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The impact of the COVID-19 crisis on income distribution in Mexico City[1]

Impacto de la crisis del COVID-19 en la distribución del ingreso en la Ciudad de México

Armando Sánchez Vargas*

Instituto de Investigaciones Económicas, Universidad Nacional Autónoma de México, México

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Abstract

The spread of the SARS-CoV-2 virus triggers a sudden reduction in labor supply and demand. The workers' salary is reduced in the sectors which are highly labor intensive in Mexico City. This will generate negative changes in the income distribution. To approximate the effect of the COVID-19 crisis on income distribution, we propose a simulation using an income equation estimated with a pseudo-panel and data from the Encuesta Nacional de Ocupación y Empleo (ENOE). Our findings suggest that the sector most affected, in terms of income distribution by the health emergency, would be the service sector; while the least affected would be the construction sector. However, in all sectors, the cohorts that are most sensitive to the economic shock, and that would fall by one decile in the income distribution, are the individuals of the generations born between 1951 and 1985.

JEL Code: J2, C23, E24
Keywords: demand and supply of labor; panel data models; intergenerational income distribution

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*Corresponding author.
E-mail address: armando_sanchez123@hotmail.com (A. Sánchez Vargas).
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Resumen

La propagación del virus SARS-CoV-2 desencadena una súbita reducción en la oferta y la demanda de trabajo. Los ingresos de los trabajadores se reducen en los sectores más empleadores en la Ciudad de México. Esto generará cambios negativos en la distribución del ingreso. Para aproximar el efecto de la crisis del COVID-19 en la distribución del ingreso, proponemos una simulación usando una ecuación de ingresos estimada con un pseudo-panel y datos de la Encuesta Nacional de Ocupación y Empleo (ENOE). Nuestros hallazgos sugieren que el sector más afectado, en términos de la distribución del ingreso por la emergencia sanitaria, sería el sector de los servicios; mientras que el menos afectado sería el sector de la construcción. Sin embargo, en todos los sectores, las cohortes más sensibles al shock económico y que descenderían un decil en la distribución del ingreso, serían aquellas que concentran a los individuos de las generaciones nacidas entre 1951 y 1985.

Código JEL: J2, C23, E24
Palabras clave: oferta y demanda laboral; modelos de datos tipo panel; distribución del ingreso intergeneracional

Introduction

The health and economic crisis caused by the SARS-CoV-2 virus has paralyzed production, machines, and the workforce. The general lockdown has radically modified working methods and schedules. Jobs have been lost, and demand for manufacturing has fallen (Nicola et al., 2020). Other risks that could aggravate the crisis in Mexico City would be business failures, bank insolvency, and lack of liquidity. Furthermore, the COVID-19 crisis will negatively affect production and the demand for goods and household incomes, which will probably lead to an increase in the number of poor people to 10 million (CONEVAL, 2020). This trend will reduce the possibilities of social and income mobility of the population working in the sectors most affected by the crisis, such as services, industry, trade, and construction. The change in income distribution will affect the most vulnerable sectors, especially the younger and productive age cohorts of workers, who were already facing a very precarious labor and income situation before the crisis.

The main objective of this article is to estimate the effect that the COVID-19 crisis will have on the income of the working population in Mexico City. As labor supply and demand fell due to the health crisis, wage income declined suddenly starting in the second quarter of 2020 and, with it, the income of more than one million formal employees. This work seeks to answer the following questions: How many formal workers will move one or more deciles in the income distribution in Mexico City? What will be the impact on the social mobility of income in Mexico City? What can be done to mitigate the shocks? Specifically, this work simulates the negative impact on income for those employed in sectors with more

formal workers and analyzes which cohorts of workers will fall one decile in the income distribution due to the crisis.

To answer these questions, this work uses an estimation with data from a pseudo-panel constructed from the National Occupation and Employment Survey (Spanish: Encuesta Nacional de Ocupación y Empleo, ENOE). To obtain an estimation of how the health crisis will affect the income distribution of people working in the service, trade, construction, and industry sectors, this work proposes a simulation based on an income equation under the assumption that employees would see their income reduced by at least one minimum wage due to the paralysis of employment in the construction, industry, trade, and service sectors in Mexico City.

The findings suggest that, with the economic shock resulting from the pandemic, many formal workers would fall by at least one decile in the income distribution in Mexico City. However, the sector most affected is the service sector, with 1,019,199 workers having a lower income and quality of life. The population most affected by the COVID-19 crisis would be those formal workers born between the 1951 and 1985 cohorts. Thus, the challenge will be to design public policies that foster conditions to prevent these workers from falling into poverty.

The article is structured as follows. The second section presents the theoretical framework for income distribution and mobility. The third section displays the stylized facts about the income of formal workers in Mexico City, especially those belonging to the industry, trade, services, and construction sectors before the COVID-19 crisis. The fourth section describes the methodology used to carry out the simulation. The next section discusses the results and, finally, the conclusions are presented.

Theoretical framework

By income mobility, this work means the change in income distribution among segments of the population in a given period (Vargas, 2002). This mobility makes it possible to occupy a different position in the initial distribution. For example, households located in lower percentiles would have greater mobility if they could reach higher positions in future periods. This would be feasible through opportunities and possibilities of access to better living conditions associated with jobs with higher salaries. It is worth mentioning that these movements between percentiles can be in the direction of higher or lower positions or in no direction, maintaining their position in a given decile (Ayala & Sastre, 2002).

Ayala and Sastre (2002) argue that an alternative in identifying income mobility is through differentiation by groups since grouping individuals with similar characteristics will make the results less skewed, leading to more precise findings. Few studies consider the analysis of intergenerational income mobility for Mexico. However, authors such as Torche (2010) consider that social mobility in Mexico is

low in the socio-economic distribution and that, as long as the socio-economic achievements of children are very similar or equal to those of their parents, mobility will continue to be low. On the other hand, Campos and Vélez (2015) resort to the methodology of Genicot and Ray (2012) for the measurement of upward income mobility and show that short-term labor income mobility in Mexico has been low. For his part, Trombetta (2017) conducted a study for Latin America (including Mexico) in which household surveys in each country were used to learn about changes in income distribution. The author finds that income mobility is very small but significant.

Conversely, Torche (2014) mentions that intergenerational income mobility is lower in Latin America than in industrialized countries, given the concentration of income in a few sectors of the population and that the most disadvantaged families face problems in accessing good quality education. Among other research works dedicated to Latin American countries, Jiménez and Jiménez (2009) suggest that in Argentina, income persistence has increased in the population belonging to the lower percentiles in the income distribution, so there is less intergenerational mobility for disadvantaged families. Araya (2019) shows that in Uruguay, intergenerational income mobility is determined by the degree of development of the country and the influence of the labor market structure.

Stylized facts about the income distribution of the economically active population in Mexico City

To correctly calculate the impact of the change in the income of the population participating in the labor market, it is necessary to know the income situation of the study population before the health crisis. It is also important to identify the factors that affect labor income, such as gender, age, education, and others. First, it is important to know how the working population was distributed according to their employment sector before the pandemic. For this purpose, a pseudo-panel was constructed that includes the formal working population working in the construction, industry, trade, and services sectors from the first quarter of 2005 to the first quarter of 2020.

Figure 1 shows that the employed population by generational cohorts in Mexico City was mostly in industry, trade, and services. For example, the 1971-1975 and 1976-1980 cohorts were employed in the industrial sector, while those individuals in the 1961-1965 cohort had higher participation in the service sector. It is worth mentioning that the youngest cohort, those individuals born in the period 1996-2000, were proportionally distributed, although their participation in trade was relatively prominent. It is also important to note that with the 2020 health crisis, this distribution will undergo notable changes in the coming years.

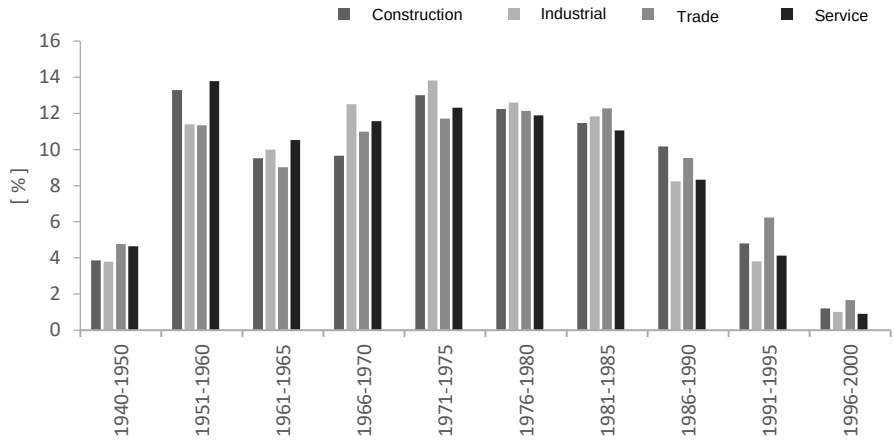


Figure 1. Employed population by labor sector for the different cohorts.
Source: created by the author based on the ENOE from the first quarter of 2005 to the first quarter of 2020.
Note: These data consider the expansion factor. Only the employed population reporting income in the formal sector is considered.

On the other hand, Table 1 presents the real monthly income median and the average hours worked per week by labor sector. Table 1a considers only the construction sector, where the cohort with the highest median income level is the 1940-1950 cohort, with 10 591.45 pesos, while the cohort with the lowest median income is the 1996-2000 cohort. The average number of hours worked per week is similar in both cohorts, 45.70 and 45.45 hours, respectively. In the industrial sector (Table 1b), something similar is seen, as these same cohorts have the highest and lowest median income levels, 1940-1950 with 6 834.50 pesos per month and 1996-2000 with 4 837.73 per month. However, the generational cohort that, on average, works the most hours is the 1966-1970 cohort, with 47.42 hours per week.

Now, analyzing the employed population in Table 1c, it may be observed that the cohort with the highest median monthly income is that of 1961-1965, with 7,354.45 pesos, but it is not the generation that on average works the most hours; the 1940-1950 cohort works 50.73 hours per week. Contrary to what has been seen in the previous sectors, in the services sector (Table 1d), the cohort that works the most hours on average is the 1986-1990 cohort, which works almost 45 hours per week. However, in all cases, the youngest cohort (1996-2000) comprises the population that has the lowest median income compared to previous generations.

Table 1
Real monthly income median* and hours worked per week by cohort in each formal sector of employment

a) Construction sector

Cohort	Real monthly income (July 2018 = 100)	Average hours employed	Income per hour employed
1940-1950	$10 591.45	45.70	231.78
1951-1960	$11 479.10	47.83	239.98
1961-1965	$10 272.87	47.79	214.96
1966-1970	$9 385.92	49.35	190.18
1971-1975	$9 976.97	48.96	203.79
1976-1980	$9 024.72	47.73	189.08
1981-1985	$8 919.47	47.98	185.91
1986-1990	$8 982.97	48.73	184.33
1991-1995	$7 480.81	46.98	159.23
1996-2000	$6 215.89	45.45	136.76

b) Industrial sector

Cohort	Real monthly income (July 2018 = 100)	Average hours employed	Income per hour employed
1940-1950	$6 834.50	45.44	150.41
1951-1960	$6 681.98	46.40	144.00
1961-1965	$6 644.08	46.20	143.81
1966-1970	$6 492.78	47.42	136.92
1971-1975	$6 589.96	46.73	141.01
1976-1980	$6 619.66	46.95	141.00
1981-1985	$6 093.99	46.35	131.49
1986-1990	$5 474.39	46.89	116.74
1991-1995	$4 990.86	46.51	107.31
1996-2000	$4 837.73	47.30	102.29

c) Trade sector

Cohort	Real monthly income (July 2018 = 100)	Average hours employed	Income per hour employed
1940-1950	$7 347.09	50.73	144.82
1951-1960	$7 122.60	51.23	139.04
1961-1965	$7 354.45	50.44	145.79
1966-1970	$7 085.93	50.64	139.91
1971-1975	$6 693.09	49.83	134.32

d) Service sector

Cohort	Real monthly income (July 2018 = 100)	Average hours employed	Income per hour employed
1940-1950	$8 238.48	41.05	200.69
1951-1960	$8 957.10	42.67	209.92
1961-1965	$8 652.76	42.86	201.89
1966-1970	$8 855.25	43.68	202.75
1971-1975	$8 919.47	44.16	201.98

1976-1980	$6 848.58	48.95	139.90	1976-1980	$8 726.88	44.62	195.59
1981-1985	$6 167.70	48.63	126.82	1981-1985	$8 076.23	44.50	181.50
1986-1990	$5 517.81	47.79	115.47	1986-1990	$7 432.57	44.84	165.75
1991-1995	$5 160.00	47.94	107.63	1991-1995	$6 116.72	44.35	137.93
1996-2000	$4 770.41	48.71	97.94	1996-2000	$5 260.93	44.68	117.74

Source: estimated by the author based on data from the ENOE from the first quarter of 2005 to the first quarter of 2020
Note: Real income refers to the monthly amount reported in pesos by employed persons. The National Consumer Price Index (NCPI) for each quarter of the period 2005-2020 based on the third quarter of 2018 was used to change it to real values.

To appreciate the behavior of monthly income more visually, Figure 2 presents the real income median by gender in each labor sector. In all cases, the real monthly income of women is below the same estimate for men. It is not until the generation of 1971-1975 (Figure 2a) that women's income rises and exceeds that of men in the construction sector, and until the cohort of 1981-1985 that the wage gap decreases. This tendency is similar in the services sector (Figure 2d), where the wage level is relatively equal from the same cohort (1981-1985). Something similar happens in the construction sector in Figure 2a and the commercial sector in Figure 2c, where the real monthly income median between both genders is closer, beginning with the 1976-1980 cohort; however, in both cases, women's real income is still lower.

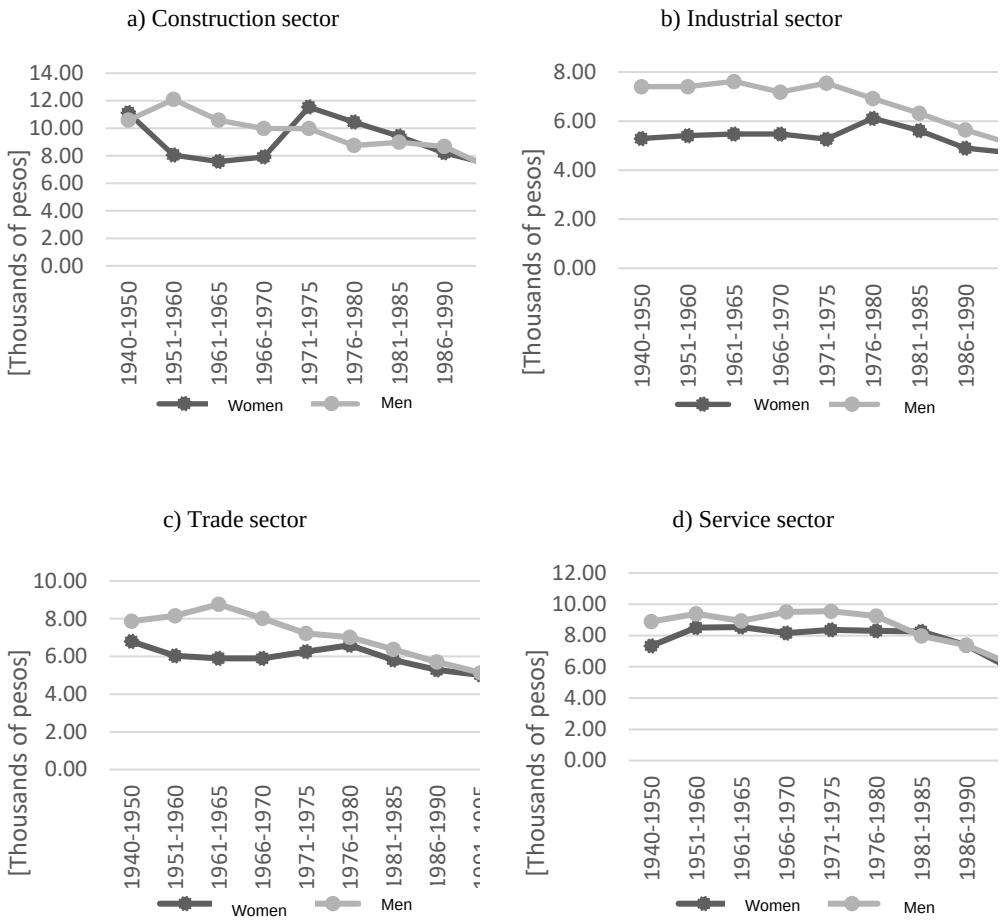


Figure 2. Real monthly income median by cohort and gender for each employment sector in the 2020q1 quarter (pre-crisis).
Source: estimated by the author with data from the ENOE.
Note: Only the employed population reporting income in the formal sector is considered.

Another important factor to consider in the working population is the education level since working in different sectors influences their education level and income. Figure 3 displays the behavior of the real monthly income median by education level.

Figure 3a considers only the construction sector. Those workers with a higher level of education have a higher median income, reaching 20 thousand pesos in the 1940-1950 cohort, unlike those with a preschool/primary level, whose real income is only 9 thousand pesos. In the industrial sector (see Figure 3b), those who reach postgraduate education levels have a median income of between 16 and 26 thousand

pesos in the 1940-1950 and 1976-1980 cohorts, respectively. Figure 3c considers the trade sector. Here it is possible to see how in the 1951-1960, 1971-1975, and 1976-1980 cohorts, those with postgraduate education levels reach an income of up to 40 thousand pesos. In contrast to the previous sectors, in Figure 3d for the service sector, most cohorts reach a higher level of education, including postgraduate education.

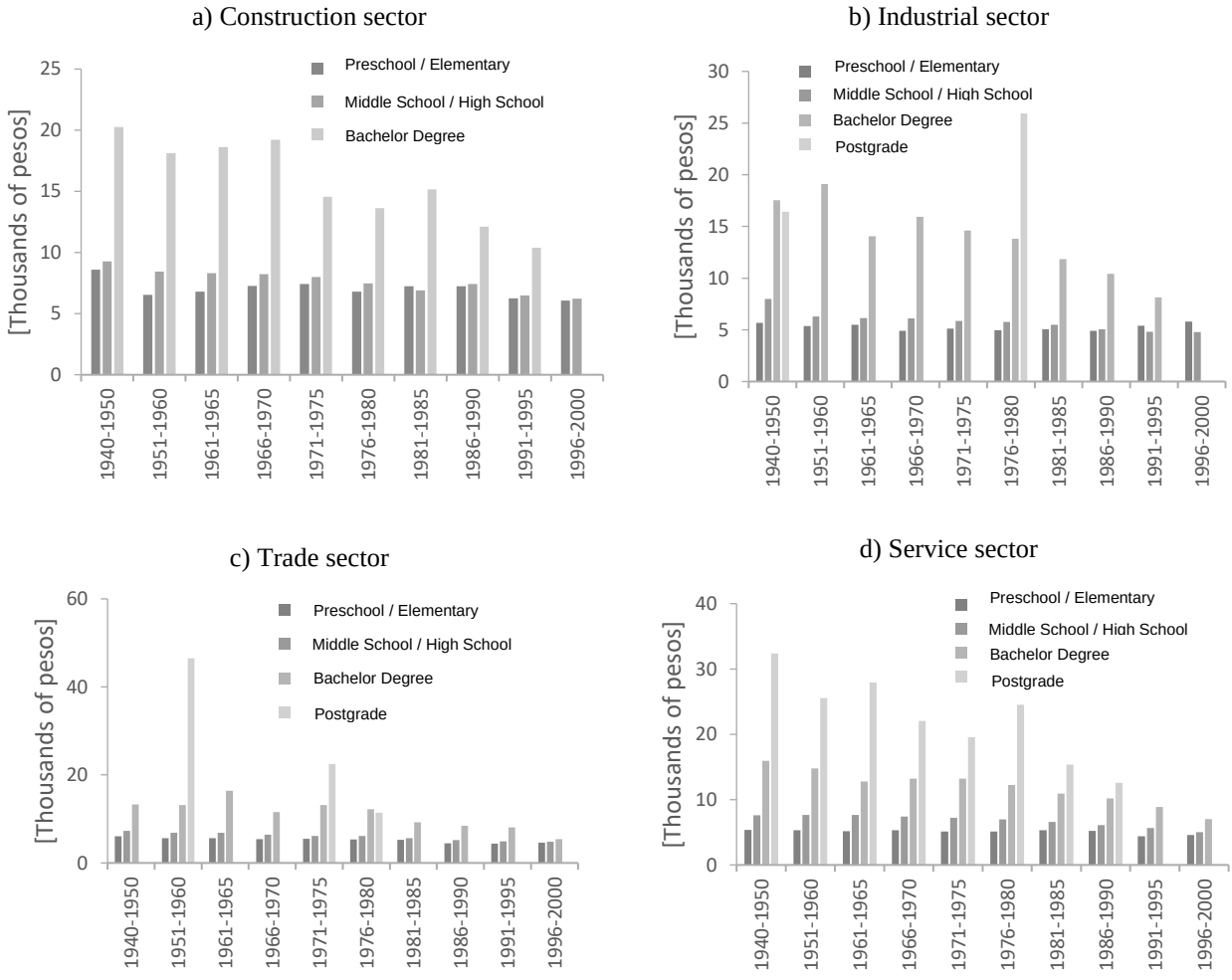
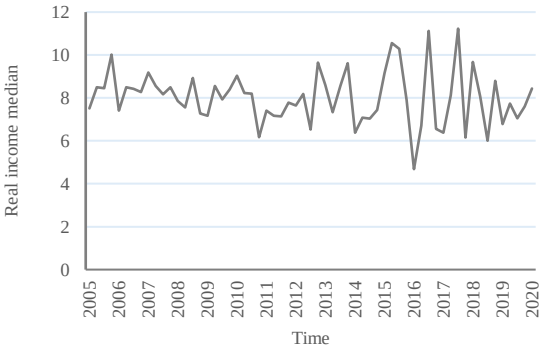


Figure 3. Real monthly income median by cohort and educational level by employment sector
Source: estimated by the author with data from the ENOE.
Notes: Real income refers to the monthly amount reported in pesos by employed persons. The National Consumer Price Index (NCPI) for each quarter of the 2005-2020 period based on the third quarter of 2018 was used to estimate income at real values.

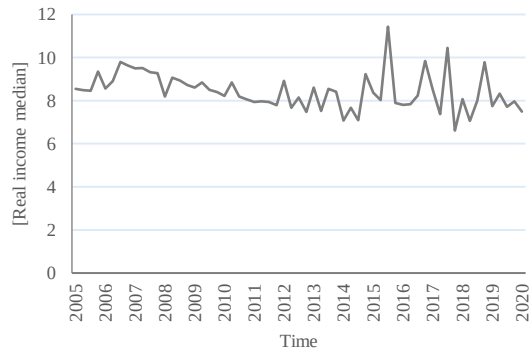
The median income is presented since it is the best measure of central tendency according to the skewed distribution of the data.

Finally, Figure 4 presents the real monthly income median for each cohort over the last 15 years. It can be seen that there is variability in all cohorts. From the first to the eighth cohort (1940-1950, 1951-1960, 1961-1965, 1966-1970, 1971-1975, 1976-1980, 1981-1985, and 1986-1990), income remains between 6 thousand and 10 thousand pesos in the last five years. The figures show that incomes converge to 8 thousand pesos.

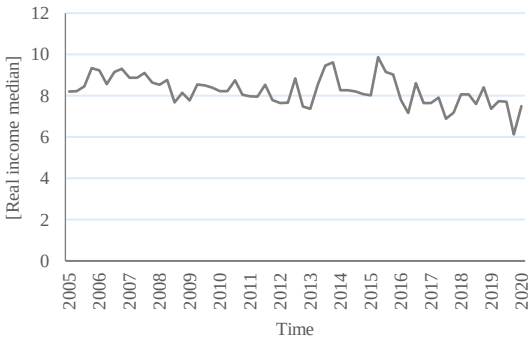
First cohort: 1940-1950



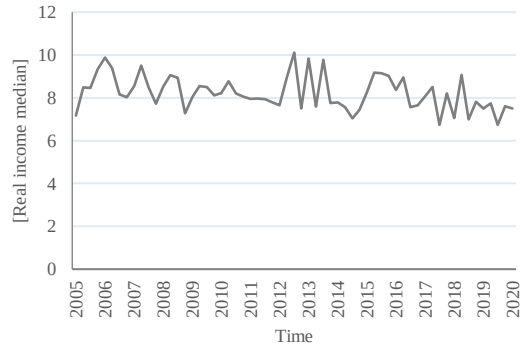
Second cohort: 1951-1960



Third cohort: 1961-1965



Fourth cohort: 1966-1970



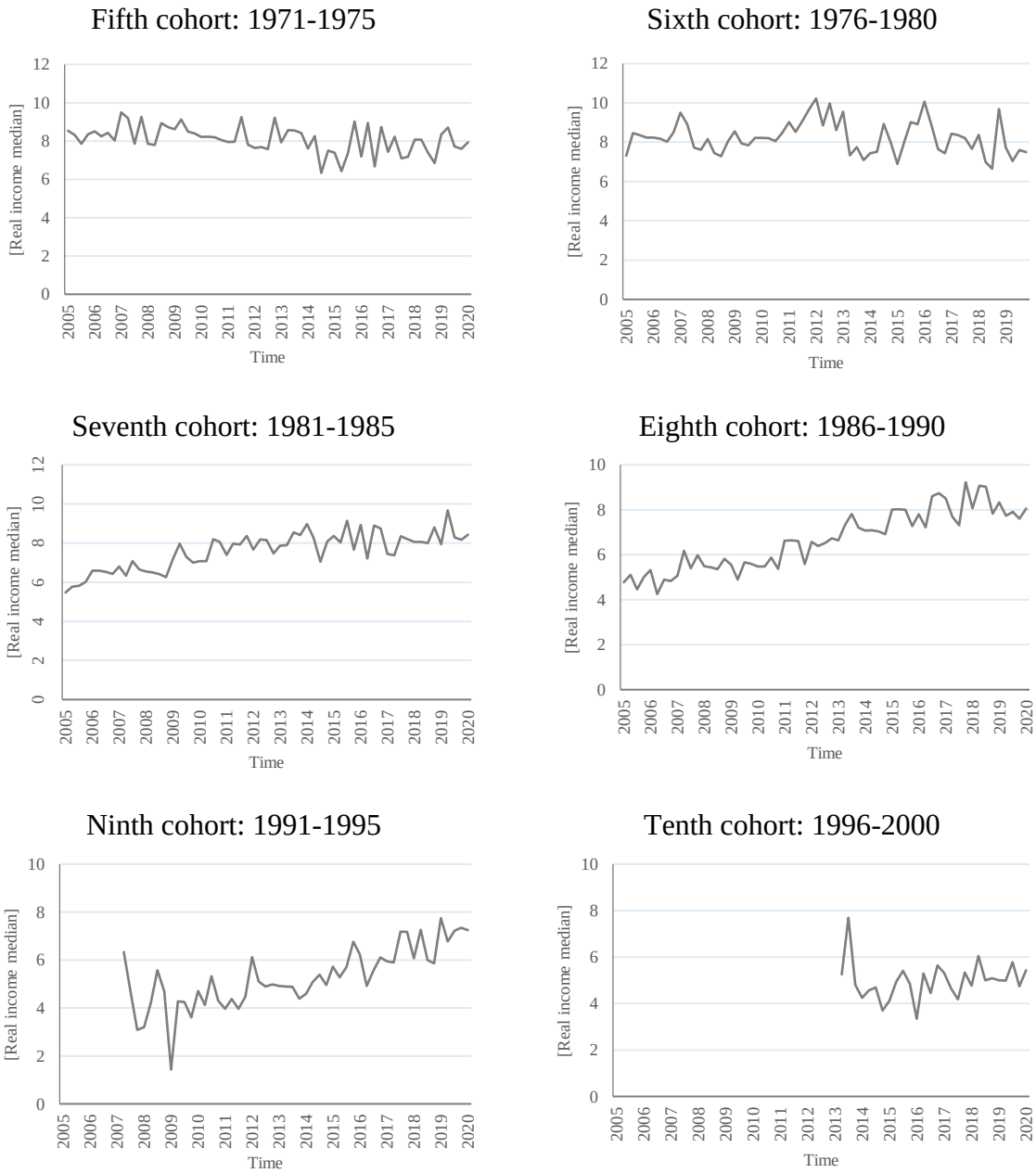


Figure 4. Real monthly income median for all cohorts
Source: created by the author with data from the ENOE

With the health crisis caused by SARS-CoV-2, a completely unexpected change emerged. Regarding workers' income, Téllez (2020) mentions that the National Institute of Statistics and Geography (INEGI) indicated a loss of 12.5 million jobs during April 2020, of which 2.1 million were within the formal sector. However, INEGI (2020) indicates that this is a temporary loss due to social distancing. Similarly, it is possible to note that the situation of workers is uncertain since the suspension of activities is without pay, so many people have lost at least one minimum wage for each month of the quarter that began in March 2020.

Methodology

This work used the National Occupation and Employment Survey (Spanish: Encuesta Nacional de Ocupación y Empleo, ENOE) to obtain information on the income and characteristics of the employed population in Mexico City. Incomes will be estimated at the level of groups by year of birth, called cohorts. These cohorts are generated because the simulation requires information on all the individuals over time. A pseudo-panel database is obtained by following the cohorts over time, including only economically active individuals and comprising 61 quarters of the ENOE, that is, from the first quarter of 2005 to the first quarter of 2020. Eleven cohorts are constructed with 10-year intervals for the first two cohorts and 5-year intervals for the remaining cohorts. The ages of the individuals included range from 14 to 65 years old.

Methodology for simulating the effect of SARS-CoV-2 on income distribution

This work uses the ENOE[2] pseudo-panel data to estimate an earnings equation that depends on hours worked and individual characteristics such as gender, education, age, and other time-fixed effects. Currently, in Mexico it is not possible to have information on hours worked and earnings in the form of a genuine panel. However, the ENOE is a rotating panel that makes it possible to analyze labor earnings by constructing a pseudo-panel. For this purpose, cohorts or groups of individuals with characteristics that do not change over time are constructed. For example, a cohort of individuals could be defined from a set of people born in the same year, which can be followed over time in sample terms. This work proposes

[2]The ENOE may be characterized as a rotating panel, where a portion of the individuals interviewed are kept up to three times in the same survey and each year a portion of them is replaced with new individuals. Due to these characteristics, it is not possible to construct a genuine panel with this survey, since each year up to a third of the individuals are lost and, consequently, a bias or inconsistency in the estimators arises.

using generational cohorts of labor market participants to more reliably estimate the parameters of regressions on the impact of COVID-19 on the fall in labor income. The above is possible because there are repeated cross-sectional observations, and it is possible to control for unobservable time-invariant cohort factors that could skew the impact estimates if they are not taken into account (Deaton, 1985).

For the construction of the econometric model used to estimate income mobility and for the simulation, this work proposes a relationship between past and present income so that income is time-dependent:

$$y_{i,t} = \beta y_{i,t-1} + \mu_{i,t} \tag{1}$$

where $y_{i,t}$ is the total income of the individual (i) at time (t), $\mu_{i,t}$ is a stochastic error term and β is a parameter that measures mobility. Notably, when $\beta = 1$, an individual's current income diverges from the previous income; that is, income does not converge over time. Conversely, when $\beta = 0$, incomes converge completely; that is, income mobility is total, and current income depends only on other characteristics of individuals. Likewise, if Si $0 < \beta < 1$, income converges and, therefore, there is persistence of income over time but eventually it returns to the original income; this convergence can be slow or fast depending on the value of the coefficient β (Fields & Sánchez-Puerta, 2005).

Equation (1) does not control other covariates, which could lead to a bias in the econometric income estimates. The conditional income equation can be calculated by controlling for other regressors to solve this problem. The above equation is modified as follows:

$$y_{i,t} = \beta y_{i,t-1} + \delta X_{i,t} + \mu_{i,t} \tag{2}$$

where X is a vector of covariates and δ measures the impact of the covariates on income. Examples of such explanatory variables could be age, gender, education level, and other time or individual fixed effects.

As mentioned above, in the pseudo-panel technique, follow-up is based on cohorts (Deaton, 1985). These should be constructed from a characteristic of the individuals that does not change over time, such as the year of birth. Therefore, the above equation is modified so that Equation (2) can be rewritten as:

$$\bar{y}_{c(t),t} = \beta_c \bar{y}_{c(t-1),t-1} + \delta_c \bar{X}_{c(t),t} + \mu_{c(t),t} \tag{3}$$

where the cohort index $c(t)$ replaces the individual index (i), and β and δ_c remain the parameters of interest.

Scenario of the effect of SARS-CoV-2 on the income of the working population

To carry out the simulation, using the model of Equation (3), it is assumed that COVID-19 leads to a total work stoppage in some sectors. The assumption is that people in the Economically Active Population (EAP) in Mexico City reduce their working hours or even do not work and stop receiving their wages. It is worth mentioning that the econometric model only considers the population with formal jobs in the construction, industry, trade, and services sectors. As mentioned above, Figure 4 shows that the population's real income is around 8 thousand pesos on average across generational cohorts. This income level may have varied due to the conditions derived from the health crisis, mainly in those sectors. Based on the COVID-19 crisis, a simulation, where it is assumed that the employed population stops receiving income due to the lockdown and the cessation of activity by companies, was carried out. In this way, this work estimates what will happen to the distribution of income as a result of employees having their working hours reduced and losing wages. Specifically, it analyzes the impact on the decline of the population in the deciles of the income distribution due to the health crisis.

Simulation design

Using data from the ENOE[3], this work simulated what happens to the distribution of income once there is a reduction of one minimum wage in the income of formal workers in Mexico City. Individuals in the EAP between 14 and 65 years of age and income levels by occupation were considered. Among the assumptions used, the following stand out: (1) working hours are reduced, and a minimum wage is deducted from the working population as a base scenario, (2) the reduction only applies to workers who report labor income by occupation in the formal sector, and (3) the number of monthly minimum wages does not change for the population analyzed. In this simulation, the aim is to find out how a reduction in the level of income of individuals influences their downward income mobility. If a reduction in the minimum wage generates problems in the income distribution of the employed population, a negative movement within income deciles could be observed.

[3]It is important to possess this income data to have a clearer idea of how much of the population could be affected if the necessary measures are not taken. The great advantage provided by the ENOE is its collection of variables of this type, such as income by occupation and minimum wages received. Also, for the purposes of this study, only people who reported income by occupation were taken into account.

The simulation process is carried out in 2 stages. In the first, the number of minimum wages from the occupation income reported by individuals and the amount of the monthly minimum wage in 2020 are calculated. In the second stage, the new occupational income is estimated after deducting one minimum wage from individuals, based on the number of monthly minimum wages obtained from the first stage. Figure 5 displays this process.

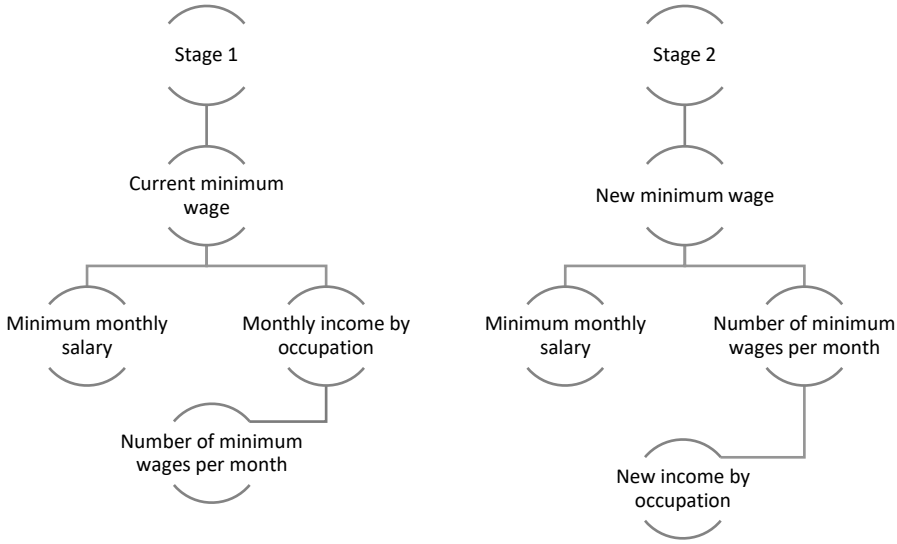


Figure 5. Simulation process.
Source*:* created by the author.

The amount of the monthly minimum wage is the product of the daily minimum wage multiplied by the 30 days of the month. What a person earns per month in minimum wages is obtained from the quotient between the reported income of the employed population and the monthly wage. With the new income per occupation after the shock of the reduction in hours worked and wages lost, it is possible to estimate the new income equation. Subsequently, whether or not there is mobility in income distribution to a lower decile than pre-crisis income is observable.

Simulation results

The results of this work suggest that the population in the highest income deciles of the income distribution would not show very significant changes if they cease to earn a minimum wage due to the pandemic.

However, the employed population in the lower deciles could be displaced at least one decile lower. Table 2a presents the result for the construction sector, where the most affected cohort is those born in the five years between 1981-1985, as 2.59% of its population moves down a decile if it loses a minimum wage. For the industrial sector, 6.96% of the 1940-1950 cohort drops one decile (Table 2b). In the trade sector, 6.62% of the population in the 1981-1985 cohort drops one decile (Table 2c). Finally, in the service sector, Table 2d, 4.04% of the population in the 1940-1950 cohort also declines.

In this simulation, the cohorts between 1951 and 1985 are the most affected since they are the population with the highest number of people who dropped one decile. The simulation also shows that the cohorts between 1991 and 2000 are the ones that regress the least in terms of income distribution. However, they are the ones that earn the least and have the lowest participation in the labor market. The simulation results for the construction sector show that of the four sectors studied, this is the least affected, with 33,906 workers dropping one decile; the cohort born between 1981 and 1985 is the most sensitive to this shock.

On the other hand, the trade sector is the third most affected, with 375,893 workers in conditions of backward income mobility. The cohort with the largest employed population falling back one decile, once again, is the cohort from 1981 to 1985, with a total of 89,786 workers affected. In the case of the industrial sector, the simulation reveals that it is the sector with the second greatest impact since the income of 446,690 workers declines.

Specifically, the population in the cohort between 1951 and 1960 is the most affected, with a total of 81 130 workers whose quality of life worsened. However, according to the simulation, workers in the service sector were the most affected compared to the others due to 1 019 199 individuals moving down deciles after the shock. As in the case of the industrial sector, the 1951-1960 cohort is the one with the highest number of workers who lost the standard of living they had before the health crisis (201 054).

The sector most affected in terms of income distribution by the health emergency was the services sector, while the least affected was the construction sector. However, the cohorts most sensitive to the economic shock in all sectors were those between 1951 and 1985.

The results presented make it possible to define a public policy to alleviate the negative effects of the crisis on income distribution. This policy could be supported with a differentiated subsidy of workers' salaries that would allow them not to fall one decile in the income distribution. For example, differentiated support could be given to those in the service sector and those in the construction sector. This support could also be differentiated according to the age of the participants. This type of temporary subsidy should be delivered directly to workers and could have a significant impact on aggregate consumption, reduce inequality in income distribution, and strengthen the economic recovery.

Table 2
Employed population by cohort after the shock in each sector

a) Construction sector

Cohort	Down 1 decile	Down 1 decile (%)
1940-1950	2 608	3.05
1951-1960	3 847	1.38
1961-1965	4 185	1.97
1966-1970	3 315	1.70
1971-1975	5 646	1.88
1976-1980	3 718	1.33
1981-1985	7 018	2.59
1986-1990	2 584	1.11
1991-1995	985	0.89
1996-2000	0	0.00
Total	33 906	

b) Industrial sector

Cohort	Down 1 decile	Down 1 decile (%)
1940-1950	26 503	6.96
1951-1960	81 130	6.08
1961-1965	64 477	5.67
1966-1970	67 418	4.43
1971-1975	71 341	4.29
1976-1980	64 646	4.49
1981-1985	51 989	3.82
1986-1990	17 944	2.05
1991-1995	1 242	0.34
1996-2000	0	0.00
Total	446 690	

c) Trade sector

Cohort	Down 1 decile	Down 1 decile (%)
1940-1950	15 862	3.41
1951-1960	46 125	3.80
1961-1965	24 091	2.60
1966-1970	37 122	3.13
1971-1975	56 302	4.48
1976-1980	67 356	4.78
1981-1985	89 786	6.62
1986-1990	39 249	3.73
1991-1995	0	0.00
1996-2000	0	0.00
Total	375 893	

d) Service sector

Cohort	Down 1 decile	Down 1 decile (%)
1940-1950	94 555	4.04
1951-1960	201 054	2.70
1961-1965	134 544	2.54
1966-1970	131 716	2.27
1971-1975	139 582	2.25
1976-1980	137 869	2.37
1981-1985	119 056	2.33
1986-1990	57 374	1.63
1991-1995	3 449	0.22
1996-2000	0	-
Total	1 019 199	

Source: created by the author with data from the ENOE

Conclusions

Analyzing social mobility from a socio-economic perspective is important in designing and implementing public policies. The findings presented here from a simulation of a change in income distribution suggest that the formal population in the service and manufacturing sectors will be drastically affected. Also, people working in the formal sector born between 1951 and 1985 would be displaced downward in the income distribution. Public policies that allow wages to be compensated are required to avoid an increase in income poverty and a reduction in income mobility in Mexico City. It should be noted that the effects are not as high in the younger population since many of them are not yet participating in the labor market. The results of this simulation provide data that can be used to design a public policy that grants monetary support to compensate the wages, in a differentiated manner, of the productive sectors and age groups most affected by the crisis.

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