, Peru, https://escale.minedu.gob.pe/inicio; MINSA 2021.

Secundary



Source: ESCALE (Estadística de la Calidad Educativa) (dashboard), Unidad de Estadística Educativa, Ministerio de Educación, Lima, Peru, https://escale.minedu.gob.pe/inicio; MINSA 2021.

Inadequate access, low quality, and the unequal distribution of public goods limit the ability of Peruvians to accumulate productive assets. The low availability and low quality of health services and education have a direct impact on Peruvian workers' lower human capital, making them less productive and able to earn only lower wages. Moreover, lack of safe water and sanitation makes a population more prone to become sick from waterborne diseases, jeopardizing their school or work attendance. This then affects their learning or productivity and leads to lower ability to work and be productive or to lower wages. Similarly, lack of electricity or unreliable power sources negatively affects workers' productivity and their businesses. In addition, lack of electricity increases the burden of household chores, which could be performed more effectively with home appliances.[22] This reduces labor force participation and increases the opportunity cost of children going to school, particularly for women and girls, who are usually the ones that end up taking on the additional household burdens.

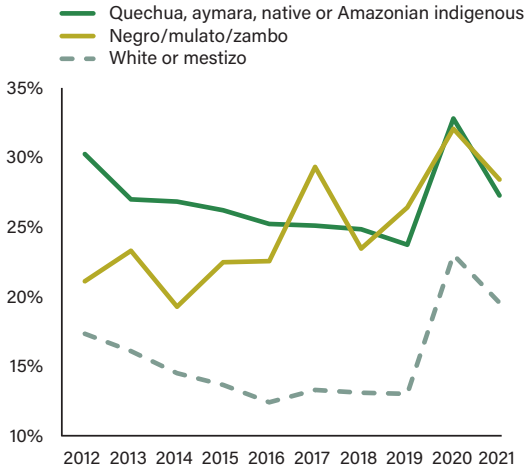
Persistent disparities in productive assets by minorities and political instability lead to social unrest

The indigenous and Afro-Peruvian populations face higher poverty rates relative to the rest of the population. According to the 2017 National Population and Housing Census, about 5.7 million Peruvians self-identified as belonging to an indigenous or native people of the Andes, which is equivalent to 25 percent of the census population ages 12 or more. Another 828,841 people self-identified as Afro-Peruvian ("negro, mulato, or zambo"), which is equivalent to 4 percent of the population. The remaining 66 percent self-identify as white or mestizo.[23] In terms of geographical location, about 23 percent of the indigenous population lived in Lima, followed by another significant proportion that lived on southern regions, such as Puno (15 percent) and Cusco (12 percent). Afro-Peruvians were more concentrated in Lima (27 percent), Piura (15 percent), and La Libertad (12 percent). In terms of poverty, as Figure 24 shows, the indigenous and Afro-Peruvian populations face a higher poverty rate than those self-identified as white or mestizo, and the difference is significant. By 2021, poverty among indigenous and Afro-Peruvian peoples was 7 to 8 percentage points higher than among white or mestizo.[24] Poverty rises to 27 and 28 percent for indigenous and Afro-Peruvians, while, among those considered white or mestizo, it only reaches 20 percent.

22. Less than 60 percent of households in Peru have a refrigerator, and only a third have a washing machine.
23. Mestizo refers to a person whose parents are from two different ethnicities, usually a white and an indigenous parent.
24. Estimates of poverty for the subset of the population ages 14 or more who answer the self-identification question.

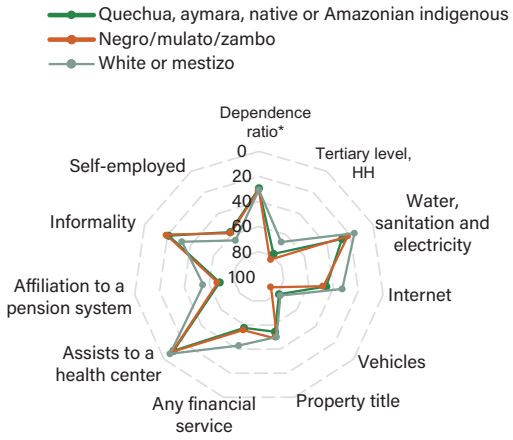
Similarly, the indigenous and Afro-Peruvian populations exhibit lower levels of productive assets with respect to the rest of the population. Figure 25 shows that the population that self-identifies as indigenous has lower levels of productive capital relative to those that self-identify as white or mestizo. In terms of human capital, for instance, 33 percent of whites and mestizos live in a household with an educated household head (tertiary education) with respect to 16 percent and 22 percent of the Afro-Peruvian and indigenous populations, respectively. In terms of labor productivity, the indigenous and Afro-Peruvian populations are more informal (between 11 and 13 percentage points higher) and more self-employed (between 6 and 7 percentage points higher) than those who self-identify as whites or mestizos. They also have less access to productive services, such as electricity, the internet, and financial services.

Figure 24. National poverty by self-identification with ethnic groups, 2012–21
% of population ages 14 or more



Source: INEI - Enaho

Figure 25. Characteristics of population, by self-identification with ethnic groups, 2021
% of population ages 14 or more

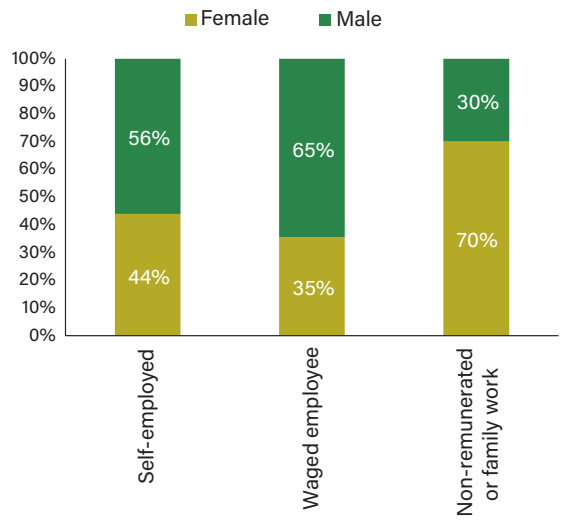


Source: INEI - Enaho
Note: The dependence ratio is income earners over total household members.

In addition, persistent gender gaps in the labor market continue to undermine economic and social outcomes. Female labor force participation has remained unchanged and well below male participation (around 20 percentage points lower) over the last two decades. Moreover, women are more likely to engage in poor-quality and low-productivity jobs. They represent 70 percent of all unremunerated work and only 32 percent of total adequate employment. Estimates suggest that women dedicated, on average, 39 hours per week to domestic work compared with 15 hours among men.[25] The higher time spent in household work diminishes the opportunities of women in employment, savings, and greater well-being. Accordingly, these differences translate into systematic differences in labor income. By 2021, the average labor income of women was only 74 percent of men's labor income, a share that has remained unchanged over the last decades (in 2005, it was 73 percent).

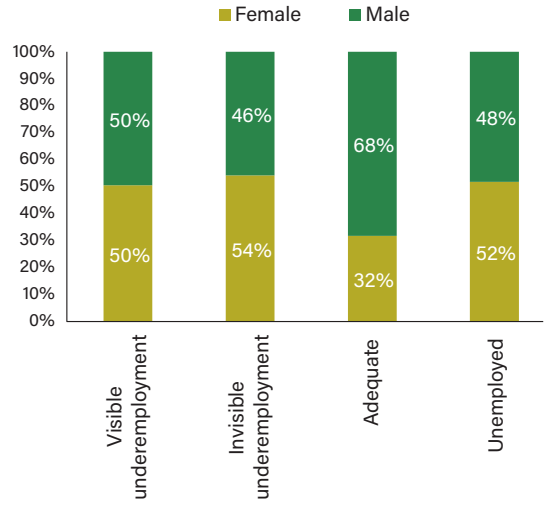
25. According to the latest data from a Time Survey in Peru (2010).

Figure 26. Distribution by type of employment, 2021
% of total



Source: INEI – Enaho.

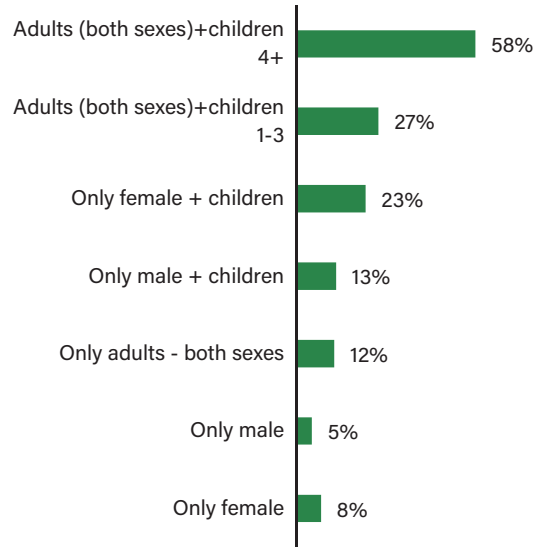
Figure 27. Distribution by quality of employment and unemployment, 2021
% of total



Source: INEI – Enaho.

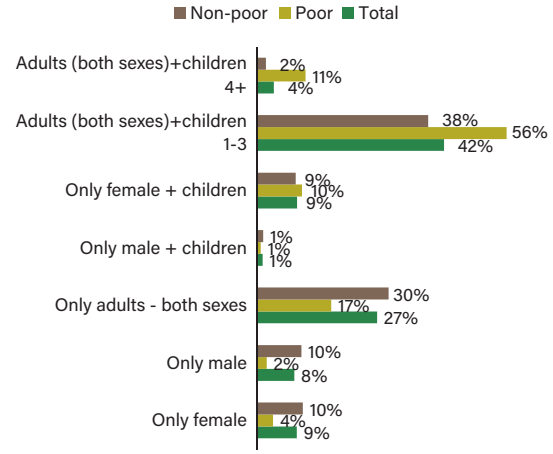
The difficulties that women face in gaining access to economic opportunities have negative implications for monetary poverty. Poverty (and extreme) poverty rates are similar among men and women in Peru. However, the incidence of poverty tends to be higher among young female adolescents (ages 11–14), older women (ages 65–75), and women in the peak reproductive ages (20–40). The poverty rate is considerable higher (58 percent) among those households with adults of both sexes and children ages over 4. Among households with only one adult and children, poverty is higher if the adult is a female (23 percent) rather than a male (13 percent). Furthermore, in terms of household composition, 56 percent of poor households have adults of both sexes and children ages under 3, while this share is only 38 percent among the nonpoor and 42 percent in total. Additionally, 17 percent of poor households are composed of adults of both sexes, which rises to 30 and 27 percent, respectively, among nonpoor households and all households.

Figure 28. Poverty rate by household composition characteristics, 2021
%



Source: INEI – Enaho.

Figure 29. Household composition by poverty condition, 2021
% of total households



Source: INEI – Enaho.

Although Peru has made significant progress in reducing territorial inequalities, persistent social gaps and political instability over the last years have become a breeding ground for social discontent. During the past seven years, because of political crisis, Peru has had six presidents, and the political and governance situation has deteriorated, and economic performance and investment perspectives have suffered in consequence. Moreover, with the arrival of the pandemic and the consequent setback of years of progress, the governance crisis has become the focus of popular discontent in a context in which social gaps are persistent and political institutions are perceived as turning away from the needs of the country. Indeed, according to a recent global survey on broken-system sentiment conducted by Ipsos, about 70 percent of Peruvians agreed with affirmations such as "Traditional parties and politicians do not care about people like me" and "Experts in this country do not understand the lives of people like me". This situation was exacerbated when President Castillo—a former rural teacher—was arrested in December 2022 and, since then, the country has experienced extended periods of political turmoil and violent protest.[26]

Governability challenges hamper socioeconomic progress and development, particularly among minorities and the most vulnerable. Castillo had been elected with key support from regions in the southern Andes, Amazonia, and rural areas, where marginalized populations and indigenous people heavily identified with him. His appointment was perceived by constituents as an opportunity to respond to unmet demands of marginalized population and his dismissal caused severe social unrest. However, as the country is still paralyzed by political instability, road blockades, and protests, structural reforms and the closure of social gaps are not being prioritized. Moreover, small businesses and several activities, such as tourism, commerce, and the agroexport sector, are suffering significant economic loses.

Trends in intergenerational mobility

The human opportunity index (HOI), a synthetic measure that penalizes inequality in coverage of services due to individual circumstances, has improved significantly in Peru over the last decade.[27] Considering all services, the average improvement in HOI has been 54 percent. The largest increase came from the HOI of Internet access, which, in 2013, was 10, and, in 2021, it was 39 (386 percent increase), and access to sanitation, which, in 2013, was 41 percent was, in 2021, 52 percent (a 27 percent increase) (Figure 30).

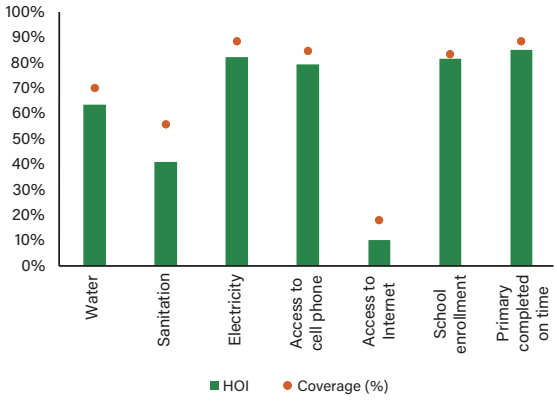
26. By mid-February, 59 people had tragically died because of the violence during the protests.

27. The human opportunity index (HOI), as an opportunity-adjusted measure of coverage, considers coverage and coverage differentials among different groups. The formula is HOI=C−P ,where C is the coverage and P a penalty for inequality of opportunity. To construct the penalty, it is necessary to identify the groups (k) with coverage rates below the average. Then, for every group, an opportunity gap is estimated as the difference of the total number of individuals with access in the group (M) and the number of people with access to a good or service needed for their coverage rate to equal the average rate ($\overline{M}$). The penalty is then the sum of the opportunity gap of all vulnerablegroups, divided by the total population: $P = \frac{1}{N}\sum_{k=1}^{V}(M_k - \overline{M}_k)$.

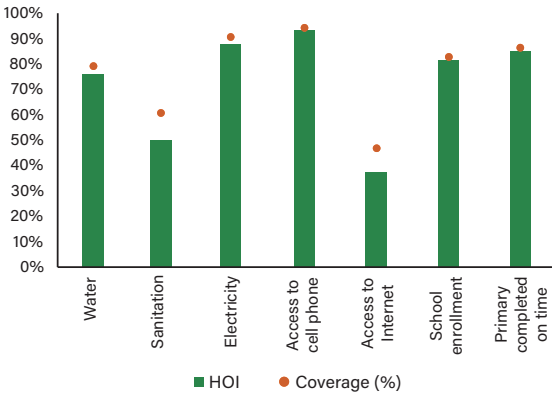
As of 2021, the HOI showed a significant gap in access to basic services, particularly in sanitation and the internet. The HOI for access to sanitation and access to internet (52 and 39) are low compared with the HOI for access to electricity and primary-school completion on time (91 and 88, respectively). A low HOI is explained by limited coverage, but also by unequal distribution of the service. Figure 30, panel b shows the share of inequality explained by various circumstances. Children living in rural households are much less likely to enjoy access to water or sanitation. The place of residence explains between 37 and 54 percent of the inequality in access to water or sanitation. The educational level of the parents is also strongly correlated with access to water and sanitation, as it explains 20 and 23 percent of the inequality in access. Parental education and per capita income are also main predictors of inequality in school enrollment. Children who live in wealthy households with educated parents are at least 64 percent more likely to be enrolled in school. After the pandemic, gender also became an important predictor of enrollment, as girls' enrollment increased, while that of boys remained stagnant.

Figure 30. The Human Opportunity Index, 2013, 2019, 2021

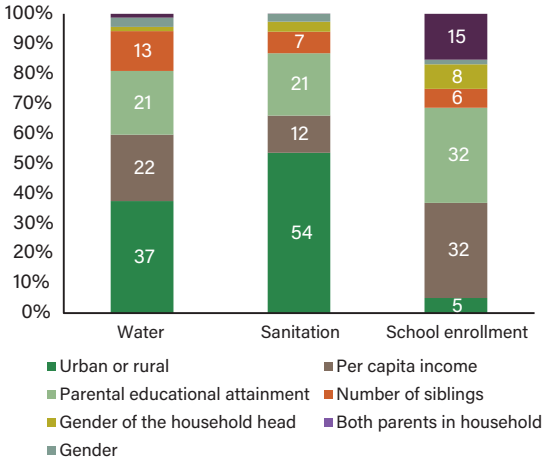
a. By type of service, 2013



b. By type of service, 2021



c. Decomposition on the inequality in access, by household characteristics, 2021



Source: Estimates based on INEI - Enaho.

1.3. Poverty profile: combining monetary and nonmonetary dimensions of poverty

Poverty transitions: chronic, transient, and structural poverty

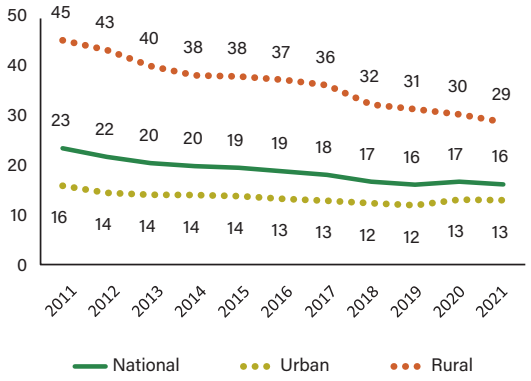
Multidimensional poverty—chronic and structural poverty—decreased from 71.1 to 16.3 percent between 2004 and 2021. During the last two decades, along with the significant decline in monetary poverty, the proportion of the population with nonmonetary deprivations

also decreased significantly. Between 2004 and 2019, before the arrival of the pandemic, multidimensional poverty decreased from 71.1 to 19.7 percent and kept decreasing to 16.3 percent in 2021. While rural multidimensional poverty is higher than urban multidimensional poverty (29 percent vs 13 percent), the drop in rural areas has been much higher. The rural multidimensional poverty index (MPI) went from 45 percent in 2011 to 29 percent, a 16 percentage point drop. The MPI among the urban population has only dropped 3 percentage points (Figure 31).

As of 2021, the MPI in Peru was 16 percent, with the living standards dimension registering the highest incidence of deprivations. Among education, the biggest deprivation is child enrollment, with 10.2 percent of the population without a school-age child enrolled in school. Regarding health, 9.4 percent of the population is not getting the health services they require. Regarding living standards, the biggest deprivations are access to sanitation (31.7 percent), lack of economic assets (29.1 percent), and lack of access to cooking fuels (27.9 percent) (Figure 31).

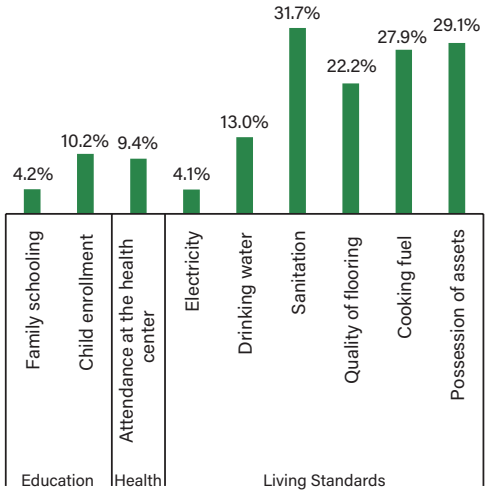
There is substantial heterogeneity in the MPI across the territory; Amazon is the area with the worst indicators. As of 2021, rural Amazon was the area with the highest degree of deprivations (49.6 percent), followed by urban Amazon (32.3 percent).[28] Urban and rural Amazon had the highest deprivations in education, with the highest percent of children of school age not enrolled in school. Furthermore, rural Amazon and the Andes have the highest deprivation in living standards, especially in lack of access to sanitation services. For all dimensions, the urban coast had the least percentage of deprivations.

Figure 31. Multidimensional Poverty Index, 2011–21
Population with at least one deprivation, %



Source: INEI, 2021. Statistical Table 23: Population with at least one unmet basic need, according to geographical region, 2011 – 2021.

Figure 32. Share of the population with non-monetary deprivations, 2021



Source: Own elaboration based on data from INEI.

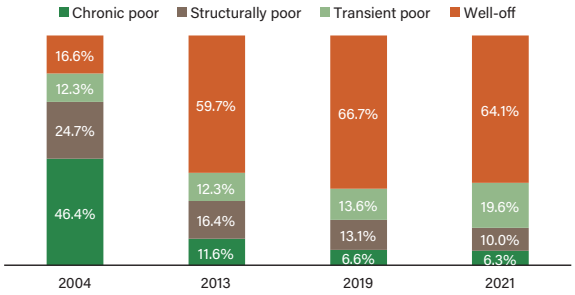
The chronic poor, defined as people who are poor in both monetary and multidimensional dimensions, decreased substantially over the past two decades, from 46.4 percent in 2004 to 6.3 percent in 2021. Chronic poverty decreased the most during 2004–13 (34.8 percentage points), corresponding with the period of outstanding economic growth and

28. INEI, 2021. Statistical Table 23: Population with at least one unmet basic need, according to geographical region, 2011 – 2021.

poverty reduction. After that, during 2013–21, the period of economic slowdown, chronic poverty decreased 5.3 percentage points.

Structural poverty, accounting for individuals deprived of multiple nonmonetary dimensions of welfare, the nonincome poor, also declined, from about a quarter of the population to 10 percent over the 2004–21 period. The largest decline in this socioeconomic group was observed over the 2004–13 period, declining from about 25 percent in 2004 to a 10th of the population in 2021. This group, together with the remining chronic poor, will perhaps be the hardest segments to move out of poverty in the years to come because closing deprivations in education, health, and living standards require substantial investments over longer periods to yield dividends.

Figure 33. Evolution of poverty status, 2004–21



Source: Own elaboration based on data from INEI.

Although the share of households classified as well off, that is, poor in neither monetary or multidimensional terms, increased substantially over the 2004–19 period. The COVID-19 crisis reduced this number, which has not yet returned to the pre-pandemic level. The well-off population registered a significant increase, from 16.6 to 66.7 percent during 2004–19, which decreased to 64.1 percent in 2021, after the setback of the pandemic.

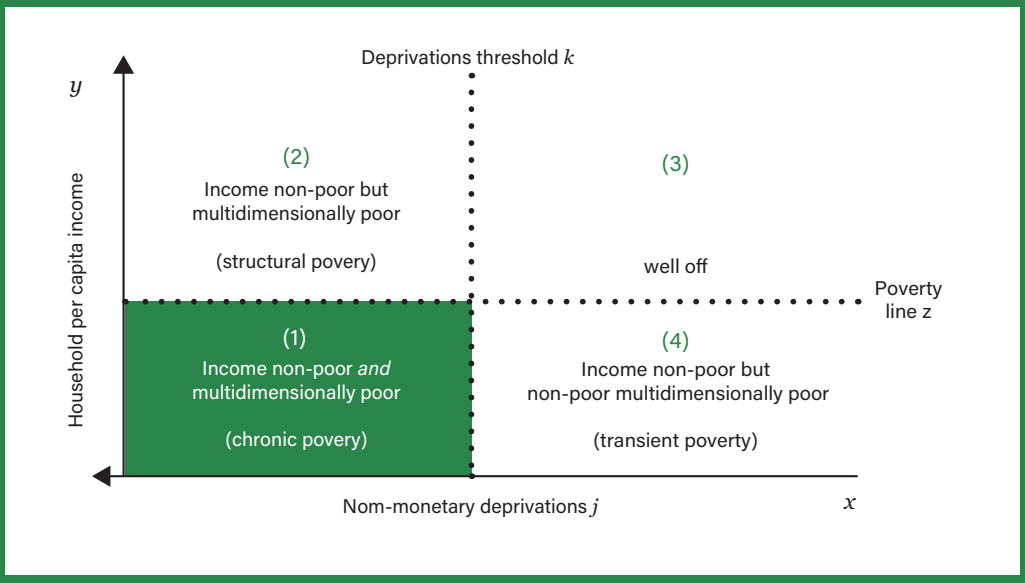
The share of the transient poor, those poor by income but not by social deprivations, also increased during the pandemic, showing the high vulnerability of falling back into poverty. Between 2004 and 2013, transient poverty remained at 12.3 percent, but then increased to 19.6 percent in 2021. Moreover, the pandemic accounted for 6 percentage points of that increase, which still reflects the high vulnerability of a fifth of the population to intertemporal variations in income or expenditure.

Box 3. An approach to identify the chronic poor

Combining monetary and nonmonetary indicators is useful in identifying underlying conditions that explain the persistence of poverty over time. Bolch et al. (2020) propose a method to identify chronic poverty using a single cross-sectional survey and successfully test two conjectures related to the extent of poverty and existence of poverty traps. If a household is poor under both monetary and nonmonetary dimension approaches (that is, the chronic poor), it is (a) persistently income poor and (b) more likely to remain in monetary poverty in the future. This is related to the concept of poverty traps in the sense that, if individuals are below a critical threshold of assets, it will be more difficult for them to generate income (Carter and Barret 2006) and, also, that the longer individuals remain in poverty, the less likely it will be for them to exit poverty.[a]

This approach also defines three additional poverty statuses: (a) the structurally poor, defined as households that are nonpoor under the monetary approach but face nonmonetary deprivations; (b) the transient poor, defined as households below the monetary poverty line but that do not face nonmonetary deprivations; and (c) the well off, which corresponds to households with income or consumption per capita above the monetary poverty line and, also, below the nonmonetary deprivation threshold (Figure 34).

Figure 34. Representation of household poverty status



Source: Bolch, Lopez-Calva, and Ortiz-Juarez (2021).

a. Carter and Barret (2006) developed a theoretical framework in which households are unable to move into a stronger position if their initial level of productive assets places them in a less advantageous and less productive equilibrium. In this way, the critical threshold is key for upward economic mobility as the income generating capacity.

Poverty profile: what are the main characteristics and assets of the poor

The main factors that limit the ability of people to get out of poverty are low level of education, work in agriculture, and work in the informal sector. Table 3 displays the incidence of several characteristics across the four poverty statuses described above. For instance, only 6.9 percent of chronically poor households are headed by individuals with tertiary education, compared with 31 percent among the well off. As expected, the share of the population living in urban areas in well-off households almost doubles (86.5 percent) that of the chronic poor (46.9 percent). Regarding nonmonetary deprivations, the proportion of the structurally poor that lack access to family schooling or visits at health centers is higher compared with the chronic poor. There are also large differences in labor market indicators by poverty status, mainly between the chronic poor and those considered well off. The chronic poor are more likely to be informal and to work in agriculture than the more well off. For instance, the informality of the well off is 71.1 percent, close to the national average, but amounts to 96.4 percent for the chronic poor. Likewise, the average labor income for occupied chronic poor workers is only a third of the labor income for well-off employed workers.

Table 3. Defining characteristics and asssets by socioeconomic status, 2021

	Chronic poor	Structurally poor	Transient poor	Well-off
Age of household head (years)	52	55	48	52
Woman household head	26.6%	32.6%	29.9%	34.0%
Tertiary education of household head	6.9%	14.9%	9.9%	31.0%
Household size (number)	5.0	3.9	5.2	4.0
Located in urban areas	46.9%	63.9%	75.8%.	86.5%
Located in Lima Metropolitana and Callao	19.0%	18.9%	35.7%	35.6%
Multidimensional poverty deprivations, proportion of the population in each socioeconomic status that lacks access to:				
Education				
Family schooling	15.6%	17.4%	1.3%	1.9%
Child enrollment	33.7%	15.9%	12.2%	6.4%
Health				
Attendance at the health center	52.3%	61.0%	0.0%	0.0%
Living standards				

Family schooling	15.6%	17.4%	1.3%	1.9%
Child enrollment	33.7%	15.9%	12.2%	6.4%
Health				
Attendance at the health center	52.3%	61.0%	0.0%	0.0%
Living standards				
Electricity	21.3%	10.1%	3.9%	1.6%
Drinking water	33.5%	21.6%	16.1%	8.8%
Sanitation	70.5%	49.2%	39.6%	22.7%
Quality of flooring	62.6%	39.4%	31.2%	13.4%
Cooking fuel	65.7%	44.9%	40.1%	18.0%
Possession of assets	60.6%	43.3%	37.7%	21.2%
Labor market				
Informal labor	96.4%	87.6%	90.6%	71.1%
Average annual labor income (soles)	4898	8853	7374	15231
Self-employed	48.3%	46.4%	43.1%	37.8%
Agriculture	65.8%	45.3%	41.9%	20.9%
Manufacture	7.9%	7.2%	8.6%	8.9%

Source: Elaboration based on data from INEI.

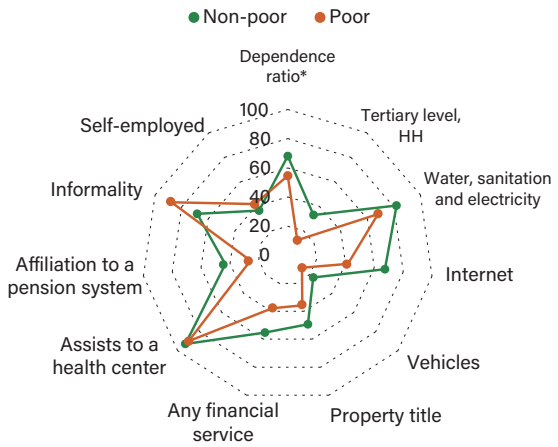
The urban (monetary) poor exhibit significantly lower levels of productive assets and access to services and markets relative to the nonpoor. In 2021, the urban poor were more vulnerable and had lower human, physical, and institutional capital than the urban nonpoor (Figure 35). For instance, in terms of human capital, the percentage of the urban poor whose head of household had achieved tertiary education was only 12 percent, while this proportion increases to 33 percent among the nonpoor. Likewise, in terms of physical capital, only 68 percent of the urban poor have access to water, sanitation, and electricity, while this proportion amounts to 82 percent among the nonpoor. Internet access is also lacking among the urban poor. Only 42 percent of the urban poor have access to internet, while 67 percent of the nonpoor have access. With regards to institutional capital, the urban poor lack access to property titles and any financial service, while the access among the nonpoor is 49 and 55 percent, respectively. Meanwhile, the urban poor and nonpoor exhibit similar rates of assistance from health centers, but the low affiliation to a pension system and higher levels of informality and self-employment among the poor make them more vulnerable in terms of access to social protection and markets.[29]

The urban poor are more well off than the rural poor. The rural poor experience more deprivations and are employed in more vulnerable jobs than the urban poor (Figure 36). For some indicators, the differences are small. For example, the percent of the population with at least one child not attending school is 17 percent in urban areas and 19 percent in rural areas. Other indicators are much more deterministic. For example, 53 percent of the rural poor work in the agricultural sector, while only 10 percent of the urban poor are employed in that sector. Finally, the rural poor

29. Lavado, 2022.

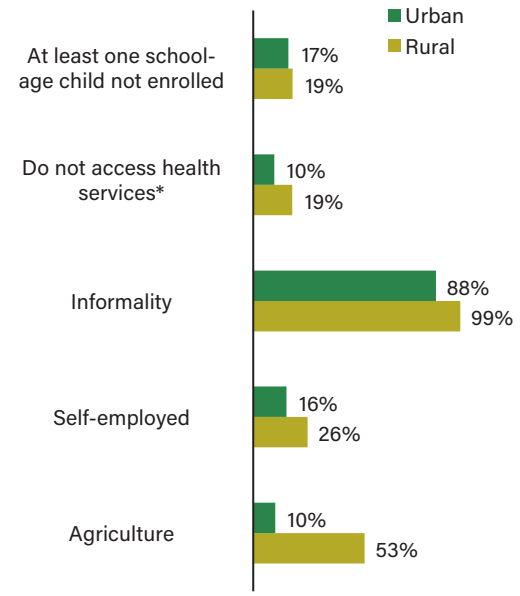
face much higher constraints in accessing health services; the urban population is almost twice as likely to attend a health care center than the rural population.

Figure 35. Characteristics of the urban population, by poverty status, 2021
% of the population



Source: INEI-ENAHO.
Note: The dependence ratio is income earners over total household members.

Figure 36. Characteristics of the poor by area, 2021
% of the population



Source: INEI-Enaho.
Note: In the event of discomfort, illness or accident, they do not access health services due to lack of money, the health center is far away from her home or does not have any health insurance.

Because of the pandemic, both the poor and nonpoor in urban areas experienced losses that meant a setback relative to the situation almost a decade earlier. Although significant improvements were achieved, the urban poor are still more vulnerable and have lower human, physical, and institutional capital than the urban nonpoor. Table 4 shows that the urban nonpoor have worsened in certain aspects of asset accumulation and access to services. For example, in 2021, among the urban nonpoor, the proportion of households in which the educational level of the head of household was tertiary, the members were accessing pension systems, and the population was living in dwellings with property titles had declined below levels of almost a decade earlier (2013).[30] The poor also experienced a setback below levels of almost a decade earlier. By 2021, the urban poor were more self-employed and had less property titles than they had in 2013.

30. According to estimates from ENAHO, the decline in the share of the population living in dwellings with property titles could be explained by the decrease in the population living in their own properties (fully paid or not). This is consistent with the urbanization of poverty and the increase in the number of people living under poverty after the COVID-19 pandemic.

Table 4. Profile of the urban poor population, 2013 and 2021

Indicator	2013*		2021		2021 vs 2013	
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor
Dependence ratio	62.3	46.9	68.0	54.6	^	^
HH head Tertiary education	33.7	9.5	32.8	12.3	v	^
Water, sanitation and electricity	80.0	59.3	82.1	68.1	^	^
Access to Internet	36.5	6.9	67.3	41.7	^	^
Vehicle ownership	23.6	9.4	23.1	13.0	v	^
Property title	56.7	45.8	49.4	35.7	v	v
Any financial service	52.6	36.5	55.3	38.0	^	^
Assists to a health center	86.9	72.9	92.8	89.9	^	^
Affiliation to a pension system	43.8	17.5	43.3	25.8	v	^
Informality	63.5	89.2	68.4	87.7	^	v
Self-employed	31.6	40.5	36.4	41.8	^	^

Note: For financial inclusion it corresponds to 2015.
Source: INEI-Enaho.

1.4. Labor markets as the key driver of poverty reduction

Contribution of labor market outcomes to poverty reduction

Over the 2004–21 period, better labor market outcomes contributed close to 80 percent of the decline in poverty.[31] Higher labor earnings explained 56 percent of the poverty reduction between 20104 and 2021, measured by the US$6.85 per day international poverty line (2017 PPP) and 48 percent of the reduction in extreme poverty, measured by the US$2.15 per day international poverty line (2017 PPP) (Figure 37). Additional employment among both men and women also explained a substantial part, accounting for 23 percent of the reduction in total poverty and 3 percent of the reduction in extreme poverty.

Improvements in women' economic opportunities through their participation in labor markets was a key driver of poverty reduction over the past two decades. Between 2004 and 2021, labor outcomes among women contributed to 32 and 22 percent of the decline in poverty and extreme poverty. Specifically, labor incomes among women contributed between 22 and 19 percent to the reduction in poverty and extreme poverty. The increase in female employment contributed 10 and 3 percent to the reduction in poverty and extreme poverty, respectively.

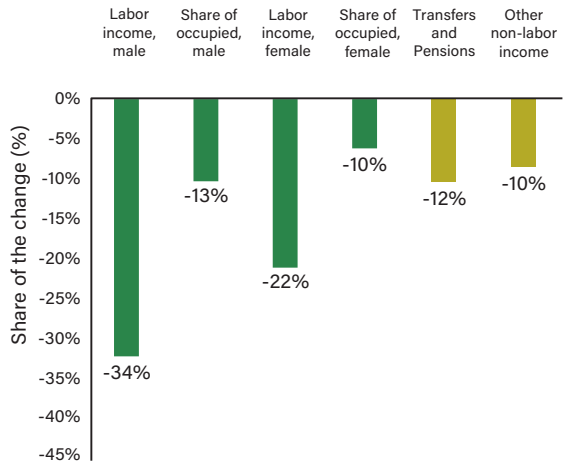
Social transfers and pensions had a more significant role in the observed decline in extreme poverty relative to poverty. Nonlabor components, which include social transfers, pensions, and capital income, explain 13 and 39 percent of the reduction in poverty and extreme

31. The decomposition of poverty and extreme poverty reduction follows the Shapley decomposition proposed by (Azevedo, Sanfelice, and Nguyen 2012) in which income per capita as an observable welfare aggregate is calculated as a function of components. Under this method, a counterfactual distribution of per capita income in 2004 is computed using labor income observed in 2021, and, so, it is possible to compute poverty rates in a situation whereby labor income in 2004 was equal to labor income in 2021. Then, the contribution of each component (that is, labor income) is defined as the difference in poverty using labor income in 2004 and under the counterfactual distribution. This method deals with the path dependence from the stepped decomposition, which may not be satisfied, and relies on the rank correlation of the welfare aggregate. Moreover, as the counterfactuals generated are not result of an economic equilibrium, this approach should be utilized as an accounting exercise that complements others analysis.

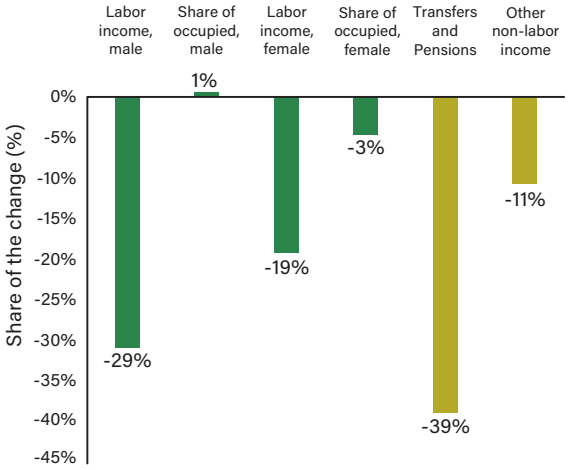
poverty, respectively. Social transfers include the conditional cash transfer Juntos and the COVID-19 mitigation measures such as Bono yo me quedo en casa, Bono Rural, Bono Familiar Universal, Bono Yanapay, and Bono 600. Pensions include contributory and noncontributory schemes such as Pension 65. Other nonlabor income includes income from capital and public and private donations. The fact that social transfers and pensions had a larger effect on extreme poverty relative to poverty measured at a higher poverty line may suggest adequate targeting of these programs.

Figure 37. Income decomposition by components, 2004–21

a. Reduction in Poverty ($6.85 /day) by income component (2017 PPP)



b. Reduction in extreme poverty ($2.15), by Income components (2017 PPP)



Source: Own calculations based on ENAHO from 2004 and 2021.
Note: Poverty decomposition is based on income per capita. Transfers and pensions include conditional and non-conditional transfers, as well as contributory and non-contributory pensions. Other non-labor income includes public and private gifts or donations, and capital income. This exercise excludes imputed house rent.

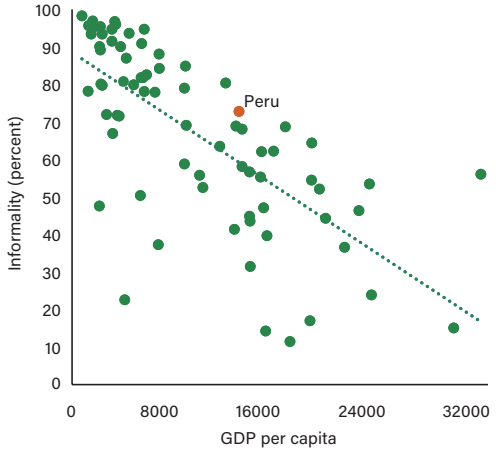
Structural weakness of the labor market: low productivity and high informality

The slowdown in the economy, even before the arrival of the pandemic, revealed structural weaknesses in the functioning of the labor market, including the high informality rates of approximately 70 percent in 2019. During 2004–19, economic growth translated into the creation of 4 million jobs, an increase in average labor incomes by 50 percent in real terms, and an increase in the rate of the creation of formal jobs (to the point of exceeding the creation of informal jobs). However, despite all the progress, labor informality only dropped 7 points, from 80 percent in 2007 to around 73 percent in 2019. For some sectors, such as agriculture, which employs a quarter of total workers, informality reached 96 percent. This means that, even before Covid-19, 12.5 million workers did not have access to social benefits, such as health insurance, paid vacations, and pensions, and experienced higher instability. Labor informality does not necessarily take place within the informal sector.[32] In fact, almost a fifth of informal workers are employed in the formal sector, which is particularly worrying as this sector is estimated to produce only 20 percent of total GDP.[33]

32. The extensive margin of informality differentiates the formal and informal sectors of the economy. In this margin, firms could decide to become formal or remain informal and small to avoid detection by tax authorities. The intensive margin of informality takes place within the formal sector of the economy (Ulyssea 2018; Perry et al. 2007).
33. INEI, 2020.

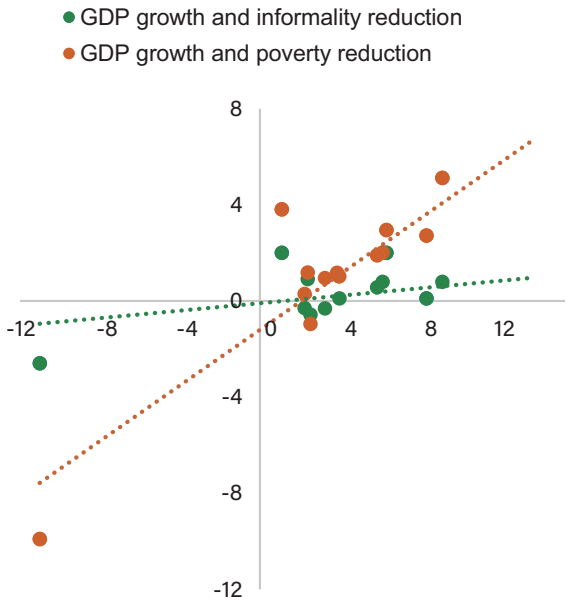
Peru has excess informality given its level of income. As Figure 38 shows, labor informality in Peru is significantly higher than the average in developing countries at similar income levels. For instance, Mongolia and Guyana have similar GDP per capita, but have substantially lower informality rates (41.4 and 58.1 percent, respectively).[34] Several studies have aimed at unpacking the main drivers of informality, including comparisons with other countries. Recent studies conclude that institutional quality as well as poor governance compared with Chile explain some of these discrepancies.[35] Another recent study suggests that labor informality in Peru increased with trade liberalization as firms reduced their labor costs by hiring workers off the books.[36] Other reports conclude that deregulation of the labor market during the 1990s is one of the factors that increased labor informality.[37] Likewise, although there is a strong positive relation between GDP growth and poverty reduction, labor informality does not seem to respond to economic growth.

Figura 38. Labor informality and GDP per capita in developing countries, 2019 or latest year available
% of total employment, constant 2017 international US$)



Source: ILO, World Bank.
Note: GDP per capita corresponds to 2019 (latest update in September 2022) and informality rate corresponds to latest year available.

Figura 39. GDP growth relation with poverty and informality reduction, 2008–21
real percentage change and percentage points



Source: INEI – Enaho.

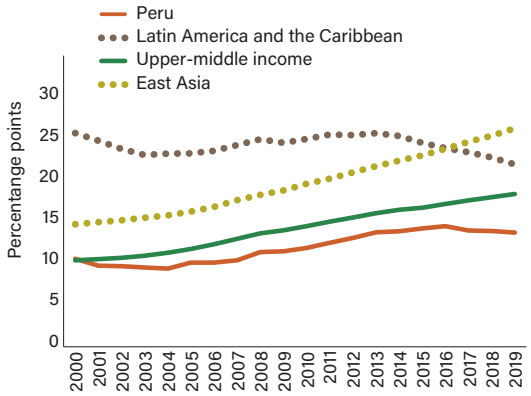
Rigid and costly labor regulations partially explain the limited availability of good jobs. The recent Country Private Sector Diagnostics of the World Bank shows that Peru's labor rigidity index is higher than that in neighboring countries and the average of other developing regions.[38] An example of labor rigidity in Peru is the dismissal of a worker under an indefinite contract, which requires a justified cause. If the business cannot prove the justification, then the courts can reinstate the worker in his previous job. This type of regulation may create incentives for hiring through short-term contracts, which increases labor turnover.[39]

34. Likewise, Colombia, which is also a member of the Pacific Alliance, has almost 10 percentage points less informality compared with Peru.
35. Ohnsorge & Yu, 2021, Loayza & Wada, 2010.
36. Cisneros-Acevedo 2021.
37. Chong, Galdo, and Saavedra-Chanduví 2007.
38. Peru CPSD 2022, Maratou-Kolias and Packard 2019.
39. Jaramillo, Almonacid, & De la Flor, 2019.

In this regard, the Peruvian Central Bank (BCRP) estimates that, since 2010, the contribution of total factor productivity (TFP) to GDP growth has decreased significantly due to growing labor rigidity, excess regulations, and the absence of structural reforms in the labor market, education, infrastructure, and institutional quality.[40]

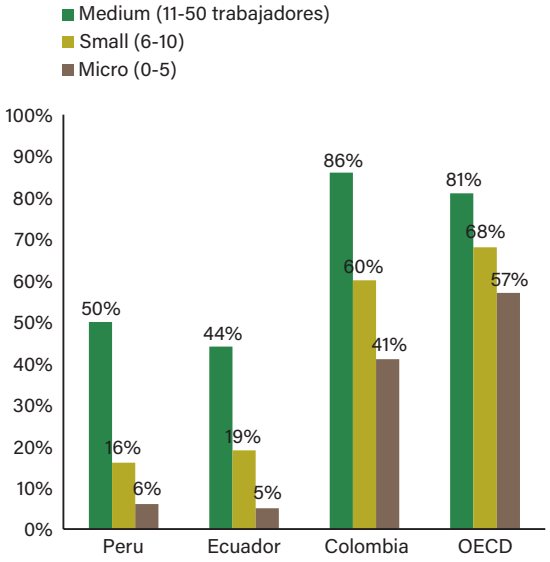
During the years of economic expansion, productivity increased little compared with other upper-middle-income countries. The increase in nonwage labor costs over the past three decades in Peru did not reflect an increase in productivity. Labor deregulations during the 1990s negatively affected the ability and willingness of the authorities to enforce labor regulations.[41] In particular, Peru is one of the countries with the greatest nonwage cost of salaried labor, which is about 70 percent of the average wage of formal workers. Furthermore, labor productivity—measured as output per worker—barely increased compared with other upper-middle-income countries during 2000–19, it only increased from 10 to 13 percent of the labor productivity in high-income countries (Figure 40). Moreover, most Peruvian workers are employed in low-productivity firms. Figure 41 shows that Peruvian microfirms, which employ about 73 percent of workers, are only 6 percent as productive as large firms, while, in Colombia, the productivity of microfirms is 41 percent of that of large firms and well below that of the OECD, which stands at 57 percent.

Figure 40. Comparison of labor productivity share of high-income countries' labor productivity



Source: World Bank elaborations based on data of the International Labor Organization.
Note: Labor productivity is measured as output per worker in constant 2010 US dollars.

Figure 41. Relative productivity by firm size, 2018 (as percentage of large firms' productivity)



Source: (Ruiz-Arranz & Deza, 2018).
Note: Authors' own elaboration based on Isaza et al. (2015) (Colombia), variables of the business directory (Ecuador), and CEPAL (2017) (Peru and selected member countries from OECD).

40. Jaramillo, Almonacid, & De la Flor, 2019.
41. Chong, Galdo, and Saavedra-Chanduví 2007.

Box 4. Enforcement of labor regulation as a measure to reduce labor informality

Developing countries have adopted different types of interventions to increase formalization among firms and workers, such as the enforcement of labor regulations. Interventions include information campaigns, simplified registration procedures, reduction in payroll taxes, and interventions that enforce formalization. Particularly important, the enforcement of labor regulations discourages informality by increasing the relative cost of hiring informal workers due to the higher risk of being detected and, if detected, penalized.

In Peru, SUNAFIL is the institution in charge of promoting, supervising, and verifying compliance with labor obligations. During the COVID-19 pandemic, the enforcement of labor regulations and SUNAFIL's role took on a special place in the public debate. SUNAFIL—the National Labor Inspection Office—began to operate in 2014, gradually opening regional offices across the country. SUNAFIL misses a large share of labor informality because inspections are focused on firms in the formal sector and mainly small and large firms, as the supervision of microfirms (that is, with no more than five employees) requires an authority that, until 2018, only regional governments possessed.[a] However, SUNAFIL's role and effectiveness gained special attention during the protests by workers in the agroexport sector during November 2020, demanding that SUNAFIL be more productive in the supervision of firms on compliance with labor rights.

Pinto et al. (2022) find that SUNAFIL significantly increases the number and size of fines.[b] The authors use data on (a) all labor inspection orders that resulted in administrative penalties (that is, the severity of the penalty, location, amount of fine, economic activity of the firm inspected, and so on), (b) creation of SUNAFIL inspection agencies (date and location), (c) individual data from the ENAHO, and (4) administrative data on district- and regional-level characteristics. In particular, they estimate the impact of the opening of a SUNAFIL office in the region and find that, indeed, the level of enforcement of labor regulations—measured by the number and size of fines issued—was driven by the opening of a SUNAFIL office in the region. Map 3 displays geographically the heterogeneity in the level of enforcement—measured by the number of fines issued—across the country according to whether firms in districts located in a region with an operating SUNAFIL agency were significantly more likely to be inspected and penalized.

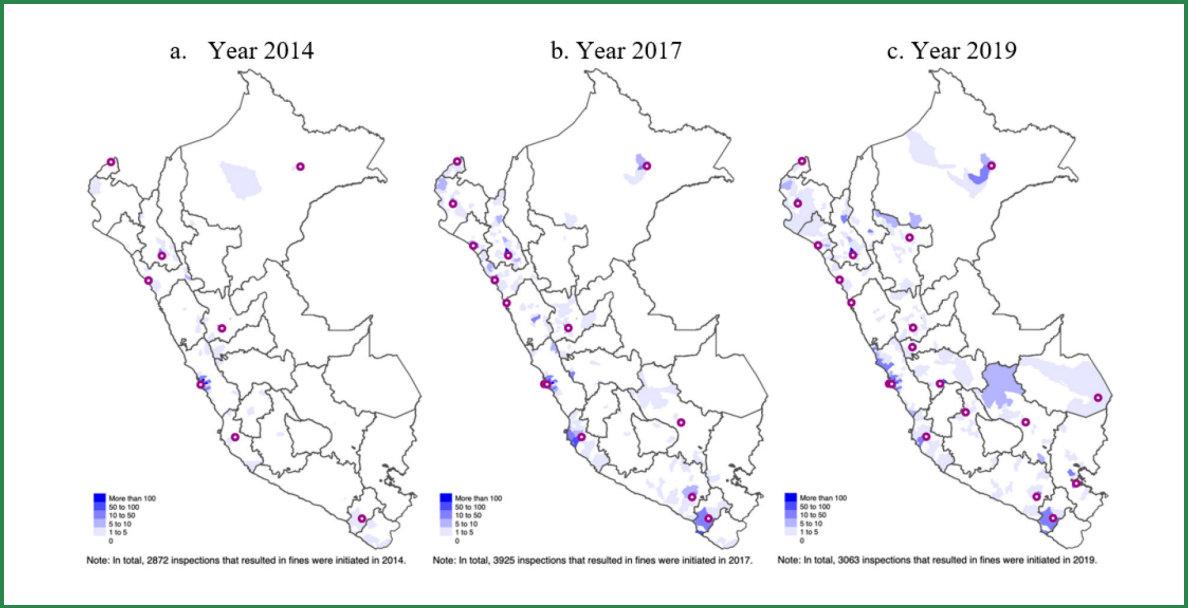
---

a. To date only three regions have fully completed the transfer of power from regional governments to SUNAFIL.

b. "Is the Enforcement of Labor Regulations Effective in Promoting Formal Employment? The Peruvian Case" (Pinto et al. 2022).

*** $p < .01$ ** $p < .05$ * $p < .10$

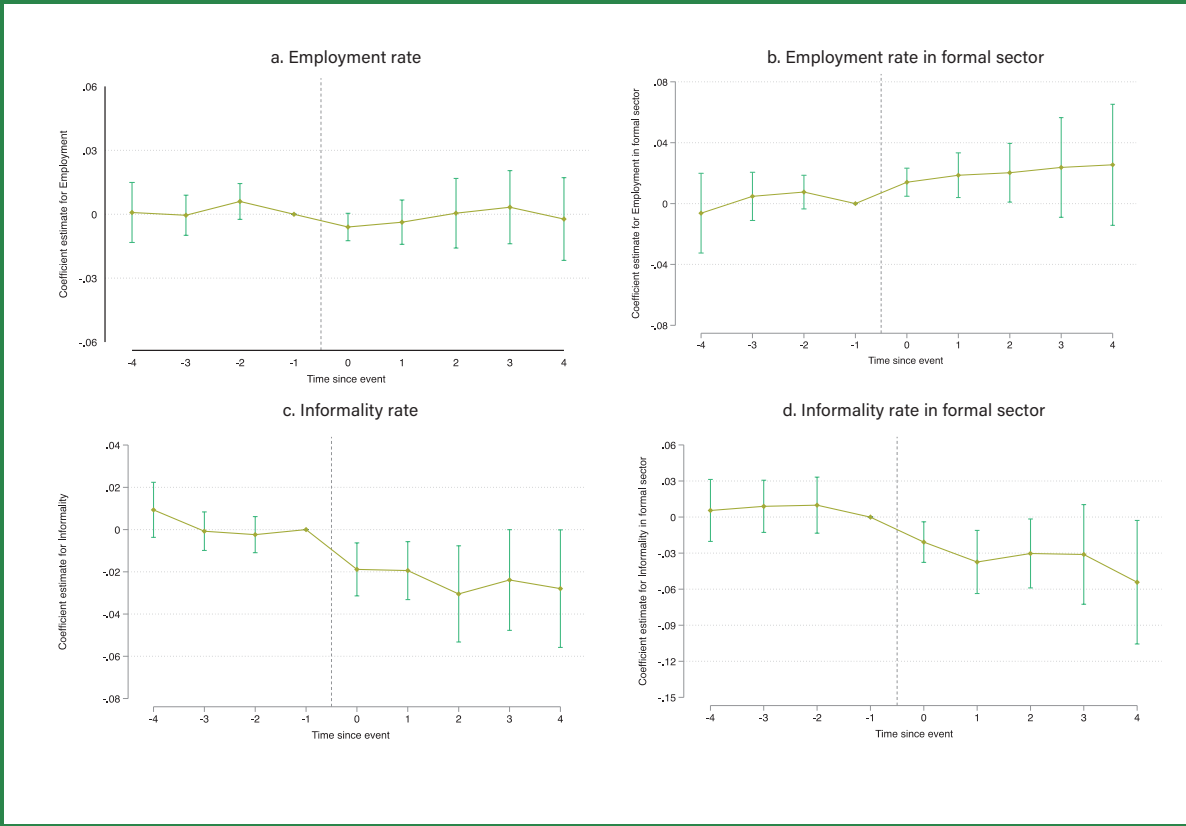
Map 3. Number of fines issued by SUNAFIL at the district level



Source: Elaboration based on data from SUNAFIL and ENAHO.
Note: The purple dots indicate the location of SUNAFIL regional offices in a given year. The shaded areas represent districts, and the boundaries correspond to regions.

Nonetheless, they find negligible positive effects on employment in the formal sector as well as small effects in informality, both for all workers and for those in the formal sector. Plausible reasons for this reduced impact on informality rely mostly on institutional capacity. As Figure 42 shows, they find a negligible effect on labor market outcomes. For instance (panel a), the estimates on employment rates are not statistically different from zero, but reach about 1.4 percentage points, which is only significant the first two years after the opening of the SUNAFIL office, in looking at the effects on the employment rate in the formal sector (panel b). Likewise (panels c and d), they find a small reduction in the informality rate for all workers and for workers in the formal sector, the sector targeted by SUNAFIL. The reason for the reduced impact of SUNAFIL on labor informality may be manifold. On the one hand, according to SUNAFIL, the capacity of inspection work is negatively affected by the lack of inspectors and insufficient infrastructure, equipment, and vehicle units for proper attention to citizens. This clearly limits the effective supervision capacity. On the other hand, there are factors related to the institutional framework. For instance, most inspections are reactive rather than preventive.

Figure 42. Impacto de apertura de una oficina de SUNAFIL sobre los resultados del mercado laboral



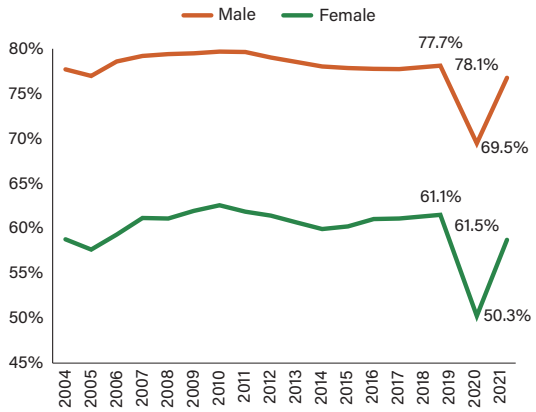
Source: Elaboration based on data from SUNAFIL and ENAHO.
Note: The dots and bars represent the coefficients and 95% confidence intervals based on standard errors clustered at the region level.

Precariousness of the Peruvian labor market may partially explain the disproportionate negative impact of the COVID-19 pandemic on the most vulnerable. During the COVID-19 lockdown, most economic activities were restricted, causing GDP to fall 30 percent and around 6.7 million jobs to be lost during the second quarter of 2020.[42] However, the impact on employment was heterogeneous and depended mainly on the formal-informal segmentation. For instance, in the Lima Metropolitan Area, self-employed workers and those employed in businesses with fewer than 10 workers (mostly informal) reported the largest drop in employment (63 and 66 percent, respectively).[43] Similarly, workers who were able to work from home and who had internet connectivity (mostly formal) were less likely to lose their jobs in 2020. For comparison: workers in essential sectors were 22.2 percent more likely to remain employed, and informal workers were 12.4 percent more likely to be unemployed. Women were particularly affected by the pandemic, as well as workers who depended on public transport, mainly in urban areas.[44]

42. INEI, 2020, INEI, 2020.
43. INEI, 2020.
44. Cueva, Del Carpio, and Winkler 2021.

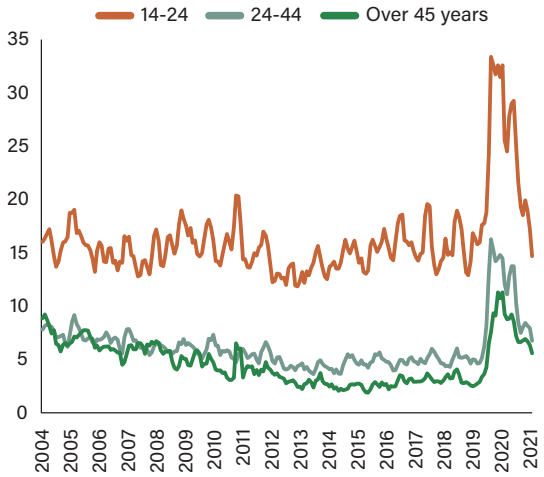
Women and youth were disproportionately affected by economic losses. Women were 9 percent more likely to lose their jobs.[45] They left the workforce at a higher rate than men, mainly to take care of children and the elderly, given the closure of schools and the reduced supply of support and care systems. Figure 47 shows that the fall in labor participation among women, 18.2 percent, was greater than that among men, 11.0 percent. This is in line with evidence from the World Bank High Frequency Phone Survey conducted during the pandemic, which reported that 31 percent of women experienced an increase in the amount of housework, compared with 20 percent of men.[46] Young people (ages 14–24) also lost their jobs at a higher rate. Figure 44 shows that the unemployment rate among youth in Lima doubled between 2019 and 2020. It also increased more than the rate among adults: 20 percentage points among youth, compared with 10 percentage points among adults. Similarly, the informality rate among youth, which was already 8 percentage points higher than the rate among adults, increased during the pandemic.

Figure 43. Labor force participation, by sex, 2004–21
percent of total population ages 14 or more



Source: INEI-Enaho.

Figure 44. Lima Metropolitana: unemployment rate, by age-group, 2004–21
three-month moving average, %



Source: BCRP.

In 2021, despite the gradual recovery of the economy and employment, the quality of jobs had not yet returned to pre-pandemic levels.[47] Before the pandemic, Peru was estimated to have one of the worst indicators of job quality in the region.[48] Low-quality jobs without adequate social protection and working conditions put workers at risk of unexpected shocks, such as the COVID-19 pandemic.

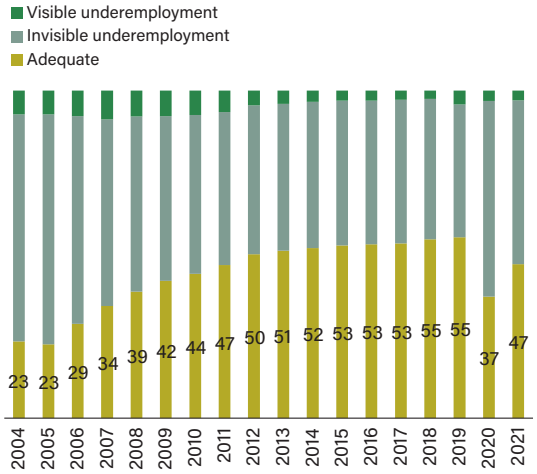
47. Impact of Covid-19 pandemic is addressed in Chapter 2.
48. The index is based on Brummundi, Mann, and Rodriguez-Castelan (2018) and Hovhannisyan et al. (2022), where four different dimensions of job quality are aggregated using individual-level data on the economically active population (EAP). The categories included in the index are (a) earnings above the upper-middle-income class poverty line of US$5.5 per day (2011 PPP); (b) benefits provided through jobs, such as health insurance and pensions; (c) job security and tenure; and (d) working conditions.

45. Cueva, Del Carpio, and Winkler 2021
46. The High Frequency Phone Survey was an instrument implemented in the midst of the pandemic by the World Bank in a joint effort with statistical offices in Latin America and the Caribbean and other regions. The surveys were performed by phone in a panel format in three waves. On average, 1,000 interviews were performed in each country during each wave. The surveys collected information on multiple dimensions, such as changes in employment and income, the prevalence of food insecurity, access to health, education, and financing services, coping mechanisms, and so on. See Mejía-Mantilla, Carolina, Sergio Olivieri, Ana Rivadeneira, Gabriel Lara-Ibarra, and Javier Romero. 2021. "COVID-19 in LAC." Under the guidance of Ximena V. Del Carpio, Technical Note (April), World Bank, Washington, DC.

Almost 50 percent of workers had no contract in the formal sector, and only 17 percent of workers had an indefinite work arrangement. Moreover, as Figure 45 shows, after falling from 55 to 37 percent between 2019 and 2020, job quality—measured as adequate employment—recovered slightly in 2021, but it remains at levels of one decade ago. [49] As a result, more than half of workers are underemployed (visible or invisible).[50]

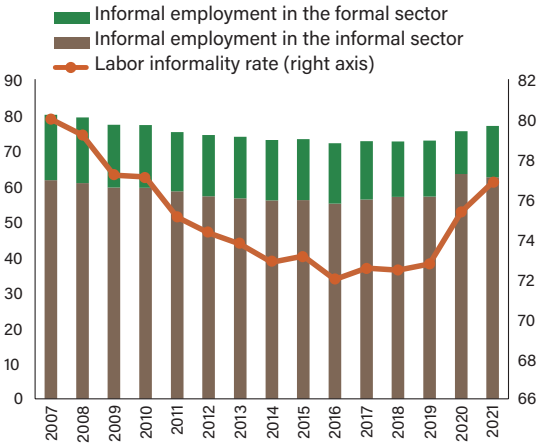
Labor informality also increased substantially due to the COVID-19 pandemic and reached its highest level in 11 years. Labor informality reversed the downward trend in 2016, before the arrival of the pandemic and reached 73 percent of total employment in 2019. This means that, even before Covid-19, 12.5 million workers did not have access to social benefits, such as health insurance, vacations, and the pension system, and experienced higher instability. Accordingly, in 2020, labor informality registered a significant increase, to 75 percent, the highest level in 11 years, which occurred while total employment experienced a decrease by 13 percent, to 14.9 million.[51] In 2021, following the recovery of total employment (by 15 percent), labor informality increased to 77 percent, and 13.2 million workers were informally employed. In this sense, labor informality does not necessarily take place within the informal sector (Figure 46). In Peru, about a fifth of informal workers are employed in the formal sector, where registered businesses are partially informal because they employ unregistered workers, pay off-the-books wages, or otherwise fail to comply with labor regulations.

Figure 45. Employment by type, 2004-2021
% of total employment



Source: INEI-Enaho.

Figure 46. Labor informality by sector, 2007-2021
% of total employment



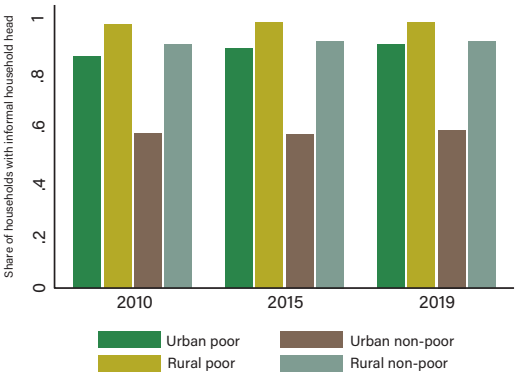
Source: INEI-Enaho.

49. The adequately employed population is made up of those workers who work 35 or more hours a week and receive income above the minimum income reference and those who work less than 35 hours per week and do not wish to work more hours.
50. Visible underemployment is defined as the group of employed people who usually work less than a total of 35 hours per week in their main occupation and in their secondary occupation and who want to work more hours per week and are available to do so, but do not because they are unable to get more paid work or more independent work. A person with employment (salaried or self-employed) is under invisible underemployment (income underemployment) if they normally work 35 or more hours a week, but their income is less than the value of the minimum family consumption basket for income earners.
51. In 2020, although informal workers decreased by 10 percent, total employment decreased by 13 percent relative to 2019.

Informality and its impact on household wellbeing

Given the high prevalence of labor informality among Peruvian workers, labor earnings from this activity play a central role in the well-being of households in the country. In 2019, 7 households in 10 had a household head engaged in informal employment. Furthermore, while just under 30 percent of employed household heads in the richest decile are informal workers, this proportion is close to 100 percent among those in the poorest decile. More than 95 percent of poor households in rural areas have a household head who is employed in the informal sector, while this share is around 90 percent in urban areas. These gaps are not only large but have persisted over time. Since the labor income of the head of the family represents the largest share of the total income of the household (51 percent for the richest decile and 92 percent for the poorest), household income depends largely on income from informal employment.

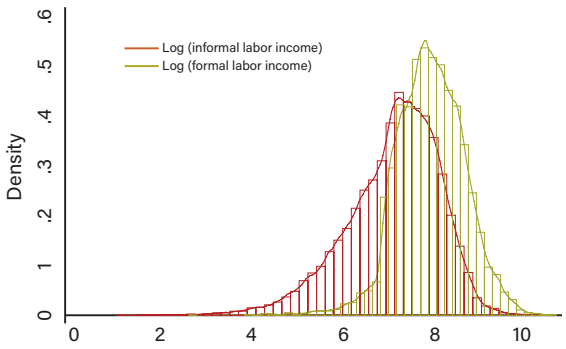
Figure 47. Households with a head working in the informal sector by poverty and area of residence, 2010, 2015 and 2019



Source: INEI-ENAHO.
Note: Informal households are households where the household head is an informal worker.

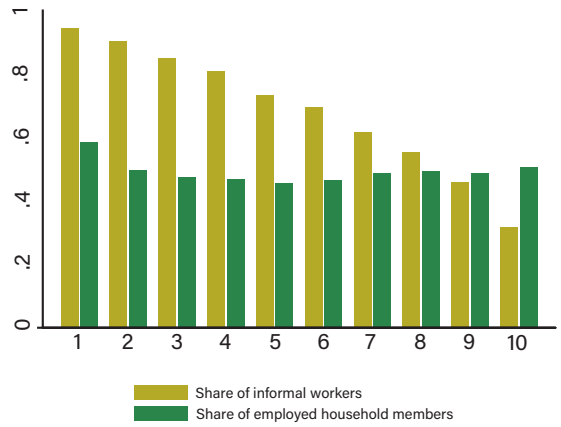
Labor income derived from informal employment is distributed throughout the entire distribution; however formal jobs are associated with significantly higher household incomes. The labor income densities of formal and informal households in 2019 show that labor income from formal jobs contributes more to the increase in the upper tail, while income from informal labor sources contributes to expanding the lower tail. However, there is an overlap between the two sources of labor income, especially in the case of high income from informal work (Figure 48). Moreover, even in the richest decile, informal workers account for more than 30 percent of employed household members (Figure 49). The sum of the labor income of all informal household workers represents close to 100 percent of the total labor income among households in the poorest decile and 30 percent among those in the richest decile. Furthermore, at least 70 percent of households in the bottom half of the distribution receive all of their labor income from informal sources. However, even among households in the top decile, 30 percent receive all their labor income from informal sources.

Figure 48. Labor income distribution by informality of household, 2019 (soles)



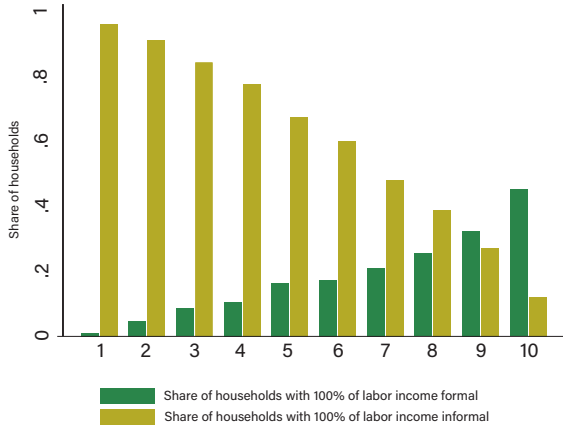
Source: INEI-ENAHO.

Figure 49. Household composition by employment and informality condition, 2019



Source: INEI-ENAHO.

Figure 50. Informal labor income as a % of total labor income by decile, 2019



Source: INEI-ENAHO.

The following four chapters in this Poverty Assessment on Peru take a closer look at the short- and long-term welfare impacts of the pandemic, the redistributive capacity of the tax and transfer system, the vulnerability of households to future shocks, and the importance of achieving gender equality before concluding with policy recommendations for resuming the long-term progress in poverty. First, after experiencing a shock that snatched away a decade of poverty reduction, the COVID-19 shock has shaped and will continue to shape the development path of the country. Therefore, the next chapter analyzes the incidence of death from COVID-19 across income levels and regions, as well as the shortterm and potential long-term welfare effects on the lives of Peruvians. Second, fiscal policy is the main tool that the government has to redistribute the benefits of economic growth. To propose recommendations for progressive fiscal reforms aimed at targeting social programs more effectively and raising revenues for redistribution, it is necessary to understand how fiscal policy is performing. Thus, the following chapter focuses on analyzing the incidence of fiscal policy. Third, the COVID-19 pandemic and other aggregate shocks, such as the Ukraine war, have revealed the fragility of the social gains in Peru. Looking ahead, one may expect that aggregate shocks, particularly those related to climate change, will become more frequent and larger in magnitude. In this context, it is critical to understand the degree of vulnerability to poverty and to the risks facing Peruvian households to understand which critical mitigation and adaptation policies are critical in minimizing the negative welfare effects of shocks. Fourth, the important associations between gender equality and poverty reduction as well as the persistent gaps that remain a challenge for development.

1.5. Recommendations

Peru's challenge is to restore growth and resume poverty reduction in a more resilient way, one which safeguards social progress and prevents future shocks from having such harrowing effects on the welfare of Peruvian households. To promote growth, Peru should focus on a mix of policies that focus on incentivizing scale and the productivity of existing firms, prioritizing

investments in high-growth-potential sectors to achieve more inclusive and resilient growth and promoting a business environment conducive to attracting national and foreign investors. To promote resilience, the country should advance toward designing more adaptative and universal social protection systems, which requires updating household registries, as well as separating the access to social protection from the employment status of workers.

Promoting growth

The current tax system, with multiple schemes according to the size of firms, encourages firms to remain small and partition themselves as they grow bigger to avoid moving from one regime to another. This phenomenon, known as shrinking or enanismo, and has been well documented in Peru.[52] Under the current schemes, firms are not incentivized to grow. Promoting firm growth and formalization requires simplifying tax regimes. This simplification should be done gradually, starting with incorporating new small and medium enterprises into the general regime and merging the other categories, such as the single simplified regime, the special income regime, and the micro and small enterprise tax regime, into one. Additionally, the announcement of the elimination of special regimens should be carried out well in advance to allow firms to adapt to the general regime. In this sense, SUNAFIL plays a key role as the enforcement of labor regulations aimed at formalizing workers has a clear impact on productivity. However, SUNAFIL should expand its punitive role to support firms in this transition as labor regulations may differ and formalization of workers may be new for smaller firms or entrepreneurs.

Peru needs to prioritize its efforts and investments into high-growth sectors to unleash the potential of these sectors across the entire country and achieve climate-resilient growth to prepare for the future. Agriculture is one of the sectors with promising resilient growth. In the past two decades, the value of agricultural exports increased 10-fold, mainly as the result of nontraditional crops such as grapes, asparagus, and blueberries.[53] Moreover, during the pandemic, agriculture proved to be one of the most resilient parts of the economy, growing steadily each year. As the recent Country Private Sector Diagnostic (CPSD) report states, prioritizing agriculture could be done by improving infrastructure connectivity, mainly through roads that connect the Andes and Amazon with the coast, where most agroexport firms are concentrated. Better connectivity would allow more agroexporters to appear, as more fruits and vegetables could reach costumers fresh, and would make exports more inclusive. Furthermore, the inclusion of farmers into the export value chain could be achieved by strengthening logistics activities and investment in agro-specific infrastructure and services, such as cold chain facilities, collection points, and traceability technology. Productive alliances have been shown to be effective in promoting the inclusion of smallholders by linking them to coastal exporters.[54] Scaling up productive alliances could be achieved by improving training among small farmers in the use of technology and climate-smart practices, as well as increasing access to microfinance among smallholders.

Tourism is another sector worth prioritizing to accelerate the economic recovery, while emphasizing conservation tourism. By 2019, the CPSD report estimates that tourism contributed 9.3 percent of GDP. Still, Peru was only the fifth

52. IDB and Private Council for Competitiveness.
53. CPSD, 2022.
54. Productive alliances are contractual arrangements linking smallholder associations to larger exporters (CPSD 2022).

county in the region in terms of international arrivals. Moreover, according to the Adventure Travel Trade Association (ATTA), 30 percent of the tourism in the world is explained by adventure tourism. These conditions showcase the potential of Peru in becoming a more important player in adventure tourism in the region. To promote nature-based and adventure tourism, the Ministry of Foreign Trade and Tourism could develop a management plan involving protected areas and develop actionable market research that considers both profits and conservation efforts.[55] To increase tourism in nature areas outside the regions typically receiving tourists in the country, investments in road and air connectivity are necessary. For example, upgrading regional airports and expanding the current ones through existing public-private-partnership frameworks to accommodate tourists.

Investments and the prioritization of sector growth will not achieve the expected results without a conducive environment for private sector investment. For this, Peru has a long road ahead. Peru is undergoing a political crisis. As a reflection of the political crisis, the business environment has deteriorated. The months following the elections in April 2021 have witnessed the lowest business confidence index since 2002.[56] Moreover, US$10 billion of portfolio investment outflows were reported during 2021. Although the political crisis will not be solved in the short term, specific actions can be undertaken to provide more safety to investors. For example, reforms to enhance the rule of law by improving internal control activities by the Contraloria General de la Republica could increase confidence in the system. Similarly, reducing the length of court proceedings and providing training to apex audit institutions would also enhance the rule of law by improving enforcement. Addressing land market challenges, such as lack of transparency and weak property rights, would foster investment. This could be achieved by streamlining responsibilities and improving coordination among municipal, regional, and national levels of government.[57]

Updating social protection policies

Current social protection systems are not prepared to respond to the growing crises or to the urbanization of poverty. The biggest social assistance program in Peru, Juntos, was created in 2005 to fight rural poverty. The demand for an urban cash transfer system during the pandemic forced the government to update the household registry. Although effective, the transfers suffered from serious leakages that could have been avoided if the systems had been prepared to identify the vulnerable and poor urban households. Social insurance is targeted mainly on formal wage workers and their families as protection against unemployment, which, in Peru, takes the form of monthly contributions, the Contribucion por Tiempo de Servicio (CTS), and contributory pensions are linked to the status of workers.[58] In urban areas, 87.7 percent of the poor are informal, and 41.8 percent are self-employed, which showcases the low capacity of social insurance to cover the poor in urban areas.

58. The CTS is a benefit for waged formal workers, whereby employers make a monthly contribution equivalent to one wage per year to an individual account. The account is available to the employee when their contract is terminated. As workers have access to it if they are fired, this acts as unemployment insurance. Workers can also access it in case of special emergencies. For example, during COVID-19, workers were allowed to withdraw form their accounts.

55. CPSD 2022.
56. The business confidence index is measured monthly by the Central Bank. More information on the index and its development can be found in the SCD (2022).
57. SCD 2022.

To become more resilient, it is necessary to reformulate social protection policies in Peru. A first step would be to improve the identification of poor and vulnerable households. For this, the National Household Registry (Padron General de Hogares) needs to be updated to realize better coverage of urban households. The updating of this registry is currently done mainly through face-to-face interviews. Thus, a key step in this process is to introduce technological solutions, such as high frequency phone surveys, to monitor household needs more frequently.[59] More frequent monitoring would allow quicker responses in case of natural hazards.

A second step would involve updating the social protection system to redefine the households that require assistance to include the vulnerable population as well as recently new poor in urban areas. Poor households are identified in the National Household Registry through a combination of individually surveyed and administrative variables. However, these variables were selected to predict poverty, more specifically rural poverty. Increasing urbanization and the increasing size of the vulnerable class calls for a reformulation of beneficiary criteria. As the pandemic has shown, in times of crisis, the vulnerable also need social protection to avoid falling into poverty. In normal times, protecting the vulnerable could help ensure progress on social issues.

Given the high levels of informality and low coverage of social insurance, the country should move toward universal social protection systems. Access to social security must be separated from the employment status of workers. A clear example of the need for this separation is the case of health insurance. The health system for formal and public workers as well as their families (EsSalud) has collapsed in terms of number of visits, but is still efficient in the purchase and delivery of medicines. Meanwhile, the public system (SIS) that covers anyone without insurance has a greater capacity to absorb patient visits, and its facilities are more widely distributed throughout the country, but the quality of service they offer is also heterogeneous.[60] By separating the financing part of the system from service delivery, a more efficient system could be established. Such a system would require interoperability between SIS and EsSalud: SIS affiliates would gain access to EsSalud hospitals (2nd and 3rd levels of care for highly complex cases), and EsSalud affiliates could gain access to MINSA hospitals (1st level and regional establishments). A unified health system would also allow the pooling of resources and avoid the current duplication of expenditures.

59. See Mejía-Mantilla et al. (2021).
60. https://videnza.org/experiencias-exitosas-en-entrega-de-medicamentos/ and https://videnza.org/en/cobertura-universal-para-las-enfermedades-de-alto-costo/.

Appendix 1. Dimensions and deprivations of the non-monetary multidimensional poverty index

NOM-MONETARY MULTIDIMENSIONAL POVERTY INDEX, 2004-2013-2019-2021				
Dimension	**Deprivation**	**Description of each deprivation**	**Observation**	**Who is poor?**
Education	Family schooling	The household has at least one school-age child (6-17) who is not enrolled (and has not yet finished high school)		An individual is multidimensionally poor if the person's weighted deprivation score is equal to or higher than the poverty cutoff of a third (33.3%) which is the weight of each of the three dimensions: education, health and living standards.
	Child enrollment	No member of the household aged 11 or older has completed 5 years of school		
Health	Attendance at the health center	In the event of discomfort, illness, or accident, any member of the household does not access health services due to lack of money, the health center is far away from her home or does not have any health insurance		
Living standards	Electricity	Dwelling does not have electricity		
	Drinking water	Dwelling does not have water from public connection		
	Sanitation	Dwelling does not have sanitation from public connection		
	Quality of flooring	The floor of the dwelling is made of dirt or another material.		
	Cooking fuel	Dwelling uses solid fuels for cooking (wood, charcoal, petroleum, animal waste)		
	Possession of assets	Dwelling does not have at least two of any of the following assets: radio, TV, telephone, cellphone, internet, vehicle, property	For 2004, the deprivation does not include property title.	

Poverty, Inequality and household Welfare

www.bancomundial.org.pe

/BancoMundialPeru

@BancoMundialLAC