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# Evaluating CCTs from A Gender Perspective: the Impact of Chile Solidario on Women's Employment Prospect

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**Abstract** This paper examines the effects of Chile Solidario programme on labour market outcomes from a gender perspective. Chile Solidario was implemented as the main anti-poverty programme in Chile in 2002. The purpose of this conditional cash transfer is to provide poor families with auxiliary social services, including support for employment. We compare the gender impact of Chile Solidario using difference-in-differences and regression discontinuity design estimations based on data from the Chile Solidario Panel Survey. We find that the programme has a strong impact on labour market outcomes, but the positive effects are particularly important for men in the beneficiary families. This analysis suggests that cash transfers should be targeted more specifically to women's needs to contribute to their empowerment.

**JEL:** I38, J16, O15, O54, C1

**Keywords:** Social Protection; Conditional Cash Transfers; Latin America; Gender; Impact Evaluation

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## 1. Introduction

Throughout Latin America, conditional cash transfer (CCT) programmes have played an important role in social and development policies since the 1990s. This approach to poverty relief is based on the co-responsibility of the beneficiaries: cash transfers are provided to poor households that meet verifiable behavioural requirements related to children's health care, education and nutrition (Adato and Hoddinott, 2010; de Braw and Hoddinott, 2011). The rationale for providing these well-targeted and conditional transfers, typically paid to mothers, is to reduce poverty in the short run and to increase human capital in the long run, thus hindering the inter-generational transmission of vulnerability. The programme's secondary goals are to build women's capacities, empowerment and gender equity by awarding the transfer directly to mothers, with the intention to improve the educational levels of daughters and mothers and strengthen the position of women in the family (Molyneux, 2008).

Evaluations of the impact of CCTs from a number of countries focus on the outcomes for children and find positive effects on poverty, education, health and nutrition variables (Fiszbein and Schady, 2009). However, the majority of these analyses do not consider the impact on intra-household dynamics and overlook the possibility that CCTs reinforce asymmetrical gender roles, given the inequalities in gender relations at household level prevailing in developing and emerging countries (Jenson, 2009; Molyneux, 2008; Soares and Silva, 2010; Tabbush, 2010). Moreover, CCTs emphasise women's status as mothers and principal carers of children, and charge the beneficiaries with a number of duties required by the co-responsibility arrangement. The positive effects of CCTs on women's overall well-being may therefore be questionable and contingent on the specific dimensions of the programme design.

This paper contributes to the literature on the gender impact of CCTs by investigating the effects of Chile Solidario (CS), a multidimensional anti-poverty programme that was first implemented in Chile in 2002 to help the extremely poor. CS differs from the majority of CCTs because it not only pays cash hand-outs directly to women, but also provides the so-called Puente scheme, which includes social worker support to ensure that the beneficiaries gain access to education, training and work (Barrientos and Villa, 2013; Molineux, 2008). Considering that employment is a crucial condition for empowerment (Alsop, 2006; Duflo, 2012), it is particularly interesting to evaluate the impact of CS on women's opportunities with regard to labour market participation and the capacity to generate an earned income in the long-run. Using the Chile Solidario Panel Survey, this paper combines difference-in-differences (DiD) and regression discontinuity design (RDD) estimations to evaluate the gender impact of CS, focusing on the labour market outcomes for participants of the programme between 2004 and 2006. Our analysis focuses on three labour market outcomes: status (working or not), type of contract (regular, full-time, temporary or permanent) and employment sector (self-employed, private or public). The main finding is that CS has had a strong

effect on most of these labour market outcomes, but these effects have been particularly important for the men in the beneficiary families. This analysis confirms that cash transfers, and social protection in general, should target women more specifically through job training, employment support and childcare provision, to improve gender equality and contribute to women's empowerment. The introduction of more balanced devices in CCTs to facilitate the sharing of commitments within the family would also be desirable in supporting women's employment opportunities and their economic security and autonomy

The remainder of the paper is organised as follows. Section 2 sketches a brief overview of the debate on social protection in Latin America and describes the key characteristics of CS. Section 3 examines the dataset and the identification strategy. Section 4 discusses the empirical strategy. Section 5 provides the results of the estimation while Section 6 summarises the main conclusions and suggests some policy implications from a gender perspective.

## **2. Social Protection and Gender Equality: An Overview of Chile Solidario**

The gender bias in Latin America has prevailed in both social policy and in social life, and the expansion of entitlements has been established on the basis of deeply rooted notions of gender differences and patriarchal authority (Molyneux, 2006). During the era of nationalist state-centred development established in the post-war period, women gained some minimum rights to education and health but the social provisions they received were generally related to their maternal role and primary duty within the family. As a consequence of the economic crises of the 1980s, the erosion of the social sector combined with the increasing participation of women in the labour force produced a sharp change in the policy agenda, with a new emphasis on poverty reduction strategies based on the principles of participation, empowerment and co-responsibility. At the same time, women's organisations were particularly active in promoting women's rights, shaping the new social policy of post-authoritarian Latin American states. Women's poverty and their role in poverty relief programmes became increasingly evident and gender analysis was incorporated in government policy (Molyneux, 2006). In this context, CCTs have been widely implemented in Latin America as a pillar of the primary approach to social policy.

Despite the efforts to reform social policy and the rise in social expenditure, the guiding principles of this approach have attracted criticisms due to the predominance of narrowly targeted, means-tested interventions and the failure to tackle poverty and inequalities in the long-term (Barrientos, 2004; Bastagli, 2009; Valencia Lomeli, 2008). Moreover, even if CCTs are assigned to women and have been designed to bolster their bargaining power, several studies have highlighted the shortcomings related to conditioning from the point of view of gender (Bradshaw, 2008; Escobar Latapí and Gonzàles de la Rocha, 2008; Molyneux, 2006, 2008; Soares and Silva, 2010; Staab and Gerhard, 2011; Tabbush, 2010). These analyses stress the continuity of current social policy with the

Latin American cultural tradition, which identifies femininity with motherhood and considers serving the needs of children and the household a primary maternal responsibility, neglecting interventions that tackle women's economic autonomy and security (Molyneus, 2006). Women's needs are not part of the policy objectives, while CCT mechanisms perpetuate male privilege by absolving men from any designed role in the poverty alleviation programme (Chant, 2008; Tabbush, 2010). Moreover, the new social policy does not address the gender division of labour and the difference in men's and women's access to different opportunities, and does not encourage women's entry into paid labour as a basis for welfare improvements (Cook and Razavi, 2012; Franzoni and Voorend, 2012).

The case of CS is particularly interesting in light of the ongoing debate around the gender effect of the new social protection instruments in Latin America. Chile has undergone a transition from the 'authoritarian liberal exclusionary model' implemented under the dictatorship (1973-1990), to the 'democratic liberal inclusive model' that has been in effect since re-democratisation (Castells, 2005). Social funding has been strengthened together with with social investments aimed at improving the equity and quality of basic social services. This strategy translated into an impressive reduction in poverty and indigence indicators: during the first half of the 1990s, the overall incidence of poverty decreased from 38.6 to 23.2%, while extreme poverty followed a similar path, decreasing from 12.9 to 5.8% (De la Guardia et al, 2011; Palma and Urzua, 2005). Nevertheless, in the second half of the 1990s, the pace of the reduction slowed down and public programmes were unable to achieve the expected outcomes in relation to a core of resistant poverty (the so-called 'nucleo de pobreza duro') (Barrientos, 2010). The difficulty in tackling poverty was linked to a substantial lack of opportunities and access to social services for poor families. It became apparent that a bridge between these families and the social system was needed. The election of Ricardo Lagos in 2000 represented a great opportunity 'to revise the social protection system in force and to adopt a proactive role in reducing poverty' (Barrientos, Gideon and Molyneux, 2008 p. 764). It was this framework that launched the Programa Puente (Bridge Programme) in 2002, and the expanded programme Chile Solidario (Supportive Chile)<sup>1</sup>.

The aim of the programme is to assist the very poorest (6% of the total population) by providing beneficiaries with a package of integrated interventions. The amount it provides is only a small proportion of the beneficiaries' resources (6-7% of the total income of households covered by the programme), because it was conceived simply as a contribution for the accomplishment of specific practices, or for the fulfilment of administrative requirements for registering with CS, such as producing certificates and national ID cards. The key characteristic of the programme is that it combines the provision of a moderate income to the mother with welfare services related to health,

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<sup>1</sup> In 2012 the Ethical Family Income (Ingreso Etico Familiar, IEF) was launched to gradually replace the CS programme. The IEF programme significantly expands the type and amounts of cash transfers compared with CS and places greater emphasis on households' income-generating capacity and employment support (Cecchini et al., 2012; Fultz and Francis, 2013).

education and employment, and with psychological counselling tailored to the needs of the families (Carneiro et al., 2014; Larrañaga et al., 2012; Palma and Urzua, 2005). The programme has a maximum duration of five years. During the first two years, the Puente programme (a bridge between a family and its rights) provides intensive psycho-social support, which is intended to stimulate the demand of the neediest for social services and thus link them to the broader social protection system. The underlying rationale is reflected in the transfer design ('Bono de protección familiar'), characterised by a maximum duration of two years, a decreasing transfer amount over time and a clear exit strategy for beneficiaries. CS continues to pay a graduation bonus ('Bono de ingreso') for another three years to the families that fulfil the conditionalities imposed during the first phase (Bastagli, 2009). Moreover, the beneficiaries are given specific municipal subsidies for the entire duration: subsidies for families with children under the age of 18 (Subsidio Unico Familiar, SUF), pensions for the elderly poor and for the disabled (Pensión Asistencial, PASIS) and water consumption subsidies (Subsidio de Agua Potable, SAP). The beneficiaries also have priority access to a range of social and work programmes (De La Guardia et al., 2011; Henríquez and Reca, 2005).

CS shows three peculiarities compared with other cash transfer programmes. First, it represents a new generation of CCT inspired by the human capability approach (Barrientos and Hulme, 2009; Barrientos, 2010). Second, it does not pursue children's well-being exclusively, but addresses gender-specific concerns and family dynamics with some empowering components, such as promoting economic engagement for mothers and their daughters (Antonopoulos, 2013; Tabbush, 2010). Third, the programme defines a set of requirements for each family in six areas representing the multidimensional aspects of deprivation: identification/legal documentation, health, education, family dynamics, housing, employment and income (Bastagli, 2009; Galasso, 2011). The fulfilment of 53 'minimum conditions' is supported by the Solidarity and Social Investment Fund (FOSIS) in each municipality, where the local providers of public services (Unidades de Intervención Familiar, UIF) operate through social workers (the so-called Apoyos Familiares, AF), who make 21 home visits during the first two years of the programme. In 2004, a supply-side response to the needs of the target population was activated. This reform improved the quantity and quality of auxiliary services (Galasso, 2011) and led to an increase in the coverage of employment programmes from 24% in 2004 to 100% in 2007 (Carneiro et al., 2014). As Carneiro et al. (2014) stress, intensive psycho-social support is the central feature of the programme, helping households to acquire the skills they need to autonomously access the labour market and participate in the welfare, education and health systems available to them.

Considering the areas of intervention, 'employment and income' are the most problematic dimensions of the system and involve the hardest requirements for families to fulfil (Palma and Urzua, 2005; Raczynski, 2008). In particular, the minimum conditions in the 'employment' category, include (i) at least one member of the family should have a regular job and a stable salary; (ii) no child under the age of 15 should leave school to work; and (iii) all unemployed persons should be registered with the Municipal Information Office (MIDEPLAN, 2008). These requirements show that CS is not

specifically targeted at women despite their over-representation among the programme's participants (Henriquez and Reca, 2005). At the operational level, FOSIS provides three types of support strategy discretionally selected depending on beneficiaries' characteristics: (i) job placement assistance programmes, mainly job training and wage subsidies; (ii) self-employment programmes and support for micro-enterprises, based on a combination of technical assistance and funding for inputs and start-up capital; and (iii) employability programmes, ranging from adult education to soft-skills training (Carneiro et al., 2014). The response to job placement programmes, especially among women, has been low, while self-employment programmes have been the preferential channel for women entering the labour market (Henriquez and Reca, 2005; MIDEPLAN, 2008). This confirms Banerjee and Duflo's (2007) insight that it is easier for a woman with low skills and low capital to become an entrepreneur than to find a job.

Assessments of the effects of CS have so far focused households' health and education outcomes (Galasso, 2006, 2011), participation in training and employment programmes and housing conditions (Carneiro et al., 2014; De La Guardia et al., 2011; Galasso, 2011; Larranaga et al. 2009; Larranaga et al. 2012). These studies, however, did not address the issue of gender and thus do not provide straightforward effects related to women entering the labour market (Antinopoulos, 2013). As Chile Solidario programme was designed as a means of integral support for all family members living in extreme poverty, this study further investigates the impact on women's employment choices and opportunities to provide a gender perspective as a complement to previous evaluations. The effects of CS on labour market outcomes are disaggregated by gender to verify whether CS promotes paid work amongst women or reinforces the traditional male breadwinner-female caregiver model. Of course, labour market participation does not automatically empower women (Elson, 1999; Fultz and Francis, 2013). However, the lack of gender-sensitive data is a main obstacle to exploring other dimensions of women's empowerment and gender inequality, such as relations in the domestic sphere and intra-household inequalities, that are relevant is assessing whether CS is gender equitable. We are aware of this limitation and mention that our dataset does not allow us to proceed differently<sup>2</sup>.

### **3. Data and Identification Strategy**

The Chile Solidario Survey is a non-balanced panel, composed of beneficiaries and non-beneficiaries of the system, and containing information about education, health, employment, income, housing, family and demographic and psycho-social characteristics. We use the survey that was designed for evaluating the effects of CS to identify the group of families entering the programme (treatment group) and a similar population of eligible families who were not admitted to the programme (the control group). Beneficiary families are selected using the information collected on the Socio-

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<sup>2</sup> For a qualitative discussion on the broader impact of CS on gender equity, see Martinez Franzoni and Voorend (2012) and Soares and Silva (2010). For a review of CT programmes and the empowerment of women, see Fultz and Francis (2013).

economic Characterisation Scorecard (Ficha CAS, Comités de Asistencia Social), replaced in 2006 by the Social Protection Scorecard (FPS, Ficha de Protección Social). CS uses this information to calculate a proxy means index to rank families according to their level of vulnerability. Beneficiary families are those below a given cut-off point that approximates the level of extreme poverty (Soares and Silva, 2010). The Ficha CAS used different cut-off points for different regions, whereas the FPS has just one cut-off point for the entire country. Because the cut-off changes every year, families enter the programme progressively. We include families that are eligible on the basis of the CAS score, but have not yet been enrolled in the programme, in the control group. The exclusion of eligible families can occur for two reasons. First, some regions have higher cut-offs than others and so exclude families that may be eligible elsewhere. Second, a family is excluded from the programme if there are no more available slots in a given district or because the district is not able to provide the necessary services included in the programme. This may occur mainly in areas far from large urban centres or located in extreme regions.

By including only eligible families in the control group, we obtain a gradual shift of families from the control to the treatment group when the regional cut-off changes or when other slots open up in a given district. This offers two important advantages for the proposed impact evaluation study. First, it allows us to select a control group that is homogeneous to the treatment group on the basis of the observable characteristics. Second, as the official cut-off changes every year and for each district and region, the gradual inclusion of families in the treatment group is guaranteed. For these reasons, the programme is suitable for a difference-in-differences identification.

In its first year, the Chile Solidario Panel used the household data from the 2003 National Socio-economic Characterisation Survey (Encuesta CASEN), which was then followed-up longitudinally in 2004, 2006 and 2007. The main problem related to this survey is the lack of baseline data because it was implemented after the programme began: in 2003 94% of households belonging to the first cohort of participants had already entered the programme. This excludes the possibility of running a rigorous pre-post evaluation.

In addressing this issue, we consider that the sample collected by the Chile Solidario Panel Survey is a heterogeneous combination of data referring to different populations. Consequently, we can isolate the population of interest by exploiting the longitudinal and transversal sections of the sample. Specifically i) from the sample of treated individuals in the 2004-2007 longitudinal sections we drop all observations on participants belonging to the 2003-2007 longitudinal section to isolate the population interviewed from 2004 to 2007; and ii) to identify the treated subjects interviewed for the first time in 2006, we drop from the 2006-2007 sample all of the observations linked to both the 2003-2007 and 2004-2007 longitudinal sections. By treating the data in this way, we completely remove the treated population that entered the panel in 2003 and use this population as the baseline for the impact evaluation analysis. Finally, given that in 2007 the eligible families were selected with a targeting instrument based on a unique cut-off set by the FPS, the information relating to 2007 is not included in

the analysis. Following these arguments, the analysis focuses only on the cohorts of entrants between 2004 and 2006.

Table 1 – Chile Solidario, sample sizes

| Year  | Full sample | Solidario-Puente |           | Follow-up phase |           |
|-------|-------------|------------------|-----------|-----------------|-----------|
|       |             | Treated          | Untreated | Treated         | Untreated |
| 2003  | 5,952       | .                | 5,952     | .               | 5,952     |
| 2004  | 7,848       | 3,545            | 4,303     | .               | 7,848     |
| 2006  | 8,286       | 5,993            | 2,293     | 460             | 7,826     |
| 2007  | 10,222      | 6,174            | 4,048     | 1,078           | 9,144     |
| Total | 32,308      | 15,712           | 16,596    | 1,538           | 30,770    |

From this cohort we extract two samples. The first is suitable for analysing the first phase of the Chile Solidario programme, which includes the personalised support provided by Puente (*Solidario-Puente*). In this first phase, CS set up 53 conditionalities, i.e. the achievement of some basic thresholds, to develop in the beneficiary family the necessary functionings to facilitate a permanent exit from extreme poverty (Barrientos, 2010). The second sample considers families that completed all of the commitments required by Chile Solidario and were successfully admitted to the subsequent three years (*Follow-up phase*). During the follow-up period, households continue to be entitled to access public programmes and receive an exit transfer. We use the second sample to investigate the role of the conditionalities on the behaviour of the treated subjects, and to explore the discontinuity in the neighbourhood of admission to the follow-up phase of the programme. Note that although Chile Solidario targets a given beneficiary family, we consider each member of the treated family to investigate the effects of the programme on several labour market outcomes from a gender perspective. Hereafter, we refer to treated subjects, the majority of whom are the head or the spouse of the head of the beneficiary family.

Table 1 reports the characteristics of the treatment and control groups. We first consider the *Solidario-Puente* scheme. The table shows that the whole sample of 32,308 observations comprises a treatment group of 15,712 and a control group of 16,596 observations. Further, we find that between 2004 and 2006, the treated population increased from 3,545 to 5,993 subjects, whereas it remained quite constant between 2006 and 2007, as expected. From the second sample, which comprises those admitted to the exit transfer of Chile Solidario (*Follow-up phase*), the table shows that only 406 individuals were treated in 2006, whereas more than 1,000 subjects entered the programme in 2007. This outcome was also expected as admission to the Follow-up phase only occurs after two years of participation in Puente, and thus it is a function of the number of years the treated subjects spent in the programme.

Table 2 - Individual characteristics

| Characteristic                   | Full sample mean | Solidario-Puente |                | Follow-up phase |                |
|----------------------------------|------------------|------------------|----------------|-----------------|----------------|
|                                  |                  | Treated mean     | Untreated mean | Treated mean    | Untreated mean |
| <b>Age</b>                       | 26.255           | 26.949           | 27.551         | 44.695          | 24.750         |
| No. of members in the family     | 4.767            | 4.855            | 4.932          | 4.626           | 4.884          |
| Gender (Female=2)                | 1.492            | 1.504            | 1.514          | 1.756           | 1.473          |
| Training courses                 | 0.061            | 0.063            | 0.064          | 0.088           | 0.057          |
| <b>Relationship to the Head</b>  |                  |                  |                |                 |                |
| Head                             | 0.280            | 0.281            | 0.282          | 0.587           | 0.243          |
| Spouse                           | 0.137            | 0.152            | 0.165          | 0.390           | 0.122          |
| Son or daughter                  | 0.504            | 0.497            | 0.491          | 0.015           | 0.557          |
| Other relative                   | 0.075            | 0.067            | 0.060          | 0.008           | 0.075          |
| Other                            | 0.004            | 0.003            | 0.002          | 0.000           | 0.003          |
| <b>Education level</b>           |                  |                  |                |                 |                |
| No education                     | 0.153            | 0.154            | 0.155          | 0.107           | 0.160          |
| Primary                          | 0.584            | 0.600            | 0.614          | 0.680           | 0.591          |
| Secondary and tertiary           | 0.263            | 0.245            | 0.230          | 0.213           | 0.249          |
| <b>Marital status</b>            |                  |                  |                |                 |                |
| Marriage and common-law marriage | 0.286            | 0.309            | 0.329          | 0.654           | 0.266          |
| Divorced                         | 0.039            | 0.035            | 0.032          | 0.094           | 0.028          |
| Widowed                          | 0.033            | 0.033            | 0.034          | 0.086           | 0.027          |
| <b>Region</b>                    |                  |                  |                |                 |                |
| Tarapacá                         | 0.156            | 0.139            | 0.124          | 0.111           | 0.142          |
| Antofagasta                      | 0.093            | 0.105            | 0.115          | 0.070           | 0.109          |
| Atacama                          | 0.174            | 0.188            | 0.199          | 0.190           | 0.187          |
| Coquimbo                         | 0.110            | 0.136            | 0.159          | 0.160           | 0.133          |
| Valparaíso                       | 0.197            | 0.234            | 0.267          | 0.248           | 0.233          |
| O'Higgins                        | 0.106            | 0.103            | 0.101          | 0.091           | 0.105          |
| Maule                            | 0.128            | 0.162            | 0.192          | 0.203           | 0.157          |
| BioBio                           | 0.391            | 0.481            | 0.559          | 0.498           | 0.479          |
| Araucanía                        | 0.290            | 0.332            | 0.368          | 0.317           | 0.333          |
| Los Lagos                        | 0.249            | 0.269            | 0.287          | 0.337           | 0.261          |
| Aysén                            | 0.066            | 0.063            | 0.060          | 0.084           | 0.060          |
| Magallanes                       | 0.075            | 0.065            | 0.056          | 0.074           | 0.064          |
| Santiago metropolitan region     | 0.365            | 0.428            | 0.483          | 0.531           | 0.415          |

*Notes:* The survey also accounts for non-relatives living in the house ('Other').

To examine the homogeneity of the treated subjects based on the observable characteristics, Table 2 reports some descriptive statistics for the treatment and control groups. In line with the previous table, we report the *Solidario-Puente* and the *Follow-up phase* separately. It is worth clarifying that, because the samples are constructed to be homogeneous in relation to specific poverty indices, we omit these variables from the observable characteristics.

The chosen observables, which are standard in the literature, cover different aspects at the individual and family levels. At the first level of analysis we account for the age, gender, education and marital status of each individual, whereas at the family level we account for the relationship with the head of the household and for the region of residence. In general, the analysis of the first sample shows that the mean values of the selected observables are quite similar for the treatment and control groups. In particular, when the regional dummies are accounted for, we find some heterogeneity in the treatment and control groups. Indeed, as expected, the most populous regions of BioBio, Valparaíso, Araucanía and the Santiago metropolitan region are well represented by the survey and are homogeneously divided between the treatment and control groups. Conversely, when we consider the south and north of the country, we find less represented regions, but the observations maintain a fairly homogeneous distribution between the treatment and control groups.

Some differences in the observable characteristics emerge in the analysis of the *Follow-up phase*. For example, we find that the treated population is older than the control population and is composed mainly of the head or spouse of the head of the beneficiary families. Some variability is also found when the region of residence is analysed.

#### 4. Empirical Framework

To analyse the labour market outcomes, we choose three dimensions that characterise the trend and working conditions in the labour dynamics before and after the introduction of the programme: status (working or not), type of contract (regular, full-time, temporary or permanent) and employment sector (self-employed, private or public). Descriptive statistics are presented in Table 3. From the Chile Solidario Panel survey we extract a dummy variable representing the share of subjects with a job of unspecified duration. This variable provides a first indication of the general dynamics in the labour market. To study the labour market outcomes more precisely, we construct two dummy variables to differentiate workers with a regular contract (i.e., working in the formal economy) and with a full-time job. As a further investigation, we include in the analysis the worker's contract type and, finally, the sector in which she/he works.

Table 3 - Labour market characteristics

| Variable                 | Sample | Treatment group | Control group |
|--------------------------|--------|-----------------|---------------|
| <b>Working status</b>    |        |                 |               |
| <i>Working (yes=1)</i>   | 0.367  | 0.349           | 0.334         |
| <b>Type of contract</b>  |        |                 |               |
| <i>Regular</i>           | 1.450  | 1.425           | 1.403         |
| <i>Full-time</i>         | 0.288  | 0.292           | 0.284         |
| <i>Temporary</i>         | 0.188  | 0.177           | 0.167         |
| <i>Permanent</i>         | 0.108  | 0.102           | 0.097         |
| <b>Employment sector</b> |        |                 |               |
| <i>Self-employed</i>     | 0.100  | 0.098           | 0.096         |
| <i>Private sector</i>    | 0.247  | 0.233           | 0.222         |
| <i>Public sector</i>     | 0.019  | 0.017           | 0.016         |

Following the proposed identification strategy, we now present the empirical framework to analyse the effects of CS on labour market outcomes, with a particular focus on gender equality and the role of conditionalities. To better characterise the labour market dynamics, we restrict the sample to the population aged 15 to 64 and exclude from the analysis those who are still in the education system and subjects receiving an old age or disability pension. Furthermore, we emphasise that the control group is restricted to subjects who were eligible on the basis of the CAS score, but were not admitted to participate to the programme.

We first analyse the impact of the *Solidario-Puente* treatment using a difference-in-differences (DiD) specification. The general formulation of the DiD model applied to the *Solidario-Puente* is written as

$$y_{it} = \beta_1 Tr_i + \beta_2 TrxT_{it} + \beta_3 T_t^{2004} + \beta_4 T_t^{2006} + \beta_5 d_{reg_{it}} + \beta_6 d_{dist_{it}} + \beta_7 X_{it} + \varepsilon_{it}, \quad (1)$$

where  $y_{it}$  includes all of the underlying dimensions of the labour market,  $Tr_i$  is a dummy variable indicating whether the subject is a participant of the *Solidario-Puente* programme and  $T_t^{2004}$  and  $T_t^{2006}$  are dummy variables accounting for the two treatment periods. Further,  $X_{it}$  is the vector of observable characteristics and  $d_{reg_{it}}$  and  $d_{dist_{it}}$  are the regional and municipal (to proxy the district level) time-varying fixed effects. These time-varying effects account for both the heterogeneity at the regional level due to changes in the cut-offs, and for the heterogeneity at the district level due to the availability of participation slots. From Equation (1) we also construct gender marginal effects by interacting the DiD term  $TrxT_{it}$  with the gender dummy variable. The marginal effects allow us to detect whether the effects of the *Solidario-Puente* treatment differ when only women are considered. As a robustness check, in the next section we present an estimation of (1) that excludes those municipalities in which the control sample is considerably larger (e.g. 20 times) than the treatment group. Given that the unbalanced distribution of the treated population across districts could produce non-parallel trends, this check is useful to inspect the robustness of the proposed results.

As a second step in the econometric strategy, we apply a regression discontinuity design (RDD) to study the effects of admission to the *Follow-up phase* on the labour market dimensions. The RDD uses a two-stage-least-squares (2SLS) estimation. In this case, the DiD design is less applicable because our main interest is in understanding whether there is a discontinuity in the neighbourhood of admission to the Chile Solidario follow-up treatment, which, in turn, is a function of the number of years spent in the programme. The RDD is a more appropriate strategy in this case as it allows us to condition the probability of being treated to the number of years that the subject has spent in the programme. In other words, the Chile Solidario follow-up treatment ( $D_i$ ) is a discontinuous function of the number of years spent in the programme ( $YS_i$ ). Proceeding in this way, we obtain the causal relationship between the achievement of the minimum conditions and the labour market outcomes. More formally, we can describe this hypothesis as follows:

$$P(D_i = 1|YS_i) = \begin{cases} g_0(YS_i) & \text{if } YS_i < \overline{YS} \\ g_1(YS_i) & \text{if } YS_i \geq \overline{YS} \end{cases}$$

where  $g_1(YS_i) > g_0(YS_i)$  and  $\overline{YS}$  is the cut-off point. This is the simplest formulation of the RDD for a just identified model with an instrument describing the discontinuity in the treatment variable. Given this condition, we obtain a first-stage regression:

$$D_{it} = \gamma_0 + \gamma_1 YS_{it} + \gamma_2 d_{reg_i} + \gamma_3 d_{dist_i} + \gamma_4 X_{it} + \eta_{it}. \quad (2)$$

Consequently, we can estimate the following equation:

$$y_{it} = \delta_0 + \delta_1 \widehat{D}_i + \delta_2 d_{reg_i} + \delta_3 d_{dist_i} + \delta_4 X_{it} + \mu_{it} \quad (3)$$

where  $\widehat{D}_i$  is the estimated value of the treatment variable obtained in (2). The model formulation (3) does not account for a non-linear form of the RDD. In this case the functional form describing the discontinuity may affect the estimated results. To exploit this issue as a robustness check, we propose a higher degree polynomial of the instrument variable and replace  $f_1(YS_i)$  in (2).

## 5. Results

This section presents the main results of the evaluation analysis. Following the structure presented in the previous sections, we first account for the effects on the three labour market dimensions of the *Solidario-Puente* treatment. Table 4 reports the marginal effects estimated on the whole sample and those estimated on two sub-samples that distinguish between males and females in the treated population. All of the specifications include individual observable characteristics and the fixed and time-varying regional and districts effects. The reported standard errors are clustered at the family level, whereas the standard errors for the two sub-samples are estimated using the delta method.

In the first column of Table 4 we report the effect of the *Solidario-Puente* treatment on the probability of being employed with an unspecified contract. The estimated  $\beta_2$  parameter, as in Equation (1), shows that a 1% variation in the *Solidario-Puente* treatment (or a 1% increase in programme participation) produces a 0.05% (*d-in-d*) variation in the probability of being employed. When we distinguish between male and female populations, we find a significant and positive variation in the probability of being employed only for the latter.

The next two columns of the table take into account the presence of a regular labour contract and the duration of the working day. From these two columns we find that the *Solidario-Puente* treatment increases the probability of having a regular employment contract (0.09), but the effect is significant only for men (0.18). Moreover, a positive variation is found for full-time employment, but is significant only for the full sample (0.08).

Columns (IV) and (V) provide a more detailed characterisation of the labour market dynamics related to temporary and permanent contracts. In this context, we find no significant variation in the probability of being permanently employed. On the contrary, we find that the *Solidario-Puente* treatment increases the probability of having a temporary job. This effect is particularly relevant for men, who show a positive variation of 0.1% in the probability of being employed with a temporary

contract with respect to a 1% variation in the *Solidario-Puente* treatment. As a further investigation, we consider the sectors in which there is more probability of the treated subjects being employed. Positive variations are found in the probability of working in the private (0.05) and public (0.023) sectors. More interesting, in column VI we find an increased probability of treated women being self-employed (0.06). The CS's self-employment programmes and support for micro-enterprises may underpin this result. However, this result also supports the view that the lack of services targeted at reducing care responsibilities explains why women prefer self-employment rather than regular and full-time jobs.

The outcomes presented in Table 4 indicate that, overall, the policy has had positive effects on labour market opportunities and the probability of finding employment in the formal economy. Moreover, the effects are stronger than those estimated in previous evaluations, which relied on different methods and datasets (Carneiro et al., 2012; De la Guardia et al., 2011; Larrañaga et al., 2009). However, it also confirms that the programme has not triggered any meaningful changes in gender inequality. Overall, these estimations show that CS has played a central role in improving labour market outcomes for beneficiary families, and also confirm that the policy has not increased female labour force participation and the security of women from low-income families.

Different from other evaluations of CS, we also explore the role of conditionalities in achieving labour market outcomes for the treated population. As already stressed, the Puente programme provides intensive psycho-social support, which should stimulate the demand of the neediest for public services that will link them to the broader social protection system. Thus, the positive effects of the programme on the ability to participate in the labour market should increase for those subjects who fulfil the conditionalities and are admitted to the second three-year stage of CS. Following this argument, we expect the presence of a discontinuity in the impact of the *Follow-up phase* treatment as a function of the number of years spent in the programme. To analyse these effects, we consider the neighbourhood of the *Follow-up phase* treatment and use the RDD (3), restricting the sample to those subjects treated by the *Solidario-Puente* programme. The restricted sample is useful for isolating the effect of the conditionalities, which may only be accounted for when the subjects treated by the *Solidario-Puente* programme are considered. Table 5 reports the marginal effects estimated for the full sample and for the two sub-samples that distinguish between the male and female treated population. Note that as we only report results for the second stage of the 2SLS model specification, the marginal effects are still interpreted in terms of the impact of a 1% increase in participation in the *Follow-up phase*.

Table 4 - The impact of *Solidario-Puente* on labour market dimensions, marginal effects

|                         | (I)<br>Working                |     | (II)<br>Regular<br>job |    | (III)<br>Full-time<br>job |    | (IV)<br>Temporary<br>job |     | (V)<br>Permanent<br>job |                   | (VI)<br>Self-<br>Employed |                  | (VII)<br>Private<br>Sector |                  | (VIII)<br>Public<br>Sector |  |
|-------------------------|-------------------------------|-----|------------------------|----|---------------------------|----|--------------------------|-----|-------------------------|-------------------|---------------------------|------------------|----------------------------|------------------|----------------------------|--|
|                         | Marginal effects, full sample |     |                        |    |                           |    |                          |     |                         |                   |                           |                  |                            |                  |                            |  |
| D-in-D                  | 0.050<br>(0.019)              | **  | 0.093<br>(0.038)       | ** | 0.081<br>(0.040)          | ** | 0.067<br>(0.022)         | *** | 0.030<br>(0.037)        | 0.032<br>(0.020)  | 0.050<br>(0.021)          | **               | 0.023<br>(0.011)           | **               |                            |  |
|                         | Marginal effects, men         |     |                        |    |                           |    |                          |     |                         |                   |                           |                  |                            |                  |                            |  |
| D-in-D                  | 0.023<br>(0.027)              |     | 0.181<br>(0.078)       | ** | 0.102<br>(0.068)          |    | 0.093<br>(0.039)         | **  | 0.079<br>(0.082)        | -0.034<br>(0.038) | 0.066<br>(0.034)          | *                | 0.018<br>(0.026)           |                  |                            |  |
|                         | Marginal effects, women       |     |                        |    |                           |    |                          |     |                         |                   |                           |                  |                            |                  |                            |  |
| D-in-D                  | 0.069<br>(0.023)              | *** | 0.053<br>(0.038)       |    | 0.065<br>(0.042)          |    | 0.054<br>(0.022)         | **  | 0.011<br>(0.036)        | 0.066<br>(0.020)  | ***                       | 0.040<br>(0.023) | *                          | 0.025<br>(0.011) | **                         |  |
| Covariates              | yes                           |     | yes                    |    | yes                       |    | yes                      |     | yes                     | yes               | yes                       |                  | yes                        |                  | yes                        |  |
| Regional FE             | yes                           |     | yes                    |    | yes                       |    | yes                      |     | yes                     | yes               | yes                       |                  | yes                        |                  | yes                        |  |
| District FE             | yes                           |     | yes                    |    | yes                       |    | yes                      |     | yes                     | yes               | yes                       |                  | yes                        |                  | yes                        |  |
| Adjusted R <sup>2</sup> | 0.017                         |     | 0.041                  |    | 0.031                     |    | 0.033                    |     | 0.031                   | 0.036             | 0.029                     |                  | 0.023                      |                  |                            |  |
| No_cluster              | 3434                          |     | 3247                   |    | 3325                      |    | 3287                     |     | 3206                    | 3231              | 3351                      |                  | 3123                       |                  |                            |  |
| N                       | 23398                         |     | 17796                  |    | 19745                     |    | 18497                    |     | 16801                   | 17025             | 20531                     |                  | 15049                      |                  |                            |  |

**Notes:** All of the specifications include individual observable characteristics and the fixed and time-varying regional and districts effects. The reported standard errors are clustered at the family level, whereas standard errors for the two sub-samples are estimated by the delta method. The asterisks denote the p-value significance levels\* p<0.1; \*\* p<0.05; \*\*\* p<0.01.

Table 5 - The impact of the *Follow-up phase* on labour market dimensions, marginal effects

|                         | (I)<br>Working                |     | (II)<br>Regular<br>job |     | (III)<br>Full-time<br>job |     | (IV)<br>Temporary<br>job |     | (V)<br>Permanent<br>job |    | (VI)<br>Self-<br>Employed |                  | (VII)<br>Private<br>Sector |                   | (VIII)<br>Public<br>Sector |  |
|-------------------------|-------------------------------|-----|------------------------|-----|---------------------------|-----|--------------------------|-----|-------------------------|----|---------------------------|------------------|----------------------------|-------------------|----------------------------|--|
|                         | Marginal effects, full sample |     |                        |     |                           |     |                          |     |                         |    |                           |                  |                            |                   |                            |  |
| RDD                     | 0.144<br>(0.053)              | *** | 0.445<br>(0.107)       | *** | 0.506<br>(0.111)          | *** | 0.276<br>(0.058)         | *** | 0.216<br>(0.100)        | ** | -0.054<br>(0.050)         | 0.215<br>(0.058) | ***                        | 0.055<br>(0.031)  | *                          |  |
|                         | Marginal effects, men         |     |                        |     |                           |     |                          |     |                         |    |                           |                  |                            |                   |                            |  |
| RDD                     | 0.206<br>(0.183)              |     | 0.874<br>(0.523)       | *   | 1.199<br>(0.575)          | *   | 0.927<br>(0.307)         | *** | 0.106<br>(0.614)        |    | -0.298<br>(0.228)         | 0.523<br>(0.256) | **                         | 0.062<br>(0.203)  |                            |  |
|                         | Marginal effects, women       |     |                        |     |                           |     |                          |     |                         |    |                           |                  |                            |                   |                            |  |
| RDD                     | 0.124<br>(0.049)              | **  | 0.264<br>(0.085)       | *** | 0.310<br>(0.092)          | *** | 0.168<br>(0.046)         | *** | 0.153<br>(0.080)        | *  | -0.257<br>(0.226)         | 0.535<br>(0.253) | **                         | -0.068<br>(0.093) |                            |  |
| Covariates              | yes                           |     | yes                    |     | yes                       |     | yes                      |     | yes                     |    | yes                       |                  | yes                        |                   | yes                        |  |
| Regional FE             | yes                           |     | yes                    |     | yes                       |     | yes                      |     | yes                     |    | yes                       |                  | yes                        |                   | yes                        |  |
| District FE             | yes                           |     | yes                    |     | yes                       |     | yes                      |     | yes                     |    | yes                       |                  | yes                        |                   | yes                        |  |
| Adjusted R <sup>2</sup> | 0.163                         |     | 0.175                  |     | 0.167                     |     | 0.141                    |     | 0.144                   |    | 0.228                     |                  | 0.109                      |                   | 0.095                      |  |
| No_cluster              | 1328                          |     | 1243                   |     | 1267                      |     | 1258                     |     | 1236                    |    | 870                       |                  | 1097                       |                   | 1097                       |  |
| N                       | 4545                          |     | 3553                   |     | 3753                      |     | 3669                     |     | 3448                    |    | 1943                      |                  | 3155                       |                   | 3155                       |  |

**Notes:** All of the specifications include individual observable characteristics and the fixed and time-varying regional and districts effects. The reported standard errors are clustered at the family level, whereas standard errors for the two sub-samples are estimated by the delta method. The asterisks denote the p-value significance levels \* p<0.1; \*\* p<0.05; \*\*\* p<0.01.

In line with our previous results, column (I) shows a positive variation in the probability of being employed with an unspecified job. In this case, a 1% variation in the *Follow-up phase* treatment produces a 0.124% increase in the probability of finding a job for women, compared with a probability of 0.144% for the whole sample. A strong effect is also estimated when we analyse regular contracts (II) and full-time jobs. We find that a 1% variation in the treatment increases participation in the regular labour market by 0.445% for the full sample and 0.874% for the male population. The effect is even stronger when full-time employment is accounted for: the estimates show an increase of 0.506% in the probability of accessing a full-time job for the full sample and of 1.199% for the sub-sample of men. Comparing these two columns with the first column, we see that the main effect of the policy for men is in the type of job in which they are involved, rather than an increase in the probability of leaving unemployment. Moreover, considering the sub-sample of women, we find a lower but still relevant impact of the programme on the probabilities of finding a job (0.124) and finding a regular (0.264) and full-time job (0.310).

Column (IV) and (V) analyse the labour market outcomes related to temporary and permanent contracts. In line with the previous results, we do not find significant variations in the probability of being employed in a permanent job, but we do find that the Chile Solidario treatment increases the probability of being employed in a temporary job. In this case, the effect is particularly relevant for the male sub-sample: the analysis shows a variation of 0.927% in the probability of being employed on a temporary contract when a 1% variation in the *Follow-up phase* treatment is produced, compared with a 0.168% for the female sub-sample. Finally, looking at columns (VI), (VII) and (VIII), we do not find any significant impact of CS when considering the employment sector of the labour market.

In sum, the estimates show the importance of the basic thresholds and the public services provided by the social protection system in increasing the probabilities of the families in finding employment and achieving security. These results are consistent with the findings of Carneiro et al. (2014), who estimated a strong impact of the programme on the take-up of employment services provided by FOSIS. Nevertheless, it is evident that improvements are still needed to address gender inequalities: treated women are less likely than men to participate in the labour force and to be in regular and full-time work, even though they bear a disproportionate burden of the conditionalities compared with men. Thus, the main weaknesses of the policy seem to be the insufficient provision of extra-familial childcare and employment and training support for women, and the imbalance between men and women in the distribution of commitments and opportunities.

Table 6 - The impact of *Solidario-Puente* on labour market dimensions, marginal effects

|                         | (I)<br>Working                |     | (II)<br>Regular<br>job |    | (III)<br>Full-time<br>job |    | (IV)<br>Temporary<br>job |     | (V)<br>Permanent<br>job |  | (VI)<br>Self-<br>Employed |     | (VII)<br>Private<br>Sector |    | (VIII)<br>Public<br>Sector |    |
|-------------------------|-------------------------------|-----|------------------------|----|---------------------------|----|--------------------------|-----|-------------------------|--|---------------------------|-----|----------------------------|----|----------------------------|----|
|                         | Marginal effects, full sample |     |                        |    |                           |    |                          |     |                         |  |                           |     |                            |    |                            |    |
| D-in-D                  | 0.047<br>(0.019)              | **  | 0.088<br>(0.038)       | ** | 0.080<br>(0.041)          | ** | 0.065<br>(0.022)         | *** | 0.030<br>(0.038)        |  | 0.029<br>(0.020)          |     | 0.048<br>(0.021)           | ** | 0.020<br>(0.011)           | *  |
|                         | Marginal effects, men         |     |                        |    |                           |    |                          |     |                         |  |                           |     |                            |    |                            |    |
| D-in-D                  | 0.010<br>(0.025)              |     | 0.161<br>(0.065)       | ** | 0.077<br>(0.065)          |    | 0.079<br>(0.081)         | **  | 0.057<br>(0.081)        |  | -0.051<br>(0.037)         |     | 0.054<br>(0.032)           | *  | 0.008<br>(0.025)           |    |
|                         | Marginal effects, women       |     |                        |    |                           |    |                          |     |                         |  |                           |     |                            |    |                            |    |
| D-in-D                  | 0.056<br>(0.021)              | *** | 0.035<br>(0.032)       |    | 0.041<br>(0.037)          |    | 0.041<br>(0.018)         | **  | 0.007<br>(0.031)        |  | 0.047<br>(0.017)          | *** | 0.029<br>(0.020)           |    | 0.016<br>(0.008)           | ** |
| Covariates              | yes                           |     | yes                    |    | yes                       |    | yes                      |     | yes                     |  | yes                       |     | yes                        |    | yes                        |    |
| Regional FE             | yes                           |     | yes                    |    | yes                       |    | yes                      |     | yes                     |  | yes                       |     | yes                        |    | yes                        |    |
| District FE             | yes                           |     | yes                    |    | yes                       |    | yes                      |     | yes                     |  | yes                       |     | yes                        |    | yes                        |    |
| Adjusted R <sup>2</sup> | 0.247                         |     | 0.280                  |    | 0.300                     |    | 0.263                    |     | 0.215                   |  | 0.240                     |     | 0.265                      |    | 0.085                      |    |
| No_cluster              | 3256                          |     | 2939                   |    | 3058                      |    | 3005                     |     | 2868                    |  | 2893                      |     | 3114                       |    | 2698                       |    |
| N                       | 15991                         |     | 10616                  |    | 12486                     |    | 11287                    |     | 9662                    |  | 9880                      |     | 13237                      |    | 7970                       |    |

**Notes:** All of the specifications proposed include individual observable characteristics and the fixed and time-varying regional and districts effects. The reported standard errors are clustered at the family level, whereas standard errors for the two sub-samples are estimated by the delta method. The asterisks denote the p-value significance levels \* p<0.1; \*\* p<0.05; \*\*\* p<0.01.

Table 7 - The impact of the *Follow-up* phase on labour market dimensions, marginal effects

|                         | (I)<br>Working                |    | (II)<br>Regular<br>job |     | (III)<br>Full-time<br>job |     | (IV)<br>Temporary<br>job |     | (V)<br>Permanent<br>job |    | (VI)<br>Self-<br>Employed |  | (VII)<br>Private<br>Sector |     | (VIII)<br>Public<br>Sector |  |
|-------------------------|-------------------------------|----|------------------------|-----|---------------------------|-----|--------------------------|-----|-------------------------|----|---------------------------|--|----------------------------|-----|----------------------------|--|
|                         | Marginal effects, full sample |    |                        |     |                           |     |                          |     |                         |    |                           |  |                            |     |                            |  |
| RDD                     | 0.137<br>(0.054)              | ** | 0.455<br>(0.118)       | *** | 0.421<br>(0.121)          | *** | 0.245<br>(0.062)         | *** | 0.231<br>(0.108)        | ** | -0.038<br>(0.051)         |  | 0.196<br>(0.060)           | *** | 0.018<br>(0.025)           |  |
|                         | Marginal effects, men         |    |                        |     |                           |     |                          |     |                         |    |                           |  |                            |     |                            |  |
| RDD                     | 0.199<br>(0.173)              |    | 1.280<br>(0.542)       | **  | 1.325<br>(0.488)          | *** | 0.896<br>(0.308)         | *** | 0.816<br>(0.589)        |    | -0.277<br>(0.214)         |  | 0.665<br>(0.258)           | *** | -0.090<br>(0.092)          |  |
|                         | Marginal effects, women       |    |                        |     |                           |     |                          |     |                         |    |                           |  |                            |     |                            |  |
| RDD                     | 0.118<br>(0.049)              | ** | 0.250<br>(0.092)       | *** | 0.207<br>(0.098)          | **  | 0.137<br>(0.048)         | *** | 0.149<br>(0.084)        | *  | 0.012<br>(0.041)          |  | 0.099<br>(0.049)           | **  | 0.035<br>(0.023)           |  |
| Covariates              | yes                           |    | yes                    |     | yes                       |     | yes                      |     | yes                     |    | yes                       |  | yes                        |     | yes                        |  |
| Regional FE             | yes                           |    | yes                    |     | yes                       |     | yes                      |     | yes                     |    | yes                       |  | yes                        |     | yes                        |  |
| District FE             | yes                           |    | yes                    |     | yes                       |     | yes                      |     | yes                     |    | yes                       |  | yes                        |     | yes                        |  |
| Adjusted R <sup>2</sup> | 0.248                         |    | 0.268                  |     | 0.292                     |     | 0.253                    |     | 0.211                   |    | 0.226                     |  | 0.243                      |     | 0.052                      |  |
| No_cluster              | 3311                          |    | 2982                   |     | 3107                      |     | 3050                     |     | 2912                    |    | 2982                      |  | 3187                       |     | 3187                       |  |
| N                       | 16213                         |    | 10753                  |     | 12646                     |     | 11428                    |     | 9774                    |    | 10427                     |  | 13831                      |     | 13831                      |  |

**Notes:** All of the specifications include individual observable characteristics and the fixed and time-varying regional and districts effects. The reported standard errors are clustered at the family level, whereas standard errors for the two sub-samples are estimated by the delta method. The asterisks denote the p-value significance levels \* p<0.1; \*\* p<0.05; \*\*\* p<0.01.

### *5.1. Robustness checks*

This section provides two different robustness checks, one applied to the DiD estimation (Equation 1) and an other to the RDD estimation (Equations 2 and 3). Table 6 replicates the estimation results presented in Table 4, excluding the municipalities in which the control sample is considerably larger (e.g., 20 times) than the treatment group. The table shows that when we restrict the sample to the districts with a balanced treatment and control group, the results remain unchanged and the estimated marginal effects are in line with those in Table 5. One marginal effect is no longer significant, which relates to the sub-sample of women when employment in the private sector is considered. Finally, Table 7 analyses the non-linear form of the RDD estimated in Table 5 and proposes a higher degree polynomial of the instrument variable. The table shows that all of the marginal effects remain significant, whereas the effects of the treatment on the labour market outcomes are even stronger when the male sub-sample is analysed.

## **6. Concluding Remarks**

The objective of this study was to evaluate the impact of Chile Solidario on women's empowerment, proxied by their inclusion in the labour market. Our aim was to assess whether this anti-poverty programme has reinforced existing gender inequalities or contributed to women's capabilities. construction. We evaluated the impact of CS on several dimensions of labour market outcomes. The econometric analysis used difference-in-differences and regression discontinuity design estimations based on the Chile Solidario Panel Survey for the 2004-2006 period. The main results show that the CS programme has had a positive and significant impact on labour market outcomes, particularly for the men in the beneficiary families. Moreover, the labour market outcomes for the treated population were substantially improved for those subjects who reached the basic thresholds imposed during the first phase of the Chile Solidario-Puente, and were admitted to the follow-up phase.

The implication of our empirical analysis is that the design of the policy, which combines a number of conditionalities with support for the beneficiary families, has been crucial in strengthening families' capacity to generate autonomous income and reduce extreme poverty in Chile. However, the estimates also confirm that there are broad margins of improvement from cash transfers, and social protection policies in general, from a gender equality perspective. First, targeting public services more strictly to the specific needs of women is necessary to promote gender equality. Second, considering the conditionalities, a clear gender bias emerges in the way commitments and opportunities are distributed within the family according to the CS policy design. Consequently, it would be desirable to introduce shared schemes of engagement between males and females in the cash transfers designed to recalibrate the responsibility for the achieving the thresholds.

In this regard, the Ingreso Etico Familiar (IEF) programme, established in 2012 and intended to gradually replace CS, could help to reduce the shortcomings that emerge from this evaluation. One of the most positive aspects of the IEF is the enhancement of employment services and the introduction

of an employment subsidy for women (Cecchini et al., 2012; Fultz and Francis, 2013). However, more ambitious and multi-dimensional provisions are still needed to promote women's empowerment and participation in the labour market.

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