

COVID-19 and external shock: Economic impacts and policy options

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COVID-19 and external shock

Economic impacts and policy
options in Peru

Miguel Jaramillo
Hugo Ñopo

108

Documentos de Investigación 108

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Miguel Jaramillo
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COVID-19, ECONOMIC IMPACTS, PUBLIC POLICY, PERU

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MAIN ABBREVIATIONS

BCR	Peruvian Central Bank
CTS	Compensation for time of service
EAP	Economically active population
ED	Emergency Decree
ENAHO	National Household Survey of Living Conditions and Poverty
FISE	Social Inclusion Energy Fund
INEI	National Institute of Statistics and Informatics
ITU	Tax unit
JNE	National Elections Board
MEF	Ministry of Economy and Finance
MSMEs	Micro and small enterprises
OECD	Organisation for Economic Cooperation and Development
PEN	Peruvian nuevos soles
PGH	General Household Register
PRONABEC	Scholarship and Educational Credit Programme
RMV	Minimum living wage
RUC	Individual taxpayer registration number

SBS	Superintendence of Banking and Insurance
SIS	Comprehensive Health Insurance
SISFOH	National Household Targeting System
SUNAT	Peruvian tax authority
UFWs	Unpaid family workers

ABSTRACT

Latin America is currently suffering from two independent but related shocks: the impact of COVID-19 and the shock of commodity prices. Peru, we argue, is a case in which the strongest impact comes from the pandemic. Peru was the first country in Latin America to react and implement sanitary and economic measures against the coronavirus. The country has been in mandatory quarantine since Monday, March 16. This carries very important challenges for all economic actors. Global and national activity has suffered a sudden stop with direct implications for: (i) the income generating capacity of independent workers, (ii) the jobs of formal and informal workers, and (iii) the survival of small, medium and large companies. In this note we consider the situation of Peruvian households in the face of the pandemic, exploring their vulnerabilities through an analysis of their main source of income generation: work. We also consider the situation of the companies that employ the workers under analysis. We present an overview of what the government's main actions have been so far and offer some recommendations.

INTRODUCTION

The current international situation, which also affects Peru, is marked by great uncertainty. The year began with prospects of lower growth, then two separate but linked economic shocks occurred: the spread of the COVID-19 virus and the collapse of commodity prices (oil and copper, in particular, are crucial to the region). COVID-19 is affecting all countries in the region in a similar way —though to varying degrees depending on the containment policies they are adopting— producing a negative impact on aggregate supply with a knock-on effect on aggregate demand. The impact of the commodity price shock will depend on the situation of each country's commodity trade balance.

The economic shock caused by COVID-19 increasingly seems to be permanent rather than temporary, with medium- and long-term impacts that will only become apparent gradually. In turn, the impact on the price of commodities is also changing over time. Overall, what we are experiencing today seems to be more intense and widespread than anything the sudden stops modelling had predicted.

At the moment, given the high degree of uncertainty, any estimate of the impact of these shocks is very tentative; so much so, that both the Peruvian Central Bank (BCR) and the Ministry of Economy and Finance (MEF) decided independently that publishing official macroeconomic projections is not possible under such uncertain circumstances, at both local and global levels. The Central Bank has postponed the publication of its weekly inflation report containing

the principal macroeconomic projections. The MEF was also due to publish its update on the multiannual macroeconomic framework on March 31. As we write, a law is being drafted that will suspend its publication until further notice.

Macroeconomic uncertainty also produces microeconomic uncertainty. In our economy, two out of three workers are self-employed or freelance, with only one in three in formal employment. Household budgets are thus highly volatile. The restrictions on personal and economic freedoms needed to deal with the health emergency have meant an abrupt cutback in the income-generating potential of many households. This will have short-term impacts that, depending on the duration of the emergency, could result in greater impacts in the medium term. Looking at the Chinese experience, quarantine may well last for two or three months. Moreover, there is no clear quarantine exit strategy at the moment, although any exit is expected to be very gradual. What criteria will be used to allow some businesses to open, while others remain closed? At the moment, this is not clear, and therefore the macroeconomic picture is also clouded by uncertainty.

However, at this juncture it is important to contribute to the discussion on possible impact transmission channels and possible scenarios, based on the evidence available. This will contribute to the creation of short- and medium-term measures that will allow us to deal with the crisis and determine the country's position in the new global economic order that may emerge. To that end, this document will analyse the potential impacts on household income at this time.

In contrast to other countries in the region, Peru is a net importer of fuel. The fall in oil prices could therefore have a positive effect on its balance of trade. This positive effect could be significant, given that so far this year, the price of a barrel of crude oil has fallen by more than 50 percent. However, in a quarantine situation, in which

the demand for fuel has dropped sharply, the positive effect of this fall in prices might not materialize.

One of the consequences of the disruptions caused by the coronavirus pandemic is a fall in the price of raw materials in general, and of minerals in particular. Mineral exports accounted for around 60 percent of the country's total exports in 2019. Copper alone accounts for half of Peru's mining exports and about 30 percent of the country's total exports. So far this year, the price of copper has fallen by 20 percent. Although future sales and hedging policies adopted by mining companies must be taken into account when considering the net effect of any price drops, a negative effect is expected. At the same time, the situation of gold partially counteracts this effect. In terms of exports, it is in second place, accounting for 30 percent of mineral exports and 18 percent of total exports. Gold prices have risen by an impressive 10 percent in comparison with last year.

Insofar as it can be noted, the net effect on prices will be negative, although Peru has a relative comparative advantage in this situation, in which many countries in the region are likely to experience negative price shocks. In fact, estimates to date produced by the private consulting firm *Apoyo Consultoría* reveal a reduction of around 20 percent in the balance of trade, from US\$6614 million in 2019 to \$5100 million for 2020.

The biggest impact, therefore, will be from the COVID-19 virus. The extent of its impact will depend on how it continues to spread in the country (starting in urban areas and gradually affecting rural areas), the sectors that are most heavily affected (tourism, services and trade), the health policies being implemented to contain it and how long it lasts.

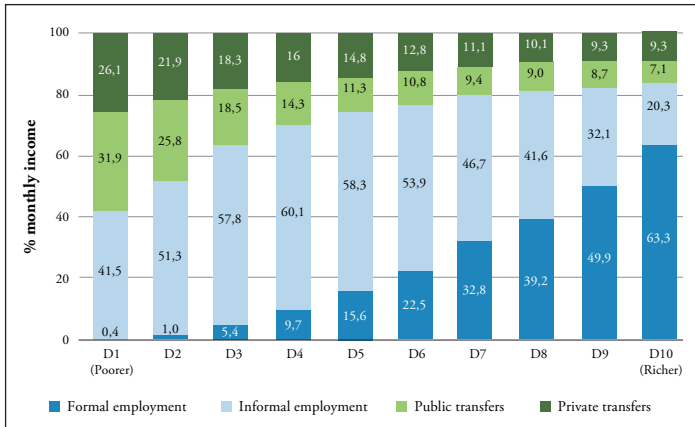
This paper will focus on the effect of the virus on households. While the magnitude and duration of the economic shock they face

is still uncertain, we aim to respond to the question: How prepared are Peruvian households for the kinds of shocks taking place at the moment? A distributional approach to this question is key. We will present a comparative analysis of different household profiles based on the number of income earners, exploring their strengths and weaknesses when confronted with this type of shock. The source of income for Peruvian households is also crucial to the question posed above. In this context, employment plays a central role. We will additionally analyse the role of the companies in which Peruvians work.

In Peru, income from formal employment constitutes about 20 percent of regular household income, while income from informal employment accounts for almost 50 percent. The rest comes from other sources of income and transfers, both state and private. Nevertheless, there are significant socioeconomic differences between households. For households in the higher income brackets, formal employment covers three-fifths of their budget, while informal employment and other sources of income account for one-fifth each. For lower income households, employment makes up 50 percent of the budget, and it is almost exclusively informal. The other half is made up of transfers received from the state and from other households. In relative terms, transfers received from the state constitute almost a third of the total regular income of households in the first income decile (Figure 1a).

Private transfers include a vast array of diverse sources of income. In poorer households, private cash transfers and donations are the most common forms of such income. Data from the *Encuesta Nacional de Hogares sobre Condiciones de Vida y Pobreza* ‘National Household Survey of Living Conditions and Poverty’ (ENAHO) do not enable us to ascertain whether these transfers come from a foreign source (remittances) or a domestic one. One way or another, they are very likely transfers from children to their parents or between siblings, cousins

Figure 1a^{1/}
Peru 2018: components of monthly household income
by deciles of total household income



Source: INEI-ENAH0, 2018.

Note: The data takes into account only the regular monetary income of households. Income from employment is considered the primary and secondary activities. Private transfers include rental income and private donations. Public transfers include public funding.

^{1/} Income from formal employment. Monthly income from formal employment (primary and secondary sources). We used the ratio of work-related income from members of the economically active population (EAP) in formal employment to total household work-related income.

Income from informal employment. Monthly income from informal employment (primary and secondary sources). We used the ratio of work-related income from members of the EAP in informal employment to total household work-related income.

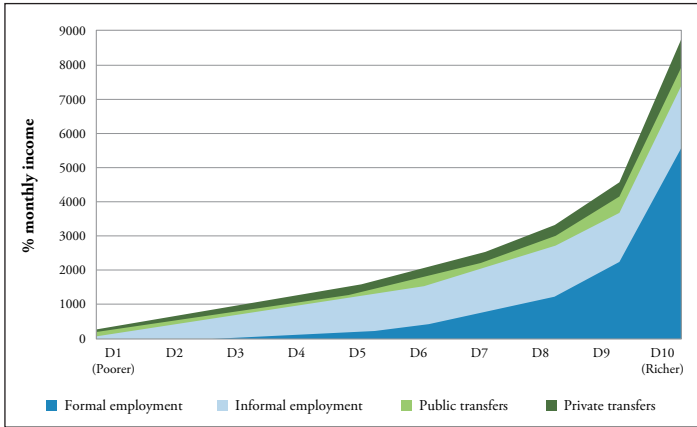
Private transfer. Monthly income from private cash transfers, property rental and private donations to household expenses.

Public transfer. Monthly income from State cash transfers (JUNTOS programme, *Pensión 65*, gas grant, *Beca 18* scholarship and other programmes).

or relatives in various forms of solidarity. For the more affluent households, property rental is the main source of this income.

The chart above shows the proportions represented by each of the four regular sources of monetary income. An examination of the same data in absolute terms (in Peruvian nuevos soles-PEN) is also

Figure 1b
Peru 2018: components of monthly household income by deciles of total household income in PEN at Metropolitan Lima prices



Source: INEI-ENAH0, 2018.

Note: The data takes into account only the regular monetary income of households. Income from employment is considered the primary and secondary activities. Private transfers include rental income and private donations. Public transfers include public funding.

useful (Figure 1b). It shows us that transfers, both public and private, are more or less homogeneous throughout the income distribution spectrum.

Since employment is such an important source of income for households, we first ranked households according to the number of wage earners. Then we focused on the socioeconomic profiles of households according to working conditions (basically type of employment—formal or informal), income and education. Thus, we began with the EAP at the national level and then distinguished between formal and informal workers within that category. We also introduced urban and rural distinctions, first looking at urban areas since the effects of the pandemic will be concentrated there. The assumption is that different

categories of workers will be affected differently by the virus containment policies being implemented by the Peruvian government, which reduce the supply of labour.

The approach we have adopted focuses on identifying the sources of household income associated with the situation of workers in the labour market. We will also present an analysis of the position of households in terms of their indebtedness and the potential they have for coping with shocks using loans or transfers (from the financial system, other households or the government).

This document is organized into six sections, including this introduction. Section 2 describes the labour market and households in terms of certain basic sociodemographic characteristics and how they relate to the labour market. Section 3 presents the main economic measures that the government has implemented so far. Section 4 analyses income sources in the household to identify their vulnerability to the crisis. Section 5 discusses the role of businesses as employers of the household members we analyse in this study. Finally, Section 6 presents some policy options.

1. PROFILE OF PERUVIAN HOUSEHOLDS AND THEIR SOURCES OF INCOME

Where does Peruvian household income come from? As highlighted above, income mainly comes from employment. So, what types of jobs do Peruvians have? We show below how the workforce is distributed according to its place in the labour market. Table 1 shows national level data and Table 2 shows only urban areas, where the impact of this sudden disruption of economic activity will first be felt.

The national and urban figures show that 4 percent of workers are employers. Their average income is almost twice that of the rest of the working population; however, there are big differences within this group. In effect, those in the lower third of the income distribution within this group have lower incomes than the average self-employed person or freelancer. Nevertheless, public policy treats this lower income third of employers as part of the group of self-employed workers. For all of them, in any case, it is important to focus on their businesses as generators of employment for the rest of the population. This analysis will be presented in Section 5.

The remaining workers include salaried employees (about half of the workers who are not employers), self-employed persons and freelancers (about 40 percent of non-employers), unpaid family workers and domestic workers (between 2 and 3 percent of non-employers). Unpaid family workers (UFWs) account for 10 percent nationally, but in urban areas they only account for 5 percent. This means that this form of work is much more prevalent in rural areas. Since the

virus first appeared in urban areas of the country (and within those areas, in the most affluent districts), the impact of the coronavirus is not expected to be as strong in rural areas, at least initially. This will need to be reviewed as we learn more about the patterns of the spread of the pandemic within the country.

The segments of salaried employees and self-employed workers deserve further attention. One in five salaried employees works for the

Table 1
Distribution of the EAP in employment and average monthly income in PEN, at the national level, 2018

EAP in employment	Women		Men		Average monthly monetary labour income ^{1/} (PEN)
	Number	%	Number	%	
	7 421 616	100,0	9 354 867	100,0	
Employers	186 088	2,5	485 356	5,2	2475,8
<i>Employed workers</i>	7 235 528	97,5	8 869 511	94,8	1162,5
Salaried employees	2 938 095	39,6	4 832 816	54,5	1480,8
Salaried employees (public)	677 352	23,1	748 651	15,5	2251,7
Salaried employees (private)	2 260 743	76,9	4 084 165	84,5	1402,1
With contract	1 097 930	48,6	1 908 451	46,7	1817,6
Open-ended	211 178	19,2	449 906	23,6	2581,9
Fixed-term	886 753	80,8	1 458 545	76,4	1602,1
No contract	1 162 812	51,4	2 175 629	53,3	842,5
Freelancers/Self-employed ^{2/}	2 788 720	37,6	3 493 034	39,4	703,1
Formal ^{3/}	320 661	11,5	351 355	10,1	1494,5
Informal ^{3/}	2 468 059	88,5	3 141 679	89,9	608,3
Freelancers/Self-employed ^{2/}	2 788 720	37,6	3 493 034	39,4	703,1
Highly-skilled (higher education) ^{4/}	294 025	10,5	407 748	11,7	1260,8
Low-skilled (up to secondary completed) ^{4/}	2 494 695	89,5	3 085 286	88,3	633,0
Unpaid family workers	1 145 280	15,4	525 712	5,9	0,0
Domestic worker	363 408	4,9	17 604	0,2	716,6

Source: INEI-ENAH0, 2018.

Table prepared by the author.

Note: ^{1/} Average monthly monetary income from the primary occupation, whether employed or self-employed ^{2/} Special Primary Education is excluded from calculations. ^{3/} The variable situation of informality is reported under primary occupation in the ENAH0 2018 (INEI) Module 500 database. ^{4/} Formal and informal employment levels are approximated based on the level of education obtained.

Table 2
Distribution of the EAP in employment and
average monthly income in urban areas, in PEN, 2018

EAP in employment	Women		Men		Average monthly monetary labour income ^{1/} (PEN)
	Number	%	Number	%	
	5 838 542	100,0	7 170 124	100,0	
Employers	168 003	2,9	408 825	5,7	2687,8
<i>Employed workers</i>	5 670 539	97,1	6 761 299	94,3	1286,2
Salaried employees	2 697 788	46,2	4 204 051	62,2	1565,8
Salaried employees (public)	628 878	23,3	686 205	16,3	2310,2
Salaried employees (private)	2 068 910	76,7	3 517 846	83,7	1429,6
With contract	1 071 657	51,8	1 824 971	51,9	1837,3
Open-ended	209 345	19,5	442 478	24,2	2596,4
Fixed-term	862 312	80,5	1 382 493	75,8	1616,8
No contract	997 253	48,2	1 692 874	48,1	904,1
Freelancers/Self-employed ^{2/}	2 184 780	37,4	2 274 823	33,6	852,9
Formal ^{3/}	308 122	14,1	342 791	15,1	1509,1
Informal ^{3/}	1 876 658	85,9	1 932 032	84,9	740,8
Freelancers/Self-employed ^{2/}	2 184 780	37,4	2 274 823	33,6	852,9
Highly-skilled (higher education) ^{4/}	281 874	12,9	374 397,52	16,5	1300,2
Low-skilled					
(up to secondary completed) ^{4/}	1 902 905	87,1	1 900 426	83,5	775,8
Unpaid family workers	447 165	7,7	265 540	3,9	0,0
Domestic worker	340 780	5,8	16 699	0,2	710,0

Source: INEI-ENAH0, 2018.

Table prepared by the author.

Note: 1/ Average monthly monetary income from the primary occupation, whether employed or self-employed. 2/ Special Primary Education is excluded from calculations. 3/ The variable situation of informality is reported in the primary occupation in the ENAH0 2018 (INEI) Module 500 database. 4/ Formal and informal employment levels are approximated based on the level of education obtained.

public sector and the other four work for the private sector. Half of salaried employees have a contract and the other half do not. The vast majority of these salaried employees have a fixed-term contract, with less than one in four on open-term contracts. Both types of contract offer protection against dismissal, but the financial protection against contract termination is often higher for fixed-term workers: 1,5 times their monthly salary for each month from their early dismissal to the

end date of the contract, versus one month's pay for every year worked in the case of workers on open-term contracts. Companies can therefore be expected to wait for these contracts to expire rather than terminating them early. However, fixed-term contracts are typically for short periods: at least 27 percent are for three months or less. It is not possible to ascertain the full extent of this phenomenon because data from spreadsheets do not clearly identify when a contract is a renewal of an existing one. However, the fact that 37 percent of fixed-term contracts are for more than one year suggests that many of those are renewals. As for self-employed workers or freelancers, nine out of ten are in the informal segment of the labour market; in other words, they are not registered with the tax authority. This statistic coincides with the proportion of self-employed and freelance workers who do not have a higher education qualification (they also account for nine out of ten self-employed workers and freelancers).

Our labour market differs substantially from those in developed country economies. There are not many formal salaried employees in Peru, and even they experience a high degree of job insecurity. In addition, we have a lot of fixed-term (temporary) contracts and high rates of self-employment (especially informal self-employment). In total, of the nearly 17 million workers in the country, only nearly 3 million (one in six) work under textbook conditions with an open-term contract. This reality poses serious challenges when attempting to shape labour policy under normal circumstances, and moreso when channelling temporary support in times of crisis such as this.

As reflected in the previous tables, of the nearly 17 million workers in Peru, just over 13 million are based in urban areas. Moreover, there are no substantial differences between the national and urban indicators. Based on that analysis, we have concentrated on urban areas, where exposure to the pandemic (and, therefore, to the sudden

falloff in economic activity) is highest, affecting the vast majority of the country's workers (78 percent).

Apart from the distribution of workers in the labour market, it is important to ascertain how the structure of the Peruvian labour market is reflected in household incomes. This means moving from an individual analysis to one that focuses on the household economy. The first step in that direction involves defining households according to how their members are linked to the labour market. Tables 3a and 3b below categorize urban Peruvian households according to the number of wage earners: zero (0,2 percent of the country's households), one (30 percent), two (40 percent), three to four (26,5 percent) and five or more (3,3 percent). We see that the modal household in the country has two wage earners. The proportion of households with one and three wage earners is almost identical.

In households with one wage earner, 31 percent are in formal employment as their main occupation, similar to the national rate. It is also interesting to note that 15 percent of workers who are the sole earner in their household have more than one job. In terms of households with two wage earners, in 19 percent of them, both workers have formal employment for their main occupation; in 32 percent one worker has formal employment and the other informal employment; and in the remaining 49 percent, both earners have informal employment.

The first thing to note is that households with only one wage earner are more vulnerable than other households. If that sole wage earner loses their job, the shock to household income will be greater than in other households with more wage earners. Overall, apart from the working conditions of each individual, vulnerability to shocks decreases as the number of wage earners increases.¹

1 In the following section we present an analysis according to the main source of household income.

There are significant differences in the sociodemographic indicators of households according to the number of wage earners. First of all, the household burden indicator (total number of household members divided by the number of members earning an income) decreases steadily with the number of wage earners. Next, the indicators of the presence of children under 6 years of age in the home and the presence of students in the home increase with the number of wage earners. The potential impacts of a sudden stoppage of household incomes will differ according to these dependency measures. Some workers may thus be better able to deal with government restrictions on going out to work than others.

In terms of labour characteristics, of note is the relatively low dependency of households on formal salaried labour, which fluctuates between 23 and 30 percent for the main household wage earners, and the importance of freelance work (self-employment)—of which about 90 percent is informal. The data also shows that household expenditure is lower than income on average, suggesting that there are no serious debt problems. In fact, approximately three out of four Peruvian households manage to balance their accounts, and the rest have surpluses. The percentage of households whose income does not cover their expenditure is statistically zero.

Table 3a
Main demographic indicators of urban households by number of wage earners, 2018

Wage earner	No wage earner	One wage earner	Two wage earners	From 3 to 4 wage earners	5 wage earners or more	Total
No. of households	16 354	1 942 707	2 648 111	1 975 874	261 438	6 844 483
%	0,2	28,4	38,7	28,9	3,8	100,0
Average household education level ^{1/}	Secondary completed	Secondary completed	Secondary completed	Secondary completed	Non-University higher education	Secondary completed
Household burden		2,3	1,7	1,5	1,4	2,0
Households with children under 6 years old (%)	9,3	11,2	17,4	17,9	27,4	16,2
Households with students (school & university)	24,9	36,6	56,3	67,2	78,3	54,6
% Households in poverty	5,2	16,0	14,2	14,1	13,7	14,4
% Households in extreme poverty	3,6	1,1	0,8	0,7	0,5	0,8

Source: INEI-ENAHO, 2018.

Table prepared by the author.

Note: ^{1/} The median of the highest level of education among household members is reported in each category of the variable number of wage earners.

Tabla 3b
Main labour indicators of urban households by number of wage earners, 2018

Wage earner	No wage earner	One wage earner	Two wage earner	From 3 to 4 wage earners	5 wage earners or more	Total
Self-employed workers and freelancers ^{1/}	0	47,1%	40,2%	35,9%	31,9%	40,3%
Informal self-employed workers and freelancers ^{2/}	0	39,2%	34,7%	31,0%	27,0%	34,4%
Formal salaried employees ^{3/}	0	23,5%	26,6%	27,7%	30,9%	26,3%
Annual monetary household income from employment (primary and secondary occupations) ^{4/(A)}	0,0	15 832,9	27 014,5	40 213,5	64 055,1	29 036,1
Annual gross monetary income ^{5/(B)}	0,0	20 573,7	33 614,0	49 030,4	77 871,0	36 010,5
% <i>Work-related income</i> /Gross income (A/B)		77,0%	80,4%	82,0%	82,3%	80,6%
Annual monetary household expenditure ^{6/(C)}	10 757,2	16 881,1	24 558,7	32 573,4	45 101,9	25 465,9
Total annual gross household expenditure ^{7/(D)} (C/B)	21 883,5	23 342,5	32 428,2	42 380,5	57 204,9	33 668,8
		82%	73%	66%	58%	71%

Source: INEI-ENAH0, 2018.

Table prepared by the author.

Note: ^{1/}Self-employed workers and freelancers as a proportion of the total number of employed workers. ^{2/}Informal self-employed workers and freelancers as a proportion of the total number of employed workers. ^{3/}Salaried employees (public and private) as a proportion of the total number of employed workers. ^{4/} Gross monetary income in PEN received by the household from primary and secondary occupations, salaried and self-employed. Does not include income from self-consumption and in-kind income from primary and secondary occupations. ^{5/}Work-related monetary income plus property income and transfers in PEN, including taxes. ^{6/}Expenditure on goods and services in PEN involving a cash payment by households. ^{7/} Monetary expenditure plus self-supply, self-consumption, private and public donations in-kind, in PEN.

2. GOVERNMENT ECONOMIC MEASURES

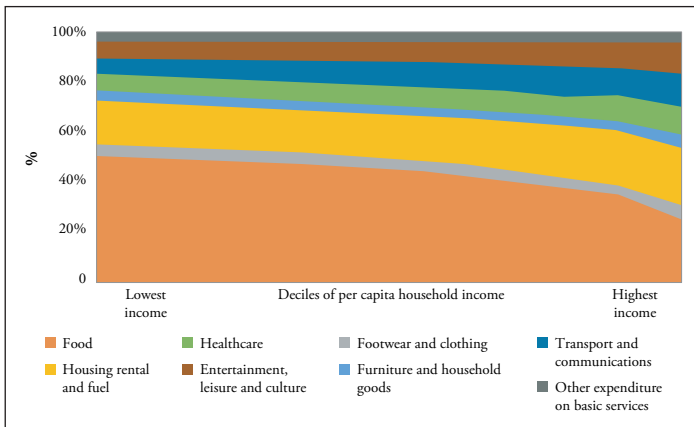
In contrast to countries in Europe and North America, Peru responded quickly to the arrival of the virus. At the time of writing, the measures taken by the government can be classified into three types: (1) strengthening of the health system through investment in care personnel (bonuses), equipment (intensive care units and other supplies) and infrastructure (dedicated hospitals for treating those infected by the virus), (2) slowing the expansion of the virus through a mandatory quarantine (flattening the virus transmission curve), and (3) instituting an economic relief package for households and businesses.

The relief package includes cash transfers to poor and vulnerable urban households, to households with self-employed workers, and to businesses. The starting point for identifying beneficiary households has been the *Padrón General de Hogares* ‘General Household Register’ (PGH) from the *Sistema Nacional de Focalización de Hogares* ‘National Household Targeting System’ (SISFOH). This register contains socio-economic information that indicates whether households are poor or vulnerable. Different existing social programmes and state subsidies identify their targets using this source. Of these, the national conditional cash transfer programme JUNTOS, which offers direct support for the poorest households, is the most important programme in terms of budget; but there are several others.²

2 These include: *Beca 18 ‘18 Scholarship*’ from the *Programa Nacional de Becas y Crédito Educativo* ‘Scholarship and Educational Credit Programme’ (PRONABEC), *Seguro Integral*

JUNTOS provides primarily rural coverage, while the first stage of cash transfers due to this emergency was targeted to urban households. In these areas, a family grant of PEN 380 (approx. \$110) called *Bono 380* was provided. This amounts to just over 80 percent of the national monthly minimum living wage (*Remuneración Mínima Vital-RMV*). As a reference, 50 percent of workers with informal jobs have monthly incomes below the monthly minimum amount (PEN 760); whereas this is the case with only seven percent of formal workers. In addition to the cut-off depending on urban status, a cut-off was

Figure 2
Urban Peru: composition of per capita household expenditure by decile, 2018



Note: Calculations of per capita household expenditure are based on the INEI methodology (2018).

Source: INEI-ENAH0, 2018.

de Salud SIS (SIS) -*SIS Gratuito* 'Comprehensive Health Insurance- Free SIS' (SIS), the *Trabaja Perú* 'Peru Works' programme generating socially inclusive employment, *Fondo de Inclusión Social Energético* 'Social Inclusion Energy Fund' (FISE), a severe disability pension, and the *Mi Vivienda vulnerable* 'My vulnerable home' housing earthquake protection grant.

also made according to household income. Households whose head is employed in the public sector (where there will be no labour cuts) were not eligible for the grant. This prioritized 2,7 million households. Within these 2,7 million lower-income households, there are 1,5 million self-employed workers, 1 million wage earners (60 percent of them in informal jobs), 270 000 unpaid family workers and 100 000 domestic workers.

This subsidy covers a significant part of household expenditure (see Figure 2). Among lower-income households, food is the most important item of expenditure. It represents 50 percent of total expenditure, followed by housing and fuel (10 percent).

Household food expenditure in PEN is shown below in Figure 3. This shows that a monthly grant of PEN 760 covers all or almost all food expenditure for the first two deciles of income, 85 percent

Figure 3
Urban Peru: monthly household expenditure on food by decile, 2018 (in PEN at Metropolitan Lima prices)



Source: INEI-ENAHO, 2018.

Note: Calculations of household expenditure are based on the INEI methodology (2018).

of food expenditure for the third decile, 73 percent of food expenditure for the fourth decile and 69 percent of food expenditure for the fifth decile.

However, there is an important caveat. Previous statistics assume perfect targeting, which we know is very difficult to achieve on the ground. In any case, the information contained in the PGH makes it possible to identify poor and vulnerable households under normal conditions. However, the conditions of this sudden stoppage are exceptional and unprecedented in contemporary social politics. It is likely that some households that do not usually qualify as poor or vulnerable do now have financial difficulties, having lost their income-generating capacity.

At the same time, it is also worth underlining here that the PGH is an imperfect instrument. In these types of registers we are usually concerned about both inclusion and exclusion errors. However, given that this intervention reaches more than half of the urban population, the concern about errors of exclusion is of lesser importance. The central concern is now errors of inclusion. At this point it is difficult to understand how many errors of this type there may be in the data. Correcting this problem would require inviting unregistered households to enter their data and be evaluated.

The PGH data are imperfect for detecting households that, without being poor or vulnerable, have experienced a sudden stoppage to their income, which endangers their ability to maintain a smooth path of consumption. There is no doubt that self-employed middle-income workers are a group that could be affected in this regard, especially by the quarantine. That is why a grant has been created for them of a similar amount and frequency as the one for poor and vulnerable households. The households benefiting from this grant have been targeted in such a way that no household will receive more than

one grant. At the time of writing, this grant for self-employed workers is being disbursed to over 700 000 homes.

Since the households prioritized for the *Bono 380* do not regularly receive transfers from the state, bank information was not available for most of them. This meant that such households had to visit banks to receive their grants in cash. This bonus has been delivered in coordination with the country's network of banks and the *Jurado Nacional de Elecciones* 'National Elections Board' (JNE), which is a body that manages a comprehensive database of the country's citizens, which is used whenever elections are called. Just as in election situations, each person consulted a website to see whether he or she was eligible for the grant, and the bank where he or she could receive it. Part of the coordination involved paying attention to the number of people that each bank can assist per day while still maintaining social distancing requirements.

Overall, between the two grants, 3,4 million urban households have been reached. The country has a total of 6,4 million households in urban areas (and 1,8 million households in rural areas). The household grants are thus potentially reaching more than half of the country's urban households. The monthly cost of this effort is about 0,8 percent of the GDP.

In addition, there is a measure in place for workers who have an individual capitalization account in the private pension system from a past formal employment relationship. They are being allowed to withdraw up to PEN 2000 (approximately \$590) from their accounts. People with balances below PEN 2000 can withdraw all of their available funds.

For companies, the enacted measures have been aimed at avoiding both payment issues and the mass dismissal of workers. A credit guarantee package has been put in place for up to 98 percent of new

loans that businesses acquire within the national financial system. The percentage of the guarantee covered by the State depends on the amount of the loan (the higher the amount, the lower the guarantee, on a scale). The size of the loan is calculated based on the company's contribution to Essalud (workers' health insurance) or average monthly sales. Ineligible companies include those with tax debts greater than 1 ITU (PEN 4300), those linked to the financial system, and those owing civil reparations for corruption cases. Beneficiary companies are not allowed to distribute dividends or profits, except for percentages paid to their employees, during the term of the loan. Loan duration may be up to 36 months, with a grace period (for both interest and principal) of up to 12 months. This programme has been allocated PEN 30 billion. At the time of writing, disbursement of programme funds is just beginning.

A few additional measures intend to protect contracted workers. There is an incentive package for low-income workers (monthly wages below PEN 1500 or approximately \$400), which covers 35 percent of payroll, not subject to any conditions. Furthermore, an Emergency Decree has been issued with measures aimed to "maintain the employment relationship and remuneration, privileging the agreement with workers," given the magnitude of the sudden stoppage and related uncertainties (regarding the duration of the quarantine, the strategy for the return to normalcy, and the potential need for further quarantines). In this context, "full suspension of work" by an employer is permitted only exceptionally, with the suspension of the employment contract only possible for the duration of the health emergency. In other words, the contract remains in force, but all its effects are suspended temporarily: the worker does not have to work and the employer does not have to pay salaries. The Minister of Labour has indicated that full suspension cannot be used by companies that have

benefited from the payroll subsidy or guarantee framework, although the rule does not explicitly indicate this. The company can proceed with this measure after completing a form that details its grounds for requesting it. The Ministry of Labour, ex-post, decides whether the grounds merited application of the measure. If not, the company will be required to compensate the worker for all wages not received.

This suspension measure is complemented by the continuation of Social Health Insurance benefits for the duration of the suspension and access to a monthly transfer of PEN 760 for workers in the microenterprise labour system earning up to PEN 2400 per month. Workers are also allowed to access one gross payment per month of work suspension from their *compensación por tiempo de servicio* ‘compensation for time of service’ (CTS) account, which is part of a system of individual accounts where the employer deposits half a month’s wages twice a year. Similarly, workers may withdraw up to PEN 2000 from their retirement pension fund. For employers, they may postpone their contribution to CTS accounts for workers with gross wages higher than PEN 2400, from the first half of the year to November.

For companies operating in the financial market, the package is not “one-size-fits-all”, but rather depends on payroll or sales. The labour package, though it appears to be a “one-size-fits-all” measure, will also particularly benefit larger and more formal companies (both characteristics are associated with higher productivity).

Overall, the size of the fiscal stimulus package has an announced ceiling of 12 percent of the GDP, but the components are not yet known in detail. As described, some of the components are cash flows (from the State to households), while others are financial guarantees. In addition, some workers have been allowed to withdraw money from their individual capitalization accounts in the private pension system. It is highly likely that the components of the package will

become more fully known in the coming days. If the ceiling for the package needs to be raised, the Ministry of Economy and Finance has announced that they would be willing to do so. All of this information, like many of the uncertainties surrounding the virus, will become clearer over the coming weeks.

Public indebtedness is currently low (28 percent of the GDP), meaning that the size of the package does not seriously compromise the financial viability of public accounts. Yet to date there is no estimate of the impact of the pandemic on the economy. It is impossible to know whether or not the magnitude of the package is appropriate for the current challenge. Quarantine is undoubtedly the measure that will have the greatest impact, both on the development of the pandemic itself and on household economies. Households are already affected by mobility restrictions, which limits the ability to work for most of the workforce. Below, we analyse which groups of households could be the most affected by this.

3. THE VULNERABILITY OF HOUSEHOLDS

The distribution of the main wage earners according to their labour market integration shows a number of differences between households with one or two income earners (tables 4 and 5). In line with the increased vulnerability of single-income households, the employment rate is higher among those with two incomes (65,8 percent versus 58,1 percent). The rate of salaried employment is also higher in two-income households (51,8 percent versus 43,6 percent). If we estimate the proportion of formal workers in each case, among single-income households it is 32,2 percent while among two-income households it is 35,3 percent. These estimates assume that all employees in the public sector are formal, and that having a contract is proof of formality in the private sector. Finally, the proportion of unpaid family workers is marginally lower among households with two wage earners.

An analysis of the type of labour market integration evidences the vulnerability of households in the current situation. One distinction that it is important to make in this respect relates to the type of protection that comes from formal labour market integration. Formal salaried employees benefit from legal protections that do not apply to self-employed persons or freelancers. As we can see from the above tables, formal workers only account for a small proportion of main household wage earners, at about one-third of the actively employed population.

In fact, the number of “protected” people in the workforce may well be even smaller than one-third. The category includes workers

Table 4
Distribution of households with one wage earner,
by employment status and average monthly income,
at the national urban level (2018)

Households with only one wage earner	Number of households	%	Average monthly income ^{1/}	Gross monetary income ^{2/}
	1 942 707	100,0		
Occupied workers	85 270	4,4	2992,5	3356,4
<i>Salaried workers</i>	1 129 107	58,1	1380,5	1629,5
Salaried workers	491 764	43,6	1843,3	2156,3
Salaried workers in the public sector	107 296	21,8	2661,6	3012,2
Salaried workers in the private sector	384 468	78,2	1614,9	1917,5
With contract	195 468	50,8	2211,1	2684,2
Open-ended	50 811	26,0	3004,3	3810,5
Fixed-term	130 829	66,9	1919,0	2290,1
No contract	189 000	49,2	998,3	1124,5
Freelancers/self-employed ^{3/}	531 674	47,1	914,9	1093,9
Formal ^{4/}	88 926	16,7	1698,1	1972,4
Informal ^{4/}	442 748	83,3	757,6	917,5
Freelancers/self-employed ^{3/}	531 674	47,1	914,9	1093,9
Highly-skilled (higher education) ^{5/}	76 451	14,4	1707,6	2004,9
Low-skilled (up to secondary completed) ^{5/}	455 222	85,6	781,8	940,9
Unpaid family workers	75 827	6,7	0,0	2005,4
Domestic worker	29 842	2,6	815,5	1536,0
<i>Unemployed workers</i>	728 329	37,5	0,0	1627,2

Source: INEI-ENAH0, 2018.

Table prepared by the author.

Note: ^{1/} Average monthly income in PEN from primary and secondary employment. Does not include payment in kind or self-consumption. ^{2/} Cash income in PEN received by the household for work, property rental and transfers, including taxes. ^{3/} Special Primary Education is excluded from the calculations. ^{4/} According to the Ministry of Employment and Job Promotion's definition of formal and informal employment. ^{5/} Formal and informal employment levels are approximated based on the level of education obtained.

Table 5
Distribution of households with two (02) wage earners,
by employment status and average monthly income,
at the national urban level (2018)

Households with 2 wage earners	Number of households	%	Average monthly income from labour ^{1/}	Gross monetary earnings ^{2/}
	2 648 111	100,0		
Employers	84 034	3,2	3982,6	4458,3
<i>Employed workers</i>	1 741 352	65,8	2398,8	2793,5
Salaried employees	901 327	51,8	2934,6	3423,4
Salaried employees (public)	208 657	23,2	4161,8	4724,3
Salaried employees (private)	692 669	76,8	2565,0	3031,5
With contract	338 980	48,9	3465,2	4230,1
Open-ended	86 528	25,5	4571,8	5898,6
Fixed-term	225 751	66,6	3083,8	3667,6
No contract	353 690	51,1	1702,1	1882,6
Self-employed/freelance ^{3/}	700 538	40,2	1813,4	2106,0
Formal ^{4/}	97 105	13,9	3098,4	3674,7
Informal ^{4/}	603 433	86,1	1606,6	1853,6
Self-employed/freelance ^{3/}	700 538	40,2	1813,4	2106,1
Highly-skilled (higher education) ^{5/}	93 474	13,3	3075,7	3758,6
Low-skilled				
Low-skilled (up to secondary completed) ^{5/}	607 065	86,7	1619,0	1851,6
Unpaid family workers	92 141	5,3	0,0	1945,5
Domestic worker	47 326	2,7	2267,4	2624,5
<i>Unemployed workers</i>	822 725	31,1	0,0	2626,6

Source: INEI-ENAH0, 2018.

Table prepared by the author.

Note: ^{1/} Average monthly income in PEN from primary and secondary employment. Does not include payment in kind or self-consumption. ^{2/} Cash income in PEN received by the household for work, property rental and transfers, including taxes. ^{3/} Special Primary Education is excluded from the calculations. ^{4/} According to the Ministry of Employment and Job Promotion's definition of formal and informal employment. ^{5/} Formal and informal employment levels are approximated based on the level of education obtained.

on temporary contracts in the private and public sectors. This is not insignificant, given that the bulk of employment contracts in the private sector are temporary (fixed-term contracts). How much effective protection there is at present depends on how the duration of fixed-term contracts is distributed. At least 27 percent of these contracts are for three months or less (Jaramillo and Campos, 2019). Moreover, according to data from the *Planilla Electrónica*, the database of all formal businesses, about 7 percent of employment relationships end each month, while at the same time 8 percent of jobs are created. In the first quarter, January to April, employment termination rates are also seasonally high, fluctuating between 8 and 12 percent (Jaramillo and Campos, 2020). Thus, if recruitment comes to a halt in March and April, which seems realistic, we can expect somewhere between 16 and 20 percent of formal jobs to have been lost in the first two months of the crisis, purely by virtue of this inertia. It is not clear whether this dynamic is affected by support programmes, which do not include any payroll stability conditions. In addition, in the public sector there are an indeterminate but considerable number of so-called “administrative service contracts” which are essentially fixed-term contracts.³

Therefore, only a limited number of households enjoy regulatory employment protection at the moment. At the other extreme, the groups that have the potential to be hardest hit are uncontracted salaried workers, accounting for 15,6 and 19,4 percent of each household group analysed, respectively, and informal self-employed persons, accounting for 36,5 and 33 percent. As we can see, these two groups

3 Citing the Ministry of Economy and Finance as a source, information in the press has suggested that in 2018 there were about 500 000 administrative service contracts in the public sector. That would involve around one-third of public sector contracts. Retrieved from <https://gestion.pe/economia/management-empleo/cifra-exacta-trabajadores-cas-planilla-235737-noticial> (*Diario Gestión*, 12/06/2018).

represent just over half of all urban households. Formal self-employed persons make up a small group, on which a far smaller portion of the country's urban households depend. As reflected in the tables above, they tend to be professional workers. This group is expected to be badly affected, even if part of their work can be done from home and they are more likely to have savings.

Finally, the unpaid family worker and domestic worker categories will probably suffer the same restrictions on their work as informal self-employed workers, who will face restrictions when trying to sell their products—except for those who work in their own homes or the homes of family members. In the case of domestic workers, those who sleep overnight at the homes where they work will be less affected than those who commute daily.

4. THE VULNERABILITY OF FIRMS

In order to protect the incomes of workers, it is vital to keep companies afloat. This is important not only because of the volume of workers that they directly employ, but also because of the indirect employment generated through their demand for intermediate goods from other companies or self-employed workers.

It is no secret that in the Peruvian business sector companies with varying degrees of formality co-exist, both in terms of the employment that they generate and their relationship with the State. Table 6 shows the structure of the business sector, according to the *Directorio Central de Empresas y Establecimientos* ‘Central Directory of Companies and Establishments’, the most comprehensive data source in the sector⁴. According to this source, in 2015 the formal business sector in Peru consisted of 2 042 992 economic units. As we can see, the total number of production units in the formal sector is less than one-third of the number in the informal sector. However, their output is four times higher (INEI, 2016a).⁵

With regards to employment, the data are in line with that presented above based on household surveys: formal employment accounts for 27 percent of all employment. Thus, labour productivity is almost

4 The database comprises two information systems: the National Statistical System (used as a basis for the Economic Census and updated annually in line with Economic Surveys) and the Register of Taxpayers kept by the Peruvian tax authority (SUNAT).

5 This section is based on chapter 3 of Jaramillo and Campos (2020). *La dinámica del mercado laboral peruano: creación y destrucción de empleos y flujos de trabajadores*.

Table 6
Characteristics of productive units
in formal and informal sectors, 2015

	Total	Formal sector		Informal sector	
Production units (in thousands)	8709	2043	23%	6666	77%
Firms	480	480		-	
With RUC [individual taxpayer registration]	1563	1563		-	
Agricultural producers	2386	-		2386	
No RUC	4280	-		4280	
Employment (in thousands)	15 919	7004	44%	8915	56%
Formal employment	4266	4266		-	
From 01 to 05 people	23%				
From 06 to 10 people	4%				
From 11 to 30 people	9%				
31 or more people	64%				
Informal employment	11 653	2738	23%	8915	77%
From 01 to 05 people	80%				
From 06 to 10 people	8%				
From 11 to 30 people	5%				
31 or more people	8%				
Labour productivity (PEN per employee)	37 850	61 631		13 000	
GDP (in millions of PEN)	602 527	486 842	81%	115 685	19%

Source: INEI, 2016b.

Note: The informal sector consists of production units that are not incorporated and not registered with the tax administration. Informal employment refers to jobs that do not receive statutory benefits such as social security, bonuses and paid leave.

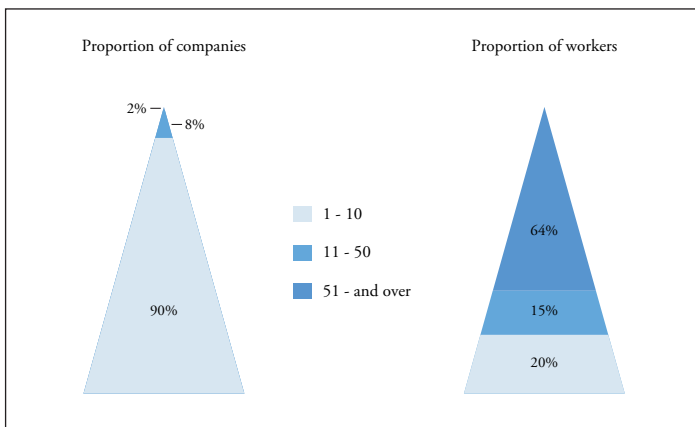
five times higher in the formal sector than in the informal sector. As for their legal status, of the total number of formal companies, only 23,5 percent are incorporated as companies, while the rest are registered only as individual taxpayers (*Registro Único de Contribuyente – RUC*).⁶

⁶ Some 76,6 percent are registered as natural persons, 10,9 percent as public limited liability companies, 6,5 percent as individual limited liability companies, 2,6 percent as commercial

According to the *Planilla Electrónica*, the monthly register of company employees, there were around 270 000 registered companies this year. This represents approximately 13 percent of the total number of companies in the formal sector of the Directory. This is important, since any measure of support for formal companies should concentrate on those that report data every month to the *Planilla Electrónica*, as that would presumably contain the most up-to-date information.

Figure 4 shows the distribution of businesses by size, according to the *Planilla Electrónica*, and the proportion of workers they hire on average in a year relative to the total number of formal EAP workers.⁷ Smaller enterprises (from 1 to 10 workers) account for 90 percent of

Figure 4
Proportion of companies and workers by company size, 2015



Source: *Planilla Electrónica* | Prepared by the author.

limited liability companies, 1,5 percent as associations and other types of organization, respectively, and 0,4 percent as civil society organizations (INEI, 2016a).

⁷ Although the number of companies making use of the *Planilla* is only around one-tenth of all companies, the distribution of employment by size is similar between the group of companies in the *Planilla* and the total number of formal companies in the Directory.

businesses, but employ only 20 percent of the formal EAP; medium-sized enterprises (from 11 to 50 workers) account for 8 percent of enterprises and employ 15 percent of the formal EAP; and larger enterprises (51 or more workers) account for 2 percent of enterprises but employ 64 percent of the formal EAP. Therefore, approximately 1 percent of these businesses generate half of the country's formal employment. It is clear that at this juncture support or stimuli that exclude large companies will also exclude the bulk of formal employment.

5. POLICY OPTIONS

When considering policy options, it is useful to distinguish between two stages in the current crisis. The first stage is characterized by heavy restrictions on the supply of labour, as the population in general was under quarantine. In the second stage, many of these restrictions are being lifted gradually, but the level of economic activity is still very low. Different policies are required for each of these contexts. In the first stage, it was not possible to stimulate employment or consumption, since most work activities were prohibited and household consumption was mainly food. In the second stage it is more possible to work, but consumption and aggregate demand are depressed.

The aim in the first stage was to help households and businesses overcome the barriers imposed by the health measures. In households, this meant directly supporting basic domestic consumption (food and cleaning items). In companies, this required measures that supported their survival and preserved the jobs that they generated. In the network of businesses as a whole, it was important to ensure that payment chains were maintained. In the second stage, the aim was to stimulate growth in employment and aggregate demand.

Policies for the first stage of the crisis

In the first stage, the policies sought to fulfil two aims. The primary concern was to provide an income to households that had workers

who had been employed before the onset of the crisis. The second was to preserve the viability of formal jobs—in other words, prevent businesses from going bankrupt and generate incentives for them to retain their workers.

Table 7 presents a maximalist approximation of the cost of maintaining the work-related income of the primary wage earner in each household. In the country 5,1 million urban households have a main wage earner who is a private salaried employee or self-employed person. In other households, the primary wage earner is a public sector employee (whose job, we assume, will not be cut), a domestic worker or an unpaid family worker.

Household income support is provided according to the employment status of the main wage earner, without making any targeted

Table 7
Peru: EAP in employment and the primary wage earner in urban households, 2018. Cost of maintaining their income

	EAP in employment	Work-related income from primary occupation	Total work-related income from primary occupation
Salaried employees (private)	2 973 552	1749	5 200 320 553
With contract	1 718 496	2203	3 786 196 160
No contract	1 255 057	1121	1 407 060 494
Self-employed and freelance	2 127 632	1193	2 537 303 763
Formal	364 985	1965	717 339 722
Informal	1 762 647	1033	1 819 964 962
Monthly total			7 737 624 317
Quarterly total			23 212 872 950
GDP 2019			930 705 000 000
Percentage points of GDP			2,49

Source: INEI-ENAH0, 2018.

Note: The main wage earner is the person in the household who generates the highest work-related income. Work-related income is monetary income in PEN from the principal activity.

cuts. Thus, this first cost estimate is maximalist in two ways: (i) it is based on universal support for the income of urban households (100 percent of households), and (ii) it assumes that said support covers the total work-related income of the primary wage earner in each household (100 percent of their income). Coverage for contracted salaried employees is the highest cost here, followed by informal self-employed persons and non-contracted salaried employees.

The key benefits of such a measure include preservation of formal employment and income stability by supporting household consumption, which will be critical once restrictions on the supply of labour start to be lifted. The cost does not seem so high when compared to the government's 12-point GDP ceiling for supporting the economy in this crisis, especially when we consider that the Ministry of Economy and Finance has indicated that it could be raised if necessary as local and global economies evolve.

A more limited strategy of state cash support to households is currently being implemented. This consists of fortnightly payments of PEN 380 for each of the 3,5 million urban households targeted using the criteria set out in the previous section. Thus, the cost of this transfer for the same three months of the previous year would be: $380 \times 6 \times 3,5 = 7980$ million, or 0,86 percent of the GDP.

The two options described above provide leeway for the government's policies. Priority would be given to self-employed and informal employees who are not on the *Bono 380* beneficiary register, but whose lack of income at the moment means that they are very likely to fall below the poverty line.

A different operational strategy is required in order to reach beneficiaries in each group of workers. It could be very simple and direct for formal salaried employees. In fact, the previously mentioned grant for 35 percent of the payroll value is currently operational and targets

this. The options are to expand the scope of this grant immediately or wait and see what transpires in the formal employment sector before deciding whether there is a case for increasing it.

For informal salaried employees and informal self-employed persons alike, the main difficulty is that there is inadequate registration. This makes operational design complicated. The *Seguro Integral de Salud* ‘Comprehensive Health Insurance’ (SIS) database could be the starting point for reaching this population (beyond the poor and vulnerable households included in the *Padrón General de Hogares* ‘General Register of Households’ (PGH) and the households that are included despite not living in poverty). Formal self-employed persons could submit their sworn declarations to this respect from the last year, and, based on this, a fixed amount could be set and used as a credit against future income tax payments.

There are two important operational details that need to be addressed in the short term to facilitate the implementation of these procedures in the future. Firstly, it is important to identify any errors of exclusion that might affect the PGH. A systematic review of the PGH, with a focus on identifying sources of exclusion problems, is an immediate priority. We also should consider something Brazil has done when faced with the same circumstances: open up the possibility of registering on the PGH through a digital platform and application. In the context of this emergency, which makes it difficult to verify information, a registration of that kind would serve as a sworn declaration. If it were subsequently found that a citizen’s declaration was inaccurate, any amounts that had been transferred could be charged in the annual tax return.

Secondly, it is important to incorporate the vast majority of households receiving grants into the financial system. To that end, the next time a payment is made over-the-counter at banks, the procedure

to open a very basic savings account for each head of household could be included in the payment. In addition, the feasibility of telephone transfers should be explored.

On the business side, as discussed in section 3, the government has already implemented a set of measures to safeguard the health of companies. The subsidy of 35 percent of the payroll value has been implemented, as well as a working capital guarantee fund. More recently, Emergency Decree 038 has opened up the possibility of applying the “perfect suspension of labour,” correcting an earlier ED that implicitly prohibited it. The real problem is that if companies are unable to adjust their payroll in this situation, it could cause them to go under or lead to major job losses. At the same time, the criteria have been relaxed for companies to compensate for this stoppage period by granting leave, as well as by reducing working hours with a consequent reduction in remuneration, if agreed upon with the workers. It is essential to monitor the responses of companies to these subsidies and to assess how effective they are in preserving jobs and businesses.

As for the guarantee fund, it is too early to assess whether the impact of the incentives for businesses, particularly smaller ones, is enough to get them to use such initiatives. While the rules do not discriminate by type of enterprise (companies versus other forms of organization), it is clear that smaller enterprises have more difficulty accessing credit in general. Data from the Superintendence of Banking and Insurance indicate that only 12,4 percent of the total credit balance is for micro and small enterprises (MSMEs) and 37,5 percent of the total debtors are MSMEs, even though they constitute 90 percent of formal enterprises. In this context, it is important to maintain proper monitoring of access to this fund by setting up a daily-updated database of the credits covered by this guarantee fund and the characteristics of the companies using it—particularly their size and sector

of activity. This information will help improve the mechanism for credit to reach small businesses and the activity sectors to which it is intended to flow.

The measures taken so far have reached a significant proportion of urban households: over 50 percent. The expected effect of this measure is to prevent further impoverishment of households that were already poor before the crisis. A comparison of the amount of *Bono 380* with the income of these families suggests that for the duration of the transfer, poverty levels would not shift dramatically unless the income of households in deciles 6-10 falls to a level where their income is below that of the second decile. In one out of every five households, this grant covers 100 percent of the food expenses of these families in regular times, while in others it partially covers them. However, this is a temporary grant, and thus it will only have a passing effect on household income distribution. In any case, as suggested below, it is likely that the prolongation of the crisis after the restrictions on labour supply are lifted will require some kind of poverty alleviation programme, which would to some extent replace the *Bono 380*.

Policies for the second stage: reactivation

The second stage comes into play as the restrictions on the labour supply are lifted. A reasonable scenario is that the transition to this stage will be gradual and variable across sectors. Restrictions on certain activities (e.g. tourism and public events) will certainly continue for most of the year. In this regard, a crucial issue is health policy, regarding the extent to which it will be possible to open up spaces to restart economic activities. By necessity, widespread testing should be put in place, and in some cases it could be a requirement for restarting activities, such

as meal delivery. The use of adequate protection will also continue to be an issue conditioning many activities. A more sophisticated health policy will require significant public investment to strengthen the capacity of the health sector to act, particularly in early identification and effective monitoring, and generate a closer public-private partnership.

At the same time, the scale of the policy effort in the second stage will depend on both how long the indiscriminate quarantine continues and how effective the policies in the first stage have been at keeping companies afloat. Continuous evaluation and improvement of the effects of the measures taken is therefore key.

In any case, a high unemployment scenario, tempered by an increase in informal employment, and depressed aggregate demand will likely be issues to address in this second stage. The natural focus, therefore, seems to be accelerating the generation of employment. In the context of countries such as Peru, the additional challenge is to make these new jobs formal in character. This stage is much more typical of previous experiences of international economic crises. In such contexts of economic depression, the usual remedies involve wide-ranging monetary and fiscal policies; these should be adjusted to the particular conditions of this emergency. Here we will focus instead on labour market and social protection policies that complement the known tools of liquidity management and management of public spending and taxation.

Labour market policies during an economic recession should aim to promote the expansion of formal employment. Informal employment will also grow in the absence of unemployment insurance, as people will have to generate their own employment. How much informal employment grows will depend on the policies promoting formal employment. Restrictions on formal employment relate to the cost of regulation and, in the case of open-ended contracts, difficulties when

it comes to terminating employment contracts. Given the political difficulties of reforming labour regulations, consideration should be given to extending the payroll grant at the start of this stage. This would be justified insofar as it allows faster growth of formal employment. One way of implementing this effect is to announce an end date when companies will no longer enjoy this subsidy for newly hired workers, while extending the subsidy for those already hired for an additional reasonable period, which could be between 3 and 6 months.

An additional regulatory restriction on formal recruitment relates to the minimum wage. The minimum wage in Peru is high relative to median earnings; indeed, it is higher than in several European countries (OECD, 2019). Moreover, it is high in relation to wages in the informal sector. Indeed, the cost of a worker earning minimum wage in the formal sector is 20 percent higher than the average wage of an informal salaried employee and 30 percent higher than that of an informal self-employed person. Non-compliance with the minimum wage is also high. Thus, extending the subsidy to formal contracts is further justified in this situation. While it is not feasible, and perhaps not desirable, to lower the minimum wage, attempts to raise it further must be resisted in this context.

In these times of crisis there will be plenty of well-intentioned policy proposals for boosting work; unfortunately, this is not effective for improving overall well-being. Entrepreneurship policies are one group. They aim to boost workers' employability by encouraging them to create their own jobs (which then generate jobs for others, according to the narrative). Peru is a country with an excess of entrepreneurship compared to other countries with similar levels of development. To be more specific, we have an excess of subsistence-level entrepreneurship, with low productivity. Estimates in the literature show that the productivity of a job in an enterprise with fewer

than five workers is only six percent of the productivity of a job in a company with 51 or more workers. Improvements to aggregate productivity in the country must correct some of the poor allocations of resources that have been made in the past. This crisis is thus also an opportunity to improve.

In addition to creating the right conditions for the expansion of formal employment, the reactivation of employment in the future “new normal” should incorporate many of the instruments of active labour market policies. In this regard, it will be important to strengthen job placement centres by improving the flow of information that facilitates labour market participants’ decisions on (i) job searches and (ii) job training and retraining. In the same vein, on-line employment portals should be enhanced, in order to help match labour supply with demand.

Young people are among those most likely to be affected by this pandemic in terms of labour markets. In normal times they were already experiencing higher rates of unemployment and informality, with overall lower rates of labour market participation. This is one group that will need more support to join the labour market. For this group, an internship programme could facilitate the transition from the world of education to the world of work, along with a version of the policy package described above oriented towards the young workforce.

Another potentially beneficial tool in the early stages of post-quarantine economic recovery is a temporary employment programme. One of the advantages of this intervention is that the country already has a programme of this kind. This means expanding it could be a relatively simple matter. However, its operations should be reviewed. Currently, local governments execute it in urban and rural districts with high poverty levels, overseen by the Ministry of Labour. In the new context, it should be linked to public investment policies

that are implemented as part of a tax package to restart the economy. A Keynesian public infrastructure development programme focuses on formal and specialized private companies, but since this type of small local labour-intensive work is typically unattractive to this type of enterprise, it offers a niche for this type of programme.

In this second stage of the crisis, with fewer restrictions on mobility and therefore on labour participation, the need for the *Bono 380* is reduced. However, as substantial increases in unemployment and informal work are expected, the risk of households falling into poverty increases. This is particularly true in urban areas, which were the first areas affected by the health restrictions. The existing social protection network for normal times must be extended.

This may be a good time to implement a decisive expansion of the JUNTOS programme to include urban areas. Since its creation in 2005, JUNTOS has been primarily rural-focused. One important reason for this is that rural poverty rates have been much higher than urban poverty rates (today the former is about 40 percent, the latter about 15 percent). Programme targeting has taken a geographical approach, which has hindered expanding the programme to urban areas, where the targeting criteria need to be different. The “new normal” that the coronavirus pandemic will leave in its wake, with greater urban poverty, will be a good reason to accelerate this expansion.

Another group of well-intentioned policies support informal workers but generate unsuitable long-term incentives. Such interventions channel resources to improve the poorer welfare conditions of informal workers. While the intention is good, the incentives have perverse effects for the medium and long term. They subsidize the informal status of workers, which perpetuates many of the inequalities and inefficient allocations of resources. This crisis should also be an opportunity for society to internalize the notion that formal employment

status brings significant benefits. Policies to support vulnerable workers can more easily reach people and their households if their information is properly updated in tax authority records and they are included in the financial system. In these circumstances, public policies should reach everyone—formal and informal. But after the storm has passed, we must engage in a serious discussion on ways to increase formality in the country.

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Latin America is currently suffering from two independent but related shocks: the impact of COVID-19 and the shock of commodity prices. Peru, we argue, is a case in which the strongest impact comes from the pandemic. Peru was the first country in Latin America to react and implement sanitary and economic measures against the coronavirus. The country has been in mandatory quarantine since Monday, March 16. This carries very important challenges for all economic actors. Global and national activity has suffered a sudden stop with direct implications for: (i) the income generating capacity of independent workers, (ii) the jobs of formal and informal workers, and (iii) the survival of small, medium and large companies. In this note we consider the situation of Peruvian households in the face of the pandemic, exploring their vulnerabilities through an analysis of their main source of income generation: work. We also consider the situation of the companies that employ the workers under analysis. We present an overview of what the government's main actions have been so far and offer some recommendations.

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