1. **Title:**

Remittances in the time of COVID-19. Evidence from Mexico

2. **Authors:**

Lelys Dinarte, ldinartediaz@worldbank.org, The World Bank Group

Eduardo Medina-Cortina, emm5@illinois.edu, University of Illinois at Urbana-Champaign

Hernan Winkler, hwinkler@worldbank.org, The World Bank Group

3. **Abstract:**

Remittance flows to low- and middle-income countries are one of the main contributors to economic growth and development. Since mid-1900s, these flows have exceeded official aid by a factor of three and they overtook foreign direct investment flows to these countries in 2019. However, COVID-19 can negatively affect remittances transfers to recipient households. Due to continued business closures, reduced economic activity, and an expected recession, migrants, who predominantly work in the construction and services industries, may be the first ones to lose income—either by working fewer hours, days, or losing their jobs. According to some estimates, remittance flows to Latin America are expected to fall by 19.3 percent in 2020, a decline larger than that experienced during the 2008-2009 financial crisis. This income loss will then negatively affect economic wellbeing of households in recipient countries.

In this project, our goal is twofold. First, this project aims to measure the effects of a negative shock on remittances flows on economic activity, family income, and employment in the context of a country highly dependent on remittances. We use data from Mexico—the top third remittance recipient country in the world—and the US—the main remittance sending country in the world. Using detailed data on the location of Mexican migrants in the US and their place of birth, we construct an index of exposure to the pandemic in the US for each Mexican municipality. Intuitively, municipalities with a higher share of migrants in US states heavily affected by the pandemic will be more exposed than those whose migrants are in less affected states, as the decline in economic activity in US states more affected by the pandemic may hinder the ability of migrants to send remittances back home. The exposure index will be estimated as a weighted average of two variables: (i) the number of Mexican migrants living in the different US states, and (ii) changes in infection rates in US states where Mexican migrants live. We interact this exposure variable with the total or per capita value of remittances received by each Mexican municipality in 2019, to capture the fact that the impact of the exposure measure is likely to be larger on municipalities that depend more heavily on remittances. The interaction between the exposure measure and the total or per capita value of remittances received by each Mexican municipality in 2019 will capture the effect of COVID-19 in the US on remittances to Mexico.

Second, by exploiting the timing differences in the contagion rates and lockdown policies in Mexico compared to the US, this project aims to disentangle the domestic and cross-border effects of a pandemic on economic activity and household's income.

4. **Data description**

For the outcomes of interest, we will create a panel data at the municipal level of remittances, economic activity, family income, and employment rates. These data come from variety of sources, including estimates from the INEGI (the National Office of Statistics from Mexico) and the Mexican Central Bank, who provides with remittance inflows data for each municipality in Mexico. We'll also use data on nightlight activity as a proxy for overall economic activity.

Data on COVID-19 for the US will come from official sources. We will also use data on economic activity such as unemployment rates and nightlight activity at the US state level, and exploit variation in the implementation of lockdown measures across time and geographies.

### 5. JEL Codes
F24, F22, I18,

### 6. Keywords
COVID-19, remittances, international migration, Latin America