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Shelter from the Storm: Upgrading Housing Infrastructure in Latin American Slums
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ABSTRACT

This paper provides rigorous empirical evidence on the causal effects that upgrading slum dwellings has on the living conditions of the extremely poor. In particular, we study the impact of providing better houses in situ to slum dwellers in El Salvador, Mexico and Uruguay. We experimentally evaluate the impact of a housing project run by the NGO TECHO, a youth-led program which provides basic pre-fabricated houses to members of extremely poor population groups in Latin America. The main objective of the program is to improve household well-being. Our findings show that better houses have a positive effect on overall housing conditions and general well-being: the members of treated households are happier with their quality of life. In two countries, we also document significant improvements in children's health; in El Salvador, slum dwellers also feel that they are safer than before. There are no statistically significant effects on the possession of durable goods or in terms of labor outcomes. Our results are unusually robust in terms of both internal and external validity because they are derived from experiments in three different Latin American countries.

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1. Introduction

The 1948 United Nation Universal Declaration of Human Rights identified housing, along with food and clothing, as a basic requirement for achieving an adequate standard of living.[1] Despite this, almost one billion people, primarily in the developing world, live in urban slums and lack proper housing (United Nations, 2003).[2] A major concern about slum conditions is the poor quality of housing that is associated with them. Large numbers of slum dwellers live in houses with dirt floors and have poor-quality roofs and walls (constructed out of waste materials such as cardboard, tin and plastic) that do not provide proper protection against inclement weather. In addition, many of these people have insufficient access to services such as clean water, sanitation and electricity (UN-Habitat, 2003).

Housing is one of the largest expenditures that a family makes. It is also classified as a superior good, inasmuch as, the world over, the share of income spent on housing increases disproportionately as income rises. Adequate housing provides a number of benefits. First and foremost, houses are where families live and spend a large amount of time. Overall well-being depends crucially on the quality of housing, and a proper house can induce a sense of dignity and pride. Thus, housing has the potential to substantially improve a person's satisfaction with his or her quality of life (Cattaneo et al., 2009). Second, adequate housing can promote mental and physical health, with the home serving as a place for rest and relaxation, as well as providing protection from the ravages of the environment. Roofs and walls shelter household members from rain and from the cold. Water, sanitation and non-dirt floors protect against parasitic infestations and infections (Cattaneo et al., 2009). Finally, housing provides security and serves as a defense against crime, a major problem in slums (United Nations, 2003). Thus, having proper housing may allow households to accumulate assets, as well as freeing up time for use in more productive activities that would otherwise be devoted to protecting the assets they have acquired (Field, 2007).

[1]United Nations, Universal Declaration of Human Rights, Article 25 (1948).

[2]In line with previous work, we define a slum as an overcrowded settlement which has poor-quality housing, inadequate access to safe water and sanitation, and insecurity of tenure (UN-Habitat, 2003).

This paper provides some of the first pieces of rigorous empirical evidence regarding the causal effects that upgrading dwellings can have on the living conditions of extremely poor persons in the slums of three Latin American countries: EL Salvador, Mexico and Uruguay. We examine the impact of the extremely inexpensive but sturdy houses constructed by *TECHO*, a youth-led NGO that provides basic pre-fabricated houses to extremely poor population groups in Latin America. TECHO targets the poorest informal settlements and, within these settlements, the families who live in extremely substandard housing.

TECHO houses are mainly made either of wood (Mexico and Uruguay) or aluminum (El Salvador).[3] A typical house is 18 m2 (6m by 3m) in size, is built by teams of youth volunteers along with the household recipient, and costs USD 1,000. The TECHO dwellings are a significant improvement over existing housing units in terms of their flooring, roofs and walls. While the TECHO houses constitute a substantial qualitative improvement over the pre-existing dwellings, they do not have indoor sanitation facilities, running water or kitchens.

The TECHO budget and staffing constraints limit the number of housing units that can be upgraded at any one time. We exploit the fact that the excess demand for the limited number of units prompted the program administrators to select beneficiaries by means of a lottery. All eligible households in a pre-determined geographical neighborhood had an equal opportunity to receive the available upgraded housing units in a given year. In this paper, we use the experimentally generated variation to assess the effects of upgraded housing on living conditions.

Our findings show that the better structures have a positive effect on overall housing conditions and general well-being: treated households are happier and more satisfied with the quality of their lives. In two countries, El Salvador and Mexico, we also document significant improvements in children's health, while, in El Salvador, slum dwellers' perception of their safety and security also improves. There are, however, no effects on the possession of durable goods or in terms of employment outcomes.

[3] In El Salvador, floors are made of cement, and walls and roofs are made of aluminum. In Mexico and Uruguay, floors and walls are made of wood, while roofs are made of aluminum.

Any causal study must overcome both internal and external threats to its validity (see Campbell, 1957, and Cook and Campbell, 1979). Most research is focused on dealing with threats to internal validity; i.e., on ensuring that it can be validly inferred that, within the context of the study, the estimated effects were caused by the identified differences in the relevant explanatory variables. External validity, in contrast, refers to the extent to which the estimated effects can be applied to other populations in different settings and at different times. Ultimately, external validity is established by replication in multiple data sets drawn from a variety of settings (Angrist, 2004). Our results are unusually robust in terms of both internal and external validity because they are derived from experiments in three different Latin American countries.

Governments play a very active role in the provision of many essentially private goods, including education, health services and housing. The normative public finance literature puts forward three major arguments to justify such interventions. These lines of reasoning focus on merit goods, redistribution and market failure (see, among others, Barr, 2003, and Gasparini and Pinto, 2006). Irrespective of the argument used, governments and NGOs spend substantial amounts of resources on housing subsidies. For example, the U.S. Government spends more on housing programs than on many other better-known welfare programs, such as the food stamps program and the Temporary Assistance for Needy Families initiative (Olsen, 2003). Despite the importance of housing, however, very little evidence has been collected on the causal effects of housing and housing improvement programs. Our findings constitute a contribution to the small body of literature on this subject.[4] To the best of our knowledge, this study is the first randomized experiment undertaken to assess the impact of upgrading housing infrastructure in slums in the developing world.[5] Previous contributions to the literature include

[4] See Jaitman (2012) for a literature review on slum upgrading programs and Duflo et al. (2012a) on urban services.

[5]There are a large number of cross-sectional observational studies that point to the existence of strong associations between poor housing and indicators of poor health (see Thomson et al., 2001, for a review). These studies indicate that common features of substandard housing, including a lack of drinking water and poor waste disposal and insufficient food storage systems, are associated with the prevalence of infectious diseases and respiratory infections. However, since this body of evidence is observational, it remains open to criticism.

Katz et al. (2001), who analyzed the results of a program which randomly offered vouchers to poor slum dwellers in the U.S. that allowed them to relocate to areas with lower poverty rates. Voucher recipients experienced improvements in some indicators of well-being, including safety, health and fewer behavioral problems among boys. Kling et al. (2004) exploited the same experiment and found a reduction in the number of arrests of young people for violent crimes and of young females for property crimes, but also found increased behavioral problems and property crime in the case of young males. Cattaneo et al. (2009) exploited a natural experiment which showed that replacing dirt floors with cement floors in urban areas of Mexico has a positive impact on child health, maternal mental health and satisfaction with quality of life. Finally, Devoto et al. (2011) studied the effects of randomly offering credit to finance household connections to the water distribution system in urban Morocco. While they do not find significant health effects (a finding which they attribute to the quality of the water already available), they do find a significant improvement in self-reported well-being.

The rest of this paper is organized as follows. In Section 2, we describe the intervention. Section 3 presents the experimental design. Section 4 offers a descriptive analysis of the data while taking into account the differences between slum inhabitants and the overall poor population. We also shed some light on the possible explanations for slum formation. In Section 5 we introduce the econometric methods used in this study, while in section 6 we present our empirical results. Section 7 concludes.

2. Upgrading Housing Infrastructure

TECHO is a youth-led program that provides basic pre-fabricated houses to members of extremely poor population groups in Latin America with the objective of improving well-being. TECHO targets the poorest informal settlements and the households within these settlements that live in very substandard dwellings. Typically, these housing units are made of waste

materials such as cardboard, tin and plastic, have dirt floors and lack connections to basic services such as water and sewer systems.

TECHO started up fifteen years ago in Chile and now works in eighteen additional Latin American countries. It has built almost 100,000 houses with the help of an army of volunteers throughout the continent. A key aspect of its success has been the involvement of various sectors of society – the private sector, the media and university students – in working toward the ultimate goal of alleviating extreme poverty in Latin America.

Every year more than 20,000 committed youths throughout Latin America volunteer to work with TECHO. While their work primarily involves building transitional homes, over 3,500 regular volunteers also commit at least one day a week to community organization and participating in social inclusion programs. This second phase of the intervention aims at developing skills through the implementation of these inclusive programs, while a third phase of the project focuses on helping to create sustainable neighborhoods. In this area, TECHO acts as a social housing development advocate by helping families to prepare their applications for permanent housing in a new neighborhood and by coordinating the activities of the different stakeholders (technical personnel (architects, engineers), government officials, community members, and legal authorities) involved in these projects.

Our study focuses on evaluating the impact of the first phase of the program: the construction of transitional housing. Methodologically, in order to limit the evaluation to the impact of transitional housing alone, for our sample frame we chose only settlements that did not receive the services provided during the second and third phases of the intervention during the period covered by the study. In other words, no TECHO intervention other than the construction of transitional housing took place in the settlements studied during the period of analysis.

The model used by TECHO is designed to serve what are known as “irregular settlements” in Latin America and the Caribbean. The term “irregular settlement” refers to a community comprised of families that inhabit plots which they do not own. Settlements are typically located in dangerous geographic locations (on cliffs, slopes, etc.), and their inhabitants are plagued by a host of problems in terms of their living conditions, such as insufficient access to

basic services (water, electricity and sanitation), significant levels of soil and water contamination, and overcrowding. The typical housing units in these informal settlements are no better than their surroundings, as they are mostly rudimentary units constructed from discarded materials and have dirt floors.

The TECHO housing units are one-room houses (6m by 3m) made of pre-fabricated, insulated pinewood panels to protect the occupants from humidity and insects; their roofs are made of tin. In order to reduce dampness and protect occupants from floods and infestations, the floor is built on top of 15 stacks that raise it up to between 30 and 80 centimeters off the ground. Units are modular and portable, are constructed with simple tools, and are set up by volunteers working in squads of 4-8 members.

Although these houses are a major improvement over the recipients' previous housing situation, the facilities they offer are limited, as they do not include a bathroom or kitchen or amenities such as plumbing, drinking water hook-ups, or gas connections. Nor do these houses, in and of themselves, protect children or families from many of the environmental risks that they face, since family members spend only a fraction of every day in the TECHO houses.

The cost of each transitional housing unit is around $1,000, and the beneficiary family contributes 10% of that sum. (In El Salvador, this is approximately equivalent to 3 months' worth of earnings at the baseline level, while in Mexico and Uruguay, it is roughly equivalent to 1.4 months' worth of earnings.) The following images show examples of the TECHO houses built in El Salvador, Mexico and Uruguay.

	
El Salvador	*Mexico and Uruguay*

The houses are designed to be low in cost, easy to construct and easy to disassemble and move to a new location. It is important for the houses to be movable because most of the families in these makeshift settlements do not have formal title to the land that they live on and, while some of them have lived in the same place for decades, there is always the possibility that they could be forced off the land. In addition, TECHO managers were concerned that upgrading the value of the land by building permanent housing on these plots might induce both public and private owners to try to reclaim the land, thereby forcing the residents to move, and appropriate the house. However, by making the housing mobile, there is no such incentive. Naturally, this suggests that a more comprehensive slum upgrading program should be preceded by a land titling program (see, among others, Field, 2005, and Galiani and Schargrodsky, 2010).

3. Experimental Design

TECHO budget and personnel constraints limit the number of housing units that can be upgraded at any one time. (This also constrained the size of the sample used in our study in each country.) Under these constraints, TECHO opted to select beneficiaries through a lottery system in El Salvador, Mexico and Uruguay, giving all eligible households in a pre-determined geographical neighborhood an equal opportunity to receive the housing upgrade in a given

year. We exploit this experimental variability to assess how upgrading slums through the introduction of improved housing affects poor households' living conditions. Thus, we rely on a randomized controlled experiment to evaluate the effect of upgraded housing in slum areas on a set of outcomes of interest.

As is well known, there are good reasons for randomly allocating the treatment in order to determine the average effect of that treatment on the population of interest. The use of a randomized experiment resolves the problem of selection bias in such an evaluation. When treatment is randomly manipulated, we have the greatest assurance that the program participants and the control group of program-eligible individuals are, on average, alike in every important sense (including observable and unobservable characteristics), with the only significant difference being that one group has received the service provided by the program and the otherwise probabilistically identical group has not.

TECHO first selected a set of eligible settlements (i.e., communities). The eligibility criteria were: (i) the settlements had to be composed of more than 10 families located on public or private lands; and (ii) they had to be ones in which one or more basic services (electricity, safe water, a sewerage system) were not available. TECHO then conducted a census to identify the eligible households in these settlements (i.e., those households poor enough to be given priority). Once the eligible households had been chosen, they were randomly assigned to treatment and control groups within the settlement. Thus, in this study we exploit single randomized controlled experiments stratified at the settlement level, which ensures that, within each stratum, the treatment and control groups are probabilistically identical.[6]

The field work (surveying and building) involved coordinating the tasks of the surveyors (UNIMER in El Salvador, MORI in Uruguay and IPA in Mexico) with the TECHO program activities. Since TECHO did not have the capacity to work in all settlements at once, the program was rolled out in two phases. In El Salvador, Phase I took place between August and December 2007, while Phase II was carried out between March and August 2008. In Mexico,

[6] Within each settlement, naturally, every household had the same probability of being chosen for inclusion in the intention-to-treat group, but this was not the case across settlements.

Phase I took place between April and June 2010, while Phase II was conducted between September and December 2010. In Uruguay, Phase I was held between October and December 2007, while Phase II took place between July and September 2008. Since randomization was performed within each settlement, baseline surveys were conducted approximately one month before the start of each phase.[7] The follow-up survey was conducted between the end of September and October 2009 in El Salvador, between February and April 2012 in Mexico and between January and March 2010 in Uruguay, that is, 25 months after the beginning of Phase I and 18 months after the beginning of Phase II in El Salvador, 26 months after the beginning of Phase I and 19 months after the beginning of Phase II in Mexico, and 27 months after the beginning of Phase I and 17 months after the beginning of Phase II in Uruguay. Thus, the follow-up surveys were done between 17 and 27 months after each treatment assignment.

All the surveys included modules on socioeconomic characteristics, the labor market, assets, security, health and self-reported measures of satisfaction. Table 1 details the variables used for the causal analysis in this study.

Table 2 presents general information about our sample for the intention-to-treat and non-intention-to-treat groups. In El Salvador, we have 23 settlements distributed throughout the country, mainly in rural areas (and excluding San Salvador, which is the main province of the country). In Mexico, we have 39 settlements in urban and rural areas of Estado de Mexico, while, in Uruguay, we have only 12 settlements, all of them located in the two largest urban municipalities of the country (Montevideo and Canelones). In all of these countries, some settlements were randomly assigned a higher intensity-of-treatment level. However, due to the small number of clusters, we do not exploit this feature of the experimental design in the analysis. Treatment was offered to 60% of households in El Salvador, 51% in Mexico and 61% in Uruguay. Thus, we have 421 households (2,111 individuals) in the intention-to-treat group and

[7] However, in order to obtain truthful information from households and to avoid creating any desirability bias in the treatment group, as noted above, the data collection efforts were separated from the implementation of the program itself and were contracted out to a highly respected survey firm in each country.

277 households (1,363 individuals) in the non-intention-to-treat group in El Salvador. For Mexico, we have 457 households (2,239 individuals) in the intention-to-treat group and 439 (2,152 individuals) in the non-intention-to-treat group. In Uruguay, the respective numbers are 478 households (2,067 individuals) in the intention-to-treat group and 301 households (1,259 individuals) in the non-intention-to-treat group.[8]

In the follow-up surveys, there was a small sample attrition rate. In El Salvador, Mexico and Uruguay, the proportion of households lost from the sample through attrition was 5.5%, 7.0% and 6.7%, respectively, in the intention-to-treat group and 6.9%, 8.7% and 6.3%, respectively, in the non-intention-to-treat group. In all three cases, the difference between the experimental groups is not statistically significant at conventional levels. Thus, our final follow-up samples are 398, 425 and 446 households that were offered treatment and 258, 401 and 282 households that were not provided with treatment in El Salvador, Mexico and Uruguay, respectively. In all, 87.7% of the households in the intention-to-treat group in El Salvador complied with the treatment assignment, 86.6% in Mexico did so and 85.9% did so in Uruguay, while the compliance rates for the non-intention-to-treat groups were 99.6% for El Salvador, 100% for Mexico and 99.3% for Uruguay. Overall, the compliance rate is quite high and justifies the intention-to-treat analysis that we conduct in this paper. Naturally, due to the almost perfect compliance rate in the control group in El Salvador, Mexico and Uruguay, the difference between the compliance rates for the two experimental groups is significant in all three countries.

Finally, we estimate the number of households that moved out of the settlements where they were residing at the time that the baseline survey was conducted. We attempted to track all of them in the follow-up survey, but could interview only a fraction of them, so not all of the movers are treated as having left through attrition in the analysis; instead, only those who were not interviewed in the follow-up survey are classified as having left through attrition. Migration rates are reasonable for this population: 4.75%, 4.81% and 7.53% of the households in the

[8] Note, however, that the number of individuals, as measured in the follow-up survey, increased in all groups and samples.

intention-to-treat and 5.8%, 5% and 8.3% of those in the non-intention-to-treat group moved to another settlement in El Salvador, Mexico and Uruguay, respectively. Though the migration rates are consistently one percentage point higher in the non-intention-to-treat group in all three countries, the differences are not statistically significant at conventional levels.

3.1. Experimental Group Balance

Under randomization, the outcomes of the intention- and non-intention-to-treat groups should be equal, on average, under the non-treatment situation. Therefore, it is common practice to test for a statistical balance of pre-treatment observable variables in order to assess the success of randomization.

In Tables 3a and 3b, we present summary statistics separately for the intention- and non-intention-to-treat groups on a large set of pre-treatment variables grouped as socioeconomic characteristics, housing characteristics, assets, satisfaction with quality of housing and life, security, education and health. We also report robust standard errors and test for the null hypothesis of no difference between the mean values of each variable for each experimental group. Given that the randomization of units between experimental groups occurred within each settlement, we expect them to be well-balanced once we control for settlement fixed effects. Thus, when testing the null hypothesis of no differences between the two groups, we control by settlement fixed effects.

The analysis indicates that the design is fairly well balanced, since, in Mexico and El Salvador, only three variables are unbalanced (out of 39) at the 10% significance level, while, in Uruguay, five variables appear to be unbalanced at that level of significance. Overall, only three variables are statistically unbalanced. This is exactly what would be expected by chance.[9]

[9] Without controlling for settlement fixed effects, we find that, in Uruguay, only three variables appear to be statistically unbalanced; in Mexico, five variables are unbalanced, but in El Salvador as many as seven variables are unbalanced at the 10% level of statistical significance. In particular, in El Salvador, the prevalence of diarrhea is highly unbalanced (being greater in the intention-to-treat group).

3.2. Baseline Cross-Experiment Housing Differences

A major strength of this study is that it provides an evaluation of the same intervention in three different populations (and environments). Certainly, Mexico and Uruguay are much richer than El Salvador. The PPP Gross National Income (GNI) per capita in 2007 was USD 12,580 in Mexico, USD 11,020 in Uruguay and only USD 5,640 in El Salvador. This income difference is reflected in our sample, as well.

A comparison of the baseline housing characteristics is an important input for the interpretation of our results. In Table 4, we highlight a set of 11 baseline housing characteristics in all of the countries and test the null hypothesis of no difference between the mean values of each variable by country. Baseline housing was, as is to be expected, substantially better in Mexico and Uruguay than in El Salvador. For example, in Mexico 64.9% of households had high-quality floors, while in Uruguay the corresponding figure was 37.2% and in El Salvador it was only 14.4%. In Uruguay and Mexico, a large percentage of households had electricity (95.9% and 83.8%, respectively) and some form of water connection (91.3% and 51.0%, respectively), while, in El Salvador, only 39.1% of households had electricity and 21.5% of them had some sort of water hook-up on the property. The service conditions tended to be much better in Uruguay than in Mexico, which is consistent with the fact that the settlements in Uruguay are located in the richest urban centers of the country.

4. Slum Dwellers

The aim of this section is to provide a further description of the slum population in terms of the main socioeconomic and demographic variables that are of interest in order characterize it. We compare the slum population with the general poor and non-poor populations. By doing so, we also shed some light on what may be the underlying mechanisms that influence some poor households to opt to live in substandard dwellings.

First, it is important to note that the location of the population groups under analysis within the three countries is different. On the one hand, El Salvador is the poorest of the three, and the TECHO-targeted population group is concentrated in poor rural and peri-urban areas scattered throughout the country. There are no beneficiaries in the province of San Salvador, which is the political and economic hub of the country (and the site of the capital city). Therefore, we expect the TECHO poor to outperform not only the non-poor, but also other poor groups in all socioeconomic dimensions.

On the other hand, we have the cases of the relatively wealthier countries (Uruguay and Mexico) in which the TECHO households are centrally located. In the case of Uruguay, the targeted population groups live in the two main urban areas: the provinces of Montevideo and Canelones. In Mexico, there are TECHO households in both rural and urban areas, but all of them are located in the most important and wealthiest state of the country: Estado de Mexico. Therefore, we expect the slum dwellers in these countries to be worse-off than the non-poor of their countries, but how they compare with the other non-slum poor groups is not straightforward. We will therefore focus our analysis on this point, as well as offering some hypotheses concerning their housing decisions.

In Tables 5a to 5f, we compare a large number of outcomes of interest in regard to the slum population using information from the national household surveys of El Salvador, Mexico and Uruguay on the poor and non-poor populations in the same geographical areas as our TECHO samples. In the case of Uruguay, the national survey enables us to distinguish between poor slum dwellers and poor groups not living in slum conditions; while in El Salvador and Mexico, the information for slum dwellers comes exclusively from our baseline survey. Tables 5a and 5b are for El Salvador, 5c and 5d for Uruguay, and 5e and 5f for Mexico. The first column of each table shows the mean of the variable of interest for the non-poor, the second for the poor and the third for the slum dwellers targeted by TECHO. The fourth column shows the differential between the outcomes for the poor and the slum dwellers. For El Salvador and Mexico, we also show what the differential is once we control for a dummy that indicates whether the

household is in a rural or urban area. In those cases, our preferred estimate of the differentials is the one shown in this last column of each table.

The first salient aspect of the comparison is that it demonstrates that, in all three countries, slum dwellers are in general even worse-off in terms of assets possession than other poor populations. For instance, while the share of rooms with good-quality floors is 14% among slum inhabitants, the figure is 61% for the poor population of El Salvador overall. In Estado de Mexico and the areas studied in Uruguay, the share of rooms with good-quality floors among the non-slum poor is 20 percentage points greater than it is for slum dwellers. Rates for water connections, access to toilets and sewerage systems, and possession of refrigerators and TV sets are all significantly higher for the average poor household of El Salvador and Mexico than for slum dwellers in the same country. In Uruguay, the differences are smaller – in part because the average rates are much higher among this highly urban population.

In socioeconomic terms, the TECHO households in El Salvador are much more disadvantaged in all respects. Clearly, in this sample, the families residing in the slums that were studied are the poorest of all. Thus, we will now focus on the other two cases. In Uruguay and Mexico, the educational attainment of poor slum dwellers and poor non-slum dwellers is similar. There is no statistically significant difference in the percentages of children (aged 5-12) from these two groups who are enrolled in school, and the heads of households in these groups have similar educational backgrounds (especially in Uruguay, while in Mexico the slum dwellers have, on average, one year less of schooling than the rest of the poor population). The employment rates are higher for slum dwellers than for poor non-slum dwellers in Uruguay. Conversely, in Mexico, employment levels are consistently lower among slum inhabitants. We therefore cannot identify any conclusive pattern that would indicate that slum dwellers are more disadvantaged than other poor groups in terms of education and employment.

One of the most striking results of the comparison is that the incomes of slum dwellers in both Uruguay and Mexico are higher than the incomes of poor non-slum dwellers. In Mexico, the slum dwellers included in our baseline survey earn, on average, USD 108 per month per capita, while the average income for the poor population is USD 86 – a difference of 25%. In Uruguay,

slum dwellers earn an impressive 71% more than poor non-slum dwellers. (In both countries the difference between men's and women's incomes is also significant.) Consequently, the question that naturally arises is how can we explain why slum dwellers earn more but live in much worse housing units. To shed some light on this question, we have to look at what factors influence the emergence of slums.

At least in urban areas, conventional neo-classical explanations attribute the emergence of slums to the fact that the poor outbid the rich for the kind of housing that impoverished neighborhoods provide. In this sense, the poor are more willing than the rich are to pay for tracts of land –in polluted or floodable areas or on slopes, ridges and other inhospitable geographical environments- that are close to employment opportunities in the city center (see, for example, Glaeser, 2011). The lack of good public transportation adds to this dynamic, since it increases the cost in terms of time and effort of physically reaching the labor market. In fact, one of the reasons mentioned by Banerjee et al. (2008) for the rise of unemployment in South Africa after the end of apartheid in 1994 is the high cost of job searches for the black population, since the country's persistent geographical racial segregation has confined blacks to areas far away from the city center, which is also hard to reach due to the unavailability of good public transportation. The end of apartheid thus resulted in an increase in the labor supply among the black population that, in light of high job-search costs, could not find a match in labor demand.

What the theory predicts, then, is that slum dwellers may have a strong preference for being close to the labor market – so strong that it may offset any kind of disadvantage that living in an irregular settlement may entail. In this sense, our study provides useful information about the specific characteristics of slum dwellers and allows for a comparison with the rest of the poor population.

Indeed, the results seem to be consistent with the existence of poor groups with different preferences. A last piece of evidence that points in this direction is that, in Uruguay and Mexico, not only the monthly incomes (as noted earlier), but also the wage incomes of slum dwellers are significantly higher than those of the rest of the poor population. (The difference amounts

to approximately 40% in Uruguay and 30% in Mexico when we average the wage differentials for both men and women.) Thus, we find that, while slum dwellers have clearly worse housing infrastructure than the rest of the poor population, in the more urban areas, slum dwellers have comparable levels of educational attainment and labor-market participation, and they earn significantly more than poor people living in non-slum areas.

In summary, the picture that emerges from this comparison lends some credibility to the hypothesis that urban or semi-urban slum inhabitants are more willing to trade off living conditions for better access to the labor market than non-slum poor populations are. There appears to be, therefore, an intrinsic "selection" among the poor: those who prefer to have good access to the labor market in cities tend to gather in slums (where, on average, they are closer to areas of production activity than to other parts of the urban conglomerate), while those who are less willing to do so live in better environments, although at a significant cost in terms of income. Moving forward, an understanding of these differences will be crucial in improving the design of policies for upgrading the living conditions of the urban poor.

5. Methods

Once treatment status has been shown to be exogenous, the estimation of average treatment effects is straightforward. As we have shown in section 3, once we control for settlement fixed effects, randomization of treatment status was very successful. Additionally, compliance with the intention to treat is approximately 90% in the three countries. Therefore, we report estimates of the average intention-to-treat effect for the outcomes of interest in our study. Given the high compliance rate, these parameters are very close to average treatment effects. Operationally, we analyze the effect of the program on variable Y by estimating the following regression model:

$$\mathrm{Y}_{ij} = \alpha + \gamma\, \mathrm{Intention\,to\,Treat}_{ij} + \beta\, \mathrm{X}_{ij} + \mu_j + \varepsilon_{ij} \qquad (1)$$

where *i* indexes households or individuals, *j* indexes settlements, Y is any of the outcomes under study, and γ is the parameter of interest (a dummy variable that equals 1 for the households or individuals that were experimentally allocated to treatment, and 0 otherwise) on the outcome under consideration.[10] X is a vector of pre-treatment characteristics measured at baseline, μ is a settlement fixed effect, and ε is the error term. Given that randomization was conducted within each settlement, after controlling for settlement fixed effects, we assume that the error terms are independent. Thus, we report only robust standard errors throughout the empirical section of the analysis.

6. Empirical Results

We subsequently study the effect of the TECHO program on several outcome variables of interest, including satisfaction with the house and life satisfaction, security, assets, labor supply and child health. We begin by demonstrating that the provision of a TECHO house had an impact in terms of the quality of housing. This is a necessary condition in order for this intervention to have any impact on the outcomes that we studied.

We report the results of an intention-to-treat analysis for the TECHO program in terms of the outcomes of interest. We estimate this parameter by regressing the dependent variable on a dummy variable indicating whether or not the household was offered this benefit and a large set of control variables. For each dependent variable, we estimate two different linear regression specifications. Model 1 estimates the treatment effect on the response variables that were studied without including any control variables. (In Table 11, for child health

[10] Some of the variables under study are limited dependent variables (LDVs). The problem posed by causal inference with LDVs is not fundamentally different from the problem of causal inference with continuous outcomes. If there are no covariates or the covariates are sparse and discrete, linear models (and associated estimation techniques like 2SLS) are no less appropriate for LDVs than for other types of dependent variables. This is certainly the case in a randomized control trial where controls are included only in order to improve efficiency, but their omission would not bias the estimates of the parameters of interest.

outcomes, we control by age, age squared, gender of the children at the time of the follow-up survey and a dummy variable indicating whether the mother is present in the house.) Model 2 adds a set of pre-treatment sociodemographic control variables which are detailed in the notes to the tables. (Again, in Table 11, we also add in the same child-specific controls included in Model 1.)

In each subsection, we first present the results for Models 1 and 2 for each country separately and then present the estimates for the parameter of interest in these two models for a pooled sample that includes the three experiments. These estimates provide an informative "average" summary of the results across experiments but also are likely to be more precise.

6.1 Housing

The main intervention of the TECHO program deals with housing and we therefore expect treated households to exhibit a significant qualitative improvement in their housing conditions with respect to the control group. It could also be that the possession of a better house could provide treated households with perceived incentives to invest in further housing improvements, since such investments may be associated with other complementarities (see, among others, Banerjee and Duflo, 2011).

In Table 6 we present the results for the effects of the program on housing. As expected, the program resulted in substantial improvements in the quality of floors, walls and roofs, as well as in the percentage of rooms with windows. This is exactly what the program is meant to do. Since housing conditions were worse in El Salvador than in Uruguay and Mexico to start with, the program's absolute effects are consistently larger in the first case than in the others. Still, in all cases the effects are large both in absolute and in relative terms. The TECHO program thus substantially improves housing in these respects.

In El Salvador and Mexico, we find a significant reduction in the likelihood that a family will be using the kitchen as a place to sleep as well. However, the program has no further effect on

housing conditions. Families do not make further investments in their houses in response to the improvements brought about by the program. In particular, there are no positive effects on access to water, electricity or sanitation.

Generally, then, we find that the TECHO program has had the expected positive effect on the quality of housing but no more than that. No further housing improvements have been undertaken by the treated households. This may well be due to the *transitional* nature of the houses provided by the program.

6.2 Satisfaction with house and quality of life

One of the major aims of the TECHO program is to give slum dwellers a sense of dignity in their lives (inspired in the work of A. Sen (1999)). Living in a better house can be a source of satisfaction, dignity and pride *per se*, aside from its beneficial effects in other realms, such as health, education or labor outcomes. People's homes are an important source of well-being for them. The studies of Cattaneo et al. (2009) and Devoto et al. (2011) have shown how housing improvement programs have resulted in increased satisfaction with life and better mental well-being on the part of program beneficiaries.

Table 7 presents the program's effects on self-reported measures of satisfaction with the housing unit as well as with an overall self-reported measure of quality of life. In all countries, all measures substantially increased. Families are happier with their houses and with their lives.

The gains are substantially larger in El Salvador[11] than in Mexico and Uruguay, which is consistent with the fact that the improvement in housing conditions is greater in the first case than in the other two. The index that measures satisfaction with the quality of floors, for example, is over 200% higher in households in the treatment group with respect to the control

[11] Due to a problem with data collection in the follow-up survey in El Salvador, non-response to this question was differentially larger for the control group. Thus, to be on the safe side, we impute a value equal to 1 ("satisfied with quality of life") to 84 missing values in control group observations, which reduces the non-response rate for this variable from 43% to 7%, the same as in the intention-to-treat group. Without performing this imputation, the coefficient is 0.479 for Model 1 and 0.480 for Model 2.

group in El Salvador, while in Mexico the index is around 20% higher in the intention-to-treat households than in the control-group households, and in Uruguay the differential is around 39%. Similarly, satisfaction with quality of life is 41% higher in the intention-to-treat households in El Salvador, while in Mexico the figure is around 28% and in Uruguay it is around 21%.

What our results show is that, as in the case of the interventions analyzed by Cattaneo et al. (2009) and Devoto et al. (2011), improvements in housing conditions have a clearly positive effect on the satisfaction and well-being of poor slum dwellers. This is a dimension of social policy that is often underestimated but that can be crucial to the "life experience" of poor people and, thus, should be taken into account whenever analyzing the outcome of housing programs like TECHO.

6.3 Security and safety

Security is one of the most important concerns of urban slum dwellers. Information from our baseline survey of El Salvador shows that 49% of the heads of household often or always felt unsafe and 59% felt unsafe when leaving their homes alone. In this sense, it could be argued that providing a better house could potentially make people feel safer.

In Table 8 we present the results of the program in terms of several measures of security related to housing. We report the effect of the program on the perception of security: whether people feel safe inside the house, whether they feel that it is safe to leave the house alone, whether it seems safe to leave children alone in the house and whether the house has been burglarized. All the questions refer to the preceding year. Our estimations show that, in El Salvador, all self-reported measures of security improve substantially. The increase in the index for security inside the house is around 30% and the improvement is about 57% in the index that measures whether it is safe to leave children alone, but no such effect is detected in Uruguay or Mexico. We do not find that the program has any effect on crime, however, as there are no statistically significant reported changes in the frequency of burglaries during the past year in

any of the three countries; it is also true, however, that, in El Salvador and Mexico, burgulary rates in the settlements in our sample are very low and hence the exercise is not informative.

6.4 Possession of durable goods

There are different ways in which housing conditions can influence the possession of durable goods. On the one hand, if a better house provides security to those who live in it, then it will also provide more security for the assets inside it. Thus, dwellers can invest more in buying durable goods. On the other hand, having an improved house can also increase the valuation of some durable goods and, thus, stimulate their acquisition.

Table 9 depicts the performance of different variables corresponding to the possession of assets. We estimate the effect of the program on the possession of TV sets, fans, gas stoves, refrigerators and bicycles. The results show, however, that the program has had no effect on the possession of any of these assets. In other words, at least during the period studied, we do not find that the treated households have responded to the investment in their houses by increasing their own investments in supplementary durable goods.

6.5 Labor Outcomes and Household Structure

In Table 10 we present the results of our analysis with respect to labor outcomes and household structure. We first estimate whether the improved housing has had any effect on the number of members residing in each house and find no statistically significant effects on this front. We also investigate whether, in this limited period of time, there has been any effect on fertility by estimating whether the treatment has influenced the number of newborns in the housing units, but, here again, we do not identify any significant effects.

We then estimate whether the improved housing, either directly or indirectly, stimulates labor supply and earnings (in particular, the income per capita of the household and whether either the head of household or the spouse works more). As can be seen from the tables, we do not detect significant effects on any of these outcomes. We can conclude that better housing, at

least in the way that it is provided by the TECHO program, has no effect on the labor outcomes of the treated households.

6.6 Child Health

The reasons why better housing can lead to an improvement in the health of the persons living in those houses are clear. For instance, dirt floors generally pose a serious threat to children's health. In the study carried out by Cattaneo et al. (2009) concerning the replacement of dirt floors with cement floors, the authors found a statistically significant reduction in the incidence of parasitic infections, diarrhea and the prevalence of anemia. Another way in which housing improvements can support health is the reduction in indoor air pollution. Duflo et al. (2012b) have shown that improper ventilation of houses and the use of substandard kitchen stoves can have significantly negative effects on respiratory –and even general- health. The houses provided by the TECHO program provide better ventilation than most of the slum dwellings do and may therefore have a positive effect on overall health as well.

In Table 11 we test whether the upgraded houses result in an improvement in child health; the indicators used for this purpose are the prevalence of diarrhea and of respiratory disease. The estimated coefficients are mainly negative in both El Salvador and Mexico, suggesting that there may have been a decrease in the prevalence of those illnesses due to the intervention, but this is not the case in Uruguay. However, given our sample sizes, the estimated coefficients are imprecisely estimated and hence are not statistically significant at conventional levels. The point estimates, though, show a large decrease in diarrhea both in Mexico and in El Salvador. As a result, the overall effect, pooling across countries, is still large (a decrease of approximately 18% with a p-value equal to 0.17). It would be unsound to ignore this result. If we assume that the effect is not present in Uruguay because, there, the experiment took place in a better, more urbanized environment where people have greater access to services, then the pooled effect in the other two countries, reported in the two last columns of the table, point to an even larger effect, of approximately 27%, which is statistically significant at the 10% level. In contrast, we

do not find significant evidence that would allow us to conclude that there is a large effect in terms of the reduction of the prevalence of respiratory diseases.

7. Conclusion

This paper provides an analysis of the impact of providing better houses *in situ* to slum dwellers in El Salvador, Mexico and Uruguay. As expected, the quality of housing greatly improves after the intervention. Consequently, satisfaction with housing and with the quality of life increases drastically. This is a very significant result, since it suggests that limited *in situ* improvements in the housing of poor families has a large effect on their overall well-being. This finding is consistent with those of Cattaneo et. al (2009) and Devoto et. al (2011) and highlights the importance of using subjective indicators to evaluate interventions such as housing improvement programs, where the main objective is to facilitate the quality of family and social interactions.

Additionally, also in line with Cattaneo et al. (2009), we find that the improved housing conditions lead to large reductions in the incidence of diarrhea, at least in two of the three experiments. The one case in which these improvements do not seem to have health effects is the one in which the experiment took place in a better, more urbanized environment in which services are more accessible.

The provision of better housing has virtually no other statistically significant effects. Perceptions of security and safety change for the better only in El Salvador, while there is no change in the other two countries. In all three countries, better housing has little or no effect on further housing investments to supplement the upgrading intervention, the possession of durable goods, household structure or labor outcomes.

In this study we also compare slum dwellers to the rest of the poor population in the areas analyzed. When we consider the slum dwellers' situation within their national contexts, it

becomes possible to shed some light on their housing decisions and the dynamics of slum formation. We find that slum dwellers have clearly worse housing infrastructure than poor non-slum dwellers. However, in the more urban areas, the slum dwellers earn significantly more than other poor households and have comparable levels of educational attainment and labor-market participation outcomes. These findings are consistent with the plausible explanation for slum formation as a consequence of some poor groups being more willing to trade off living conditions for better access to the labor market. These poor households choose to live in substandard dwellings in slum areas because they tend to be closer to production activities than other parts of urban conglomerates. At the same time, other poor people are less willing to do so and therefore live in better environments but at a significant cost in terms of their income. The existence of these two types of poor households with different preferences should be taken into account when designing housing policies.

These findings contribute inputs for the debate about slum upgrading initiatives. What emerges from our analysis is that the provision of the kind of *in situ* housing upgrade that we studied in this paper has some significant effects on the living conditions of slum dwellers but that those effects are perhaps not as large as society might wish or expect. At first glance, the conclusion to be drawn from this finding might be that *in situ* upgrading should be ruled out and priority should be given to geographic relocation policies. This conclusion could, however, be in error. First of all, the *in situ* intervention is fairly inexpensive and substantially increases life satisfaction. What is more, in the two countries where we detect a reduction in the incidence of diarrhea, the effects are quite large. Additionally, Cattaneo et al. (2006) analyzed the performance of the Mexican "*Iniciamos Tu Casa*" program, which provided new houses to poor inhabitants. These houses were located far from the city center. A year after the program had started, the authors found that a large proportion of the participants had abandoned the houses; moreover, those who remained in them mentioned that, although housing conditions were better, the new neighborhoods provided them with poor access to public goods and general infrastructure. *In situ* upgrading therefore appears to remain a valid policy choice. This is also consistent with the evidence presented in Takeuchi et al. (2008) for Mumbai. These

authors use a residential location model to assess the welfare of an *in situ* slum upgrade program and a slum relocation program and conclude that, at least for those households relocated to more remote locations, the disadvantages of changes in commute distance wipe out the housing benefits of the program and that the treated households would have been better off if they had been given access to the more limited housing improvements provided by the *in situ* intervention. This is also consistent with the evidence that we present in Section 4, where we show that, as noted above, at least in urban areas, poor households are willing to trade off housing conditions for better access to labor markets and, hence, higher earnings.

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Appendix

Table 1: Description of Variables and Sample Sizes. Intention-to-Treat Groups. Follow-Up Survey

Variable	Description	El Salvador		Uruguay		Mexico		All	
		Obs. Control	Obs. Treatment	Obs. Control	Obs. Treatment	Obs. Control	Obs. Treatment	Obs. Control	Obs. Treatment
Monthly Income Per Capita (USD)	Monthly income per capita in US dollars of July 2007 is calculated as the sum of the monthly earnings of each household member divided by the household size.	200	324	258	386	339	360	797	1,070
Assets - Value Per Capita (USD)	Total value of assets per capita reported by the household.	258	398	282	446	401	425	941	1,269
Newborns (<1)	Indicator equal to 1 if the individual is less than 1 year old.	1,402	2,215	1,393	2,320	2,082	2,231	4,877	6,766
Newborns (<2)	Indicator equal to 1 if the individual is less than 2 years old.	1,402	2,215	1,393	2,320	2,082	2,231	4,877	6,766
Age	Age in years - all individuals.	1,402	2,215	1,393	2,320	2,082	2,231	4,877	6,766
Age in Months	Age in months of child is under 5 years of age.	156	235	215	391	265	293	636	919
HH's Age	Age of the head of household in years.	257	397	281	443	392	412	930	1,252
Spouse's Age	Age of the spouse or partner of the head of household in years.	180	292	174	250	291	314	645	856
Gender	Indicator equal to 1 if the individual is a man.	1,407	2,217	1,397	2,342	2,111	2,273	4,915	6,832
Head of HH's Gender	Indicator equal to 1 if the head of household is a man.	258	397	282	446	401	425	941	1,268
HH's Years of Schooling	Years of schooling of the head of household (equivalent to the highest level of education reached).	254	387	223	341	396	421	873	1,149
Spouse's Years of Schooling	Years of schooling of the spouse or partner of the head of household (equivalent to the highest level of education reached).	178	287	125	188	293	321	596	796
Hours Worked in Preceding Week by HH	Number of hours worked by the head of household at main and secondary jobs during the preceding week (conditional on HH having worked during the preceding week).	160	265	240	388	299	320	699	973
Hours Worked in Preceding Week by Spouse	Number of hours worked by the spouse or partner of the head of household at main and secondary jobs during the preceding week (conditional on having worked during the preceding week).	35	80	117	169	98	120	250	369
HH Size	Number of individuals living in the house.	258	398	282	446	401	425	941	1,269
Number of Rooms	Number of rooms on the site (observed by the enumerator).	258	398	278	444	401	424	937	1,266
Share of Rooms with Good-Quality Floors	Proportion of rooms with floors made of good-quality materials such as cement, brick or wood (observed by the enumerator).	258	398	278	444	401	424	937	1,266
Share of Rooms with Good-Quality Walls	Proportion of rooms with walls made of good-quality materials such as wood, cement or brick (observed by the enumerator).	258	398	282	446	397	424	937	1,268
Share of Rooms with Good-Quality Roofs	Proportion of rooms with roofs made of good-quality materials like cement, brick, tile or tin (observed by the enumerator).	258	398	279	444	401	424	938	1,266
Share of Rooms with Window	Proportion of rooms with at least one window (observed by the enumerator).	258	398	282	446	400	424	940	1,268
On-Site Water Supply	Indicator equal to 1 if there is on-site access to water (potable or non-potable) (observed by the enumerator).	258	398	282	446	401	425	941	1,269
House with Own Toilet	Indicator equal to 1 if there is an inside toilet or an on-site outhouse (observed by the enumerator).	258	398	282	446	401	425	941	1,269

Table 1: Description of Variables and Sample Sizes. Intention to Treat Groups. Follow Up Survey (cont.)

Variable	Description	El Salvador		Uruguay		Mexico		All	
		Obs. Control	Obs. Treatment	Obs. Control	Obs. Treatment	Obs. Control	Obs. Treatment	Obs. Control	Obs. Treatment
Electricity Connection Inside House	Indicator equal to 1 if there is a formal or informal connection to the electricity system inside the house (observed by the enumerator).	258	398	282	446	400	425	940	1,269
Sink in Room Where Food is Prepared	Indicator equal to 1 if there is a sink inside the room where food is prepared (observed by the enumerator).	258	398	275	442	398	423	931	1,263
Room Where Food is Prepared Also Used as Bedroom	Indicator equal to 1 if the household reports that the room where food is prepared is also used as a bedroom.	258	398	274	441	398	423	930	1,262
Use Gas Stove or Kerosene to Cook	Indicator equal to 1 if the household reports the use of gas stove or kerosene for cooking.	258	398	282	446	401	425	941	1,269
Refrigerator	Indicator equal to 1 if the enumerator observes and the household reports having a refrigerator.	235	352	271	432	401	425	907	1,209
T.V.	Indicator equal to 1 if the enumerator observes and the household reports having a television.	235	352	271	432	401	425	907	1,209
Fan	Indicator equal to 1 if the enumerator observes and the household reports having a fan.	235	352	271	432	400	425	906	1,209
Kitchen or Gas Stove	Indicator equal to 1 if the enumerator observes and the household reports having a kitchen or gas stove.	235	352	271	432	401	425	907	1,209
Bicycle	Indicator equal to 1 if the enumerator observes and the household reports having a bicycle.	235	352	271	432	401	425	907	1,209
Satisfaction with Floor Quality	Indicator equal to 1 if the respondent reports being satisfied or very satisfied with the quality of the floor, measured using a Likert scale of 5 categories ranging from "unsatisfied" to "very satisfied".	258	398	277	441	401	424	936	1,263
Satisfaction with Wall Quality	Indicator equal to 1 if the respondent reports being satisfied or very satisfied with the quality of walls, measured on a Likert scale of 5 categories ranging from "unsatisfied" to "very satisfied".	258	398	277	441	401	425	936	1,264
Satisfaction with Roof Quality	Indicator equal to 1 if the respondent reports being satisfied or very satisfied with the quality of roofs, measured on a Likert scale of 5 categories ranging from "unsatisfied" to "very satisfied".	258	398	277	441	401	425	936	1,264
Satisfaction with Protection Provided by House When It Rains	Indicator equal to 1 if the respondent reports being satisfied or very satisfied with the protection provided by the house when it rains, measured on a Likert scale of 5 categories ranging from "unsatisfied" to "very satisfied"..	258	398	277	441	401	425	936	1,264
Satisfaction with Quality of Life	Indicator equal to 1 if the respondent reports being satisfied or very satisfied with the quality of life, measured on a Likert scale of 5 categories ranging from "unsatisfied" to "very satisfied".	154	367	276	439	400	422	830	1,228
Safe Inside House During Past 12 months	Indicator equal to 1 if the respondent has never or rarely felt unSafe Inside House During Past 12 Months, measured on a Likert scale of 5 categories ranging from "never unsafe" to "always unsafe".	258	398	282	446	401	425	941	1,269
Safe Leaving House Alone During Past 12 months	Indicator equal to 1 if the respondent has never or rarely felt that it was unsafe to leave the house alone during the last 12 months.	258	398	282	446	401	425	941	1,269
Safe Leaving Children Alone in House During Past 12 months	Indicator equal to 1 if the respondent has felt safe or very safe leaving children alone in the house during the past 12 months, measured on a Likert scale of 5 categories ranging from "never unsafe" to "always unsafe".	258	398	282	446	401	425	941	1,269
House Robbed in Past 12 months	Indicator equal to 1 if the respondent reports that the house has been robbed during the past 12 months.	258	398	276	441	400	425	934	1,264
Respiratory Disease During Past 4 weeks	Indicator equal to 1 if the mother reports that a child under 5 years of age has had a respiratory disease in the last four weeks.	155	229	211	374	259	283	625	886
Diarrhea During Past 4 weeks	Indicator equal to 1 if the mother reports that a child under 5 years of age has had diarrhea in the past four weeks.	155	229	209	374	259	277	623	880

Table 2. General Information. Intention-to-Treat Groups

	El Salvador			Uruguay			Mexico			All		
	Observations Treatment	Observations Control	Mean Differences	Observations Treatment	Observations Control	Mean Differences	Observations Treatment	Observations Control	Mean Differences	Observations Treatment	Observations Control	Mean Differences
General Information												
No. of Households	421	277		478	301		457	439		1,356	1,017	
	60.32%	39.68%		61.36%	38.64%		51.00%	49.00%		57.14%	42.86%	
No. of Individuals	2,111	1,363		2,067	1,259		2,239	2,152		6,417	4,774	
	60.77%	39.23%		62.15%	37.85%		50.99%	49.01%		57.34%	42.66%	
Attriters: No. of Households	23	19		32	19		32	38		87	76	
Attrition Rate	0.055	0.069	-0.014	0.067	0.063	0.004	0.070	0.087	-0.017	0.064	0.075	-0.011
	(0.011)	(0.015)	(0.018)	(0.011)	(0.014)	(0.018)	(0.011)	(0.013)	(0.017)	(0.006)	(0.008)	(0.010)
No. of Households - Follow-Up Sample	398	258		446	282		425	401		1,269	941	
No. of Individuals - Follow Up Sample	2,217	1,407		2,342	1,397		2,273	2,111		6,832	4,915	
Compliers: No. of Households	349	257		383	280		368	401		1,100	938	
	87.7%	99.6%		85.9%	99.3%		86.6%	100.0%		86.7%	99.7%	
Non-Compliance Rate	0.123	0.004	0.119	0.141	0.007	0.134	0.134	0.000	0.134	0.133	0.003	0.130
	(0.016)	(0.003)	(0.016)***	(0.016)	(0.005)	(0.017)***	(0.016)	(0.000)	(0.016)***	(0.009)	(0.001)	(0.009)***
Movers[a]	20	16		36	25		22	22		78	63	
	4.75%	5.78%		7.53%	8.31%		4.81%	5.01%		5.75%	6.19%	
Movers Rate	0.048	0.058	-0.010	0.075	0.083	-0.008	0.048	0.050	-0.002	0.058	0.062	-0.004
	(0.010)	(0.014)	(0.017)	(0.012)	(0.015)	(0.019)	(0.010)	(0.010)	(0.014)	(0.006)	(0.007)	(0.009)

[a] The term "movers" refers to households whose members moved out of the original slum between the times that the baseline and the follow-up surveys were conducted. Some of these people were located and responded to the follow-up survey; those who were not located have been classified as attriters.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

Table 3a. Differences in Pre-Treatment Means. Intention-to-Treat Groups. Baseline Survey.[a]

Variables	El Salvador			Uruguay			Mexico			All		
	Mean Treatment	Mean Control	Mean Differences	Mean Treatment	Mean Control	Mean Differences	Mean Treatment	Mean Control	Mean Differences	Mean Treatment	Mean Control	Mean Differences
Income and Assets												
Assets - Value Per Capita (USD)	45.397	53.578	6.059	45.369	47.694	-1.599	48.772	50.265	1.048	45.177	48.745	-0.311
	(5.539)	(8.126)	(11.900)	(3.558)	(4.677)	(6.452)	(4.527)	(4.111)	(6.104)	(2.365)	(2.764)	(3.911)
Monthly Income Per Capita (USD)	29.940	30.463	-1.713	64.899	77.871	-15.626	56.281	67.969	-6.209	51.210	59.118	-6.453
	(1.413)	(1.893)	(2.855)	(4.179)	(6.834)	(9.275)*	(2.965)	(3.664)	(4.744)	(1.826)	(2.425)	(3.521)*
T.V.	0.453	0.412	-0.028	0.844	0.825	0.019	0.604	0.677	-0.039	0.643	0.651	-0.017
	(0.025)	(0.030)	(0.044)	(0.016)	(0.022)	(0.029)	(0.022)	(0.022)	(0.031)	(0.013)	(0.015)	(0.019)
Fan	0.043	0.050	0.004	0.291	0.264	0.037	0.033	0.023	0.005	0.127	0.101	0.016
	(0.010)	(0.013)	(0.022)	(0.021)	(0.025)	(0.034)	(0.008)	(0.007)	(0.010)	(0.009)	(0.009)	(0.013)
Kitchen or Gas Stove	0.455	0.527	-0.030	0.651	0.664	0.022	0.418	0.474	-0.027	0.511	0.544	-0.012
	(0.025)	(0.030)	(0.044)	(0.022)	(0.027)	(0.036)	(0.023)	(0.023)	(0.029)	(0.013)	(0.015)	(0.020)
Refrigerator	0.059	0.099	-0.018	0.495	0.510	0.011	0.204	0.187	0.014	0.263	0.259	0.006
	(0.011)	(0.018)	(0.026)	(0.023)	(0.029)	(0.039)	(0.018)	(0.018)	(0.024)	(0.012)	(0.013)	(0.018)
Bicycle	0.335	0.359	-0.014	0.453	0.462	-0.011	0.269	0.269	0.010	0.354	0.349	-0.003
	(0.023)	(0.029)	(0.041)	(0.023)	(0.029)	(0.039)	(0.020)	(0.021)	(0.029)	(0.013)	(0.015)	0.020)
Characteristics of the House												
Number of Rooms	2.488	2.354	-0.146	2.912	2.837	0.105	2.803	2.825	-0.023	2.743	2.700	-0.010
	(0.056)	(0.069)	(0.095)	(0.068)	(0.087)	(0.117)	(0.061)	(0.059)	(0.085)	(0.036)	(0.041)	(0.058)
Share of Rooms with Good-Quality Floors	0.145	0.142	-0.038	0.371	0.374	-0.020	0.661	0.636	0.012	0.398	0.423	-0.011
	(0.011)	(0.014)	(0.021)*	(0.020)	(0.025)	(0.033)	(0.017)	(0.018)	(0.024)	(0.011)	(0.013)	(0.016)
Share of Rooms with Good-Quality Walls	0.110	0.107	-0.021	0.248	0.217	0.022	0.259	0.237	0.022	0.204	0.193	0.010
	(0.010)	(0.012)	(0.018)	(0.021)	(0.026)	(0.035)	(0.017)	(0.016)	(0.021)	(0.009)	(0.010)	(0.014)
Share of Rooms with Good-Quality Roofs	0.101	0.149	-0.016	0.348	0.353	-0.023	0.502	0.468	-0.013	0.322	0.347	-0.017
	(0.012)	(0.019)	(0.023)	(0.019)	(0.025)	(0.033)	(0.019)	(0.019)	(0.027)	(0.011)	(0.013)	(0.016)
Share of Rooms with Window	0.154	0.184	0.002	0.561	0.586	-0.026	0.294	0.253	0.015	0.345	0.333	-0.002
	(0.012)	(0.018)	(0.024)	(0.017)	(0.022)	(0.029)	(0.016)	(0.015)	(0.022)	(0.010)	(0.011)	(0.014)
On-Site Water Supply	0.228	0.195	-0.033	0.916	0.907	0.016	0.501	0.519	0.015	0.563	0.546	0.004
	(0.020)	(0.023)	(0.030)	(0.012)	(0.016)	(0.021)	(0.023)	(0.023)	(0.028)	(0.013)	(0.015)	(0.015)
Sink in Room Where Food is Prepared	0.014	0.007	0.002	0.269	0.231	0.047	0.013	0.025	-0.011	0.103	0.081	0.012
	(0.005)	(0.005)	(0.010)	(0.020)	(0.024)	(0.033)	(0.005)	(0.007)	(0.009)	(0.008)	(0.008)	(0.012)
Room Where Food is Prepared Also Used as Bedroom	0.304	0.327	0.055	0.418	0.455	-0.027	0.229	0.230	-0.010	0.318	0.323	0.000
	(0.022)	(0.028)	(0.039)	(0.022)	(0.028)	(0.038)	(0.019)	(0.020)	(0.026)	(0.012)	(0.014)	(0.019)
Electricity Connection Inside House	0.394	0.386	-0.063	0.962	0.953	0.008	0.807	0.870	-0.041	0.734	0.763	-0.030
	(0.023)	(0.029)	(0.038)	(0.008)	(0.012)	(0.016)	(0.018)	(0.016)	(0.023)*	(0.012)	(0.013)	(0.014)**
Use Gas Stove or Kerosene for Cooking	0.195	0.141	0.010	0.439	0.475	-0.017	0.276	0.280	-0.008	0.308	0.300	-0.007
	(0.019)	(0.020)	(0.030)	(0.022)	(0.028)	(0.037)	(0.020)	(0.021)	(0.023)	(0.012)	(0.014)	(0.017)
House with Own Toilet	0.506	0.448	-0.056	0.657	0.598	0.062	0.403	0.392	-0.011	0.524	0.468	0.003
	(0.024)	(0.029)	(0.042)	(0.021)	(0.028)	(0.036)*	(0.022)	(0.023)	(0.031)	(0.013)	(0.015)	(0.020)

[a] Responses regarding construction materials used in rooms were included only for those households that reported information for all rooms. In the case of monetary variables, observations over the 99th percentile were excluded. Robust standard errors are reported in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 3b. Differences in Pre-Treatment Means. Intention-to-Treat Groups. Baseline Survey.[a]

Variables	El Salvador			Uruguay			Mexico			All		
	Mean Treatment	Mean Control	Mean Differences	Mean Treatment	Mean Control	Mean Differences	Mean Treatment	Mean Control	Mean Differences	Mean Treatment	Mean Control	Mean Differences
Satisfaction with Quality of House												
Satisfaction with Floor Quality	0.133	0.116	0.018	0.164	0.196	-0.020	0.375	0.377	0.036	0.225	0.252	0.013
	(0.016)	(0.019)	(0.027)	(0.016)	(0.022)	(0.030)	(0.022)	(0.023)	(0.030)	(0.011)	(0.013)	(0.017)
Satisfaction with Wall Quality	0.095	0.083	0.004	0.117	0.130	-0.012	0.255	0.249	0.030	0.157	0.169	0.010
	(0.014)	(0.016)	(0.025)	(0.014)	(0.019)	(0.026)	(0.020)	(0.020)	(0.029)	(0.009)	(0.011)	(0.016)
Satisfaction with Roof Quality	0.117	0.091	0.008	0.176	0.157	0.000	0.212	0.229	0.002	0.163	0.176	0.003
	(0.015)	(0.017)	(0.026)	(0.021)	(0.016)	(0.028)	(0.019)	(0.020)	(0.028)	(0.010)	(0.011)	(0.016)
Satisfaction with Protection Provided by House When It Rains	0.103	0.090	-0.005	0.159	0.180	-0.006	0.190	0.176	0.038	0.152	0.154	0.013
	(0.014)	(0.017)	(0.025)	(0.016)	(0.022)	(0.029)	(0.018)	(0.018)	(0.025)	(0.009)	(0.011)	(0.016)
Satisfaction with Quality of Life	0.266	0.181	0.025	0.219	0.229	-0.020	0.354	0.339	0.036	0.279	0.263	0.015
	(0.021)	(0.023)	(0.033)	(0.019)	(0.024)	(0.032)	(0.022)	(0.022)	(0.032)	(0.012)	(0.013)	(0.019)
Perception of Security												
Safe Inside House During Past 12 Months	0.527	0.538	-0.045	0.615	0.595	0.029	0.713	0.708	0.013	0.621	0.628	0.004
	(0.024)	(0.030)	(0.043)	(0.022)	(0.028)	(0.037)	(0.021)	(0.021)	(0.031)	(0.013)	(0.015)	(0.020)
Safe Leaving House Alone During Past 12 months	0.435	0.419	-0.011	0.328	0.272	0.061	0.615	0.597	0.031	0.458	0.452	0.031
	(0.024)	(0.029)	(0.043)	(0.021)	(0.025)	(0.035)*	(0.022)	(0.023)	(0.032)	(0.013)	(0.015)	(0.020)
Safe Leaving Children Alone in House During Past 12 months	0.147	0.166	-0.049	0.144	0.126	0.011	0.166	0.191	-0.034	0.153	0.165	-0.023
	(0.017)	(0.022)	(0.032)	(0.016)	(0.019)	(0.025)	(0.017)	(0.018)	(0.026)	(0.009)	(0.011)	(0.016)
House Robbed in Past 12 months	0.079	0.036	0.053	0.273	0.283	-0.030	0.059	0.055	0.008	0.141	0.117	0.006
	(0.013)	(0.011)	(0.020)**	(0.020)	(0.026)	(0.033)	(0.011)	(0.010)	(0.015)	(0.009)	(0.010)	(0.013)
Sociodemographic Characteristics												
HH Size	5.014	4.921	-0.040	4.324	4.183	0.109	4.899	4.902	-0.099	4.732	4.694	-0.015
	(0.124)	(0.140)	(0.233)	(0.113)	(0.134)	(0.189)	(0.113)	(0.117)	(0.159)	(0.068)	(0.075)	(0.108)
Newborns (<1)	0.023	0.025	-0.003	0.042	0.036	0.001	0.024	0.031	-0.008	0.029	0.031	-0.004
	(0.003)	(0.004)	(0.006)	(0.004)	(0.005)	(0.007)	(0.003)	(0.003)	(0.005)	(0.002)	(0.002)	(0.003)
Newborns (<2)	0.043	0.045	-0.005	0.080	0.075	0.000	0.058	0.056	-0.001	0.060	0.058	-0.002
	(0.004)	(0.005)	(0.008)	(0.006)	(0.007)	(0.010)	(0.004)	(0.004)	(0.007)	(0.002)	(0.003)	(0.004)
HH's Age	45.038	44.227	0.129	38.723	37.270	1.827	41.518	41.379	0.426	41.627	40.935	0.824
	(0.819)	(1.013)	(1.555)	(0.649)	(0.806)	(1.089)*	(0.747)	(0.697)	(0.999)	(0.430)	(0.479)	(0.673)
Head of HH's Gender	0.798	0.769	0.028	0.498	0.545	-0.046	0.788	0.770	0.018	0.689	0.703	-0.001
	(0.019)	(0.025)	(0.036)	(0.022)	(0.028)	(0.038)	(0.019)	(0.020)	(0.028)	(0.012)	(0.014)	(0.019)
HH's Years of Schooling	2.514	2.326	-0.053	5.667	5.183	0.542	4.144	3.850	0.305	4.091	3.741	0.281
	(0.147)	(0.170)	(0.245)	(0.185)	(0.206)	(0.296)*	(0.151)	(0.151)	(0.203)	(0.099)	(0.105)	(0.140)**
Spouse's Age	38.909	37.900	0.274	33.623	33.036	0.595	37.110	37.731	0.065	36.727	36.514	0.270
	(0.852)	(1.047)	(1.609)	(0.754)	(0.927)	(1.263)	(0.744)	(0.757)	(1.045)	(0.460)	(0.519)	(0.725)
Spouse's Years of Schooling	2.210	1.921	0.127	5.962	5.576	0.189	4.120	4.274	-0.320	3.889	3.867	-0.081
	(0.166)	(0.180)	(0.265)	(0.269)	(0.315)	(0.412)	(0.178)	(0.177)	(0.237)	(0.123)	(0.133)	(0.168)
Hours Worked in Preceding Week by HH	41.278	40.963	1.373	38.610	40.258	-1.744	40.924	40.785	0.606	40.182	40.662	-0.046
	(1.230)	(1.461)	(2.306)	(1.113)	(1.437)	(1.910)	(1.150)	(1.140)	(1.623)	(0.671)	(0.764)	(1.092)
Hours Worked in Preceding Week by Spouse	34.261	26.340	4.137	37.159	37.438	0.267	28.122	28.113	-2.283	33.370	31.377	-0.250
	(2.872)	(3.035)	(4.392)	(1.845)	(1.775)	(2.759)	(1.864)	(1.865)	(2.699)	(1.225)	(1.225)	(1.786)
Health (<5 years old)												
Respiratory Disease Ruring Past 4 Weeks	0.669	0.635	0.042	0.351	0.352	-0.018	0.376	0.401	-0.022	0.444	0.439	-0.007
	(0.029)	(0.037)	(0.056)	(0.024)	(0.031)	(0.042)	(0.027)	(0.027)	(0.040)	(0.016)	(0.018)	(0.025)
Diarrhea During Past 4 Weeks	0.249	0.144	0.043	0.087	0.089	-0.018	0.131	0.138	-0.011	0.145	0.123	-0.002
	(0.027)	(0.027)	(0.042)	(0.014)	(0.018)	(0.024)	(0.018)	(0.019)	(0.028)	(0.011)	(0.012)	(0.017)

[a] Robust standard errors are reported in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 4. Differences in Pre-Treatment Means Between Countries. Housing Characteristics. Baseline Survey [a]

Variables	Mean El Salvador (1)	Mean Uruguay (2)	Mean Mexico (3)	Mean Differences (1) - (2)	Mean Differences (1) - (3)	Mean Differences (2) - (3)
Characteristics of the House						
Number of Rooms	2.435	2.883	2.814	-0.448	-0.379	0.069
	(0.087)	(0.079)	(0.065)	(0.116)***	(0.108)***	(0.101)
Share of Rooms with Good-Quality Floors	0.144	0.372	0.649	-0.228	-0.505	-0.276
	(0.014)	(0.030)	(0.027)	(0.033)***	(0.031)***	(0.040)***
Share of Rooms with Good-Quality Walls	0.109	0.236	0.248	-0.127	-0.140	-0.012
	(0.013)	(0.033)	(0.031)	(0.035)***	(0.034)***	(0.045)
Share of Rooms with Good-Quality Roofs	0.120	0.350	0.485	-0.230	-0.365	-0.135
	(0.034)	(0.024)	(0.031)	(0.041)***	(0.046)***	(0.039)***
Share of Rooms with Window	0.166	0.571	0.273	-0.405	-0.107	0.298
	(0.017)	(0.016)	(0.025)	(0.023)***	(0.030)***	(0.029)***
On-Site Water Supply	0.215	0.913	0.510	-0.700	-0.295	0.403
	(0.051)	(0.014)	(0.052)	(0.053)***	(0.072)***	(0.054)***
Sink in Room Where Food is Prepared	0.012	0.254	0.019	-0.242	-0.008	0.235
	(0.005)	(0.025)	(0.004)	(0.024)***	(0.007)	(0.024)***
Room Where Food is Prepared Also Used as Bedroom	0.313	0.432	0.229	-0.119	0.084	0.203
	(0.047)	(0.025)	(0.025)	(0.053)**	(0.053)	(0.035)***
Electricity Connection Inside House	0.391	0.959	0.838	-0.568	-0.447	0.121
	(0.058)	(0.006)	(0.031)	(0.058)***	(0.065)***	(0.031)***
Use Gas Stove or Kerosene for Cooking	0.173	0.453	0.278	-0.280	-0.105	0.175
	(0.034)	(0.052)	(0.057)	(0.061)***	(0.066)	(0.076)**
House with Own Bathroom	0.483	0.634	0.397	-0.151	0.085	0.237
	(0.041)	(0.024)	(0.035)	(0.047)***	(0.054)	(0.042)***

[a] Responses regarding construction materials used in rooms were included only for those households that reported information for all rooms. Standard errors clustered at cluster level shown in parentheses.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 5a: Differences in Means between Poor, Non-Poor and Slum Dwellers.

Variable	El Salvador[a] (1) Mean of Observations Non-Poor (EHPM 2008)	(2) Mean of Observations National Poor (EHPM 2008) [b]	(3) Mean of Observations Settlements (UTPMP 2007-08)	Dif (2)-(3)	Dif (2)-(3)[d]
Income Indicator (HH)					
Monthly Income Per Capita [c]	126.332	37.293	30.146	7.147	2.844
	(2.951)	(0.622)	(1.777)	(1.896)***	(2.173)
Employment Indicators (IND)					
Employment Rate 16-64	0.630	0.540	0.510	0.030	0.019
	(0.006)	(0.006)	(0.018)	(0.019)	(0.019)
Employment Rate - Males 16-64	0.361	0.352	0.368	-0.015	0.000
	(0.004)	(0.006)	(0.014)	(0.016)	(0.018)
Employment Rate - Females 16-64	0.269	0.188	0.143	0.046	0.018
	(0.005)	(0.006)	(0.014)	(0.016)***	(0.016)
Wage Employment Rate 16-64	0.432	0.328	0.195	0.134	0.122
	(0.006)	(0.007)	(0.016)	(0.018)***	(0.017)***
Wage Employment Rate - Males 16-64	0.268	0.234	0.172	0.061	0.065
	(0.004)	(0.006)	(0.014)	(0.015)***	(0.015)***
Wage Employment Rate - Females 16-64	0.164	0.095	0.022	0.073	0.058
	(0.004)	(0.003)	(0.005)	(0.007)***	(0.006)***
Self-Employment Rate 16-64	0.198	0.212	0.313	-0.100	-0.101
	(0.004)	(0.006)	(0.020)	(0.021)***	(0.021)***
Self-Employment Rate - Males 16-64	0.093	0.119	0.192	-0.074	-0.061
	(0.002)	(0.005)	(0.022)	(0.023)***	(0.024)**
Self-Employment Rate - Females 16-64	0.105	0.094	0.121	-0.027	-0.040
	(0.003)	(0.004)	(0.010)	(0.012)**	(0.012)***
Average Wage - Males 16-64 [c]	294.322	132.607	87.041	45.565	35.581
	(7.093)	(2.206)	(5.850)	(6.167)***	(5.356)***
Average Wage - Females 16-64 [c]	260.291	111.619	84.060	27.560	18.781
	(6.298)	(2.216)	(5.105)	(5.514)***	(6.059)***

[a] Figures computed at household and individual levels in El Salvador using the 2008 multi-purpose household survey for all provinces (known as "departments") in which there are UTPMP households (excludes San Salvador Department) and UTPMP impact evaluation baseline data sources. Standard errors are clustered at the primary sample unit level shown in parentheses.

[b] The term "national poor "refers to households whose members were living on less than USD 89.4 per capita per month in urban zones and less than USD 58.2 per capita per month in rural zones in 2008; these figures are equivalent to two basic baskets for urban and rural areas, which represent the national poverty line and basic needs in El Salvador as of 2008.

[c] In the case of monetary variables, observations over the 99th percentile were excluded.

[d] Since price levels in urban and rural zones in El Salvador differ, in this column we test the hypothesis of equal means by controlling for a dummy variable that is equal to 1 if the household is located in a rural zone.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 5b: Differences in Means between Poor, Non-Poor and Slum Dwellers.

El Salvador[a]

Variable	(1) Mean of Observations Non-Poor (EHPM 2008)	(2) Mean of Observations National Poor (EHPM 2008) [b]	(3) Mean of Observations Settlements (UTPMP 2007-08)	Dif (2)-(3)	Dif (2)-(3)[c]
Demographics					
HH Size	3.873	4.669	4.977	-0.308	-0.181
	(0.032)	(0.052)	(0.129)	(0.132)**	(0.138)
Female Head	0.360	0.288	0.213	0.075	0.047
	(0.007)	(0.009)	(0.015)	(0.018)***	(0.020)**
HH's Age	48.768	46.904	44.717	2.187	1.783
	(0.310)	(0.383)	(0.927)	(1.019)**	(0.989)*
HH's Years of Schooling	6.034	3.693	2.438	1.255	0.825
	(0.156)	(0.086)	(0.184)	(0.198)***	(0.161)***
Children Aged 5-12 Enrolled in School	0.923	0.827	0.931	-0.104	-0.120
	(0.005)	(0.009)	(0.013)	(0.016)***	(0.017)***
Children Aged 13-18 Enrolled in School	0.700	0.622	0.578	0.044	0.010
	(0.011)	(0.015)	(0.037)	(0.041)	(0.040)
Housing and Assets					
Rooms Per Capita	0.894	0.507	0.126	0.381	0.343
	(0.014)	(0.009)	(0.012)	(0.015)***	(0.019)***
Share of Rooms with Good-Quality Floors	0.831	0.606	0.144	0.462	0.385
	(0.008)	(0.014)	(0.014)	(0.019)***	(0.029)***
On-Site Water Supply	0.704	0.553	0.215	0.339	0.249
	(0.015)	(0.017)	(0.051)	(0.051)***	(0.042)***
House with Own Toilet	0.845	0.781	0.483	0.298	0.279
	(0.007)	(0.010)	(0.041)	(0.042)***	(0.040)***
Connected to Sewerage Service	0.623	0.534	0.009	0.525	0.382
	(0.024)	(0.034)	(0.004)	(0.033)***	(0.064)***
Electricity Connection Inside House	0.931	0.805	0.391	0.414	0.352
	(0.005)	(0.011)	(0.058)	(0.060)***	(0.051)***
Refrigerator	0.698	0.331	0.075	0.256	0.199
	(0.011)	(0.012)	(0.019)	(0.023)***	(0.032)***
T.V.	0.879	0.666	0.436	0.230	0.168
	(0.006)	(0.014)	(0.037)	(0.039)***	(0.030)***

[a] Figures computed at household and individual levels in El Salvador using the 2008 multi-purpose household survey (EHPM) for all provinces (known as "departments") in which there are UTPMP households (excludes San Salvador Department) and UTPMP impact evaluation baseline data sources. Standard errors are clustered at the primary sample unit level shown in parentheses.

[b] The term "national poor "refers to households whose members were living on less than USD 89.4 per capita per month in urban zones and less than USD 58.2 per capita per month in rural zones in 2008; these figures are equivalent to two basic baskets for urban and rural areas, which represent the national poverty line and basic needs in El Salvador in 2008.

[c] Since price levels in urban and rural zones in El Salvador differ, in this column we test the hypothesis of equal means by controlling for a dummy variable that is equal to 1 if the household is located in a rural zone.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 5c: Differences in Means between Poor, Non-Poor and Slum Dwellers. Uruguay (Montevideo and Canelones Departments)[a]

Variable	(1) Mean of Observations Non-Poor Not In Slums (ECH 2008)	(2) Mean of Obervations Poor Not In Slums (ECH 2008) [b]	(3) Mean of Observations Settlements (ECH 2008)	Dif (2)-(3)
Income Indicators (HH)				
Monthly Income Per Capita [c]	428.383	77.561	132.936	-55.376
	(28.937)	(0.627)	(3.475)	(3.364)***
Employment Indicators (IND)				
Employment Rate 16-64	0.741	0.584	0.647	-0.063
	(0.002)	(0.004)	(0.007)	(0.007)***
Employment Rate - Males 16-64	0.387	0.337	0.388	-0.051
	(0.006)	(0.009)	(0.006)	(0.010)***
Employment Rate - Females 16-64	0.354	0.247	0.260	-0.012
	(0.008)	(0.011)	(0.006)	(0.011)
Wage Employment Rate 16-64	0.561	0.404	0.467	-0.063
	(0.011)	(0.005)	(0.008)	(0.009)***
Wage Employment Rate - Males 16-64	0.278	0.225	0.271	-0.046
	(0.002)	(0.008)	(0.007)	(0.009)***
Wage Employment Rate - Females 16-64	0.283	0.178	0.196	-0.017
	(0.011)	(0.010)	(0.006)	(0.012)
Self-Employment Rate 16-64	0.180	0.181	0.180	0.000
	(0.010)	(0.003)	(0.007)	(0.008)
Self-Employment Rate - Males 16-64	0.109	0.112	0.116	-0.005
	(0.007)	(0.003)	(0.004)	(0.005)
Self-Employment Rate - Females 16-64	0.071	0.069	0.064	0.005
	(0.003)	(0.002)	(0.004)	(0.005)
Average Wage - Males 16-64 [c]	683.019	187.336	260.234	-72.899
	(35.900)	(6.969)	(5.858)	(9.489)***
Average Wage - Females 16-64 [c]	434.197	74.283	108.738	-34.455
	(26.782)	(2.086)	(4.156)	(3.657)***

[a] Figures computed at household and individual levels in Montevideo and Canelones provinces (known as "departments") in Uruguay using the 2008 continuous household survey (ECH). Standard errors are clustered at the primary sample unit level shown in parentheses.

[b] The term "national poor" refers to households whose members are below the national poverty line in urban zones in Uruguay. This line is calculated monthly; in 2008, it ranged between USD 213 and USD 234 per capita per month. The poverty line represents a basic basket of "staple food needs" plus a basic basket of "non-food needs", both calculated using 2006 as the base year.

[c] In US dollars of December 2008. In the case of monetary variables, observations over the 99th percentile were excluded.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 5d: Differences in Means between Poors, Non Poors and Slum Dwellers. Uruguay (Montevideo and Canelones Departments)[a]

Variable	(1) Mean of Observations Non-Poor Not In Slums (ECH 2008)	(2) Mean of Obervations Poor Not In Slums (ECH 2008) [b]	(3) Mean of Observations Settlements (ECH 2008)	Dif (2)-(3)
Demographics				
HH Size	2.549	4.274	3.691	0.584
	(0.028)	(0.091)	(0.053)	(0.118)***
Female Head	0.398	0.378	0.372	0.005
	(0.023)	(0.038)	(0.013)	(0.039)
HH's Age	55.496	45.311	45.423	-0.112
	(0.151)	(0.213)	(0.352)	(0.395)
HH's Years of Schooling	9.476	6.351	6.169	0.182
	(0.550)	(0.190)	(0.099)	(0.140)
Children Aged 5-12 Enrolled in School	0.988	0.980	0.978	0.002
	(0.001)	(0.002)	(0.003)	(0.004)
Children Aged 13-18 Enrolled in School	0.875	0.707	0.661	0.046
	(0.011)	(0.011)	(0.019)	(0.024)*
Housing and Assets				
Rooms Per Capita	1.737	0.836	0.977	-0.141
	(0.017)	(0.024)	(0.020)	(0.039)***
Share of Rooms with Good-Quality Floors	0.964	0.758	0.596	0.162
	(0.011)	(0.010)	(0.017)	(0.016)***
On-Site Water Supply	0.948	0.864	0.989	-0.125
	(0.036)	(0.061)	(0.004)	(0.057)**
House with Own Toilet	0.976	0.922	0.895	0.027
	(0.001)	(0.006)	(0.009)	(0.012)**
Connected to Sewerage Service	0.703	0.543	0.604	-0.061
	(0.010)	(0.033)	(0.023)	(0.025)**
Electricity Connection Inside House	0.998	0.988	0.996	-0.008
	(0.000)	(0.003)	(0.001)	(0.003)**
Refrigerator	0.985	0.886	0.860	0.027
	(0.002)	(0.006)	(0.011)	(0.011)**
T.V.	0.984	0.939	0.919	0.020
	(0.002)	(0.007)	(0.008)	(0.009)**

[a] Figures computed at household and individual levels in Montevideo and Canelones provinces (known as "departments") in Uruguay using the 2008 continuous household survey (ECH). Standard errors are clustered at the primary sample unit level shown in parentheses.

[b] The term "national poor" refers to households whose members are below the national poverty line in urban zones in Uruguay. This line is calculated monthly; in 2008, it ranged between USD 213 and USD 234 per capita per month. The poverty line represents a basic basket of "staple food needs" plus a basic basket of "non-food needs", both calculated using 2006 as the base year.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 5e: Differences in Means between Poor, Non-Poor and Slum Dwellers. Mexico (Estado de Mexico) [a]

Variable	(1) Mean Non-Poor (ENIGH 2010)	(2) Mean Poor (ENIGH 2010) [b]	(3) Mean All Slums (UTPMP 2010 - 11)	Dif (2)-(3)	Dif (2)-(3)[d]
Income Indicators (HH)					
Monthly Income Per Capita [c]	467.494	86.274	107.674	-21.399	-34.770
	(17.287)	(1.629)	(6.073)	(6.218)***	(9.504)***
Employment Indicators (IND)					
Employment rate 16-64	0.948	0.877	0.563	0.315	0.278
	(0.005)	(0.010)	(0.009)	(0.014)***	(0.017)***
Employment rate Males 16-64	0.594	0.529	0.406	0.124	0.104
	(0.010)	(0.015)	(0.007)	(0.017)***	(0.026)**
Employment rate Females 16-64	0.354	0.348	0.157	0.191	0.174
	(0.011)	(0.013)	(0.008)	(0.016)***	(0.022)***
Wage employment rate 16-64	0.749	0.621	0.509	0.113	0.064
	(0.017)	(0.020)	(0.011)	(0.023)***	(0.037)*
Wage Employment Rate - Males 16-64	0.464	0.387	0.378	0.009	-0.012
	(0.013)	(0.014)	(0.010)	(0.017)	(0.023)
Wage Employment Rate - Females 16-64					
	0.285	0.234	0.130	0.104	0.075
	(0.011)	(0.013)	(0.007)	(0.015)***	(0.021)***
Self-Employment Rate 16-64	0.198	0.252	0.049	0.203	0.214
	(0.016)	(0.016)	(0.008)	(0.018)***	(0.028)***
Self-Employment Rate - Males 16-64	0.130	0.140	0.024	0.116	0.116
	(0.014)	(0.010)	(0.005)	(0.011)***	(0.013)***
Self-Employment Rate - Females 16-64	0.068	0.112	0.025	0.087	0.098
	(0.008)	(0.015)	(0.004)	(0.015)***	(0.031)***
Average Wage - Males 16-64 [c]	469.389	237.071	252.964	-15.893	-30.158
	(16.429)	(4.699)	(7.439)	(8.725)*	(8.264)***
Average Wage - Females 16-64 [c]	351.922	152.216	253.512	-101.295	-110.316
	(10.950)	(4.922)	(20.365)	(20.726)***	(36.068)***

[a] Figures computed at household and individual levels in Estado de Mexico, Mexico, using the 2010 national household income and expenditure survey (ENIGH) and UTPMP impact evaluation baseline data sources (including non-eligible UTPMP households). Standard errors are clustered at the primary sample unit level shown in parentheses.

[b] The term "national poor" refers to households whose members were living on less than USD 167.67 per capita per month in urban zones and less than USD 107.29 in rural zones between August and November 2010; these figures are equivalent to two basic baskets, which represent the national poverty line and basic needs in Mexico as of 2010.

[c] In the case of monetary variables, observations over the 99th percentile were excluded.

[d] Since price levels in urban and rural zones in Mexico differ, in this column we test the hypothesis of equal means by controlling for a dummy variable that is equal to 1 if the household is located in a rural zone.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 5f: Differences in Means between Poors, Non Poors and Slum Dwellers.

Variable	Mexico (Estado de Mexico) [a]				
	(1) Mean Non-Poor (ENIGH 2010)	(2) Mean Poor (ENIGH 2010) [b]	(3) Mean All Slums (UTPMP 2010 - 11)	Dif (2)-(3)	Dif (2)-(3)[c]
Demographics					
HH Size	3.796	4.658	4.721	-0.063	0.013
	(0.054)	(0.074)	(0.148)	(0.164)	(0.182)
Female Head	0.193	0.208	0.201	0.006	0.017
	(0.011)	(0.012)	(0.014)	(0.018)	(0.023)
HH's Age	47.354	46.130	43.537	2.592	2.580
	(0.426)	(0.512)	(0.711)	(0.870)***	(1.159)**
HH's Years of Schooling	10.368	6.897	5.214	1.682	1.134
	(0.177)	(0.165)	(0.227)	(0.279)***	(0.431)***
Children Aged 5-12 Enrolled in School	0.991	0.980	0.966	0.015	0.005
	(0.003)	(0.006)	(0.007)	(0.009)	(0.014)
Children Aged 13-18 Enrolled in School	0.793	0.632	0.430	0.202	0.148
	(0.023)	(0.025)	(0.030)	(0.039)***	(0.061)**
Housing and Assets					
Rooms Per Capita	1.453	0.921	0.854	0.067	0.034
	(0.032)	(0.022)	(0.023)	(0.032)**	(0.045)
Share of Rooms with Good-Quality Floors	0.985	0.959	0.738	0.220	0.227
	(0.003)	(0.006)	(0.019)	(0.020)***	(0.034)***
On-Site Water Supply	0.969	0.926	0.574	0.353	0.331
	(0.008)	(0.014)	(0.050)	(0.051)***	(0.098)***
House with Own Toilet	0.899	0.835	0.481	0.354	0.310
	(0.009)	(0.012)	(0.032)	(0.034)***	(0.044)***
Connected to Sewerage Service	0.974	0.903	0.311	0.592	0.450
	(0.007)	(0.018)	(0.048)	(0.051)***	(0.057)***
Electricity Connection Inside House	0.998	0.988	0.885	0.103	0.071
	(0.001)	(0.003)	(0.022)	(0.022)***	(0.023)***
Refrigerator	0.893	0.700	0.195	0.504	0.296
	(0.011)	(0.024)	(0.034)	(0.041)***	(0.070)***
T.V.	0.979	0.953	0.640	0.313	0.223
	(0.004)	(0.010)	(0.039)	(0.040)***	(0.048)***

[a] Figures computed at household and individual levels in Estado de Mexico, Mexico, using the 2010 national household income and expenditure survey (ENIGH) and UTPMP impact evaluation baseline data sources (including non-eligible UTPMP households). Standard errors are clustered at the primary sample unit level shown in parentheses.

[b] The term "national poor" refers to households whose members were living on less than USD 167.67 per capita per month in urban zones and less than USD 107.29 in rural zones between August and November 2010; these figures are equivalent to two basic baskets, which represent the national poverty line and basic needs in Mexico as of 2010.

[c] Since price levels in urban and rural zones in Mexico differ, in this column we test the hypothesis of equal means by controlling for a dummy variable that is equal to 1 if the household is located in a rural zone.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 6. Regressions of Housing Measures on Program Dummy. [a]

Dependent Variable	El Salvador			Uruguay			Mexico			All		
	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2
Number of Rooms		0.233	0.234		0.100	0.075		0.234	0.220		0.188	0.178
		[0.117]**	[0.116]**		[0.132]	[0.133]		[0.088]***	[0.086]**		[0.064]***	[0.064]***
		[0.047]	[0.045]		[0.453]	[0.576]		[0.008]	[0.011]		[0.004]	[0.006]
	2.690 (1.330)	8.672	8.717	3.486 (1.636)	2.865	2.143	3.067 (1.285)	7.623	7.168	3.088 (1.440)	6.101	5.752
Number of Rooms Per Capita		0.077	0.085		0.041	0.014		0.032	0.034		0.046	0.036
		[0.037]**	[0.036]**		[0.047]	[0.044]		[0.033]	[0.032]		[0.023]*	[0.022]
		[0.042]	[0.020]		[0.394]	[0.761]		[0.345]	[0.301]		[0.050]	[0.103]
	0.584 (0.366)	13.164	14.503	0.858 (0.557)	4.751	1.577	0.726 (0.531)	4.413	4.654	0.726 (0.510)	6.326	4.967
Share of Rooms with Good-Quality Floors		0.284	0.288		0.197	0.199		0.111	0.110		0.182	0.182
		[0.027]***	[0.026]***		[0.033]***	[0.033]***		[0.022]***	[0.022]***		[0.016]***	[0.016]***
		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]
	0.165 (0.274)	172.631	174.942	0.317 (0.415)	62.214	62.658	0.706 (0.355)	15.712	15.525	0.442 (0.426)	41.309	41.265
Share of Rooms with Good-Quality Walls		0.255	0.255		0.136	0.133		0.167	0.163		0.178	0.175
		[0.026]***	[0.026]***		[0.035]***	[0.035]***		[0.024]***	[0.024]***		[0.017]***	[0.017]***
		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]
	0.104 (0.223)	245.382	245.580	0.483 (0.471)	28.071	27.559	0.420 (0.388)	39.665	38.783	0.352 (0.410)	50.422	49.779
Share of Rooms with Good-Quality Roofs		0.231	0.235		0.188	0.189		0.099	0.096		0.161	0.160
		[0.030]***	[0.030]***		[0.033]***	[0.033]***		[0.022]***	[0.022]***		[0.016]***	[0.016]***
		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]
	0.283 (0.385)	81.636	83.148	0.312 (0.414)	60.036	60.619	0.599 (0.374)	16.527	16.011	0.427 (0.416)	37.760	37.468
Share of Rooms with Window		0.233	0.235		0.111	0.115		0.183	0.179		0.171	0.170
		[0.024]***	[0.024]***		[0.025]***	[0.026]***		[0.021]***	[0.021]***		[0.013]***	[0.013]***
		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]
	0.192 (0.274)	121.692	122.649	0.607 (0.336)	18.352	18.899	0.303 (0.329)	60.473	58.983	0.364 (0.358)	46.998	46.759
Sink in Room Where Food is Prepared		-0.008	-0.006		-0.014	-0.011		-0.008	-0.010		-0.010	-0.010
		[0.010]	[0.010]		[0.037]	[0.037]		[0.010]	[0.010]		[0.013]	[0.013]
		[0.418]	[0.558]		[0.706]	[0.778]		[0.421]	[0.361]		[0.453]	[0.458]
	0.016 (0.123)	-52.691	-39.219	0.335 (0.472)	-4.249	-3.171	0.020 (0.140)	-42.203	-49.262	0.112 (0.315)	-9.258	-9.135
Room Where Food is Prepared Also Used as Bedroom		-0.089	-0.089		-0.036	-0.029		-0.044	-0.044		-0.053	-0.052
		[0.035]**	[0.035]**		[0.032]	[0.032]		[0.025]*	[0.025]*		[0.017]***	[0.017]***
		[0.013]	[0.013]		[0.259]	[0.364]		[0.081]	[0.087]		[0.003]	[0.003]
	0.291 (0.454)	-30.489	-30.484	0.230 (0.421)	-15.872	-12.732	0.171 (0.376)	-25.889	-25.494	0.222 (0.415)	-23.708	-23.477
On-Site Water Supply		-0.062	-0.059		0.008	-0.002		-0.010	-0.012		-0.017	-0.020
		[0.034]*	[0.034]*		[0.022]	[0.022]		[0.032]	[0.032]		[0.017]	[0.017]
		[0.072]	[0.089]		[0.742]	[0.925]		[0.744]	[0.713]		[0.336]	[0.244]
	0.252 (0.434)	-24.626	-23.411	0.897 (0.304)	0.840	-0.240	0.551 (0.498)	-1.901	-2.157	0.573 (0.494)	-2.944	-3.568
Electricity Connection Inside House		-0.046	-0.038		0.024	0.026		-0.044	-0.048		-0.021	-0.023
		[0.042]	[0.042]		[0.018]	[0.018]		[0.022]*	[0.023]**		[0.015]	[0.015]
		[0.279]	[0.370]		[0.191]	[0.165]		[0.058]	[0.039]		[0.166]	[0.145]
	0.496 (0.500)	-9.347	-7.687	0.933 (0.251)	2.548	2.737	0.903 (0.297)	-4.831	-5.289	0.800 (0.400)	-2.664	-2.816
Use Gas Stove or Kerosene for Cooking		0.016	0.022		-0.014	-0.025		-0.051	-0.054		-0.022	-0.025
		[0.032]	[0.032]		[0.039]	[0.039]		[0.023]**	[0.022]**		[0.018]	[0.018]
		[0.626]	[0.507]		[0.724]	[0.527]		[0.029]	[0.018]		[0.233]	[0.172]
	0.167 (0.373)	9.640	13.014	0.521 (0.500)	-2.654	-4.758	0.252 (0.434)	-20.071	-21.606	0.309 (0.462)	-7.071	-8.055
House with Own Toilet		-0.069	-0.063		-0.011	-0.017		0.012	0.008		-0.016	-0.019
		[0.042]	[0.042]		[0.035]	[0.035]		[0.034]	[0.034]		[0.021]	[0.021]
		[0.103]	[0.133]		[0.748]	[0.633]		[0.727]	[0.826]		[0.459]	[0.374]
	0.516 (0.500)	-13.436	-12.315	0.730 (0.444)	-1.547	-2.328	0.392 (0.488)	3.039	1.920	0.527 (0.499)	-2.981	-3.583

[a] Responses regarding construction materials used in rooms were included only for those households that reported information for all rooms. All the reggresions have a dummy by caserio. Model 1: No Controls; Model 2: Control for HH's Years of Schooling, HH's Gender, HH's Age, Assets - Value Per Capita (USD), Monthly Income Per Capita (USD), all measured during the baseline round. Following the standard procedure, when a control variable has a missing value, we impute a value equal to 0 and add a dummy variable equal to 1 for that observation, which indicates that the control variable was missed. Reported results: estimated coefficient, robust standard error, p-value and 100*coefficient/follow-up control mean, in that order.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

Table 7. Regressions of Satisfaction on Program Dummy. [a]

Dependent Variable	El Salvador			Uruguay			Mexico			All		
	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2
Satisfaction with Floor Quality		0.387	0.389		0.121	0.121		0.108	0.107		0.180	0.180
		[0.039]***	[0.040]***		[0.038]***	[0.038]***		[0.034]***	[0.034]***		[0.022]***	[0.022]***
		[0.000]	[0.000]		[0.002]	[0.002]		[0.002]	[0.002]		[0.000]	[0.000]
	0.163 (0.369)	237.502	239.017	0.314 (0.464)	38.669	38.592	0.551 (0.498)	19.556	19.490	0.374 (0.484)	48.254	48.118
Satisfaction with Wall Quality		0.477	0.479		0.142	0.140		0.149	0.148		0.226	0.225
		[0.039]***	[0.040]***		[0.037]***	[0.037]***		[0.035]***	[0.035]***		[0.022]***	[0.022]***
		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]
	0.132 (0.338)	361.860	363.502	0.267 (0.443)	52.998	52.370	0.439 (0.496)	33.878	33.732	0.303 (0.459)	74.603	74.219
Satisfaction with Roof Quality		0.476	0.477		0.179	0.177		0.153	0.156		0.241	0.241
		[0.038]***	[0.039]***		[0.037]***	[0.038]***		[0.034]***	[0.035]***		[0.021]***	[0.021]***
		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]		[0.000]	[0.000]
	0.159 (0.366)	299.531	300.417	0.339 (0.474)	52.784	52.220	0.404 (0.491)	37.937	38.514	0.317 (0.465)	75.867	76.052
Satisfaction with Protection Provided by House When It Rains		0.426	0.427		0.166	0.158		0.094	0.096		0.199	0.198
		[0.038]***	[0.039]***		[0.038]***	[0.038]***		[0.034]***	[0.035]***		[0.021]***	[0.022]***
		[0.000]	[0.000]		[0.000]	[0.000]		[0.007]	[0.006]		[0.000]	[0.000]
	0.167 (0.373)	255.350	256.348	0.325 (0.469)	51.073	48.726	0.347 (0.476)	27.234	27.718	0.291 (0.454)	68.601	68.204
Satisfaction with Quality of Life		0.207	0.211		0.096	0.098		0.165	0.165		0.151	0.152
		[0.045]***	[0.046]***		[0.039]**	[0.039]**		[0.032]***	[0.032]***		[0.022]***	[0.022]***
		[0.000]	[0.000]		[0.015]	[0.014]		[0.000]	[0.000]		[0.000]	[0.000]
	0.506 (0.501)	40.915	41.685	0.449 (0.498)	21.379	21.825	0.593 (0.491)	27.791	27.931	0.527 (0.499)	28.691	28.803

[a] All the reggresions have a dummy by caserio. Model 1: No Controls; Model 2: Control for HH's Years of Schooling, HH's Gender, HH's Age, Assets - Value Per Capita (USD), Monthly Income Per Capita (USD), all measured during the baseline round. Following the standard procedure, when a control variable has a missing value, we impute a value equal to 0 and add a dummy variable equal to 1 for that observation, which indicates that the control variable was missed. Reported results: estimated coefficient, robust standard error, p-value and 100*coefficient/follow-up control mean, in that order.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 8. Regressions of Perception of Security on Program Dummy. [a]

Dependent Variable	El Salvador			Uruguay			Mexico			All		
	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2
Safe Inside House During Past 12 Months		0.175	0.178		0.029	0.023		0.001	0.003		0.053	0.051
		[0.040]***	[0.041]***		[0.038]	[0.038]		[0.031]	[0.031]		[0.021]**	[0.021]**
		[0.000]	[0.000]		[0.455]	[0.550]		[0.969]	[0.936]		[0.013]	[0.015]
	0.643 (0.479)	27.121	27.676	0.621 (0.486)	4.597	3.713	0.718 (0.450)	0.172	0.356	0.668 (0.471)	7.870	7.703
Safe Leaving House Alone During Past 12 months		0.155	0.159		-0.066	-0.068		0.014	0.018		0.021	0.023
		[0.043]***	[0.043]***		[0.037]*	[0.037]*		[0.035]	[0.035]		[0.022]	[0.022]
		[0.000]	[0.000]		[0.078]	[0.072]		[0.686]	[0.614]		[0.348]	[0.310]
	0.601 (0.490)	25.743	26.447	0.376 (0.485)	-17.683	-18.207	0.551 (0.498)	2.583	3.218	0.512 (0.500)	4.069	4.393
Safe Leaving Children Alone in House during Past 12 months		0.141	0.144		0.001	-0.005		-0.007	-0.006		0.032	0.029
		[0.043]***	[0.043]***		[0.029]	[0.029]		[0.026]	[0.026]		[0.018]*	[0.018]
		[0.001]	[0.001]		[0.986]	[0.862]		[0.806]	[0.823]		[0.085]	[0.110]
	0.248 (0.432)	56.923	57.872	0.170 (0.376)	0.308	-3.058	0.162 (0.368)	-4.053	-3.699	0.188 (0.390)	16.870	15.635
House Has Been Robbed in Past 12 months		0.023	0.023		0.013	0.014		0.002	0.002		0.011	0.011
		[0.019]	[0.019]		[0.035]	[0.035]		[0.017]	[0.017]		[0.014]	[0.014]
		[0.229]	[0.228]		[0.705]	[0.686]		[0.931]	[0.912]		[0.466]	[0.450]
	0.031 (0.173)	74.207	74.494	0.268 (0.443)	4.949	5.340	0.065 (0.246)	2.336	2.963	0.116 (0.319)	9.283	9.629

[a] All the reggresions have a dummy by caserio. Model 1: No Controls; Model 2: Control for HH's Years of Schooling, HH's Gender, HH's Age, Assets - Value Per Capita (USD), Monthly Income Per Capita (USD), all measured during the baseline round. Following the standard procedure, when a control variable has a missing value, we impute a value equal to 0 and add a dummy variable equal to 1 for that observation, which indicates that the control variable was missed. Reported results: estimated coefficient, robust standard error, p-value and 100*coefficient/follow-up control mean, in that order.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

Table 9. Regressions of Durable Goods on Program Dummy. [a]

Dependent Variable	El Salvador			Uruguay			Mexico			All		
	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2
T.V		-0.013	-0.001		0.005	0.013		-0.034	-0.033		-0.016	-0.014
		[0.047]	[0.047]		[0.022]	[0.021]		[0.030]	[0.030]		[0.018]	[0.018]
		[0.786]	[0.988]		[0.821]	[0.545]		[0.272]	[0.274]		[0.397]	[0.464]
	0.434 (0.496)	-3.004	-0.162	0.926 (0.261)	0.538	1.430	0.728 (0.445)	-4.616	-4.560	0.711 (0.453)	-2.222	-1.905
Fan		0.015	0.019		0.018	0.015		0.001	0.000		0.010	0.009
		[0.020]	[0.020]		[0.040]	[0.040]		[0.010]	[0.010]		[0.015]	[0.015]
		[0.458]	[0.348]		[0.656]	[0.713]		[0.934]	[1.000]		[0.516]	[0.552]
	0.034 (0.181)	44.316	56.566	0.535 (0.499)	3.363	2.815	0.018 (0.131)	4.942	0.011	0.177 (0.381)	5.627	5.167
Kitchen or Gas Stove		0.000	0.008		-0.008	-0.005		-0.035	-0.039		-0.018	-0.019
		[0.044]	[0.043]		[0.034]	[0.035]		[0.030]	[0.031]		[0.020]	[0.020]
		[0.997]	[0.853]		[0.809]	[0.890]		[0.262]	[0.210]		[0.383]	[0.352]
	0.404 (0.491)	-0.037	1.994	0.768 (0.423)	-1.098	-0.639	0.451 (0.498)	-7.684	-8.641	0.534 (0.499)	-3.351	-3.582
Refrigerator		-0.028	-0.016		-0.017	-0.011		-0.005	-0.009		-0.014	-0.014
		[0.032]	[0.031]		[0.037]	[0.038]		[0.026]	[0.026]		[0.018]	[0.018]
		[0.385]	[0.604]		[0.661]	[0.763]		[0.861]	[0.732]		[0.454]	[0.457]
	0.123 (0.329)	-22.833	-13.208	0.683 (0.466)	-2.439	-1.680	0.207 (0.405)	-2.259	-4.434	0.327 (0.469)	-4.308	-4.277
Bicycle		0.037	0.043		0.014	0.017		-0.029	-0.027		0.001	0.003
		[0.043]	[0.043]		[0.040]	[0.040]		[0.030]	[0.030]		[0.021]	[0.021]
		[0.400]	[0.325]		[0.726]	[0.669]		[0.347]	[0.371]		[0.967]	[0.875]
	0.323 (0.468)	11.368	13.352	0.546 (0.498)	2.596	3.177	0.279 (0.449)	-10.209	-9.635	0.370 (0.483)	0.240	0.905

[a] All the reggresions have a dummy by caserio. Model 1: No Controls; Model 2: Control for HH's Years of Schooling, HH's Gender, HH's Age, Assets - Value Per Capita (USD), Monthly Income Per Capita (USD), all measured during the baseline round. Following the standard procedure, when a control variable has a missing value, we impute a value equal to 0 and add a dummy variable equal to 1 for that observation, which indicates that the control variable was missed. Reported results: estimated coefficient, robust standard error, p-value and 100*coefficient/follow-up control mean, in that order.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

Table 10. Regressions of Demographics, Labor and Income Variables on Program Dummy. [a]

Dependent Variable	El Salvador				Uruguay				Mexico				All			
	Follow-Up Control Mean (Std. Dev.)		Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)		Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)		Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)		Model 1	Model 2
HH Size			-0.031	-0.098			0.253	0.326			0.002	-0.019			0.079	0.111
			[0.273]	[0.264]			[0.220]	[0.217]			[0.175]	[0.172]			[0.124]	[0.122]
			[0.909]	[0.710]			[0.252]	[0.134]			[0.991]	[0.912]			[0.522]	[0.365]
	5.453	(2.513)	-0.574	-1.806	4.954	(2.657)	5.110	6.572	5.264	(2.595)	0.037	-0.363	5.223	(2.596)	1.521	2.125
Newborns (<1)			0.002	0.003			-0.003	-0.003			0.005	0.005			0.001	0.002
			[0.006]	[0.006]			[0.005]	[0.005]			[0.004]	[0.004]			[0.003]	[0.003]
			[0.789]	[0.668]			[0.589]	[0.607]			[0.317]	[0.273]			[0.637]	[0.507]
	0.021	(0.144)	7.532	12.387	0.025	(0.156)	-11.796	-11.260	0.021	(0.143)	23.183	25.534	0.022	(0.147)	6.603	9.243
Newborns (<2)			-0.004	-0.002			0.007	0.009			0.003	0.005			0.003	0.004
			[0.007]	[0.008]			[0.008]	[0.008]			[0.006]	[0.006]			[0.004]	[0.004]
			[0.640]	[0.765]			[0.400]	[0.286]			[0.632]	[0.473]			[0.544]	[0.325]
	0.042	(0.200)	-8.857	-5.752	0.053	(0.224)	13.146	16.683	0.046	(0.209)	7.192	10.770	0.047	(0.211)	5.764	9.275
Monthly Income Per Capita (USD)			1.437	1.565			0.376	0.315			0.249	0.052			0.535	-0.017
			[3.019]	[3.060]			[12.518]	[12.742]			[3.812]	[3.897]			[3.623]	[3.625]
			[0.634]	[0.609]			[0.976]	[0.980]			[0.948]	[0.989]			[0.883]	[0.996]
	30.794	(26.879)	4.667	5.081	90.005	(136.457)	0.417	0.350	55.422	(54.912)	0.449	0.093	57.226	(71.697)	0.936	-0.030
Hours Worked in Preceding Week by HH			1.738	1.000			0.025	0.443			0.824	0.668			0.704	0.795
			[2.072]	[2.073]			[1.821]	[1.839]			[1.616]	[1.573]			[1.055]	[1.040]
			[0.402]	[0.630]			[0.989]	[0.810]			[0.610]	[0.671]			[0.505]	[0.445]
	38.033	(17.351)	4.570	2.630	39.081	(19.877)	0.064	1.133	41.086	(19.498)	2.006	1.625	39.711	(19.154)	1.773	2.001
Hours Worked in Preceding Week by Spouse			4.974	4.654			-0.047	-0.400			-3.052	-1.696			-0.693	-0.795
			[5.418]	[5.817]			[2.661]	[2.738]			[3.026]	[3.129]			[1.883]	[1.913]
			[0.361]	[0.426]			[0.986]	[0.884]			[0.315]	[0.588]			[0.713]	[0.678]
	35.500	(25.995)	14.012	13.111	39.353	(19.561)	-0.120	-1.016	28.250	(18.867)	-10.805	-6.005	34.194	(20.903)	-2.027	-2.324

[a] In the case of monetary variables, observations over the 99th percentile were excluded. With regard to the number of hours worked, cases in which more than 84 hours were reported were not considered. All the reggresions have a dummy by caserio. Model 1: No Controls; Model 2: Control for HH's Years of Schooling, HH's Gender, HH's Age, Assets - Value Per Capita (USD), Monthly Income Per Capita (USD), all measured during the baseline round. Following the standard procedure, when a control variable has a missing value, we impute a value equal to 0 and add a dummy variable equal to 1 for that observation, which indicates that the control variable was missed. Reported results: estimated coefficient, robust standard error, p-value and 100*coefficient/follow-up control mean, in that order.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Table 11. Regressions of Health Variables of Children on Program Dummy. [a]

Dependent Variable	El Salvador			Uruguay			Mexico			All			El Salvador and Mexico		
	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow-Up Control Mean (Std. Dev.)	Model 1	Model 2	Follow Up Control Mean (Std. Dev.)	Model 1	Model 2
Respiratory Disease During Past 4 Weeks		-0.041	-0.045		-0.002	0.002		-0.047	-0.043		-0.029	-0.029		-0.047	-0.045
		[0.060]	[0.062]		[0.034]	[0.034]		[0.043]	[0.043]		[0.025]	[0.025]		[0.035]	[0.035]
		[0.498]	[0.466]		[0.963]	[0.949]		[0.283]	[0.333]		[0.249]	[0.259]		[0.182]	[0.204]
	0.690 (0.463)	-5.950	-6.558	0.175 (0.381)	-0.934	1.268	0.417 (0.494)	-11.314	-10.213	0.403 (0.490)	-7.225	-7.105	0.519 (0.500)	-9.055	-8.662
Diarrhea During Past 4 Weeks		-0.050	-0.054		-0.011	-0.002		-0.035	-0.033		-0.027	-0.024		-0.040	-0.038
		[0.042]	[0.044]		[0.034]	[0.034]		[0.028]	[0.028]		[0.019]	[0.019]		[0.023]*	[0.023]
		[0.243]	[0.224]		[0.737]	[0.942]		[0.224]	[0.246]		[0.172]	[0.213]		[0.095]	[0.108]
	0.168 (0.374)	-29.924	-32.004	0.158 (0.365)	-7.261	-1.582	0.135 (0.342)	-25.534	-24.600	0.151 (0.358)	-17.801	-16.173	0.147 (0.354)	-26.822	-26.102

[a] All the regressions have a dummy by caserio. Model 1: Control for Age, Age Squared, Gender, and a dummy equal to 1 if the mother lives in the household at the time of the follow-up round; Model 2: Control for Age, Age Squared, Gender, a dummy equal to 1 if the mother lives in the household at the time of the follow-up round and also for HH's Years of Schooling, HH's Gender, HH's Age, Assets - Value Per Capita (USD), and Monthly Income Per Capita (USD) at the time of the baseline round. Following the standard procedure, when a control variable has a missing value, we impute a value equal to 0 and add a dummy variable equal to 1 for that observation, which indicates that the control variable was missed. Reported results: estimated coefficient, robust standard error, p-value and 100*coefficient/follow-up control mean, in that order.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level