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The distributional impacts of the reduction in remittances in Central America in COVID-19 times☆

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ABSTRACT

COVID-19 has generated several quarantines and economic lockdowns as the main public policy responses that dramatically affected the dynamic of economic growth and labor markets worldwide. These effects impact remittance inflows to developing countries, in particular those coming from the US, which affect poverty reduction paths in Latin America. Using data from the US labor market and economic performance indicators of the US and remittance recipient countries, this paper estimates the distributional impacts of the change in remittances post-COVID-19 for the region that most rely on remittances, Central America. Results suggest that after COVID-19, remittance inflows are expected to decrease 14 % in the region during 2020 and that effects are heterogeneous among countries: El Salvador and Nicaragua are expected to be the most affected countries while Panama is expected to be the least affected one. The model allows to estimate impacts in other countries in Latin America and the Caribbean. However, due to the lack of household survey availability, this paper only explores the distributional impacts of the change in remittance inflows in Central America. The expected impacts on poverty are also heterogeneous. While poverty in El Salvador is expected to increase by 6 % due to the change in remittances, poverty in Guatemala is expected to increase by 1 %. Results are robust to different specifications.

1. Introduction

Remittances, as proportion of the GDP, are an important source of income for Latin America, mainly for Central America and the Caribbean. In 2018, remittances represented 9 % of the GDP for the Caribbean region and 4 % for that of Central America and Mexico, while they represented 1 % of the GDP in South America. Haiti is the country that depends on remittance inflows the most, with them representing 37 % of its GDP. Honduras and El Salvador are the countries with the highest remittances/GDP ratio after Haiti, with 22 % and 21 % respectively, followed by Jamaica (16 %), Nicaragua (13 %) and Guatemala (13 %) (Fig. 1).

Poverty and inequality reduction are associated with remittance inflows in the region (World Bank, 2018). Although the effect of remittances in several Latin American countries has been positive to reduce poverty, it has not always been significant. Naturally, the distributional effects have been larger for those countries where remittances are the highest as a share of the GDP, even in those where they were mostly concentrated in the middle or upper tail of income distribution. This implied a larger impact of remittances on poverty reduction in Central American and the Caribbean countries as opposed to South America.

COVID-19 has generated several quarantines and economic lockdowns as the main public policy responses that dramatically affected economic growth and labor markets. In the current global economy, these impacts affect the remittances inflows to developing countries. In particular, reductions on the remittances flow from the US, affect poverty reduction paths in Latin America and the Caribbean as remittances represent an important source of income for poor households in these countries.

Using data from the US labor market and economic performance indicators of the US and remittance recipient countries, this paper estimates the distributional impact of changes in remittances post-COVID-19 for the region that rely on remittances the most, Central America. Results show that after COVID-19, remittance inflows to Central America are expected to decrease 14 % in 2020. The effects are

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heterogeneous among countries. El Salvador and Nicaragua are expected to be the most affected countries, while Panama is expected to be the least affected one. The model allows to see impacts on other countries in Latin America and the Caribbean. However, due to the lack of household survey availability, this paper is only able to explore the distributional impacts of remittances in Central America. The expected impacts on poverty are also heterogeneous. While poverty in El Salvador is expected to increase by 6 % due to the change in remittances, poverty in Guatemala is expected to increase by 1 %.

The next section of this paper reviews the profile of remittance recipient households in the region. Section 3 explores the impacts of COVID-19 in the US labor market and the profile of migrants in the US. Section 4 depicts the empirical methodology used in this paper. Section 5 outlines the main results. Finally, Section 6 concludes.

2. Profile of the remittance recipient households in the region

Although poverty and inequality reduction are associated with remittances in LAC, recipients are usually concentrated in the top 60 percent of the income distribution. The probability of receiving remittances usually increases across the income distribution mainly because of the migration dynamics. The poor usually do not have the means to migrate since migration involves human and social capital investments, as well as an opportunity cost for the income that the migrants stop earning for the household while migrating to their final destination (Stark, Taylor, & Yitzhaki, 1986). Thus, this dynamic is reflected in the distribution of remittances. For example, in El Salvador in 2014, the percentage of receiving households in the fifth quintile doubled the percentage in the first quintile (20 % compared to 10 %), while in Honduras, the share of households in the top quintile receiving remittances was more than three times the share in the bottom quintile (21 % compared to 6 %).

Despite not usually receiving remittances, for the poor households remittances represent a higher share of household income compared to the non-poor. For instance, in 2014 the share of remittances was 50 % of the household income of the poor while they represented 40 % of the non-poor household income in El Salvador (determined using the international $3.2 poverty line). Similarly, in Guatemala and Honduras, household members. In addition, non-receiving households tended to be comprised by a larger share of household members of working age (26–65 years old).

Less educated and female headed households are more likely to receive remittances. In Guatemala and El Salvador, receiving households had on average lower levels of education than non-receiving households. Finally, receiving households were more likely to have a female head of household, with almost half of them having a female head compared to 18 %–32 % of non-receiving households, which reflects the migration of male adults of working age.

3. Migrants and the impact of COVID-19 in the US Economy

The US is the top destination for migrant workers from Central America2 and the Caribbean,3 that, on average, have been in the US more than 20 years. Most of them are experienced employees inserted in social networks. In particular, those coming from Caribbean countries have been living in the US nearly 23 years while those from Mexico and Central America have been in the US for around 26 years.4

However, workers from Central America and Mexico have a lower education level than those coming from the Caribbean. Around 70 % of migrants coming from Central America attained high school education or less: (i) 27 % have a high school diploma; (ii) 18 % some high school; and (iii) 26 % middle school or less. By contrast, three quarters of migrant workers from the Caribbean attained high school education or more. Most of them have a high school diploma (31 %) while a relevant proportion have a college degree (26 %) or some college education (19 %).

In addition, migrants from the Caribbean are among the most educated in their countries of origin. Ozden (2006) reported that nearly 80 % of college-educated people from Jamaica, Haiti, Guyana, Belize, and Grenada were living in the US between the 1990s and the first decade of 2000, while just one-third of college-educated people from El Salvador, Guatemala, Honduras and Nicaragua lived in the US in the same period.

Three US states concentrate more than 70 % of migrant workers from the Caribbean, and four industries concentrate almost 50 % of their work force. Those from the Caribbean are mainly concentrated in Florida (38

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2 According to KNOMAD, the US is the main destination for 89 % of migrants from El Salvador, 87 % for those from Guatemala, and 82 % for those from Honduras.
3 KNOMAD (2018).
4 Based on US Census from 2018.
The economic crisis could harm the ability of migrants to send remittances back to their countries of origin as in former crises. Evidence shows that the peak levels of remittances to Central American countries — such as El Salvador, Honduras and Guatemala— occurred just prior to the global financial crisis of 2008. As developed economies contracted during the crisis, migrants saw their opportunities and earnings and the labor market reduced, as well as their ability to send remittances back home. Therefore, the newest downturn in the US economy is expected to harshly impact remittance flows to these countries again.

The COVID-19 crisis hit employment and economic activity in the US, including the sectors were migrants work. After National Emergency was declared in March, unemployment claims reached almost 3 million, and a week later this number more than doubled, reaching close to 6 million people. The unemployment rate surged to 13% in May 2020, and the most affected industries were Leisure and Hospitality Services and Wholesale and Retail Trade, which accounted for 35.9%, 18.4% and 15.1% (Fig. 2). GDP contracted 5% in the first quarter of 2020 (Fig. 3), mainly because of a plummeting in Personal Consumption Expenditure.

The crisis provoked a fall in the employment rate of US native workers in all industries, being the overall impact for migrants from the Caribbean, Mexico & Central migrants also negative. Between February and May 2020, Accommodation, Food Services and Information and Social Assistance industries faced the strongest decreases in employment: 36%, 21% and, 15% respectively.

More than 60% of workers from the Caribbean and Central America and Mexico were employed in essential activities that did not stop operating due to the lockdown. Although in both cases the majority belonged to essential sectors, 32% of Caribbean migrant’s worked in high contact intensity industries—explained by the high proportion of health care workers in this group—while only 14% from the other group did as well. Thus, the effect of the crisis on these employees should be heterogeneous. Therefore, this is also true for remittances.

4. Empirical methodology

The effect of the pandemic, including lockdowns and social distancing measures in the US, will affect remittance inflows to Latin America because of its impact on the labor market, specifically by the increase in unemployment among migrant workers. To estimate this, we developed a model where remittance inflows are positively linked to migrants’ incomes, explained by the real GDP of the destination country (the US), the level of migrant employment and the average years that they have been living in the destination country – which depicts how well inserted in the labor market those migrants are. Remittance inflows are also linked to the income of migrants in their countries of origin (remittance-recipient countries). Therefore, the specification of the linear regression model is as follows:\footnote{Other models were tested. The presented model is the one selected by LASSO. Results are robust to different model estimations.}

\[ \text{Ln (Remittances}_t) = \alpha + \beta_1 \text{Ln (GDP}_{t-1}) + \beta_2 \text{Migrant workers}_t + \beta_3 \text{Trend}_t + \beta_4 \text{Country FE}_t + \beta_5 \text{Ln (GDP}_{t-1}) + \epsilon_t \]

This allowed us to estimate the elasticity of remittance inflows from the US to Mexico, Central America and Caribbean countries using data from 2004 to 2018. The explanatory variables include the real GDP of the US for each year, the level of employment of migrant workers for each year and their country of origin, the average years in the US for each year for workers from each country of origin, the real GDP of the country of origin for each year and fixed effects by country of origin.

The remittance data of the countries in Mexico, Central America and the Caribbean comes from KNOMAD. The real GDP data (constant 2010 USD) comes from World Bank Open Data. The level of employment of migrant workers for each year and country of origin along with the average years in the country were calculated from the annual US Census (ACS).

As a second step, we extrapolate the elasticity to predict the amount of remittances in 2019 and 2020. Thus, some relevant assumptions were made regarding the inputs for the prediction. The real GDP of the US was expected to decrease by around 5% in 2020, according to IMF outlook. However, it is worth noting that it equals the drop in the US GDP just in the first quarter, and the actual decrease is still uncertain. For the percentage change in GDP of Mexico and Central American countries, as well as those from the Caribbean, we also relied on IMF estimations. The decrease in migrant employment is based on the Current Population Survey (CPS), and it is assumed at 20% for 2020. The average years in the US for migrants for each country was calculated for 2018 using the US Census. After that, the percentage change in remittances was easily calculated.

Finally, the effect of remittances on poverty rates was estimated using a linear regression model where coefficients were easily interpreted as elasticities. These results were combined with the predicted drop of remittances to get the final results (Table 1).

5. How COVID-19 affected remittance inflows in LAC?

5.1. Remittance flows

Remittances are expected to decrease by more than 10% in 2020 LAC countries\footnote{The effect is around 14% but could be larger as other estimations (done by KNOMAD) suggest a drop of around 20%. However, the model used by this paper gave more relevance to the labor market channel to predict remittances including only migrant workers.} (Fig. 4). Using data from Flood et al. (2020), Ruggles et al. (2020), and U.S. Census Bureau (2014, 2020), we estimate that the pandemic, along with lockdowns and social distancing measures, will reduce remittances in Central America and the Caribbean by 14%. The fall in remittance inflows will be around 15% for Central America while near 11% for the Caribbean. This would be explained by the surge in unemployment among migrant workers, which we estimated around 20% in the first quarter of 2020.

The most affected countries in Central America are Belize and Mexico, with drops of 20% and 17%, respectively, followed by Nicaragua and El Salvador, both with falls near 14%. For Guatemala...
and Honduras, the reduction is around 11%. In comparison, the most affected countries in the Caribbean are Antigua-Barbuda and St. Lucia, with a decrease of 18% and 17%, respectively. For Haiti, the decrease is 12% (Table 2).

5.2. Distributional impacts of reduction in remittances

For some of those countries, the impact of remittance reduction on poverty is estimated, considering the relevance of remittances for the local economy and the availability of detailed information.

As a result, a drop of 14% of remittances will likely cause a 6% increase in the USD 3.2 poverty rate\(^{13}\) for El Salvador, while for Guatemala and Honduras, the decrease of 11% in remittances, will likely increase poverty by 1%. The effect is expected to be similar for Costa Rica, Panama and the Dominican Republic, where the drop of remittances could also increase the poverty rate of USD 3.2 by around 1%. However, we expect a rise of the poverty rate by around 2% in Mexico. At the same time, the reduction of remittances is expected to increase USD 5.5 poverty rate by 2% in El Salvador, Costa Rica, and Panama while near 1% in Guatemala, Honduras and the Dominican Republic.

The decline in remittance inflows for these regions will affect household income, thus affecting poverty rates and income distribution. This change is expected to be heterogeneous across countries, depending on the relevance of remittances in the households’ income and the

\(^{13}\) In USD 2011 PPP. Given that El Salvador, Guatemala and Honduras were considered lower-middle income countries for the periods used to calculate the elasticities, we used the USD 3.2 poverty line.
distribution of remittances among income quintiles. In addition, poverty rates are expected to increase because of other reasons besides remittance reduction, but these factors were not taken into consideration in the current analysis.

6. Conclusions

We provided evidence of the change in remittance flow after COVID-19. Using data from the US labor market and economic performance indicators of the US and recipient countries, this paper shows that remittances are expected to decrease 14% in Central America and the Caribbean in 2020. Results show that these impacts are heterogeneous per country due to the number characteristics of migrants from each of the studied countries in the US.

Due to the lag in remittances data, from a logistical point of view, forecasts of key sources of income are relevant to inform policy. The authors of this paper tried to obtain data on the remittances. However, in many countries the information regarding remittance flow is only released with more than a year of lag complicating policy response to this kind of shocks.

The forecasted impacts on poverty also inform mitigation policies. Mitigation policies like scalable safety nets require assessments of the potential poverty impacts in order to be able to determine the size of these programs. As mentioned in the analysis, the elasticity of poverty to remittances vary country by country, highlighting the importance of the analysis of the distributional impacts of global shocks like the COVID-19 related one.

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