School Attendance, Labor Supply and Formality. An Impact Evaluation of PANES

RESEARCH PROPOSAL

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Abstract

The aim of this proposal is to conduct an impact evaluation of the cash transfer component of a temporary anti-poverty program, *Plan Nacional de Atencion a la Emergencia Social*, that was carried out in Uruguay from April 2005 to December 2007. The plan was targeted towards households in extreme poverty and included a wide set of interventions. Its main component, *Ingreso Ciudadano*, was a conditional cash transfer program aimed at alleviating poverty and targeted towards indigent households. By the end of 2007, 74,500 households were receiving this transfer (10% of the population).

Although the objectives of the whole intervention were very ambitious, in this proposal we concentrate on a group of outcomes that allow to assess short run and long run effects on poverty. These are child labour and school attendance, income and adult labour supply and informality.

The results of this evaluation are key inputs for the redesign of *Asignaciones Familiares*, a permanent cash transfer that is being incepted at present. At the same time, the discussion of program effects on secondary school attendance and informality can be useful for other countries implementing this kind of program.

Our evaluation will be based on the administrative registry, including successful and unsuccessful applicants, on social security data, and on two waves of a panel follow up survey especially carried out for the evaluation of PANES (it covers around 3000 households). Our identification strategy is based on differences in differences estimators and regression discontinuity design.

This research will be done in the framework of a technical assistance agreement with Ministerio de Desarrollo Social.
A. Aims

During the last decade, means tested conditional cash transfers programs were implemented in many Latin American countries. Some of them have shown successful results on different outcomes such as child schooling, according to rigorous impact evaluation exercises (ECLAC, 2006). As in most cases their coverage is very limited and they are targeted towards the most deprived households, their poverty and inequality impact has been moderate.

Recently, Uruguay has also implemented a conditional cash transfer program, *Ingreso Ciudadano*, as one of the main components of an ambitious anti-poverty plan, *Plan Nacional de Atencion a la Emergencia Social* (PANES). PANES was conceived as a temporary plan aimed at overcoming the effect of the 2002 economic crisis. It was incepted and carried out by *Ministerio de Desarrollo Social* (MIDES) from April 2005 to December 2007. By the end of 2007, around 74,500 households were receiving this transfer (10% of total population). On December 2007 the program was removed and substituted by a family allowances program, *Asignaciones Familiares*.¹

The objectives of the whole program were very ambitious, ranging from indigence and poverty alleviation to long term outcomes such as autonomy and reinsertion in social life.

The aim of this proposal is to conduct an impact evaluation of *Ingreso Ciudadano*, the cash transfer component of PANES. Among the objectives that were pursued, we will concentrate on those outcomes that we consider are key policy inputs

¹ *Asignaciones Familiares* is an old program that was started in 1942 but it provided a very low monthly stipend. At present is being reshaped and has been significantly modified.
for the present discussion on policy alleviation in Latin American countries and for the redesign of Asignaciones Familiares. These outcomes are child labour and school attendance, income and adult labour supply and informality.

In the context of the regional experience, the Uruguayan case can shed some new light on the extent to which these programs can reduce poverty and indigence in middle income countries. It can also illustrate their effects on other relevant outcomes, such as secondary school attendance or informality in the labour market, that have been scarcely addressed in previous research for the region.

Primary education has been universalized in Uruguay since the earlier decades of the XX century. At present, attendance rates for children aged 5 to 12 are close to 100% despite household income level. In contrast, dropping out from secondary school is one of the more relevant problems in the Uruguayan educational system, particularly in low income strata. Hence, our analysis will be mainly focused on children aged 12 to 17. School attendance rates for this group are 57% for children belonging to extreme poor households, 67% to children belonging to poor households and 79% for the whole age group.

Although child work is not generalized even in deprived sectors, it turns to be a relevant alternative to school attendance. According to the latest available data (2006), 9.2% of children between 12 and 17 work (Arim y Salas, 2007). Employment rates are higher among children in extreme poverty (15%).

In regard to poverty, in recent years, household well-being was significantly eroded due to the 2002 crisis. Unemployment rates reached 19% in 2002 and income poverty incidence among individuals rose from 16.8% in 1998 to 30.9% in 2003. Even

2 In Uruguayan economy experienced the most severe crisis of its modern history. Per capita GDP fell 11.4% in 2001-2002
though economic activity is recovering since the second semester of 2003, poverty incidence is still almost twice the pre-crisis level (27.1% in 2007).

During the crisis, many unemployed private employees turned into self-employment and as result, this group of workers increased considerably. Although informality is low compared to Latin American countries, around 38.8% of the total labor force do not contribute to the social security regime (Amarante and Espino, 2007). Not only they will probably perceive a very low pension when retired but they also are not entitled to legal wage increases. These persons in turn belong to low income strata.

We aim at answering the following research questions:

- Did Ingreso Ciudadano increase child school attendance in children aged 12 to 17 years old?
- Did Ingreso Ciudadano reduce child labour (6-17)?
- What were the effects of the program on household income?
- Did Ingreso Ciudadano impact adult labour supply? Did it have a differential effect by sex and region?
- Has Ingreso Ciudadano had any impact on the probability of being a formal worker (i.e. contributing to the social security system)?

B. Background and policy relevance

a) Child school attendance and work

Impact evaluations have shown that conditional cash transfer programs succeeded at increasing child school attendance, particularly at the primary school level (see for example, ECLAC, 2006; Coady, 2001; Coady and Parker, 2002; Skoufias and Parker, 2004), although compliance was difficult and expensive to control. Child labour was reduced but not to the extent policy designers have originally expected. This led to the hypothesis that schooling partly increased at the expense of a reduction of child leisure time. Ravallion and Wodon (2000) found evidence in this sense for Asia.
Although many impact evaluations have been done for the various conditional cash transfer programs that have been carried out in Latin America, PANES offers a unique possibility of understanding the effects of this type of program on a middle income country that already had an almost universal coverage of primary schooling. At the same time, this issue can be a relevant input for the Latin American debate as long as the discussion has been mainly focused on primary school attendance.

b) Household income and adult labor supply

Even when cash transfer schemes have meant a significant increase in household income, their impact in terms of poverty reduction has been meager due to their magnitude, as the amount of monthly transfers is generally low compared to national poverty lines, and to the fact that they were mainly targeted on extreme poor households (ECLAC, 2006). Besides, the reduction in child labor could also imply a reduction on the net impact on poverty, as it implies a reduction in household income. However, cash transfer programs reduced poverty in approximately 20% in Mexico and 15% in Brazil. They tend to reduce severity more than head count poverty (Zepeda et al, 2007).

The effects of conditional cash transfer programs on adult labor market behavior have been intensely debated in developing and industrialized countries. Some authors have argued that the relatively low amount of cash transfers in Latin America turn unlikely that these programs generate per se disincentives to work (Tabor, 2002). Literature on the effects of cash transfer programs clearly distinguishes substitution and income effects faced by beneficiary households (see for example, Moffit, 2002). If income effect dominates substitution, total household income will increase after the transfer is received. But if substitution effect dominates, then the behavioral response of the household can affect household income and labour supply in many ways. The most
feared outcome is that the substitution effect leads to a reduction in work effort, either in labour market participation or in hours of work. Many studies assessing industrialized countries show that empirical evidence on this effect is controversial. Nevertheless, many programs have been reshaped in order to include conditions that ensure working effort among beneficiaries, it is the case, for example, of US cash transfer programs (see for example, Moffit, 2001; Tabor, 2002).

In most Latin American countries, available evaluations show no reduction in labour force participation and effort after these plans were implemented. For example, Attanasio et al (2004) found, for the Colombian program Familias en Acción, a positive effect on female labour supply and no evidence of discouraging incentives.

c) Informality

The possibility of studying adverse effects on informality and in general, effects on incentives, is an important contribution to assess whether the generalisation of these programs can carry out adverse non intended effects. But this hypothesis needs further testing. To our knowledge there is only one paper that addresses this issue, finding a negative impact of the program Jefas y Jefes (Argentina) on formal work (Gasparini et al, 2007). The extension of the social security system in Uruguay allows to study this issue, that may not be relevant in countries that present dual labor markets and where low skilled workers do not even have the possibility of contributing to the social security system.

e) Specific country policy issues

As stated before, the impact evaluation of PANES can provide policy inputs for the redesign of Asignaciones Familiares which will be completed by July 2009.
Hence, assessing whether PANES fostered attendance to secondary education is relevant to choose policy instruments to cope with this problem. In particular, is relevant to know if cash transfer schemes can act on the probability of school attendance and child work and affect long run outcomes.

The effect of PANES on adult labor force behaviour will allow us to assess if these interventions and in particular Asignaciones Familiares are good instruments to combat poverty or if they generate welfare dependence and substitution across income sources.

At the same time, in the context of the post crisis economic recovery, the new administration that rules Uruguay since 2005 has made an important effort to expand formal work. It is relevant to assess whether a conditional cash transfer program can create potential adverse effects and desincentive formal work, driving to increased polarisation. Incentives to become a formal worker come from the fact that PANES was a means tested program that had an income threshold, and information given by the applicants was checked against social security records. Asignaciones Familiares will follow the same rule so assessing its potential negative effects is a key policy input.

C. Methods

*General description of PANES*

The aim of PANES was to overcome the adverse effects of the 2002 economic crisis on poverty and indigency. A package of interventions was designed, including the following components:

a) Ingreso Ciudadano. Households included in the plan received a fixed stipend of 1600 Uruguayan pesos (75 American Dollars), despite household size and conditional on school attendance for children aged 6 to 14, health controls of women and children and
participation in Rutas de Salida. Stipend was monthly payed to beneficiary households. On December 2007, 74,500 households receive this transfer.

b) Trabajo por Uruguay. This was a workfare program. A household member was allowed to participate in a six month temporary employment program, working six hours a day. The intervention also included training activities. While participating in this program, the household received two IC stipends a month. Inscription in the program was voluntary and selection was random. Around 16,000 persons were covered by this program.

c) Rutas de Salida. The main goal of this program was to foster the reinsertion of households in social life through different activities, including courses on civil and labor rights. One of the members of the household could attend these activities during a semester. The program was implemented in cooperation with NGOs and social organisations, and the specific activities involved varied widely depending on the proposal presented by the NGOs to MIDES.

d) Habitat. This intervention provided households with materials to improve their dwelling conditions. It had a very low coverage.

e) Food purchase card. Households with children aged 0 to 18 received a magnetic card that allowed them to purchase food and store items. The amount of the transfer was dependent on the number of children and pregnant women in the household, ranging from 400 to 800 pesos a month (20 to 40 USD).

The target population of PANES was the first quintile of households under the poverty line, which represented around 8% of the Uruguayan population. Eligibility for PANES was based on an income threshold (55 dollars per capita) and a proxy means test.
Information provided by households was checked with the social security records (data from Banco de Previsión Social). If the household did not exceed the established threshold, it was visited by an interviewer that filled a form whose content was very similar to a standard household survey. On the basis of the score and the income threshold, households became or not a beneficiaries from PANES.

The index used to determine entrance to the program was built by the research team presenting this proposal through an agreement with MIDES. It was based on a probit estimation and it included a set of variables reflecting household characteristics such as education, household size, access to durable goods, access to health insurance (see Amarante et al, 2005). Separate thresholds were built by region. As long as take up was a concern because very poor households were feared to face agency problems, the most deprived areas were visited and an in situ inscription was made.

Information processed on the basis of 2007 National Household Survey shows that 10% of the Uruguayan households received the benefit in that year. In average, the transfer represented 17% of the beneficiary households income, a relevant share of the household command of resources. The cost of the program was around 100 million dollars a year.

A recent study by the World Bank (Banco Mundial, 2007) points out that the targeting of PANES was extremely successful compared to most Latin American cash transfer programs. Data coming from the administrative records of PANES show that all potential beneficiaries have benefited at one point from the program. However, it appears that between 10 to 15% of non-eligible households have also participated at one point. This implies that enforcement of the rule was not as strict as supposed, with some not eligible households being treated.
One of the main weaknesses of the program relies on the fact that although conditions were clearly established in the law, compliance was not really controlled. Severe coordination failures with the educational authorities, among other institutional problems, explain this failure.

As it was announced since the beginning, the plan was removed on December 2007. In January 2008 a reshaped permanent conditional transfer program substituted PANES. Thus, results of the PANES evaluation are key inputs for the redesign of this new program.

As it was stated before, the objectives of the plan were extremely ambitious ranging from poverty and indigency alleviation to improvements in social participation and autonomy. In this research we aim at concentrating in some outcomes that we consider are the most important from the perspective of household well-being. In what follows we argue why these are key outcomes to be evaluated in the context of this research proposal.

a) Child (aged 12 to 17) school attendance and labour. Although child school attendance was a requirement to receive the transfer, compliance was not controlled in practice. Hence, it is a very interesting behavioral outcome to assess if providing cash transfers fosters by itself school attendance. Another interesting aspect is that schooling behavior is not completely design led as the transfer consisted of a fixed amount despite household size. This means that there is space for a division of labour among children within the household,

3 In fact, Asignaciones Familiares was created in 1943 as a conditional cash transfer aimed for formal workers with dependent children. In 1999 and 2004 the contributory requirement was removed and it was progressively transformed into a poverty alleviation program.
where some of them study and others work. Even combinations of the two outcomes can coexist.

Although in many papers child work is presented as the reverse of school dropout, in practice most of the evaluations of the many conditional cash transfer programs that have been implemented worldwide show that increased school attendance is a relatively easy goal to achieve, but in many cases it has not been followed by a proportional decrease of child labour but by a mixture of a child labour reduction and a reduction of leisure (see for example, Ravallion and Wodon, 2000).

This issue will be analyzed considering separately girls and boys as long as this decision presents gender specific responses: at the same household income level, drop outs among girls are significantly lower than among boys. This relates to the demand of low skilled teenagers for the labor market, and to the opportunities costs involved in the decision of school attendance versus work. The traditional roles of girls and boys in relation to domestic work must be also considered. As long as girls collaborate with domestic work, this can be combined with school attendance easier than market work.

In order to assess schooling and work outcomes we will observe school attendance, repetition, child labor supply and hours worked by children.

b) Income and adult labour force participation. As stated before, one relevant issue to be studied is to what extent the labour supply behavior of adults at the household is modified by the transfer. In order to do so, we will analyze per
capita household income, labor income, transfer income, labor force participation, employment rates and hours of work.

c) **Informality.** The per capita income threshold set by MIDES could act as an incentive against formality. Household income net of the transfer was monthly checked against the social security records and if the threshold was surpassed, households were temporary removed from the program.

We will develop an empirical strategy that allows us to identify the PANES effect in formality, despite the general trend towards formalization in the economy. In order to do so, we will exploit a question included in the two waves of the survey that records if each household member contributes to the social security system. This information will be also be complemented matching our data set with the social security records.

*Data available for this study*

The main data sources for this study are the administrative records of PANES and two follow up surveys carried out in 2007 and 2008. In addition to these data sets, we will use the 2005-2007 National Household Surveys that recorded application and reception of Ingreso Ciudadano and the alimentary card, and we will also consider data from the social security records.

The administrative records of PANES include information on housing conditions, personal characteristics and income for beneficiaries and for households that did not exceed the income threshold and hence, were eligible for the benefit. The content of this questionnaire is very similar to a standard household survey. It contains baseline
information about all the outcomes included in this proposal, excepting child work for the age group 6 to 13.

Applicant and beneficiary households are identified in the administrative records by an application number and by their identity card. This information is also present in the follow up surveys, so the three files can be merged.

Two panel follow up surveys on a sample of successful and unsuccessful applicants were planned. The first wave corresponds to December 2006–March 2007 and the second one, still in a field work stage, started in March 2008 and will be finished by May 2008.

As long as participation in the program was decided on the basis of a score, the evaluation strategy designed by Amarante et al (2006) proposed to follow the regression discontinuity identification strategy. This decision was also led by the fact that many social participation outcomes that needed to be evaluated lacked of a baseline observation. As said before, this restriction does not hold for the outcomes included in this proposal.

The regression discontinuity strategy requires a data set that includes an important mass of observations in a tight surrounding of the cut point. Hence, in 2006 the follow up survey sampled 3000 households located within a threshold of 2% around the cutting point. A group of 1000 households that were very close to be assigned to the program but did not enter constitute the control group, whereas 2000 households are the treated group. 500 additional households representative of the remaining beneficiaries were also sampled. In practice, 972 households belonging to the control group, 1830 belonging to the treatment group and 523 belonging to the third group were interviewed in the first round.
A preliminary report prepared by the Sociology Department (in charge of the field work) shows that to date most of the households that were interviewed in the first wave of the follow-up survey were found.

The two survey questionnaires were prepared by our research team, Marco Manacorda (London School of Economics and Queen Mary), Alberto Riella and Paola Mascheroni (Sociology Department, Universidad de la Republica), with the collaboration of MIDES staff and Edward Miguel (Berkeley University). The two waves included a wide range of questions on housing condition, personal characteristics, labor force participation and attendance to the educational system, income, knowledge about civil and labor rights, participation and opinions. Questions that had been included in the baseline were repeated in the two waves to ensure comparability. These surveys were financed by Ministerio de Desarrollo Social (MIDES) and the field work was carried out by the Sociology Department, Universidad de la República.

This research team has already conducted some previous analysis of the first wave of the follow-up survey in collaboration with Marco Manacorda (LSE and Queen Mary College, University of London). These preliminary results were presented at a workshop organized by MIDES and sponsored by the World Bank.

*Modelling and testing*

The empirical strategy we will use in this study is crafted in order to identify the impact in the four areas we intend to analyze.

As it was stated before, the selection process of the program was based on a score. Hence, households that are below a certain cut-off point are not included in the plan and a discontinuity is created. This allows to use a discontinuous design strategy to identify
the program effects (Gertler and Martínez 2006). The strategy is based on the comparison of very similar households that are situated above and below the cut-off point. This requires that the follow up sample over-represents households in the surrounding of the cut-off point. The panel survey we are proposing to use were especially designed to contemplate this. The sample for this survey was elaborated by researchers from the Instituto de Estadística, Universidad de la República. The sample size is reasonable for the identification of the outcomes to be assessed.

Identification assumptions for the discontinuous regression strategy require that outcome variables present a monotonous relation with the score before treatment. For example, child school attendance rates will be higher among those households with a higher score (non eligible). If the program has effects on child school attendance, then, treated households will experience an increase in their attendance rates and the points below the threshold will uprise. The jump in the previously monotonous relation is captured by the regression discontinuity method (Figure 1).

**Figure 1**

![Pre treatment vs Post treatment](source: Gertler and Martínez (2006))
We will capture this effect using graphical and regression analysis. In order to test our hypotheses, we will estimate the following equation:

$$y = \beta_0 + \beta_1 Treatment + D(Score) + \alpha X + \epsilon$$

where $y$ represents the outcome variable we are testing, $Treatment$ is a dummy variable that takes the value 1 if the household is below the cut-off point and was a beneficiary of PANES, $Score$ is a continuous function on the score that can be specified in many ways, for example using a second order polynomial interacted with the treatment variable. Finally, $X$ is a set of control variables such as education, sex, age, region, etc. Estimates are obtained using MCO or probit depending on the characteristics of the dependent variable.

The main weakness of RDD relies in the fact that results can not be extrapolated to all beneficiary households.

Additionally, as long as all the outcome variables included in this project were measured both in the baseline and in the first follow up survey wave, we will use the differences in differences estimator to calculate the average treatment effect of being a beneficiary from PANES. The only outcome that can not be also analysed in this way is child labor, as the baseline does not include information on this issue for children aged 12 to 14. The identification idea is that the comparison of the average variation of control and treatment groups yields the effect of the program because if the intervention had not been deployed the average variation of both groups would have been similar. The following equation will be estimated:

$$y = \alpha_0 + \alpha_1 Time + \alpha_2 Treatment + \alpha_3 Inter + \gamma X + \epsilon$$
Where \( y \) is the chosen outcome variable, \( Time \) is a dummy variable that assumes the value 0 before treatment and 1 afterwards, \( Treatment \) reflects if the household was a beneficiary of IC, \( Inter \) is the interaction between \( Treatment \) and \( Time \) and \( X \) is a set of control variables and household or individual fixed effects.

The information contained in the administrative records and in the two follow up surveys is confidential and protected by local regulations. Confidentiality has been ensured to respondents.

**References**


D. Consultation and Dissemination Strategy

The results of this study will be disseminated both at the academic and policy makers level. Dissemination at the academic level will be addressed through the publication of an article containing the main findings in a peer reviewed journal. We also intend to organize a conference to present and discuss our main results. We will invite to this conference both academics that have carried out evaluation exercises in other countries and policy makers.

At the policy-makers level, the dialogue is permanent as it has started in 2005, when PANES was incepted. In 2006, MIDES asked Instituto de Economia to prepare the evaluation strategy and it was done by some of the researchers that present this proposal and Marco Manacorda (LSE). Thus, authorities are already familiar with the evaluation strategy proposed in this project and they support this initiative. The Evaluation Unit at MIDES is very interested on the results we will obtain in this research.

We will discuss our results with BPS and MIDES authorities throughout the process. As we have cooperation agreement with MIDES, the dialogue with policy makers is ensured to be fluent.

E. The study team

The team is composed by four economists who work as researchers in the areas of poverty, income distribution and social policies.

a. Principal investigator; brief bio and explanation as to why they are well suited to lead this project.

Verónica Amarante (35, female) has a MSs in Economics and has worked extensively in the area of poverty, labor market and social policies. She has participated in all the projects jointly undertaken by MIDES and Universidad de la República, including the
design of the evaluation strategy. Her analytical and quantitative skills as well as her experience as a researcher in poverty make her able to lead this project.

b. Other key research staff and their roles.

Rodrigo Arim (36, male) has pursued postgraduate studies at Universidad Torcuato di Tella in Buenos Aires. He has extensive experience as a researcher in poverty, social policies and labor market. He has very strong quantitative skills, as well as an extensive research experience. He has carried out an impact evaluation of an Uruguayan social program using the discontinuous design, and has also been involved in the design of the targeting of PANES.

Gabriel Burdín (28, male) has been working as a research assistant in the preparation of the survey instruments of the two follow-up surveys and has been processing the data of the first wave of the follow-up survey and merged it to social security records.

Gioia de Melo (28, female) has been working as a research assistant in the team for three years. She is now a very well trained research assistant and is very familiar to the data bases that will be used in this project.

Andrea Vigorito (43, female) holds an MSc in Economics and is the coordinator of the Poverty and Income Distribution team of Instituto de Economía. She has extensive experience as a researcher in poverty and income distribution issues, and has also participated in projects of impact evaluation of social policies. She has coordinated the research projects that were carried out jointly by MIDES and Universidad de la República. She coordinates the PEP project *Family allowances in Uruguay. An ex-ante evaluation of alternative schemes* being carried out at present by Amarante, de Melo and Arim.

F. Capacity building

This project will allow us our understanding of the effects of conditional cash transfer programs on a varied set of outcomes and to deepen into the methodological
complexities of policy evaluation. This is a relatively unexplored field in Uruguay as impact evaluation analysis of cash transfers has not been undertaken in other interventions than PANES. As we have been working in collaboration with policy makers, this research project will provide inputs for better practices in policy design. There are many technical issues involved in carrying out an accurate impact evaluation that will be studied in depth by the research team. Some of the aspects to be addressed are: whether to use regression discontinuity or fuzzy regression discontinuity; compatibility of that results with those obtained from differences in differences estimations, hours and earnings equations; potential endogeneity problems.

In what follows we briefly present the tasks that will be carried out by our team members:

Veronica Amarante: Research coordinator. She will undertake the regression discontinuity analysis of labour market and informality outcomes. She will participate in the writing of final reports and other scientific communication materials to be prepared.

Rodrigo Arim. He will carry out differences in differences estimations and will collaborate in writing final reports and other scientific communication materials to be prepared.

Gabriel Burdin: He will carry out a revision of the characteristics of different estimation procedures and will analyze and prepare the panel data, studying potential attrition problems. He will carry out some estimations and will be in touch with people at MIDES.

Gioia de Melo: and will analyze the existing literature on impact evaluations in Latin America. Analysis of the quality of the data that will be used in the estimations, data analysis. She will collaborate in the organisation of the final conference.

Andrea Vigorito. She will collaborate in the econometric estimation of the models that are testing child outcomes. She will participate in the writing of final reports and other scientific communication materials to be prepared. She will be in communication with MIDES and will organize with Gioia de Melo the final workshop.

G. Past and present projects related
In the framework of an agreement between MIDES and Instituto de Economía, the research team has been involved in many projects connected to the topic studied in this proposal. Firstly, it provided technical assistance to MIDES to implement PANES since the beginning of the plan and contributed to the estimation of the score and thresholds that were used to target the beneficiaries of PANES. Secondly, jointly with Marco Manacorda (Queen Mary and London School of Economics) it elaborated the impact evaluation strategy of PANES. A first very general impact evaluation report was produced on the basis of the first wave survey.

In the framework of an agreement with Instituto de Economía, Verónica Amarante, Rodrigo Arim and Andrea Vigorito have been providing technical assistance to the implementation of PANES since March 2005. Some of the activities that have been carried out by the team are:

- design of the proxy means indicator to select beneficiaries of Ingreso Ciudadano
- design of the questionnaire to be filled by applicants to PANES

### H. Timeline

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