"The labor market situation in Mexico before and during COVID-19"

Jiménez-Bandala, C. A.[1], Peralta, J.[2] Sánchez, E.[2], Márquez, I.[2], Arellano, D.[2]

Abstract

Labor market indicators showed significant improvements during 2018 and 2019, in particular, the employed population without benefits presented its lowest level in 15 years, which represents a decline in labor precariousness. Unemployment decreased during March to 3.3%, the same as labor informality to 55.8%. The real minimum wage had its greatest recovery since 1976 and reached the purchasing power equivalent to that of 1991. The above data reflect that before the economic paralysis derived from the health contingency, the labor market had satisfactory results. During the pandemic, it can be observed that the reduction of mobility in workplaces had positive results in reducing the rate of infection. However, the entities that reduced mobility to a lesser extent have higher levels of labor informality. Based on different models, it is possible to indicate that labor precariousness is a structural cause for facilitating the spread of COVID-19. Without containment measures, it is estimated that 725 thousand jobs will be lost between April and May.

Key Words

Labor market, unemployment, minimum wage, pandemy

Introduction

This May 1st was commemorated in the midst of a worldwide confinement due to the greatest health emergency in the history of mankind; never before had an epidemic spread on a planetary scale and measures of the magnitude that have been taken today. The real size of the problem is not yet known, but the economic brake could lead to the deepest economic crisis of

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[1] Professor-Researcher Faculty of Business Universidad La Salle Mexico. E-mail: carlos_jimenez@lasalle.mx

[2] Actuarial Intern Faculty of Business Universidad La Salle México

capitalism. The ability of countries to emerge more quickly from the depression will depend to a large extent on the recovery of their labor markets.

This report presents the results of the analysis of the labor outlook in Mexico before and during the COVID-19 health contingency, as well as an approximation of the effects on the dynamics of job creation in the short term.

The pre-pandemic situation

With data as of the last quarter of 2019, the distribution of the employed population by income level maintained the same trend observed during the last 10 years, the proportion of jobs earning two minimum wages or less grew; on the contrary, the proportion of jobs with an income of more than 5 minimum wages decreased. Thus, the two segments with the lowest incomes went from representing 35% of workers in 2005 to 53% in 2019, while the highest segment went from 12% to 3.5% (Graph 1).
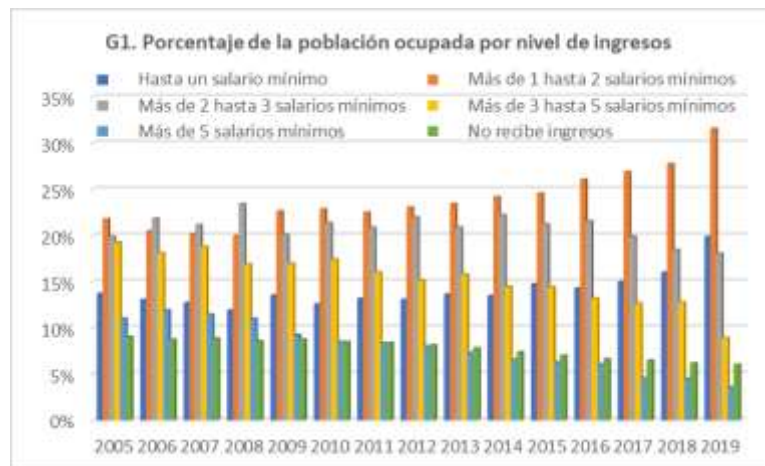
Own elaboration with data from ENOE (INEGI).

In terms of working conditions, significant improvements have been presented in indicators such as the employed population without access to health institutions; at the close of 2019 the

proportion was 61.7% which is the lowest percentage in at least 15 years, after reaching a peak of almost 65% during the economic crisis of 2009 (Graph 2).

G2. Porcentaje de la población ocupada sin acceso a instituciones de salud (2005-2019)

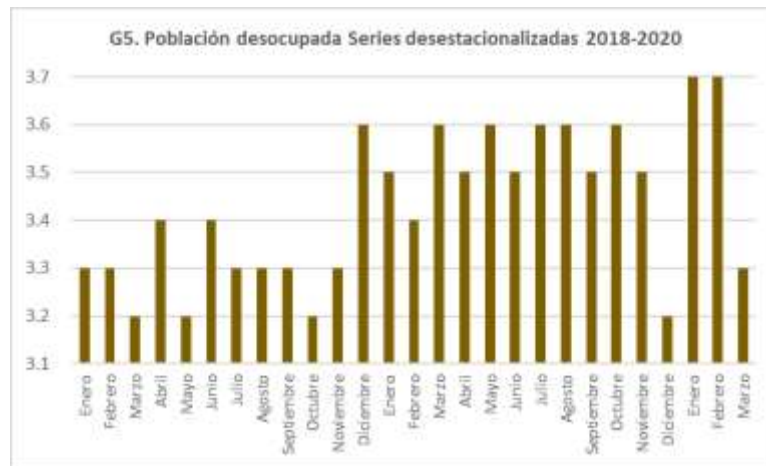Own elaboration with data from ENOE (INEGI).

Despite the fact that one of the labor conquests commemorated on May 1st is the 8-hour workday, in Mexico 27.7% of workers have longer workdays, yet this figure is also the lowest in 15 years (Graph 3). At the end of 2019, 36% of workers were working without benefits (excluding access to health care), also the lowest figure in the entire period studied (Graph 4). From the above, it is clear that prior to the pandemic, the labor market was showing a reduction in precarious conditions.

Own elaboration with data from ENOE (INEGI).

Although economic dynamics have been affected by the global cooling and a downward trajectory that started in 2017, the pace of employment generation has not been affected as demonstrated in previous reports, extraordinary wage increases did not have negative effects. For the month of March 2020 unemployment fell to 3.3% with seasonally adjusted figures and 2.9% with original figures, which is lower by 0.3% with respect to March 2019 and 0.1% higher than in 2018 (Graph 5).

Own elaboration with data from ENOE (INEGI).

Real wages have also experienced the greatest recovery since 1976; considering March inflation, they reached 116 pesos per day, equivalent to the purchasing power they had in 1991, still far from the 280 pesos of the 1980s, but they are now much higher than in the five previous six-year periods (Graph 6).

Own elaboration considering INPC 2018=100 and CONASAMI data.

The situation during the pandemic

On March 30, the government issued, through the Health Council, the declaration of a sanitary emergency due to force majeure derived from the COVID-19 pandemic; from that moment on, non-essential activities were interrupted, although since at least a week before, some economic entities had reduced their work or transferred it to remote work, particularly educational institutions. The first effects were felt in the number of formal jobs registered with the IMSS, which fell by 0.6%, equivalent to 130 thousand jobs. The net balance so far this year is a loss of 7 thousand jobs, and so far this six-year term, the balance remains positive at 480 thousand.

To verify the degree of effectiveness of the quarantine, an econometric model was proposed with data on the reduction of mobility by entity provided by Google (Community Mobility

Reports) and the infection rate. It was found that the highest level of significance was presented by the reduction of mobility in workplaces, thus, the states that reduced their work activities by more than 60% presented the lowest infection rates. The control of the pandemic and the reduction of mobility present a relationship similar to an inverted U, as the states reduce their mobility the infections continue to grow, passing the threshold of 60% the infections begin to decrease, however, not all the states are managing to reach this level and one of the main causes is the economic structure of informal markets.

A second econometric model found a negative relationship between informality and reduced mobility; states with greater informality reduce their mobility to a lesser extent (Figure 7). Thus, a higher COVID-19 infection rate is associated with higher levels of labor informality, such that for every one percentage point increase in the number of informal workers, the infection rate increases by 0.17%, with a significance level of 95%.

G7. Relación de informalidad y reducción de la movilidad
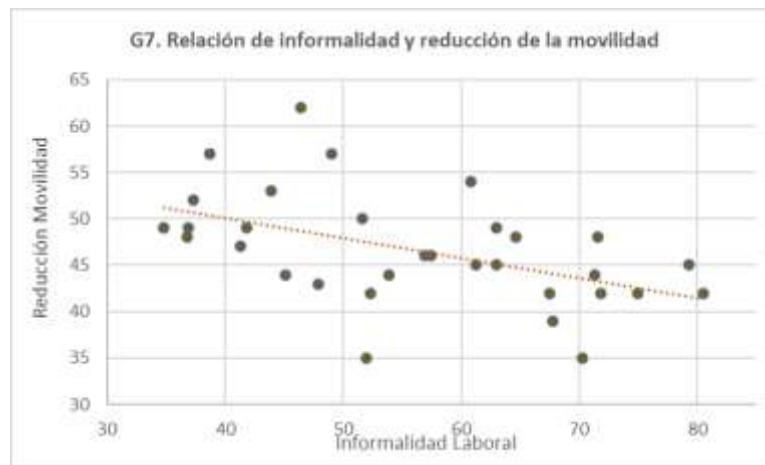
Own elaboration with data from Google (CMR) and Secretaría de Salud México.

Jiménez-Bandala, C. A , Peralta, J, Sánchez, E, Márquez, I., Arellano, D.

In general, it was found that labor conditions are having an important incidence in the spread or containment of the disease. A third model with count data (Poisson type) considered the number of deaths per entity explained through informality rates, critical employment conditions (underemployed workers and workers working more than 8 hours per day), and conditions of access to health institutions. The marginal effects were significant at 95% confidence and show elastic relationships between the independent variables and the dependent variable. This means that small changes in working conditions can greatly favor or harm COVID-19. Thus, one percentage point more informal workers increases 1.26 times the probability of increasing the number of deaths; one percentage point more workers in critical conditions increases 1.16 times the probability of deaths; on the contrary, increasing by one percentage point the number of workers with access to health institutions reduces 2.19 times the probability of deaths from the disease. All of the above results allow us to point to labor precariousness as a structural cause that facilitates the spread of this coronavirus. With this we make an urgent call for economic policy actions to reverse the precarious working conditions inherited from neoliberalism.

What could be the outlook?

As we have said in the introductory part, we are facing a phenomenon of proportions never seen before, so any prediction model faces the problem of censored data and omitted variables. On the other hand, we also face the problem of information collection; in different countries, follow-up surveys on employment and prices, including census surveys, have been suspended, so that access to accurate data will be interrupted in the coming months.

With advance data from the U.S. Bureau of Labor we know that the number of claims for unemployment benefits went from 251 thousand to 2.9 million in the week of March 21; it

increased to 6 million on March 28 and another 6 million on April 4, to jump to 12 million on April 11, with which we can affirm that private payrolls reduced at least 20.5 million jobs. These losses could translate into an economic drop of 11% of the Gross Domestic Product.

For the Euro zone, the economic contraction would be in the range of -6% to -9%, with Spain and Italy being the most affected economies with declines of 14% and 15%, respectively, and unemployment rates of up to 25%.

The International Labor Organization (ILO) estimated that in the first quarter of the year, 130 million full-time jobs were paralyzed and in the second quarter there will be 305 million; the most affected region would be the Americas, which would lose up to one twelfth of its jobs. The same report draws attention to the most vulnerable workers, located in the informal economy and in middle and low income countries, such as ours.

Under a regression model that correlates the behavior of the Mexican labor market with that of the United States, we observe a level of adjustment of 82% with a monthly lag period, so that, with the above reservations, we could forecast the behavior of the unemployment rate of the following month in Mexico with the previous months in the United States. The result would be that, in an inertial manner, without containment measures, 725 thousand jobs will be lost between April and May, representing 3.53% of the workers reported to the IMSS.

It should be noted that 40% of the jobs in the country are concentrated in micro-businesses and that according to the last economic census there are at least 4.5 million economic units belonging to this segment, which is why, without a doubt, they should be the segment of greatest attention for employment protection policies. In the next report of this Observatory (OISAD) we will show the marginal propensity of companies to lay off or hire workers according to the size of the establishment and the effects of the microcredit support that the federal government is granting.

The federal government has programmed a total of 2 million microcredits aimed at companies that have preserved employment; if the effects are positive and significant, this measure will have supported between 3.9 and 6.5 million jobs, so that, in a successful scenario, the jobs lost to the IMSS would be between 125 and 235 thousand jobs. Therefore, it should be accompanied by a fiscal strategy aimed at large companies so that they do the same with the remaining jobs.

Based on the above analysis, we recommend:

Given that employment is the only economic lever (push-up) that is capable of preventing a country from falling into a poverty trap (Andrade and Jiménez-Bandala, 2018), the economic policy efforts promoted by governments should be oriented towards labor markets.

The preservation of jobs and the relative stability of the purchasing power of wages will stimulate aggregate demand; the effort made by employers not to increase unemployment and not to reduce wages will result in greater profits in the medium term.

For its part, BANXICO, as the monetary authority, should accompany the process with a greater injection of liquidity into the markets, preferably differentiated to avoid inflationary outbreaks. The greatest benefits should be directed towards the most vulnerable sectors, which account for the largest number of jobs.

The credit support that the federal government has gradually released over a medium-term horizon is a good strategy and should therefore be continued. However, marginalized sectors whose fiscal incorporation at this time is more unlikely, such as informal businesses, should

also be strengthened. A responsible expansionary fiscal policy in the levels of indebtedness ensures a more far-reaching stability.

Subsequently, the legislature will have to develop the corresponding studies to legislate on the processes of transformation of labor relations. As a result of this pandemic, we will see an acceleration in the digitalization of many tasks, mainly in companies in the tertiary sector. Telework and digitization will increase the gaps between regions and industries that will intensify the work and could make it even more precarious, an example of this is what we live now, where it is the worker who has borne the costs of connection, electricity, computer equipment and has seen his personal and work spaces blurred.

In any case, it is not advisable to abandon the wage recovery policies that have already been undertaken; on the contrary, they should be continued, while eradicating labor precariousness which, as has been demonstrated, is a structural cause that makes us more vulnerable to unexpected events such as this pandemic.

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Methodological Notes

An econometric model was proposed that correlated the infection rate per entity (T_c) with respect to the level of mobility reduction in urban centers (M_n) reported by Google (shopping, sourcing, workplaces, transportation, and recreation locations) as of April 30, 2020, as shown in a (1)

$$T_c = -\beta_1 M_n + \varepsilon \tag{1}$$

The results show greater significance when workplace mobility is reduced (M_W) with the following results in (2). The model has the intercept constant omitted because it must start from the origin when $T_c = 0$ and cannot have negative numbers.

$$Tc = -0.3\square\square + \square \tag{2}$$
$$p = (0.042)$$

A second set of models correlated labor informality (I_L), with the reduction of labor mobility (M_W) as in (3), which was also found to be significant and with a negative sign, so the correlation between the contagion rate and informality was proposed as in (4).

$$M_W = \beta_0 - \beta_1 I_L + \varepsilon \qquad (3)$$

$$T_c = -\beta_1 I_L + \varepsilon \qquad (4)$$

$$T_c = -0.17 I_L$$
$$p = 0.031$$

To test the incidence of variables associated with the labor market, a Poisson-type count data model was proposed as in (5) which is probabilistic and therefore nonlinear, where Y (number of deaths reported by COVID-19 of the entities as of April 30, 2020, normalized under the assumption that each entity had the same probability of occurrence according to the size of its population and considered as a discrete variable) and the independent variables were critical occupation conditions, informality rate and access to health institutions.

$$Pr[Y = y] = \frac{e^{-\lambda}\lambda^y}{y!}, \; y = 0,1,2 \qquad (5)$$

$$lnL(\beta) = \sum_{i=1}^{N} [y_i x_i'\beta - \exp(x_i'\beta) - \ln(y_i!)]$$

The results of the marginal effects with their respective z-significance values are shown below:

Marginal effects (dy/dx)

Variable	dy/dx	P>z

Informality rate	1.26	0.000
Critical Occupancy Conditions Rate	1.16	0.000
Rate of employed EAP with access to health institutions	-2.19	0.000