

Tackling Social Exclusion: Evidence from Chile

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Abstract

Even though most anti-poverty programs consist mainly in the provision of cash or in-kind transfers, poverty involves disadvantage in multiple other dimensions. In 2002 Chile introduced an innovative program which involved psycho-social support through frequent home visits to very poor households, and a re-design of the local supply of social services to serve the needs of indigent families more adequately. We find program impacts on access to subsidies and training programs (especially large for those without access to subsidies before CS came to exist), but not on employment nor on housing conditions. These results indicate that even though CS was successful in approximating indigent families to the welfare network provided by the state, it was unable to produce substantive changes in their lives.

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1 Introduction

Poverty has multiple dimensions that go well beyond the lack of material resources. For example, poor families live in polluted areas or unsafe neighborhoods, they lack access to basic health and education services because they are distant or they do not know about them, they do not have skills which are valued in the labor market, or they have low aspirations for them and their children. However, most anti-poverty programs around the world address essentially only one aspect of poverty: the lack of financial resources.

In 2002, Chile implemented Chile Solidario (CS hereafter), an anti-poverty program which was exceptionally progressive by the standards of most countries, including the US and most Western European countries. The target of the program were the 5% poorest families in Chile (the indigent), which were perceived to be not only financially poor, but also alienated from most welfare services potentially available to them, and with little knowledge of which basic actions could lead them out of the situation they were in. The program tackled multiple aspects of these families lives, involving intense and direct contact with these families, and the coordination of multiple actions from multiple government agencies (as advocated, for example, by a recent report of the European Commission, 2010). In particular, participant families receive about 21 visits by the social worker with decreasing frequency within the first two years of the program, and are given priority access to many social services. In addition, the local supply of social services is adapted to better serve the needs of the poorest families, as identified by social workers. The popularity of CS has spread beyond the national boundaries of Chile, probably because of its many attractive features. Many other Latin American countries are looking at the integrated "system" as an example, and some countries have programs that mimic several aspects of CS (such as *Juntos/Unidos* in Colombia, or *Brazil Sem Miseria* in Brazil).

This paper provides results from a comprehensive evaluation of CS. The program is particularly interesting for developed and developing countries alike for two main reasons. First, it is an incredibly comprehensive and ambitious program, even for the standards of similar programs in rich nations. Its focus of a psychosocial intervention within a welfare program is unusual in developed and developing countries. Restoring the confidence and self-concept/image of the households in extreme poverty, helping them with their organizational skills and activating their hope and orientation towards the future are thought to be instrumental to poverty alleviation (Bertrand et al 2006). The psychosocial capital of the household is believed to be a key basic capability that allows people to participate in social and economic activities. Second, it attempts to change the lives of those families who are most hard to reach, by connecting them a whole array of social services and social assistance program in the short term, and removing structural bottlenecks by strengthening the human capital of adults and expanding their employment opportunities and their income generation capacity. On one end, the intensity of the program suggests that it could produce important change in the lives of the poor. On the other end the target population is so

difficult to work with that most programs targeting the same population would probably produce very limited results.

The data for our evaluation comes from the administrative records used to identify families to be target by the program. These administrative records are effectively a (unbalanced) panel which cover 10 years of data, starting two years prior to the introduction of CS, and which allow us to follow families for up to two to six years after the start of the program. The advantage of these records over alternative data sources (such as, for example, the Chilean Household Survey) is that they include all families ever receiving services from the state, including CS. The disadvantage is that they provide a fairly limited set of outcomes which we can study.

In order to evaluate the program we use a regression discontinuity design. Families are deemed eligible to participate in CS if an index of unsatisfied needs is below a given threshold, which varies across municipalities in Chile, and across years. We identify the impacts of the program by comparing, within municipality and year of eligibility, the outcomes of families which are just eligible with the outcomes of those who are just ineligible for the program. However, around each threshold the take-up rate of CS is well below 100%. This is mainly due to supply constraints, which make it impossible to serve all eligible families (more than 95% of all eligible families which are invited to participate in CS accept the invitation). There is also a small fraction of ineligible families, that seems to be able to get access to the program. We estimate that the average impact of eligibility for CS on participation at any point in time is about 21% (around the discontinuity). We then produce intention to treat (ITT) and instrumental variables estimates of the impact of CS participation, using the eligibility to CS as an instrument for participation in the program.

We examine the effects of CS on three sets of outcomes. First, we study the impact of CS on the take-up of subsidies, and participation in training and employment programs. Second, we analyze its impacts on the families' ability to generate income, by studying labor force participation and employment of heads of household and their spouses. Third, we study the impacts of CS on families' housing conditions.

We find that CS leads to an increase in the take-up of existing welfare transfers both in the short and the long run. This increase is especially large for those families who were not taking up these subsidies (to which they were entitled) before the existence of CS. We find little or no impacts of the program on labor force participation and housing conditions of participant families.

In spite of the intensity of the home visits, the effort to coordinate and adapt the supply of social services to local needs, and the high apparent motivation of those working in this system, the program achieved only modest gains in the lives of these families. Nevertheless, it was relatively successful in one very important dimension: the approximation of indigent families to the welfare network provided by the state. The lack of impacts on labor supply and income could reflect the fact that on one end, the target population is very unskilled, and on the other end, it has low aspirations and invests little in labor market activities. It is a very hard population to work with and achieve transformative changes in behaviors and outcomes.

The paper proceeds as follows. In the next section we describe the program. In Section 3 we explain the empirical strategy; Section 4 describes the data. In Section 5 we present and discuss our results. Section 6 concludes.

2 Chile Solidario

The proportion of individuals living in extreme poverty in Chile decreased from 17% in 1987 to 5.7% in 1996. This was associated to a context of rapid economic growth and job creation. However, the proportion of indigents stabilized between 1996 and 2000. This meant that, in spite of a broad and diversified offer of services and benefits for the poor, there was a group of individuals that remained in the margins of society. It was in this context that CS was created in 2002.

CS was designed by the Chilean Government to reach the 225,000 families who lived in extreme poverty in 2002, over a period of four years. However, the system expanded beyond the initial coverage, and by the end of 2009, about 390,000 families had been served by the program.¹ Since the mechanism of targeting and the structure of CS changed substantially in 2006, our study focuses primarily on the the first five cohorts of entrants (2002-2006).

CS explicitly recognizes that the provision of financial resources is not a sufficient condition for alleviating extreme poverty, because families in extreme poverty lack fundamental organizational skills. One of the most important skills concerns the inability to use the available welfare services. This lack of take-up of services could be purely due to lack of information, and it reflects an inability to understand and use the network of social services. Thus, CS intervenes simultaneously on the demand and the supply side of public services: on the demand side the program includes psycho-social support to its participants, and on the supply side it promotes the coordination of social services for a more effective targeting of the neediest families.

The program has two main components: (1) home visits and (2) guaranteed access to subsidies and other services in the community.

Home visits The first component of the intervention involves "working directly with the households". In order to do so, participating households undergo a period of psycho-social support during which they are visited regularly by a social worker. The home visiting component of CS lasts for 24 months, and this time limit is set in advance to avoid that the households become dependent of the social worker and of their assistance. It consists of a total of 21 home visits which last for 40-45 minutes, with decreasing intensity over time. The visits are done by social workers (also called family support workers, or *apoyos familiares*), which act as intermediaries between

¹The expansion is due to the consolidation of an institutional network to support social integration framed by the approval in September of 2004 of the law that regulates the structure of the Social Protection System (from which Chile Solidario is part) and the establishment in 2007 of a new mechanism to target needy families (Ficha de Proteccion Social - FPS).

families and the network of public and private services available to them in their community of residence. Each social worker is responsible by 50 families on average (SD =25).² Social workers are grouped in "Family Intervention Units" which are managed by a municipality official, which are then supervised at the provincial and regional levels.

The home visiting period has 2 distinct phases: the initial 6-8 months is a period of intensive work between families and counselor and the final 16-18 months are a follow-up period. All sessions in the initial phase are structured with a sequence of meetings, with the first session being used as a diagnostic tool to assess the needs, potentials and expectations of the family. After this diagnostics, families and social workers agree on a contract, which details concrete actions that the families commit to activate to expand their opportunities and their quality of life (see Caas, 2006).³ In exchange, the government commits to helping the family facilitating access to its network of social services. During these home visits the social worker and the families target the fulfillment of 53 minimum conditions (presented in table A), which operationalize the multidimensional aspect of deprivation. They are organized in seven areas of actions: identification, health, education, family dynamics, housing, employment and income. The minimum conditions are not an end by themselves, but instruments to help organize the joint work during the psycho-social support phase: families commit to engage in a set of behaviors that would lead them out of poverty, and the State (represented by the social worker) commits to providing them with the means to do so.

Participating families also receive a monthly cash transfer (called *Bono de Proteccion Familiar*) during the first 24 months. This amount of the transfer is decreasing for the first 24 months.⁴ After 24 months, families receive the *Bono de Engreso* (exit grant) for 3 years, which is equivalent to a monthly family allowance (SUF), or about \$8 a month. The transfer is uniform across families, and its goal is to compensate them for costs incurred in the process of applying for benefits and social services (80% of the receivers of the cash transfer component are women, regardless of their headship status). The amount of the CS transfer is lower than that of other well known cash transfers in Latin America. For example, depending on the family structure, the transfer from Mexican Oportunidades may easily exceed \$150 per month, and the Bolsa Familia monthly transfer in Brazil varies between \$40-\$60 per family.

²There is substantial variability in the average caseload of social worker across Chile. Take the year of 2005. In the regions of Aysen and Magallanes the average load is 16 (0.8) and 14 (1.1) families, respectively. On the other extreme, there the following regions: Tarapaca with 53 (7.3), Coquimbo with 58 (1.5), Bio-Bio with 60 (50.2) and Araucania with 61 (27.3). The numbers in parenthesis are the number of inhabitants/ km^2 in 2002, to have a better understanding of how caseload is related with the sparsity of the population.

³The first two months include weekly visits; followed by bi-monthly visits in the third and fourth months; and the final two months consist of monthly contacts, adding two more sessions.

⁴The amount of the Bono is as follows: \$21 per month for the first 6 months, \$16 per month for the second 6 months of the program, \$11 per month for the third 6 months, and finally \$8 for the last 6 months, an amount equivalent to the family allowance (SUF). These amounts are for 2006 but they are adjusted yearly for inflation. Transfers begin at about 15% of the average income of eligible families in the first six months after enrolment in CS, and gradually decline to the amount equivalent to the SUF transfer, or about 10% of income by the end of the initial two years period.

Guaranteed access to monetary subsidies and preferential access to social services

The short-term income support in the case of Chile Solidario besides the "bono" takes the form of accessing existing monetary subsidies to which participating households were already eligible to, but for which they had not activated the demand. In the diagnostic of the program, households in extreme poverty, were not taking up many of the programs targeted to them. The constraints to take-up of welfare programs well documented in the US literature (transaction costs associated with the application process, lack of information about eligibility and program rules, and stigma as in Currie, 2004) are likely to be compounded for indigent households. The social worker conveys information and elicits this unexpressed demand for these guaranteed subsidies. These include a monthly allowance for poor families with children less than 18 years of age (SUF - *Subsidio Unico Familiar*); the pension for the elderly poor, for the disabled, and for individuals with mental disabilities (PISIS - *Pension Asistencial*); and the water subsidy (SAP - *Subsidio de Agua Potable*).⁵

Chile Solidario, in the medium term, aims at removing structural bottlenecks by strengthening the assets (housing), the human capital of adults and expanding their employment opportunities and productive activities. Participating families have preferential access to training and employment programs, which are provided by both public and private entities. These programs aim at improving of academic and occupational competencies of individuals; they provide help in drug prevention and rehabilitation; they include preferential subsidies given for employers hiring the unemployed heads of CS households; and they also include Social Security programs for all unemployed heads of CS households. A detailed description of each of these programs can be found in table 11 and in Appendix A. The reorganization of the supply side worked at different levels: municipalities worked with the existing network of supply of existing social services to target the needs of the participating households. Over time, the indicators of unsatisfied minimum conditions by municipalities helped reorient the geographic assignment of programs to match the unsatisfied demand of the CS target population. Finally, new programs were created for those dimensions where the existing supply was not sufficient or not existent.⁶

Program administrators expect the following after each stage of the program (see Raczynski, 2008). First, after the two years of home visits it is expected that 70% of families have met the 53 minimum conditions, which include access to social benefits and a per capita income above

⁵In practice, at least in the case of SUF (and until 2007), some CS households could remain in waitlists in areas where the demand of SUF greatly exceeded its supply.

⁶Two specific examples of creation and/or reorientation of targeting of programs are given here. First, the main provider of employment programs, SENCE (Servicio Nacional de Capacitacion y Empleo - National Service Training and Employment), not only created vacancies for individuals in Chile Solidario, but also created special incentives to employ CS youth aged 18-24, which included bonuses to hire workers that amount to 50% (instead of the regular 40%) of the minimum monthly wage for a minimum period of 5 months and a maximum of 12 months (maximum is 4, in regular component). In addition, the job training delivers CLP10,000 (USD20) per beneficiary than in regular component. Second, another provider of several employment programs (FOSIS) launched PAME (Programa Apoyo al Microemprendimiento - Microenterprise Assistance Program) in 2006 to promote self-employment among CS families.

the poverty line. Second, it is expected that families who exited the intensive phase successfully maintain compliance with the 53 minimum conditions. Finally, after 5 years in the system it is expected that these families keep achieving the 53 minimum conditions. In particular, it is expected that they access those subsidies, benefits and social programs to which they are entitled to, and that they maintain an income above the poverty line.

2.1 Selection of families, coverage and cost

The targeting instrument used to select families was the Ficha CAS between 2002 and 2006, and the FPS from 2007 onwards. The Ficha CAS was introduced in the early 1980s and it assesses households' socioeconomic status, based on the measurement of thirteen variables encompassing housing, assets (durable goods and income), occupation and education. The CAS score is a weighted average of these variables (see Section 4).

Families are selected to participate in CS within each municipality according to their CAS score. The percentage of the population in extreme poverty in each municipality, call that P_c , is estimated from the 2000 CASEN (the Chilean household survey). Then, the official cutoff score of CAS for each municipality is the value of CAS such that the proportion of families below that CAS score within the municipality is exactly equal to P_c .⁷ For those (very few) municipalities without representation in the CASEN, a regional cutoff was used.

In order to determine eligibility, a family needs to have a CAS score. In the initial stages of CS there was an effort to register indigent families with the CAS system, when a CAS score was not available, but the new registration is believed to have occurred only in a few isolated instances (see Larraaga and Contreras, 2010). Families were then ordered according to their CAS score within their municipality of residence, and then invited to participate in the program. Due to capacity constraints not all eligible families were invited in the first year of operation, and the program was rolled out between 2002 and 2005. The initial plan was that 25% of all eligible families were to be enrolled in CS in each year, starting with the lowest CAS values, and subsequently moving up the CAS distribution. Once invited, a family could reject or accept to participate. In practice, families would accept the invitation almost always.

Between May 2002 and August 2006, out of the total of families invited to the program, 2.8% of families declined participation, and 1.95% were elected for participation but declared unreachable by the CS services. Thus, out of all invited families only 4.7% effectively did not participate (see table 1).

The direct cost of psychosocial support (including the home visits and the training of social worker, and supervision) amounts on average to USD130 per family per year. It is not easy to estimate the total cost of CS, since there is not an explicit transfer to public agencies that is

⁷For example, if the CASEN2000 showed that 5% households were in extreme poverty in a particular municipality, then the cutoff score for CS corresponded to the 5th percentile of the distribution of CAS scores within the municipality.

supposed to specifically cover the cost of social programs for CS families. The Ministry of Social Development (formerly Ministry of Planning, which is the responsible by the implementation of CS) establishes agreements with the different institutions that administer the training and labor market programs in which CS individuals may participate. In about half of these cases there is a financial contribution to the institution that provides the services and in other cases there is no additional transfer of resources (see Larraaga et al., 2009).⁸ As the benefits of the intervention span a large array of intermediate and final outcomes, as it is in the case of many conditional cash transfers in the region, a full cost-benefit analysis is challenging and is beyond the scope of our paper.

3 Empirical Strategy

Our goal is to estimate β from the following equation:

$$Y_i = \alpha + \beta CS_i + f(X_i) + \varepsilon_i \tag{1}$$

where Y_i is the outcome of interest for family i , CS_i is a dummy variable indicating whether the family participated in Chile Solidario, X_i is a vector of controls (entering through function $f(X)$), and ε_i is an unobservable. β is the impact of program on Y which, in principle, can vary across individuals.

Even if β does not vary across individuals, the estimation of this equation by ordinary least squares (OLS) is problematic. Families who participate in CS are systematically different from those who do not in terms of their observable and unobservable characteristics. On one end, participants in CS are indigent, and therefore they are on average much poorer than those who do not participate in CS. On the other end, not all indigent families participate in CS, and those who participate may be systematically different from those who do not. For example, families who live in more remote areas might be harder to visit making them less likely to be invited to participate in CS. It could also happen that, among the eligible, those who participate are the ones more eager to improve their situation. In order to address these problems we use a regression discontinuity design, exploring the fact that the eligibility rules for the program imply that the probability that a household participates in CS is a discontinuous function of its CAS score.

A family is eligible for CS if its CAS score falls below a given cutoff, which is specific to time

⁸Raczynski (2008) presents the budget allocated by the Ministry of Planning to the CS for each year between 2003 and 2006, which shows that an estimated annual expenditure per family in 2006 of about USD\$500. The calculation of this figure excludes families which declined participation in program, that is, includes 228,651 participating in August 2006, and excludes 6493 non participant families. The figure of 500USD includes families in the intensive or in follow-up phases, in particular by August 2006 there were five cohorts of families in the program, and only two of them in the initial stage which is the most costly (see table 2). This amount includes the cost of visits of social workers, the Bono CS and the cost of strengthening the offer of public programs, but it excludes regular cash grants to which participants in CS have guaranteed access.

and location (we explain this below):

$$E_{imt} = 1[CAS_{imt} \leq \overline{CAS}_{mt}]$$

where E_{imt} is an indicator which takes value 1 if family i living in municipality m in year t is eligible for CS, CAS_{imt} is family i 's CAS score, and \overline{CAS}_{mt} is the eligibility cutoff in municipality m at time t . In each municipality and time period, we compare outcomes of families just below (just eligible) and just above (just ineligible) their respective cutoffs (see, for example, Hahn et al., 2001; Imbens and Lemieux, 2008; Lee and Lemieux, 2009).

A CAS-cutoff determining which families are eligible to the program is computed based on the income distribution in the municipality in 2000, following the algorithm described in section 2. We call this the *official* cutoff. However, due to funding and capacity constraints, CS was implemented gradually, targeting the poorest families first (who had the lowest CAS scores within each municipality), and then moving up in the CAS distribution. Thus, the first families to be served had a CAS score substantially lower than *official* municipality cutoffs, which were not binding in the first years of the program.

In practice, the way the program was rolled out between 2002 and 2006 was the following. Once the annual funding for CS was known for each municipality, the municipality would invite the corresponding number of beneficiaries in order of their CAS score. The highest CAS scores for each cohort/year of entry would determine their own municipality specific cutoff scores, which were lower than the official cutoffs. We call these the *effective* cutoffs (which are cohort and municipality specific). Over the years, the *effective* cutoffs converged to the *official* cutoffs as new cohorts of families with higher CAS scores began enrolling in the program over the years.

Unfortunately, there is no administrative data specifying the *effective* cutoffs, which means that we must estimate them for each municipality and year. We do so using a simple procedure proposed by Chay et al. (2005), where the cutoff for each municipality-year is the score that maximizes the fit of a regression of an indicator of participation in CS on an indicator of eligibility as defined by such score (see Appendix D for details).⁹ Figure 2 plots the distribution of estimated CS cutoffs across municipalities, for each year between 2002 and 2005. The distribution gradually shifted to the right over time, in line with the gradual roll out of the program, and we show in section 5 that the effective cutoffs are much stronger determinants of participation than the official cutoffs.

Eligibility and Participation Many eligible families never enrol in CS. Table A.4 in Appendix A presents some of the main correlates of participation in CS, using only the sample of families

⁹Figure D.1 in Appendix D plots the average participation by ventiles of the distribution of CAS of each municipality in 2002. Although this figure includes only 25 municipalities in Chile the distributions presented are representative of what happened in the rest of the country. From this figure it is evident that the participation in CS is concentrated in the first two ventiles of the CAS, with a sharp decline in participation thereafter.

who were eligible according to the official cutoff when they were first observed in the Ficha CAS (standard errors are clustered at the municipality level).

Not only there is less than 100% enrolment of eligible families in CS according to the official cutoff. As for the effective cutoffs which define eligibility for each cohort, eligibility criteria are not always strictly enforced within municipalities and some ineligible families are able to benefit from CS. This means that the mapping from eligibility to participation in CS is not perfect. We address this problem by presenting instrumental variables estimates of the program, computed as described in expression (2) below (for very small ε):

$$\frac{\lim_{\varepsilon \rightarrow 0^+} \Pr(Y_i = 1 | CAS_{imt} = \overline{CAS}_{mt} - \varepsilon) - \lim_{\varepsilon \rightarrow 0^+} \Pr(Y_i = 1 | CAS_{imt} = \overline{CAS}_{mt} + \varepsilon)}{\lim_{\varepsilon \rightarrow 0^+} \Pr(CS_{imt} = 1 | CAS_{imt} = \overline{CAS}_{mt} - \varepsilon) - \lim_{\varepsilon \rightarrow 0^+} \Pr(CS_{imt} = 1 | CAS_{imt} = \overline{CAS}_{mt} + \varepsilon)}. \quad (2)$$

Families just above and just below the cutoff differ in eligibility to CS, but they are likely to be similar in all other (observable and unobservable) dimensions. All our comparisons of families in each side of the cutoff are done within municipalities and time period, since the cutoffs vary by year across municipalities, in line with the gradual roll-out of the program over time. Therefore, all our models include municipality-year effects, which absorb all municipality-year shocks which affects the outcomes independently of CS (for example, shocks in the local supply of social services, or shocks to the local labor market).

Once a family enrolls in CS, it remains in the program for 5 years, even if its CAS score rises above the eligibility threshold during this period. This means that, at each period t , eligibility only determines participation for those not yet enrolled in CS. Therefore, for each year at which we measure eligibility we remove from the cohort of potential program entrants all families who are already enrolled in CS (because they are not affected by the eligibility cutoff in that year). This means that our estimates are valid for a selected sample which is changing over time (this will be an important issue if program impacts vary across families). Notice also that the fact that the cutoffs vary across time also means that the families for whom estimates are valid is potentially varying over time. We show below that the sample of families shifted into treatment at the cutoff is in fact similar across years (in Appendix F we describe what is the parameter identified under this setup).

In regression discontinuity designs it is standard practice to restrict the sample to those families whose CAS is near the cutoff for the program, since points away from the discontinuity should have no weight in the estimation of program impacts (see e.g., Black, Galdo, and Smith, 2005, Lee and Lemieux, 2010). Therefore, we focus on the sample of families whose CAS was at most 20 points apart of their municipality's cutoff (we also present estimates using alternative intervals for CAS).

Finally, standard application of regression discontinuity would compare boundary points of nonparametric regressions of the outcome Y_i on CAS, estimated on each side of the discontinuity

point. Since we have several discontinuity points, one alternative (which we implement) is to normalize all of them to zero, and instead of the absolute value of CAS consider instead $CAS_{im} - \overline{CAS}_m$, which is the difference between a family’s CAS and the municipality cutoff in the relevant year.

We start by estimating the following model:

$$Y_{imk} = \phi + \gamma E_{im} + f(CAS_{im} - \overline{CAS}_m) + u_{imk} \quad (3)$$

where E_{im} is an indicator of eligibility for the program and u_{imk} is an idiosyncratic shock. We control for a non-linear function of CAS (normalized by the threshold). In practice, we use a cubic in $(CAS_{im} - \overline{CAS}_m)$, but we also present a robustness analysis using other parametric functions of distance to cutoff and nonparametric estimates.

Then we compute program impacts using a standard two-stage least squares procedure. All coefficients are computed using a linear probability model in the first stage, where we regress a dummy variable for participation in CS on the eligibility dummy, controlling for $f(CAS_{im})$. We study the effects of CS two to six years after the start of home visits ($Y_{imk}, k = 2, 4, 6$). All models include standard errors clustered at the municipality level (measured at the time of eligibility).

Specification checks We perform a battery of checks to assess the validity of our empirical strategy. We start by performing standard balancing checks, by analyzing whether there is any differences between families just above and below the cutoffs in terms of variables measured in 2000 as outcome (or 2001, if a family does not have a valid Ficha CAS in 2000). Then we show that our results are not driven by the choice of the functional form for $f(CAS_{im} - \overline{CAS}_m)$, nor they are sensitive to trimming the sample around cutoff. We have similar results regardless of whether we control for interactive municipality-year effects, or whether we include only additive municipality and year effects, which suggests that municipality specific shocks are not likely to be correlated with how CS is rolled out across years. Estimates are also similar if we include neighborhood fixed effects. In our main set of estimates we restrict the sample to those families who were present in the CAS system prior to the introduction of CS, but we show that the results are robust to relaxing this restriction, which substantially increases the sample size and suggests that there are no differences around the cutoff for families who request CAS after 2002.

Since the supply component is crucial to the CS system and that this was only enacted after 2004, thus fully affecting those families starting the program in 2004, we examine whether the effects of CS vary by cohort.

Most of these robustness checks are included in Appendix B, but we leave the most important ones in the main text, as stated below.

Dealing with dynamics and repeated observations Equation (1) is static, while our data is dynamic. Therefore, we need to adapt the standard RD procedure to our setting, which is similar to that of Cellini, Ferreira and Rothstein (2010), where we have a panel in which individuals who do not receive CS in a given year may begin receiving it in subsequent years. Therefore, we can follow a strategy similar to theirs.

Before that, it is important to notice that all families who were eligible for CS at a point in time actually took it up, during the expansion of the program we would probably only be able to identify very short run program impacts. Because the cutoffs are increasing over time during this period, families who are just ineligible at time t will become eligible at time $t + 1$. However, we are very far from this case. During (and after) the expansion of the program eligibility is an imperfect predictor of participation in CS, which means that at each point in time it will be possible to find individuals who have enrolled in CS for different periods, as well as exogenous variation affecting how long each of them has been enrolled in CS. Of course, for this part of the paper it will be important to assume that the impacts of CS do not vary across individuals, otherwise the interpretation of our estimates will be substantially more complex.

That said, we can go back to a version of the procedure outlined in Cellini, Ferreira and Rothstein (2010). Let β^k be the impact on some outcome Y of having first enrolled in CS k years ago. We can estimate β^1 from:

$$Y_{2003im} = \alpha + \beta^1 CS_{2002im} + f(CAS_{2002im} - \overline{CAS}_{2002m}) + \varepsilon_{2003im}$$

where we instrument CS_{2002im} with E_{2002im} .

Similarly, we could estimate

$$Y_{2004im} = \alpha + \theta^2 CS_{2002im} + f(CAS_{2002im} - \overline{CAS}_{2002m}) + \varepsilon_{2004im} \quad (4)$$

again instrumenting CS_{2002im} with E_{2002im} , but in this case $\theta^2 \neq \beta^2$, because some individuals for whom $CS_{2002im} = 0$ may have $CS_{2003im} = 1$. In other words, θ^2 measures a weighted of 2 year and 1 year impacts, where the weights depend on $\pi^{1,2} = P(CS_{2003im} = 1 | CS_{2002im} = 0)$ at the margin of eligibility. Then: $\beta^2 = \theta^2 + \beta^1 \pi^{1,2}$.

To see this take the case where CS is randomly assigned in the population. Suppose there are three time periods: $t = 1, 2, 3$. Then:

$$\begin{aligned} Y_1 &= \alpha + \beta^1 CS_1 + \varepsilon_1 \\ Y_2 &= \alpha + \beta^1 CS_1 + \beta^2 CS_2 + \varepsilon_2 \\ Y_3 &= \alpha + \beta^1 CS_1 + \beta^2 CS_2 + \beta^3 CS_3 + \varepsilon_3. \end{aligned} \quad (5)$$

Notice that in our setting, $CS_1 = 1$ implies that $CS_2 = 0$ in the second equation, and that

$CS_2 = 0$ and $CS_3 = 0$ in the third equation. This is because CS is an absorbing state. The model we estimate is:

$$\begin{aligned} Y_1 &= \alpha' + \theta^1 CS_1 + \varepsilon'_1 \\ Y_2 &= \alpha' + \theta^2 CS_2 + \varepsilon'_2 \\ Y_3 &= \alpha' + \theta^3 CS_3 + \varepsilon'_3. \end{aligned}$$

Then, from the omitted variables expressions we know that:

$$\begin{aligned} p \lim \hat{\theta}^1 &= \beta^1 \\ p \lim \hat{\theta}^2 &= \beta^2 + \beta^1 \frac{COV(CS_2, CS_1)}{V(CS_2)} \\ p \lim \hat{\theta}^3 &= \beta^3 + \beta^2 \frac{COV(CS_3, CS_2)}{V(CS_3)} + \beta^2 \frac{COV(CS_3, CS_1)}{V(CS_3)}. \end{aligned}$$

Finally:

$$\begin{aligned} \frac{COV(CS_2, CS_1)}{V(CS_2)} &= \frac{E(CS_2 CS_1) - E(CS_2) E(CS_1)}{E(CS_2) [1 - E(CS_2)]} \\ &= -\frac{E(CS_1)}{1 - E(CS_2)} \\ &= \Pr(CS_1 = 1 | CS_2 = 0) = \pi^{1,2} \end{aligned}$$

because $CS_2 * CS_1 = 0$ (at each point in time no family can possibly have been enrolled simultaneously for 1 and 2 periods). Similarly:

$$\begin{aligned} \frac{COV(CS_3, CS_2)}{V(CS_3)} &= \Pr(CS_2 = 1 | CS_3 = 0) = \pi^{2,3} \\ \frac{COV(CS_3, CS_1)}{V(CS_3)} &= \Pr(CS_1 = 1 | CS_3 = 0) = \pi^{1,3}. \end{aligned}$$

We can extend this reasoning so that $\beta^k = \theta^k + \sum_{s=1}^{k-1} \beta^s \pi^{s,k}$. And going back to equation (4), notice that one could use outcomes measured in 2004 to get another estimate of $\theta^1 = \beta^1$ (assuming that β^1 is stable across cohorts), by estimating:

$$Y_{2004im} = \alpha + \theta^1 CS_{2003im} + f(CAS_{2003im} - \overline{CAS}_{2003m}) + \varepsilon_{2004im} \quad (6)$$

When estimating this equation we omit from the sample all individuals for whom $CS_{2002im} = 1$ since they do not contribute any information to this estimation. We could proceed in a similar way to estimate various measures of θ^k , which should be indexed by the year in which we measure eligibility ($t - k$): $\theta^{k,t-k}$.

In this version of the paper we estimate θ^k assuming that $\theta^{k,t-k}$ does not depend on $t - k$ (i.e., β^k does not depend on year or cohort of entry into CS nor do the π terms). This simplifies the procedure and results in precise estimates of the θ^k terms. In future versions we will relax these assumptions.

Cellini, Ferreira and Rothstein (2010) also suggest a one step procedure to estimate β^k which is much more efficient and uses restrictions across different θ estimates. Given that we have panel data, why wouldn't we directly estimate the models of equations (5)? In particular, one could attempt to estimate:

$$Y_{tim} = \alpha + \sum_{k=1}^{t-2002} D_{tk} [\beta^k CS_{t-k,im} + f_{t-km} (CAS_{t-k,im} - \overline{CAS}_{t-k,m})] + \varepsilon_{tim}$$

where $CS_{t-k,im}$ is instrumented with $E_{t-k,im}$ and $D_{tk} = 1$ if $CS_{t-k-1} = 0$.

4 Data

Our analysis is largely based on two administrative datasets, the *CAS Consolidado* (for 2000-2006) and *Ficha de Proteccion Social* (FPS) (for 2007-2009). These data cover 1/3 and 2/3 of the Chilean population, respectively. These records include all families (and family members) applying to any publicly provided social program in Chile. We can link individuals across years through their national ID number (the RUT-Rol nico Tributario), so our panel spans data from March 1998 to January 2010, covering over 14 million individuals and nearly 60 million of observations (further details about the dataset are discussed in Appendix G).

It is possible to merge these two administrative datasets (i) with the register of families participating in Chile Solidario since its inception until May 2009, (ii) with the register of all individuals participating in social promotion and training programs offered by FOSIS¹⁰ between 2004 and 2007, and (iii) and with the register of participants in labor market programs offered exclusively to CS families between 2004 and 2007 (these programs are described in table A).

The government of Chile has been using the ficha CAS as a targeting instrument since 1979. This is a two page form that households must fill if they wish to apply for benefits. The form provides detailed information on housing conditions of the dwelling unit (e.g., material used for the construction of the housing unit, number and type of rooms, access to water, latrine and sanitary services, access to electricity, etc.); and on individual members of the dwelling unit (their occupation, educational level, date of birth, and income). Additional information is provided on assets held by the household (housing status, television, water heating, and refrigerator).¹¹ The

¹⁰FOSIS - *Fondo de Inversión Social* - is a Chilean governmental agency that funds programs for individuals, families and organizations to overcome poverty.

¹¹Table G.1 in Appendix G presents the relative weight of all 13 variables entering the CAS score and their exact definition.

information provided in this form is used to construct a score (ranging from 380 to 770 points). Households with a CAS score below 500 are considered indigents, and those with a score between 500 and 540 are considered poor.

This score is used to determine eligibility not only for income transfers (pension assistance for old age - PASIS - now replaced by a basic social pension, and family allowance, SUF - Subsidio nico Familiar), but also for water subsidies (SAP - Subsidio de Agua Potable), access to social housing, and childcare centers. At the local level, municipalities also use the CAS score for targeting their own programs and safety nets. Every year, a third of all Chilean households fill a CAS form.

Application of the survey Families are responsible for requesting a Ficha CAS/FPS if they intend to apply for a welfare benefit, but as mentioned in section 2, exceptions may happen if a family is considered as a potential target for welfare services by local social services, in which case a survey is applied. Therefore, one concern of our paper is the possible use of a selected set of families among the poor, including more motivated families that expect to benefit the most by using the welfare system. However, according to calculations from the 1998 household survey (CASEN), about 83.5% of the poor population had CAS and 91.5% of the households in the bottom decile of the simulated CAS distribution report to have a valid CAS (see Larraaga, 2005).¹² A family may request to be surveyed if they intend to apply for a benefit. It is also possible that the local authority takes the initiative to survey a family to learn about its vulnerability. The municipality is obligated by law to interview all families who submit the request to be surveyed. Whenever there is a change of address, an individual needs to contact the new municipality of residence and request a score update. Since all the information is centrally managed, it is difficult to game the system by obtaining scores in more than one municipality, and using the most favorable one.

Interviews are conducted by individuals hired by municipalities especially for this purpose.¹³ They should be conducted in the home of each respondent, and all answers should be given by the head of the family or his/her partner. Only in special cases may other family members answer to the survey questions, once they are authorized by the head of household. The interviewer should ask for official documents when recording information about individuals' identification and income: identity card, marriage certificate, pay-slips and other income (but it is unclear how rigorously this is applied). Once the information is processed, the municipalities inform the managers of social programs about the CAS score of applicants.¹⁴

¹²Official records from MIDEPLAN show that in 2000 the largest coverage was for the regions of Antofagasta, Biobo, Araucana, Los Lagos and Aysn, with a coverage between 44 and 61%, and the lowest coverage corresponds to the regions of Magallanes (the extreme south of the country) and Metropolitana (the capital, which the country's richest region), where 20-30% of population had been survey (see Mideplan, 2000).

¹³Interviewers must be over 18 years and with secondary education. Persons hired must be submitted to a spelling test, calligraphy and must be familiar with an interviewer's manual.

¹⁴The Ficha CAS is relatively cheap to administrate costing about US\$8.65 per household and this cost is borne by the municipalities. About 30 percent of Chilean households undergo interviews, which is reasonable given that the target group for the subsidy programs is the poorest 20 percent. In 1996, administrative costs represented a mere 1.2 percent of the benefits distributed using the CAS system (see Clert and Wodon, 2002).

A verification of the quality of the data can take place in three separate ways: (1) a simple check of whether the interview was applied to a family, (2) a review of surveys commissioned by a designated reviewer and (3) a required re-interview of no less than 20% of the questionnaires without any apparent problems (i.e., without omissions, inconsistencies, values out of possible ranges or incorrectly assigned). Although the standard review process was described by the Ministry of Planning and should be implemented by each municipality, there are no records of how effectively this control is implemented (Larraaga, 2005).¹⁵The CAS (2000-2006) score is valid for 2 years (for example, the 2004 wave of CAS contains data on families who (re-)enrolled between January 2003 and December 2004). By design, in each year only half of the families registered in CAS have their information updated.

The FPS In 2007 the Ficha CAS was updated to a more sophisticated instrument, the FPS. Given that the introduction of the new targeting mechanism was associated with new eligibility rules to CS and a reform in the system, in this paper we do not focus on the effects for families that entered in CS in 2007 or after (for whom we have much less data). However, we use the new register to construct an extended set of outcomes. Relatively to the CAS, the FPS is a more complete instrument, collecting detailed information which intends to capture the vulnerability of families to income shocks. Therefore, it includes much more detailed information than the CAS on the labor market situation of each family member¹⁶, verifiable income sources¹⁷, and health and education.¹⁸ Information about appliances, such as refrigerators or TV, are not included in the data. The information in FPS is administratively updated every month, using cross-checks with other administrative records. However, the full reinterview of the FPS is planned by-annually, as in the case of the CAS. We obtained information taken in 3 dates: August 2007, December 2008

¹⁵The variables are divided into two types according to the method of verification. Variables related to the durability of housing and durable goods are directly observable and verifiable (e.g., floor, walls, ceiling, water heater, refrigerator, water access, shower and sewage). Together these variables accounted for 32.1% of CAS index. Then, there are some variables that require external verification (e.g., education of the head, occupation of the head or spouse, site ownership, income and overcrowding).

¹⁶Regarding labor market information, in the FPS it is possible to distinguish whether an individual is out of the labor force, employed or unemployed, duration of unemployment, inscription on OMIL (Oficinas Municipales de Intermediacin Laboral - unemployment office), occupational category, economic sector of activity, tenure and type of contract, affiliation in the pension system, reason of inactivity, stability current employment, hours worked and approved training courses.

¹⁷This module collects information regarding the labor income, pensions and retirement funds, and any other income received by the family, such as leases, unemployment insurance, transfers from third parties, value of auto-consumption, state subsidies and pension, family allowances.

¹⁸The FPS includes the following information about health of family members: health check-ups of children, elderly and pregnant women updated, presence of individuals in family with psychiatric or physical disabilities and their certification by the health authorities, the level of dependence generated by these difficulties, drug and alcohol use, and access to an emergency service. Regarding education the data includes information about school attendance of children and adolescents in family, the reason of non-attendance if that is the case and the highest grade completed.

and December 2009).¹⁹

4.1 Descriptive

Table 3 includes some descriptive statistics of our sample. In particular, we present the mean and standard deviation for each outcome and we include two sets of columns: one for the whole sample and other for families that were ever eligible to CS according to the official definition. There is one observation per family in the table and we present the statistics for characteristics of families for the first time they are observed in the data (we only used families whose first observation in data was between 2000 and 2006 - the relevant period of evaluation). The information is divided into five areas: (1) use of subsidies, (2) housing characteristics, (3) variables related to CS, such as share of participants, CAS score and eligibility status, (4) employment and income related variables, and (5) demographic characteristics.²⁰

As expected, eligible families are more likely to be disadvantaged along most dimensions. They have on average a lower CAS score and they are more likely to be receiving subsidies, to have irregular occupation of the house where they live. Their houses present worse environmental protection against the elements (ie, they are less likely to have adequate ceiling and walls), they have a higher density of occupation as measured by the ratio of persons in house by the number of rooms, less likely to have water provided by the public network, less likely to have a fridge or to have water heating. Eligible families also present a different employment profile than the general population: heads are more likely not to be working (inactive or unemployed), and, when working, more likely to be self-employed than the average (40% among eligible vs. 57%; the alternative to self-employment is wage work). The spouses are also more likely to be unemployed or inactive (85% among eligible vs. 76%). Finally, eligible families are on average younger, with children and with fewer years of completed education by the head (5 vs. 7.91). Among the sample of families ever eligible to the program, participating households are more likely to be relatively worse off, with younger heads, lower educational attainment, and to be female headed households. About half of the ever eligible families to the program according to the official eligibility condition ended up participating to the program.

Participants and Compliers Figure 2 shows that the distribution of cutoffs shifts to the right from 2002 to 2005 and table 4 presents the baseline characteristics for entrants in CS in 2002 and

¹⁹To understand the dynamics of entry in the data, we present in table G.2 a cross tab between the number of families present in each wave against the first year the family has a valid survey. In each year between 2000 and 2005 there are around 1.5-1.8 millions families with a valid score (in 2006 there are only 0.7 million of families, since this was the year of transition to the new mechanism - FPS). About 70% of the families with CAS valid in 2002 already had a valid score in either 2000 or 2001. Between 2000 and 2006 about 80% of the families requested the survey twice, and thus they were likely to have the CAS valid for a period of 4 years. This shows that there is some persistency of families in the system.

²⁰Information about the time family takes to nearest health center is obtained from the FPS only, thus it is only available for those families we observe in CAS and in the FPS data set.

2005. Later cohorts have on average higher CAS scores, in line with the sequential entry of families from the bottom of the CAS distribution up. The later cohorts are also more likely to be living in rural areas, and more likely to be employed than the earlier ones.

But does this shift of observable characteristics of entrants imply a change in the composition of the subpopulation induced to participate over the years? This compositional change would be problematic, as it would not allow us to compare the effects of entry at different years, as the effects would be identified for families at different margins of observable and unobservable characteristics. To understand whether this is the case, we study the characteristics of the group of compliers in 2002 and 2005, although compliers cannot be identified individually. Table 5 presents compliers characteristics ratios for demographic, labor market and assets of families. It is possible to see that characteristics of individuals induced into treatment by shifts in eligibility at the cutoff have similar characteristics in 2002 and 2005.

5 Results

We present the causal effects of participation in CS on three set of domains. The first set of outcomes impact on the take-up of subsidies and participation on programs of social services. The take-up of services is the first layer of impact expected from an intervention that provides a guarantee of monetary subsidies and preferential access to services for the target population of households in extreme poverty. Activating to demand monetary subsidies is a first necessary step in the family trajectory to stabilize family income and help reduce vulnerability to shocks.

Second, we focus on two sets of outcomes that are critical for the participating households to be able to exit poverty in a sustained way. Having access to social services (health and education) and a tailored programs that strengthen her endowments, skills and income generating capacity is in the medium and long term. Textual analysis from the monitoring data from the program and qualitative work ²¹ suggests that improvements in employment (especially those related to having an stable occupation and a stable source of income in the household) and housing are among the most important aspirations of participating families. They are perceived as structural factors preventing households to escape extreme poverty in the long run. At the same time, both dimensions are also perceived as the most difficult minimal conditions to meet. Labor force participation is an important correlate of poverty incidence and vulnerability to poverty (Equity Commission). The importance of housing ranges from the wealth effect from having clear property rights and ownership status , to having access to basic infrastructure conditions that are important for health effects (Cattaneo et al 2009) and for family dynamics and subjective well-being (Cattaneo et al, 2009, Devoto et al 2012). For both dimensions, the role of supply side constraints and rationing on the supply side plays an important complementary roles to the constraints on the

²¹(Asesoría 2005, U. Chile 2004b,c, FOSIS 2004b).

demand. Social workers and participants had to work within the existing supply of employment programs and social services during the first years of operation of the program. Only after 2004, when CS became law, there has been a coordinated effort to increase the coverage and typology of housing and employment programs. The supply side increases in terms of (i) re-directing the existing supply geographically to municipalities in proportion to the needs of CS families, according to proportion of unmet minimum conditions in each of the dimensions and (ii) creating new programs where the existing supply was not sufficient. We are able to complement the analysis with detailed information on beneficiaries of labor market programs from 2004 to 2007, and study the impact of CS on the take-up of employment programs. While we are not able to disentangle the relative role of demand and supply side responses, we will presenting the dynamics of impact over time and exploit the differential availability of programs to different cohorts of participants to be able to understand the mechanisms of impact, or lack thereof.

The main results are presented in tables 6-11. As we mentioned in section 3, for each set of we present the dynamics of impact of the program over time, by reporting the effects of the program two years after entry (when families are about to leave the intensive phase of psycho-social support), 4 years (during the follow-up phase in the program) and, whenever available, 6 years after entry (after the family exists the five years of duration into the program).

For each outcome we include also two sets of estimates: the reduced form estimates of γ in model 3 as well as the two-stage least square estimates of impact on participating households. Standard errors for the reduced form estimates are clustered at municipality level and for the 2SLS we compute the 90% asymptotic confidence intervals clustered at the municipality of residence (at the time when eligibility was assessed).

The results are presented disaggregated along some key dimension of heterogeneity. We allow the effects to vary by family life cycle (we divide the sample in three groups according to the age of the head in 2002 (18-35, 36-50 and 51-65 years old): younger households are more vulnerable to credit constraints, but are also expected to be more receptive to change in habits.²² In addition, we allow the effects to vary depending on whether the condition (or outcome) was met before the start of the program (pre-2002). This dimension of heterogeneity is important, as the program explicitly aimed at providing tailored solution to the needs of each household and bridging the demand gap for previously excluded households. We expect the program effects to be larger for those families who had unmet conditions before entering the program. Finally, we allow the impacts to vary by rural/urban, and by the gender of the household head: rural areas are on average poorer and harder to reach and female headed households is a poorer and more vulnerable segment of the population.

Since we study the effect of CS on a families of outcomes we adjust the critical values for inference of the reduced form estimates γ from model 3 using a procedure for multiple hypotheses

²²We define the age of head using 2002 as the reference year, to avoid one extra dimension of changes in the composition of the sample when we study the effects of different lengths of exposure to CS.

testing (Romano and Wolf, 2005; see Appendix E). The procedure attempts to adjust critical values so that we are as confident rejecting that a particular coefficient is equal to zero in our setting, as we would be if we only had one hypothesis.

5.1 Graphical Analysis

First Stage We start by presenting evidence of how eligibility for CS predicts participation in the program. We present two types of figures. First, in figure 3 we present estimates of a local linear regression of an indicator of participation in CS on the distance to the effective cutoff, separately for eligible ($CAS_{ijmt} - \overline{CAS}_{mt} \leq 0$) and ineligible ($CAS_{ijmt} - \overline{CAS}_{mt} > 0$) families (we use a bandwidth equal to 8). We also divide the sample into bins of distance to cutoff (of size 2-CAS points) and compute cell means for participation.

There are four panels in the figure because we repeat this procedure for each the four entry cohorts/years we consider (2002 to 2005). For each cohort, there is a clear discontinuity in participation in CS around the (normalized) cutoff. In figures C-B in Appendix C show the size of discontinuity in mean participation in CS around the cutoff for several samples, which we use in our analysis below: by age and gender of head of family, by area of residence (urban and rural) and by welfare dependence (whether the family was receiving SUF prior to 2002). There are not many differences the discontinuity in participation rates at the cutoff across groups, although these figures show that families to whom eligibility in 2002 are a better predictor of participation in CS have heads aged 18 to 35 years old, are female-headed families, reside in urban areas and were connected to the social protection system prior to 2002 (that is, the first stage is stronger for families receiving SUF in 2000 or 2001). Figure C.3 in Appendix C shows that for the first cohorts of the operation of CS, eligibility as determined by official cutoff is not a good predictor of participation.

Second, to understand how the gradual shift of cutoffs over the years is used to identify the effect of entry at different years, we can look at the cumulative participation into the program around the eligibility cutoffs. The graphs in figure 3 use as dependent variable an indicator which takes value 1 if a household ever enrolled in CS up to that year, and zero otherwise.²³ Again, we estimate local linear regressions of this indicator of cumulative participation in CS on the distance to the effective cutoff, separately for eligible and ineligible families. Each graph in figure 4 has 4 lines, corresponding to each of the cumulative participation indicators (2002-2005). The four graphs correspond to a different cutoff. There is a clear discontinuity of about 15% around each of the effective cutoffs. For example, in 2004 there is a clear discontinuity at the 2004 cutoff for two CS participation dummies: entry in 2004 and entry in 2005. As expected, there is no discontinuity around that cutoff for those who entered before 2004, since participation for those enrolling in CS before 2004 should not be affected by the 2004 cutoff. Notice also that eligibility in year t has

²³The most important difference between figure 3 and 4 is the following. In figure 3 for each cohort, we drop all families who have enrolled in CS in the past, while for figure 4 we keep them and include them in the set of treated families. So we keep all families in the sample, regardless of whether they participated in CS in the past or not.

the *same* effect on CS participation in the short and long run. This follows from the fact that the discontinuities at the year t cutoffs affect all current and future cohorts equally. There are of course subsequent entrants, but their entry is not affected by the year t cutoff.²⁴

We supplement the graphical analysis with parametric estimate included in table 6: the endogenous cutoff allow us to estimate a discontinuity in the probability of entry in CS of about 15% for each of the years/cohorts of entry (we include further robustness checks in tables B.1).

Reduced Form Estimates Next, we present figures analogous to figure 3, but instead of focusing on participation in CS, in the vertical axis we represent our main outcomes. These are shown in figures 5-6. As before, we use a bandwidth equal to 8.

Figure 5 presents estimates on employment status of head and spouse, measured two years after entry in the program. The figures on the left hand present estimates for the head and they do not present evidence of a large change in the probability of being employed or in any of the two possible employment status (self-employment or dependent work) at the cutoff. On the right side of figure 5 we include the nonparametric estimates for the employment status of the spouse. The local linear regression estimates of the graph on the top right panel suggests a large drop on the probability of not being employed at the cutoff among spouse, though due to the sparsity of data for this outcome around the threshold the effect is imprecisely estimated and we cannot reject the null of no jump in the dependent variable at the cutoff.

The last two panels include estimates for the housing variables: property situation regarding the ownership of the current place of residence and an indicator for water supplied from the public network. There is a negligible effect on the dependent variable at the eligibility cutoff.

The top panels of figure 6 present nonparametric estimates on the take of the family allowance for poor with children (SUF) and on water subsidy (SAP) among those categorically eligible for these transfers. There is suggestive evidence of a increase in take-up of SUF at the cutoff, but not for SAP. The two figures in the middle panel include the participation of head of family and spouse in employment program provided by FOSIS²⁵. Eligibility to CS seems to be associated to an increase in the probability of participation in these employment programs.

Taken together, these figures suggest that two years after being exposed to CS, on average it is expected an increase in participation in subsidies families are eligible and an increase in participation in labor market qualification programs for both head of families and their spouse. Therefore, the program is expected to successfully link families to the social protection and in the short run one could expect an increase labor market participation, driven by an increase in participation in labor market programs.

²⁴The parametric estimates correspondent to this figures are presented in table B.2 in Appendix B.

²⁵We exclude participation in those programs which were especially created to serve members of families in CS.

5.2 Take-up of Subsidies

One expected immediate impact of CS is an increase in the take-up of subsidies families are eligible for, since the purpose of the program is to make a bridge between indigent families and the social protection system, so that they use the subsidies they are eligible for to improve their living conditions. We study the effects on the take-up of two subsidies which we observe in our data and to which CS families should have prioritized access if eligible: the monthly non-contributory family allowance for poor families with children called SUF (*Subsidio Unico Familiar*) and a water subsidy that involves funding, by the state, of a percentage of the monthly payment a maximum consumption of cubic meters of water to low-income residential users called SAP (*Subsidio de Agua Potable*). To analyze the effects of SUF and SAP we consider the sample of families that prior to 2002 were categorically eligible for each of these subsidies, that is, in case of SUF we consider families that had children under 18 in 2002 and for SAP we restrict ourselves to the sample of families with water provided by the public network prior to 2002.²⁶

The impact for the whole sample is presented in the two first rows of table 6. CS significantly increases the take-up of both monetary subsidies for all eligible and participating households. According to the program guidelines, one of the expected impacts of CS is that after the two years of psycho-social support 70% of families receive the subsidies they are eligible to. In fact, the estimates presented in table 6 suggest that, on average, this objective is accomplished for SUF (the control mean is 64% and 2SLS estimate among CS participants is 11%). It is interesting to note that the effects of the program are large on average and sustained 2, 4 and 6 years after program entry. The ITT and 2SLS show that the take-up of SUF or SAP do not jump to 100% among eligible families. The program provided information about the existence of the subsidies and the social worker provided practical guidance on how to apply to the program, hence alleviating important information and transaction costs in the demand for these transfers. The lack of complete take-up among participants suggests that additional transaction or psychic costs may be still constraining the activation of the demand. Our estimates control for municipality-year effects, they keep the supply of these subsidies constant, therefore, our estimates account are net of possible supply side constraints for these subsidies. Yet, it is interesting to note that the effects did not dissipate 6 years after entry into the program: these long term effects are estimated in 2008-2009, after the supply side rationing of quotas to municipalities for SUF had been eliminated. This suggests that CS acted on demand side constraints, tackling a combination of information and transaction costs that were preventing households to activate their demand.

The heterogeneity of impact presented in table 9 provides insights of the determinants of take-up and on the role of CS in alleviating barriers to take-up. Panel A show that CS is associated to

²⁶We consider eligibility prior to 2002 and, thus prior to the implementation of CS, to avoid using a sample which could include individuals whose eligibility status was a result of the introduction of CS. We show in Appendix B that in practice relaxing such constraint (that is, not condition on pre-2002 but on current eligibility status) does not change the results, which suggests that eligibility to either SUF or SAP are not caused by CS.

an increase in participation in SUF among young families (whose head is 18-35 years old) which is detect even 6 years upon entry in the program. This group of families has the largest expected benefits from SUF, given that this group has on average a larger number of children, and the benefit is assigned per child. Importantly (Panel B), the effect of CS is concentrated among those families who were previously disconnected from the welfare system: the impact is mainly driven by those families not receiving subsidies prior to 2002. Increase in the participation in SUF is only significant in urban areas (panel C) and slightly higher among families headed by males than those headed by females.

The impact on the take-up of SAP is not significant for the entire sample of eligible and participants households, perhaps due to the additional cost associated with keeping the water bill up to date. We found a significant and sizable increase in the take-up of SAP two and four years after intake among younger families, but not for any other subgroup analyzed.²⁷

5.3 Labor Market Outcomes

CS aims to develop the earnings capacity of families, not only through the direct work of the family social worker team with families devising a strategy to leave indigence, but also through the participation in programs that promote insertion in the labor market (job-placement programs), development of self-employment skills and promote employability.²⁸

We start by presenting in Panel 5 of figure 6 a comparison between the proportion of families with minimum conditions in the areas of labor market and income fulfilled at entry in the two-years visitation period and at exit. The graph shows that either at entry and exit only 40% of participant families fulfill conditions L1 and L3, suggesting that these are difficult to improve ("At least one adult family member to work on a regular basis and have a stable salary" and "That people who are unemployed are registered in the Municipal Information Office (OMIL)", respectively). The Equity Commission instituted by the Bachelet president in 2007 points to low labor force participation as an important correlate with poverty in Chile. Labor force participation in Chile is low by Latin American standards, and this is mainly due to the low labor force participation of women, which exhibits a large socio-economic gradient: 30% of the family heads are not employed a large proportion of spouses (87%) of spouses are not employed. Encouraging diversification with a second source of income is suggested by the commission to be an important strategy to reduce the vulnerability to poverty in Chile.

In table 6 we present estimates for seven labor market outcomes for the head and spouse. These

²⁷We cannot estimate the effect on SAP 6 years into the program since information on participation is only available up to 2006, inclusive.

²⁸We focus mainly on programs offered by FOSIS and these can be divided into three levels, according to their objectives. The Level 1 includes programs designed to improve the employability and/or income generation, through the following programs: PNCL, APFA, PEJ and PAME. The Level 2 aims to increase revenues, development of economic activities moving from subsistence level to stabilization through the following programs: AAE and PES. Finally, Level 3 aims at strengthening business units supported by the FOSIS at levels 1 and/or 2 through FIM.

are the following indicator variables: not employed, self-employed worker, dependent worker (these three categories are mutually exclusive and are available for all years between 2000 and 2009²⁹), work contract (2007-2009), average hours worked per week (2007-2009) and temporary work (2000-2006). For the whole sample we are unable to reject the null of no effect on any of these variables, regardless of the length of exposure to CS.

For the whole sample we are unable to reject the null of no effect on any of these variables, regardless of the length of exposure to CS (see table (6)). The lack of average effects masks heterogeneity depending on socio-demographics characteristics and initial conditions.

Employment effects can be detected in the short term for family heads who were previously not employed before the program (table 10, panel B), transitioning from unemployment/inactivity into wage employment (table A.5, panel B). When we disaggregate the employment results in the FPS (table A.6, panel B), we can more precisely document that the effects for those previously not-employed are driven by entry into the labor force, and increased effort for job search. There is no change in employment effects by age of the head, but a change in the composition of the young, away from wage employment and into self-employment activities. The effects for those living in urban areas (table A.6, panel C) are significant two and four years into the program.

Finally, there are no effects on employment when we separate the analysis by gender of head (there are also no changes in the employment composition). Notice that the lack of effects on the employment of female heads is present despite this being a key target group of employment programs (we discuss this below). When we are able to further separate non-employment into unemployment vs inactivity in the FPS, we find that female heads do experience a mild increase in labor force participation out of inactivity (A.6, panel D) and increased job search, though these effects do not translate into employment outcomes, as documented in (10, panel D).

We now turn to the employment status of spouses. There are no significant effects of eligibility to CS on the employment of spouse 2, 4 or 6 years after entry (table 10). Again, as for the case of female heads, activation of females out of inactivity and into the labor force are observed for spouses in the FPS where we are able to disaggregate non-employment into unemployment vs inactivity: the effect is observed only in urban areas, and the effects are both short term (2 years after entry) as well in the medium term (as 4 years after entry) (see A.6).

It is important to look at the cohorts of entry into the program, as the increase in the supply side and guarantee of the access to employment programs to meet the demand of the target population materialized only after 2004, affecting only the later cohorts. While in principle earlier cohorts would also be eligible to participate to such programs in their last three years of participation into the program, in practice, the majority of activation of demand for services occurred for most beneficiary families only during the first two years of psychosocial support. The current short (two year) effects of CS on labor force participation (activity) (see A.6) are estimated for the sample of

²⁹We construct these three indicator variables to be uniform in CAS and FPS data sets, since employment status and labor market participation are recorded differently in both data sets.

2007-2008, thus for families that could have entered CS in 2005 or 2006 who were exposed both the intensive psychosocial support as well as the post-2004 expansion of the labor supply of labor market programs. One possible way to better understand the complementary role of the supply of labor market program, is to look at the medium term effect of CS - the impact 4 years into the program - where both early and later cohorts are present (ie, we use the sample of 2007-2008 which include 2003-2004 cohorts before the supply side expansion vs. the sample 2009 which includes 2005 cohort which was exposed to a larger supply side of employment programs). When we allow the effects four year into the program to vary by cohort of entry, we find that the four year impact of labor force activation of spouses applies only for those cohorts (2005) exposed to the expansion of the labor supply of programs, and not for the early cohorts who did not. In the next section we will provide more details on the type of labor market programs made available to the target population, to better understand the mechanisms through which labor supply effects were or were not observed.

Take-up of Labor Market Programs The employment programs available to the target population of CS beneficiaries fall into three categories: (i) job placement programs for wage employment, mainly job training programs and wage subsidies (ii) self-employment programs and support to micro-enterprises, through a combination of technical assistance and seed funding for inputs and startup capital, and (iii) employability programs, which range from adult education equivalency and training focused on soft-skills. The comprehensive list of programs and their design is provided in Table A in the Appendix. Many of these programs provide preferential access CS participants and are provided by FOSIS, the social fund in charge of the implementation of the psychosocial support, as well as other government agencies/private institutions. After the first two years of operation of the CS, the program came to a realization that many of the existing programs were not able to meet the needs of unskilled members of households in extreme poverty and vulnerability, who had very low levels of education attainment, very low experience and sporadic labor force attachment, especially for women, and when employed, employment in casual labor, especially in rural areas with very low daily pay and and and started with a process of adaptation of existing programs (for example, adding a level of primary education to education equivalency programs who were catering only secondary school attainment), as well as creating an array of new programs that were exclusively designed for the target population of CS participants, across the big three categories mentioned above. We have individual data of participation for programs in 2004-2007 that we can merge to our administrative data through the unique ID: about 2/3 of the programs available are exclusively targeted to CS and 1/3 are represented to labor market program with preferential access. Among the three categories, the lion share of available supply side is represented by self-employment programs (75%), followed by employability programs (17%) and job placement programs (8%).

In table 11 we present ITT and 2SLS estimates of the effect of CS on participation in labor

market programs that offered by FOSIS to both CS and non-CS poor families. We find an increased take-up of labor market programs among heads (columns 1-2 and 5-6) that were not employed prior to 2002 or among those that lived in urban areas among just eligible to CS (odd columns). Taking this increase in participation in labor market programs together with the increase in the probability of employment among heads in these groups, we can speculate about a complementarity of the two components of CS (home visits and preferential access to labor markets programs). Among spouses (columns 3-4 and 7-8), CS seems to be associated to larger increase in participation in labor market programs than among heads, however, we fail to detect a sustained effect on the labor market outcomes for this group (we will approach this issue in the next version of the paper).

Complementarity between CS and other social services? As described in section 2, one central feature of CS is the connection of families to a set of local services tailored to help families overcoming specific barriers to leave poverty. During a period of five years since the entry in CS families have preferential access to these services. Out of the labor market programs to which CS families have access, some were specifically created for this set of families, whereas some other programs are one to all disadvantaged families (see table A).

To understand the complementarity between the home visits which draw the plan so that families engage in productive activities to lift them out of poverty, we focus on the sample of individuals that participate in employment and training programs by FOSIS, and which are offered to the entire population. Since of these individuals are also be eligible to CS, we estimate model 3 in this sample, and γ will estimate the added value of CS over and above of training/employment on labor market outcomes.

These results are presented in table 12. The results in this table are imprecisely estimated due to the small sample used, nevertheless they seem to suggest a larger increase in the probability of a stable job (as measured by dependent work) two years into the program among heads of family eligible to CS (see Panel A - column 5), which is driven by those living in urban areas or male heads.

5.4 Housing

The results on several indicators of housing conditions, ranging from property status of the site of residence and conditions of habitability, suggest that CS is not associated to an improvement in the housing situation for the average family.

In table A.7 in Appendix A we present the reduced form estimates for variables related with the property status of the house and also its comfort. Since 2007 with the introduction of FPS assets are no longer part of the score used to assess eligibility to welfare programs. This change in the record of the data implied a reduction of measures available to assess the housing conditions of families, and therefore, we can only assess the effects of the program on housing condition 2

and 4 years after intake.³⁰ Also, we allow the effect to vary with two dimensions: (1) whether the minimal condition regarded as acceptable for the family comfort was met prior to 2002 and (2) by area of residence of the family (rural vs urban area). We choose to allow the effects to vary along these two dimensions since families in CS have access to programs that sponsor home repairs and equipment purchase (Habitability Program - FOSIS and Habitability Program CS) and programs to help regularizing the housing situation of families (Habitability Program CS, Chile Barrio). Additionally, we allow the effects to vary by area of residence since housing characteristics and the scope for individuals to improve their housing conditions and access to equipment such as water supply from the public network and proper sewage connection vary for families living in urban or in more remote rural areas.

In column 1 and 2 of table A.7 we present results for variables related with the property situation of family's place of residence. It is interesting to notice that we are unable to detect any effect on the clarification of the property situation of the place of residence of the family, which is precisely one the dimensions that should be worked by the social workers and the offer of housing programs in Chile. However, the supply of these programs was well below the needs, which was aggravated over the years, implying that in practice the initial cohorts benefited relatively more of these housing programs (we will explore this feature in the next version of the paper).

When we analyze the effect by initial condition of families, we are unable to clearly state whether CS is associated with an improvement of housing conditions. One on hand, we find an increase in the probability of having sewage provided by the public network for those families without one before 2002; on the other hand, CS is associated with a decrease in the probability of having adequate roof and walls for those that did not have such before 2002. There is an increase in the probability of having adequate roof and a fridge for those that had already fulfilled these conditions before 2002.

CS seems to contribute for the improvement of the housing conditions for families living in urban areas: there is an increase in the probability of having water provided by the public network (which is an effect detected even six years after potential entry in CS), there is an increase in the probability of having adequate walls and roof and a fridge³¹, but we see for these families a decrease in the probability of having sewage connected to the network and water heating system. The improvement in housing conditions related with quality of walls and roof could be due to the complementarity between the housing programs associated to CS, which include the supply of materials that families could use to improve their housing comfort. However, unlike for employment programs, we do not have data on participation in housing programs to learn more about the extent to which this is true. In the future version of the paper we will address this concern directly by using cross-region and cross-cohort variation in the supply of housing programs.

³⁰The only two variables for which we can provide six years estimates of the effect of the program are for whether the family legally occupies the place of residence (that is, its property situation is solved) and for whether the water is supplied by the public network.

³¹See table A for the exact definition of what is considered adequate roof and walls.

6 Discussion

In this paper we provide evidence of the effects of an innovative program designed to tackle indigence in launched in Chile in 2002: the Chile Solidario (CS). Instead of tackling poverty simply through cash-transfers, CS is a system which tackles multiple aspects of poverty, involving intense an direct contact with these families. In particular, participant families receive about 21 visits by the social worker with decreasing frequency within the first two years of the program, and are given priority access to many social services in the country.

In this version of the paper, we examine the effects of CS on three sets of outcomes. First, we study the impact of CS on the take-up of subsidies, and participation in training and employment programs. Second, we analyze its impacts on the families' ability to generate income, by studying labor force participation and employment of heads of household and their spouses. Third, we study the impacts of CS on families' housing conditions.

We find that CS leads to an increase in the take-up of existing welfare transfers both in the short and the long run. This increase is especially large for those families who were not taking up these subsidies (to which they were entitled) before the existence of CS. We find little or no impacts of the program on labor force participation and housing conditions of participant families.

In spite of the intensity of the home visits, the effort to coordinate and adapt the supply of social services to local needs, and the high apparent motivation of those working in this system, the program achieved only modest gains in the lives of these families. Nevertheless, it was relatively successful in one very important dimension: the approximation of indigent families to the welfare network provided by the state. The lack of impacts on labor supply and income could reflect the fact that on one end, the target population is very unskilled, and on the other end, it has low aspirations and invests little in labor market activities. It is a very hard population to work with and achieve transformative changes in behaviors and outcomes.

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Tables

Table 1: Families contacted by the Puente program annually.

Year	Contacted	Not Participating	Participating	Interrupted
2002	43892	2149	38273	3470
2003	55015	2754	48154	4107
2004	52963	2433	47162	3368
2005	55407	217	50701	2536
2006	51296	3112	46727	1457
Total	258573	12618	231017	14938
Total %	100.00%	4.90%	89.30%	5.50%
Total %	100.00%	4.90%	95.10%	

Note: Each year about 50,000 families were invited to participate in the system. Of these, on average, 4.9% did not participate because they refused or because it was not possible to locate the family. The rest, 95.1% started working with social workers. 5.5% of families contacted interrupted the process, either by decision of the family support, of the family or both. The rest, 89%, has participated regularly in the system. The program interruption occurs preferentially at 3-4 months of incorporation. Source: Raczynski, 2008.

Table 2: Situation of all contacted families as of August 2006

Situation	N	%
Active	109,711	46.66
Pending	152	0.06
Interrupted	12,854	5.47
Not participating	6,493	2.76
Following up	3,971	1.69
Not found	4,596	1.95
Exited 1st phase	43,117	18.34
Exited 1st phase, completing all 53 MC	54,250	23.07
Total	235,144	100

Table 3: Basic Descriptives.

Variable	(1)	(2)	(3)	(4)	(5)	(6)
	N	All Mean	S.D.	N	Ever eligible Mean	S.D.
Any subsidy	1788715	0.35	0.48	390382	0.51	0.50
SAP	1788715	0.16	0.37	390382	0.10	0.29
SUF	1094825	0.24	0.43	258880	0.47	0.50
Housing						
Legal occupation of house	1788706	0.60	0.49	390380	0.39	0.49
Owner of house (condition on legal occupation of house)	1072670	0.82	0.39	152437	0.77	0.42
Adequate walls	1788717	0.93	0.26	390382	0.76	0.42
Adequate roof	1788717	0.89	0.31	390382	0.69	0.46
Overcrowding	1783921	1.24	0.78	389537	1.59	1.03
Water from public network	1788717	0.90	0.31	390382	0.73	0.44
Fridge	1788706	0.59	0.49	390380	0.27	0.44
Water heating	1788706	0.26	0.44	390380	0.02	0.15
CS and CAS						
CAS	1788706	542.15	55.22	390380	478.06	34.28
Ever in CS	1788717	0.22	0.41	390382	0.47	0.50
Labor Market and Income						
Not employed (head)	1788599	0.29	0.45	390349	0.31	0.46
Self-employed (head)	1788599	0.41	0.49	390349	0.57	0.50
Dependent worker (head)	1788599	0.31	0.46	390349	0.12	0.33
Not employed (spouse)	1152166	0.79	0.41	239648	0.87	0.34
Self-employed (spouse)	1152166	0.11	0.31	239648	0.11	0.31
Dependent worker (spouse)	1152166	0.10	0.30	239648	0.03	0.17
Imputed income (head)	1639269	0.57	0.50	323166	0.79	0.40
Monthly Income per capita	1788717	30317.15	27087.26	390382	16453.52	14854.09
Demographics						
Age of head	1788717	45.82	14.41	390382	45.73	15.06
Single headed	1788717	0.36	0.48	390382	0.39	0.49
Male head	1788717	0.70	0.46	390382	0.70	0.46
Years of Schooling of Head	1788714	7.36	3.82	390380	4.85	3.26
Years of Schooling of Spouse	778483	7.46	3.73	160766	7.49	3.74
Presence of children	1788717	0.61	0.49	390382	0.66	0.47
Family Size	1788717	3.64	1.71	390382	3.83	1.87
Minutes family takes to nearest health center	966954	24.05	23.19	220796	31.48	32.28
Family belongs to dominant ethnicity in neighborhood	513308	0.89	0.31	120593	0.89	0.32
Rural	1788717	0.17	0.38	390382	0.34	0.47

Note: The table includes the mean and standard deviation for selected variables for the whole sample of families in the data. For each outcome we include two sets of columns: one for the whole sample and other for families that between 2002 and 2006 were eligible to CS at least once according to the official definition. There is one observation per family in the table which is measured prior to the introduction of CS in 2002, in particular, and we present the statistics for characteristics of families when they were first surveyed in either 2000 or 2001.

Table 4: Characteristics of entrants.

	(1)	(2)
Year of entry	2002	2005
Living in rural area	0.23	0.26
Male	0.64	0.64
Age 18-35	0.34	0.36
Age 36-50	0.35	0.34
Age 51-65	0.21	0.21
Age 66-75	0.10	0.09
Years of Schooling of Head	5.54	6.30
Years of Schooling of Spouse	7.67	7.64
CAS before 2002	495.16	513.15
In SUF before 2002	0.36	0.30
In SAP before 2002	0.14	0.16
With children	0.70	0.70
Housing (before 2002)		
Legal occupation of house	0.43	0.53
Owner of house (condition on legal occupation of house)	0.80	0.83
Water from public network	0.82	0.79
Adequate roof	0.69	0.82
Adequate walls	0.76	0.88
Heating	0.11	0.15
Fridge	0.37	0.46
Labor Market and Income (before 2002)		
Not employed (head)	0.30	0.27
Self-employed (head)	0.52	0.50
Dependent worker (head)	0.18	0.23
Not employed (spouse)	0.84	0.83
Self-employed (spouse)	0.11	0.11
Dependent worker (spouse)	0.05	0.07
Income p.c. median	20598.03	22387.04

Note: This table includes the average characteristics of entrants in Chile Solidario in 2002 and 2005. All characteristics are measured prior to the introduction of CS, that is, in 2000 (or in 2001 if the family does not have a valid CAS in 2000).

Table 5: Compliers characteristics for eligibility instrument in 2002 and 2005.

Year	(1)	(2)	(3)
Variable	$P[X_i = 1]$	$P[X_i = 1 CS_{1i} > CS_{0i}]/$ $P[X_i = 1]$	$P[X_i = 1 CS_{1i} > HS_{0i}]/$ $P[X_i = 1]$
Characteristics of head			
Living in rural area	0.18	0.747	0.970
Male	0.71	0.987	0.958
Age 18-35	0.27	1.074	1.132
Age 36-50	0.36	1.072	1.086
Age 51-65	0.24	0.908	0.805
Age 66-75	0.13	0.705	0.553
With children	0.62	1.146	1.142
CAS before 2002 above median	0.52	0.604	0.959
Labor market characteristics			
Not employed (head)	0.29	1.122	0.942
Self-employed (head)	0.41	1.105	1.034
Dependent worker (head)	0.30	0.818	0.972
Not employed (spouse)	0.80	1.141	1.024
Self-employed (spouse)	0.11	1.023	1.094
Dependent worker (spouse)	0.09	0.981	1.016
Income p.c. above median	0.39	0.718	0.842
In SUF before 2002	0.17	1.350	1.132
In SAP before 2002	0.19	1.572	1.009
Legal occupation of house			
Owner of house	0.61	1.048	1.011
(condition on legal occupation of house)	0.83	1.025	1.021
Water from public network	0.89	1.264	1.025
Adequate roof	0.89	1.000	1.037
Adequate walls	0.93	1.023	1.051
Heating	0.26	0.533	0.831
Fridge	0.60	1.027	1.086

Note: Table reports the characteristics of compliers for the eligibility instrument in 2002 and 2005. Column (1) includes the mean for the characteristics for the whole sample of families in 2001. The ratios in columns (2) and (3) are the relative likelihood that compliers have the characteristics indicated at left. The sample used in columns (2) and (3) includes families around the eligibility cutoff, that is, at most 20-points apart from the cutoff in 2002 and 2005.

Table 6: First Stage Estimates.

Year of entry Cutoff	(1)	(2)		(3)		(4)		(5)		(6)		(7)	(8)
		2002 Effective	2002 Official	2003 Effective	2003 Official	2004 Effective	2004 Official	2005 Effective	2005 Official				
1[Eligible]		0.123*** (0.008)	0.021*** (0.003)	0.146*** (0.007)	0.063*** (0.007)	0.159*** (0.008)	0.093*** (0.008)	0.173*** (0.009)	0.110*** (0.010)				
Observations		229,804	326,324	267,339	315,641	264,205	296,529	256,517	276,733				
Control Mean		0.0569	0.0288	0.0635	0.0443	0.0573	0.0491	0.0647	0.0638				
SD		0.232	0.167	0.244	0.206	0.232	0.216	0.246	0.244				

Note: The dependent variable is an indicator that takes value 1 if the family started CS in a given and 0 otherwise (for the years of 2003, 2004 and 2005, entrants in previous years have missing in the dependent variable since entrants in the previous years cannot re-enrol in the intensive phase). Controls excluded from table include cubic in distance to cutoff and municipality-year of residence effects. We present estimates using both the effective and the official cutoff, and the variable distance to cutoff is defined as the difference between the CAS-score of the family and the effective or official cutoff. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 7: Results for placebo estimations (outcomes in 2000, or 2001 if missing in 2000).

	(1)	(2)	(3)	(4)	(5)
Years after start	C. Mean	2 N	ITT	N	4 ITT
Participation					
SUF	0.565	84,889	-0.001 (0.009)	48,498	0.006 (0.013)
SAP	0.120	103,483	0.011** (0.005)	19,287	0.023 (0.014)
Labor market					
Not employed (head)	0.176	136,674	-0.002 (0.005)	116,764	-0.010* (0.006)
Self-employed (head)	0.659	136,674	-0.006 (0.006)	116,764	0.011 (0.007)
Dependent worker (head)	0.165	136,674	0.008 (0.005)	116,764	-0.001 (0.006)
Not employed (spouse)	0.896	88,638	0.008 (0.006)	55,383	0.003 (0.007)
Self-employed (spouse)	0.078	88,638	-0.008 (0.005)	55,383	0.001 (0.006)
Dependent worker (spouse)	0.026	88,638	-0.001 (0.003)	55,383	-0.003 (0.004)
Temporary work (head)	0.109	74,150	-0.004 (0.006)	11,189	-0.013 (0.014)
Temporary work (spouse)	0.221	2,177	-0.031 (0.047)	226	0.049 (0.137)
Housing					
Legal occupation of house	0.426	136,662	0.005 (0.007)	116,610	-0.004 (0.008)
Owner of house (if legal occupation)	0.838	48,697	-0.003 (0.009)	12,951	0.006 (0.018)
Sewage connected	0.190	172,960	0.007 (0.005)	41,492	0.009 (0.010)
Water from public network	0.674	136,662	0.006 (0.005)	116,612	0.007 (0.005)
Adequate roof	0.743	112,557	0.010* (0.006)	31,580	-0.012 (0.013)
Adequate walls	0.823	112,557	-0.004 (0.006)	31,580	-0.022** (0.010)
Heating	0.025	112,557	-0.001 (0.002)	31,580	-0.000 (0.003)
Fridge	0.306	112,557	0.007 (0.007)	31,580	-0.007 (0.011)

Note: Controls excluded from table include cubic in distance to adjusted cutoff and municipality-year of residence effects. Coefficients in bold in columns 3 and 5 reject the null effect of no effect when we adjust the p-values to allow for correlation in all outcomes to be tested (following the procedure suggested by Romano and Wolf, 2005). "C. Mean" in the mean of the outcome for those at most 4-CAS points above the cutoff. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 8: Impact of CS: ITT and 2SLS estimates for the whole sample.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Years after start	C. Mean	ITT	2 2SLS	ITT	4 2SLS	ITT	6 2SLS
Participation							
SUF	0.641	0.022*** (0.008)	0.114 [0.0500;0.187]	0.027** (0.011)	0.152 [0.041;0.265]	0.054*** (0.020)	0.341*** (0.130)
SAP	0.156	0.002 (0.006)	0.00899 [-0.0593;0.073]	0.006 (0.012)	0.0432 [-0.119;0.190]	NA	[-0.128;0.571]
FOSIS participation (head)	0.011	0.002 (0.002)	0.0126 [-0.00390;0.030]	0.001 (0.002)	0.00506 [-0.012;0.023]	NA	
FOSIS participation (spouse)	0.020	0.008*** (0.003)	0.046 [0.0212;0.072]	0.005* (0.003)	0.031 [0.002;0.060]	NA	
Labor market							
Not employed (head)	0.173	-0.003 (0.005)	-0.0140 [-0.0573;0.028]	-0.003 (0.006)	-0.0155 [-0.076;0.047]	0.013 (0.010)	0.0836 [-0.022;0.188]
Self-employed (head)	0.629	0.007 (0.006)	0.0391 [-0.0169;0.090]	0.006 (0.007)	0.0363 [-0.032;0.104]	-0.012 (0.009)	-0.0721 [-0.179;0.036]
Dependent worker (head)	0.198	-0.004 (0.005)	-0.0214 [-0.0693;0.020]	-0.003 (0.007)	-0.0197 [-0.087;0.043]	-0.002 (0.009)	-0.00485 [-0.111;0.090]
Not employed (spouse)	0.868	0.002 (0.006)	0.0109 [-0.0403;0.065]	-0.004 (0.009)	-0.0196 [-0.103;0.069]	0.000 (0.015)	0.00145 [-0.142;0.132]
Self-employed (spouse)	0.096	-0.000 (0.005)	-0.000990 [-0.0461;0.042]	0.001 (0.008)	0.00361 [-0.065;0.076]	-0.002 (0.012)	-0.0110 [-0.133;0.118]
Dependent worker (spouse)	0.036	-0.002 (0.003)	-0.00878 [-0.0393;0.020]	0.003 (0.007)	0.0197 [-0.046;0.089]	0.001 (0.010)	0.00572 [-0.086;0.102]
No contract (head)	0.622	0.008 (0.018)	0.036 [-0.0825;0.168]	0.008 (0.009)	0.045 [-0.035;0.126]	-0.013 (0.011)	-0.081 [-0.193;0.014]
No contract (spouse)	0.238	-0.016 (0.052)	-0.0553 [-0.384;0.285]	0.026 (0.026)	0.155 [-0.095;0.429]	-0.036 (0.035)	-0.231 [-0.574;0.130]
Average worked/week (head)	41.74	-0.132 (0.577)	-0.374 [-4.201;3.743]	0.196 (0.316)	1.056 [-1.889;3.899]	0.091 (0.331)	0.429 [-2.909;3.385]
Average worked/week (spouse)	35.44	0.194 (1.850)	1.024 [-11.03;14.850]	0.303 (0.808)	1.997 [-5.561;9.584]	1.181 (0.952)	6.112 [-2.178;14.30]
Temporary work (head)	0.090	-0.002 (0.005)	-0.013 [-0.0632;0.038]	-0.016** (0.007)	-0.124 [-0.217;-0.037]	NA	
Temporary work (spouse)	0.142	0.038 (0.044)	0.254 [-0.194;0.72]	0.056 (0.186)	0.581 -4.771;5.851]	NA	
Housing							
Legal occupation of house	0.555	-0.005 (0.006)	-0.0299 [-0.0840;0.023]	0.005 (0.005)	0.0269 [-0.018;0.072]	-0.001 (0.004)	-0.00875 [-0.050;0.028]
Owner of house (if legal occupation)	0.729	-0.010 (0.011)	-0.0586 [-0.166;0.048]	0.012 (0.021)	0.0947 [-0.203;0.378]	NA	
Sewage connected	0.359	0.006 (0.005)	0.0405 [-0.0208;0.097]	0.008 (0.012)	0.0580 [-0.091;0.202]	NA	
Water from public network	0.696	0.005 (0.005)	0.0267 [-0.0169;0.073]	0.005 (0.006)	0.0267 [-0.032;0.082]	-0.001 (0.007)	-0.00692 [-0.083;0.075]
Adequate roof	0.818	0.007 (0.005)	0.0423 [-0.00689;0.095]	0.008 (0.011)	0.0250 [-0.070;0.195]	NA	
Adequate walls	0.887	0.000 (0.005)	0.00104 [-0.0470;0.044]	0.003 (0.009)	0.0613 [-0.080;0.128]	NA	
Heating	0.0646	-0.004 (0.004)	-0.0244 [-0.0618;0.009]	-0.011 (0.008)	-0.0792 [-0.167;0.014]	NA	
Fridge	0.460	0.015** (0.007)	0.091 [0.0184;0.163]	0.021 (0.013)	0.150 [-0.007;0.315]	NA	
Sample			2004-2008		2006-2009		2008-2009

Impact of CS: ITT and 2SLS estimates for the whole sample (cont.).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Years after start	C. Mean	ITT	2 2SLS	ITT	4 2SLS	ITT	6 2SLS
Other							
all children 6-11 enrolled in school	0.960	0.014 (0.012)	0.0507 [-0.0261;0.119]	0.000 (0.007)	0.000911 [-0.055;0.058]	-0.015 (0.010)	-0.0967 [-0.210;0.016]
all children 12-14 enrolled in school	0.973	0.006 (0.010)	0.0184 [-0.0382;0.079]	-0.001 (0.004)	-0.00462 [-0.037;0.029]	-0.007* (0.004)	-0.036 [-0.071;0.001]
all children 15-18 enrolled in school	0.857	-0.006 (0.021)	-0.0158 [-0.131;0.096]	-0.002 (0.011)	-0.00791 [-0.094;0.072]	0.009 (0.010)	0.0509 [-0.052;0.142]
at least one indiv 19-24 in college	0.268	0.038 (0.030)	0.161 [-0.0418;0.383]	-0.003 (0.016)	-0.0181 [-0.144;0.107]	0.004 (0.019)	0.0179 [-0.168;0.193]
all children in preschool age in preschool	0.506	0.025 (0.067)	0.130 [-0.349;0.632]	-0.017 (0.031)	-0.0804 [-0.346;0.181]	-0.054* (0.032)	-0.361 [-0.742;-0.026]
all children with controls by family (<8y)	0.994	0.000 (0.007)	0.000753 [-0.0431;0.044]	-0.005 (0.004)	-0.0271 [-0.056;0.002]	-0.008** (0.004)	-0.050 [-0.087;-0.017]
all elderly with controls by family (≥65)	0.610	0.054 (0.056)	0.454 [-0.254;1.118]	0.044** (0.022)	0.417 [0.092;0.800]	-0.022 (0.022)	-0.166 [-0.462;0.108]
Someone in family had problems w/ alcohol/drugs	0.0367	0.000 (0.007)	0.00187 [-0.0474;0.054]	0.003 (0.004)	0.0200 [-0.015;0.050]	0.005 (0.004)	0.0333 [-0.004;0.069]
Any training program	0.0450	-0.002 (0.008)	-0.00798 [-0.0625;0.046]	-0.001 (0.004)	-0.00455 [-0.035;0.030]	0.000 (0.004)	0.00361 [-0.037;0.042]
Adults employed enrolled in OMIL	0.293	0.130* (0.077)	0.454 [0.0855;0.884]	0.004 (0.033)	0.00963 [-0.237;0.248]	-0.006 (0.037)	-0.0312 [-0.373;0.344]
Sample			2004-2008		2006-2009		2008-2009

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. Coefficients in bold in columns 2, 4 and 6 reject the null effect of no effect when we adjust the p-values to allow for correlation in all outcomes to be tested (following the procedure suggested by Romano and Wolf, 2005). "C. Mean" in the mean of the outcome for those at most 4-CAS points above the cutoff. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. For the 2SLS we present the 90% asymptotic CI clustered by municipality of residence when eligibility is assessed. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 9: Reduced Form and 2SLS Estimates: Subsidies (cohorts 2002-2006).

Years after start	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)		
	RF	SUF	2SLS	RF	SAP	2SLS	RF	SUF	2SLS	RF	SAP	2SLS	RF	SUF	2SLS	RF	SUF	2SLS	RF	SUF	
18-35	0.031*** (0.009)	0.145 [0.074;0.217]	0.030*** (0.007)	0.131 [0.067;0.196]		0.180 [0.077;0.284]	0.034*** (0.012)	0.180 [0.077;0.284]		0.035*** (0.013)	0.233 [0.051;0.407]	0.070*** (0.023)	0.427 [0.184;0.677]								
36-50	0.022** (0.009)	0.116 [-0.067;0.014]	0.001 (0.006)	0.00519 [-0.155;-0.0957]		0.154 [-0.0836;0.027]	0.028** (0.012)	0.154 [-0.0836;0.027]		0.017 (0.013)	0.124 [-0.213;-0.020]	0.054*** (0.021)	0.329 [-0.202;0.016]								
51-65	0.002 (0.012)	0.0441 [-0.162;-0.034]	-0.033*** (0.008)	-0.141 [-0.320;-0.221]		0.0285 [-0.238;-0.054]	-0.006 (0.016)	0.0285 [-0.238;-0.054]		-0.022 (0.018)	-0.114 [-0.505;-0.194]	-0.015 (0.031)	0.00513 [-0.654;-0.206]								
No	0.044*** (0.009)	0.194 [0.123;0.273]	0.002 (0.006)	0.00139 [-0.064;0.063]		0.267 [0.151;0.385]	0.056*** (0.012)	0.267 [0.151;0.385]		-0.002 (0.011)	-0.0199 [-0.172;0.114]	0.079*** (0.022)	0.468 [0.245;0.708]								
Yes	0.006 (0.007)	0.0551 [-0.005;0.121]	-0.045*** (0.011)	-0.190 [-0.270;-0.112]		0.0638 [-0.035;0.173]	0.004 (0.011)	0.0638 [-0.035;0.173]		-0.025 (0.028)	-0.127 [-0.428;0.167]	0.030 (0.020)	0.213 [0.004;0.431]								
Urban	0.033*** (0.009)	0.154 [0.087;0.232]	-0.017** (0.006)	-0.0736 [-0.140;-0.012]		0.221 [0.111;0.331]	0.045*** (0.012)	0.221 [0.111;0.331]		-0.023* (0.014)	-0.154 [-0.327;0.002]	0.076*** (0.020)	0.445 [0.232;0.679]								
Rural	0.008 (0.009)	0.0607 [-0.013;0.134]	0.019*** (0.007)	0.0793 [0.007;0.151]		0.0720 [-0.040;0.188]	0.006 (0.012)	0.0720 [-0.040;0.188]		0.011 (0.011)	0.0595 [-0.096;0.200]	0.024 (0.021)	0.201 [-0.025;0.432]								
No	0.022*** (0.008)	0.116 [0.051;0.189]	0.006 (0.006)	0.0306 [-0.040;0.096]		0.160 [0.044;0.271]	0.029** (0.011)	0.160 [0.044;0.271]		0.007 (0.012)	0.0465 [-0.122;0.194]	0.058*** (0.020)	0.359 [0.144;0.591]								
Yes	0.021** (0.010)	0.104 [0.032;0.185]	-0.012* (0.007)	-0.0488 [-0.121;0.017]		0.0900 [-0.042;0.226]	0.011 (0.015)	0.0900 [-0.042;0.226]		0.000 (0.015)	0.00295 [-0.170;0.172]	0.038 (0.024)	0.266 [0.039;0.506]								
Sample		2004-2008		2004-2006		2006-2008		2006-2008			2006		2008								

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. Coefficients in bold in odd columns reject the null effect of no effect when we adjust the p-values to allow for correlation in all outcomes to be tested (following the procedure suggested by Romano and Wolf, 2005). Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. For the 2SLS we present the 90% asymptotic CI clustered by municipality of residence when eligibility is assessed. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 10: Reduced Form and 2SLS Estimates: Not employed (cohorts 2002-2006).

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)		(11)		(12)													
	RF	Head	2SLS	RF	Spouse	RF	Head	2SLS	RF	Head	2SLS	RF	Head	2SLS	RF	Head	2SLS	RF	Head	2SLS	RF	Head	Spouse	2SLS												
Years after start	2						4						6																							
18-35	0.003 (0.005)	0.0146 [-0.028;0.0539]	0.005 (0.007)	0.0169 [-0.040;0.079]	-0.002 (0.006)	-0.00874 [-0.064;0.048]	-0.004 (0.012)	-0.0123 [-0.111;0.086]	0.007 (0.008)	0.0483	0.001 (0.016)	-0.0121																								
36-50	0.002 (0.005)	0.009 [-0.028;0.016]	-0.001 (0.007)	-0.0009 [-0.054;0.021]	0.004 (0.006)	0.0212 [0.001;0.053]	-0.006 (0.011)	-0.032 [-0.081;0.034]	0.0151* (0.008)	0.0872	-0.022 (0.018)	-0.116																								
51-65	-0.008 (0.007)	-0.0344 [-0.094;-0.009]	-0.001 (0.007)	-0.00226 [-0.060;0.022]	0.004 (0.009)	0.0198 [-0.024;0.082]	0.003 (0.012)	0.00225 [-0.056;0.091]	0.011	0.0123	-0.014 (0.020)	-0.0809																								
Not employed	-0.036*** (0.008)	-0.143*** [-0.214;-0.109]	0.000 (0.005)	-0.000517 [-0.052;0.051]	-0.009 (0.009)	-0.0372 [-0.114;0.041]	-0.006 (0.010)	-0.0324 [-0.119;0.056]	0.012 (0.012)	0.0814	-0.009 (0.014)	-0.0504 [-0.196;0.081]																								
Employed	0.005 (0.005)	0.0189 [-0.022;0.060]	0.001 (0.011)	0.0125 [-0.068;0.092]	0.004 (0.005)	0.0238 [-0.030;0.081]	0.006 (0.015)	0.0401 [-0.081;0.170]	0.0174** (0.008)	0.103*	0.026 (0.020)	0.118 [-0.041;0.281]																								
Urban	-0.014** (0.006)	-0.061** [-0.107;-0.017]	-0.003 (0.007)	-0.00981 [-0.067;0.045]	-0.017** (0.007)	-0.0851** [-0.152;-0.021]	-0.012 (0.011)	-0.0571 [-0.154;0.038]	0.000 (0.011)	0.0153	-0.009 (0.015)	-0.0459 [-0.186;0.092]																								
Rural	0.0115* (0.006)	0.0456 [-0.003;0.094]	0.008 (0.006)	0.0354 [-0.015;0.090]	0.0171** (0.007)	0.0757* [0.011;0.143]	0.008 (0.010)	0.0314 [-0.056;0.117]	0.0312** (0.010)	0.175**	0.0133 (0.016)	0.0652 [-0.085;0.202]																								
No	0.001 (0.005)	0.00507 [-0.037;0.050]	0.002 (0.006)	0.00997 [-0.042;0.063]	-0.001 (0.006)	-0.00359 [-0.057;0.053]	-0.004 (0.009)	-0.0199 [-0.104;0.067]	0.017* (0.009)	0.104	0.002 (0.014)	0.00941 [-0.130;0.137]																								
Yes	-0.007 (0.006)	-0.0331 [-0.084;0.010]	-0.077* (0.042)	-0.276 [-0.569;0.014]	-0.006 (0.009)	-0.0367 [-0.113;0.043]	-0.009 (0.046)	-0.0671 [-0.413;0.260]	0.012 (0.012)	0.0813	-0.082 (0.061)	-0.360 [-0.848;0.123]																								
Sample	2004-2009												2006-2009												2008-2009											

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. Coefficients in bold in odd columns reject the null effect of no effect when we adjust the p-values to allow for correlation in all outcomes to be tested (following the procedure suggested by Romano and Wolf, 2005). Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. For the 2SLS we present the 90% asymptotic CI clustered by municipality of residence when eligibility is assessed. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 11: Reduced Form and 2SLS Estimates: Participation in training programs (cohorts 2002-2006).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Years after start	2		Spouse		4		Spouse	
	RF	Head 2SLS	RF	2SLS	RF	Head 2SLS	RF	2SLS
	Panel A: Age							
18-35	0.001 (0.002)	0.006 [-0.013;0.027]	0.012*** (0.004)	0.0621*** [0.034;0.092]	0.001 (0.002)	0.00666 [-0.012;0.026]	0.006* (0.003)	0.0333* [0.004;0.065]
36-50	0.003 (0.002)	0.016 [-0.0004;0.022]	0.010*** (0.003)	0.0550*** [-0.025;0.001]	0.0003 (0.002)	0.004 [-0.0127;0.008]	0.004 (0.003)	0.0285 [-0.0205;0.013]
51-65	0.002 (0.002)	0.012 [-0.007;0.020]	0.003 (0.004)	0.027 [-0.057;-0.013]	0.001 (0.002)	0.009 [-0.0102;0.014]	0.003 (0.004)	0.0233 [-0.0296;0.009]
	Panel B: Not employed before 2002							
No	0.007** (0.003)	0.0297** [0.008;0.051]	0.009*** (0.003)	0.0474*** [0.023;0.072]	0.003 (0.003)	0.0137 [-0.009;0.037]	0.005* (0.003)	0.0315* [0.003;0.060]
Yes	0.001 (0.002)	0.009 [-0.007;0.026]	0.005 (0.004)	0.0365* [0.003;0.069]	0.0004 (0.002)	0.004 [-0.013;0.020]	0.005 (0.004)	0.0281 [-0.008;0.063]
	Panel C: Area of residence							
Urban	0.005** (0.002)	0.0252** [0.008;0.044]	0.015*** (0.003)	0.0703 [0.042;0.098]	0.000 (0.002)	0.00343 [-0.014;0.021]	0.004 (0.003)	0.0279 [-0.002;0.059]
Rural	-0.002 (0.002)	-0.005 [-0.022;0.012]	0.002 (0.003)	0.020 [-0.005;0.046]	0.001 (0.002)	0.00646 [-0.010;0.023]	0.006** (0.003)	0.0337* [0.005;0.062]
	Panel D: Female-headed family							
No	-0.002 (0.002)	-0.00264 [-0.018;0.014]	0.009*** (0.003)	0.0467*** [0.022;0.072]	0.001 (0.002)	0.006 [-0.011;0.021]	0.005* (0.003)	0.0311* [0.003;0.061]
Yes	0.017*** (0.003)	0.074*** [0.051;0.097]	-0.021*** (0.005)	-0.067** [-0.109;-0.033]	0.0006 (0.003)	0.004 [-0.019;0.029]	-0.0005 (0.003)	0.008 [-0.021;0.036]
Sample	2004-2007			2006-2007			2006-2007	

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. Coefficients in bold in odd columns reject the null effect of no effect when we adjust the p-values to allow for correlation in all outcomes to be tested (following the procedure suggested by Romano and Wolf, 2005). Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. For the 2SLS we present the 90% asymptotic CI clustered by municipality of residence when eligibility is assessed. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 12: Reduced Form Estimates: Labor Market outcomes for participants in training programs (cohorts 2002-2006).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Outcome	Not Employed		Self-Employed		Dependent Worker		Not Employed		Self-Employed		Dependent Worker	
Years after start	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse
Basic	-0.000 (0.017)	-0.012 (0.018)	-0.022 (0.021)	0.011 (0.016)	0.022* (0.013)	0.001 (0.008)	0.028 (0.022)	0.009 (0.032)	-0.044 (0.028)	-0.019 (0.028)	0.017 (0.024)	0.010 (0.018)
Control Mean	0.150	0.852	0.763	0.120	0.0867	0.278	0.181	0.334	0.623	0.287	0.196	0.396
N	7,207	7,337	7,207	7,337	7,207	7,337	5,766	3,623	5,766	3,623	5,766	3,623
18-35	0.012 (0.026)	-0.011 (0.020)	-0.040 (0.031)	0.004 (0.018)	0.028 (0.019)	0.007 (0.009)	0.023 (0.025)	-0.009 (0.042)	-0.032 (0.034)	-0.002 (0.035)	0.009 (0.030)	0.010 (0.023)
36-50	0.0021 (0.020)	-0.018 (0.021)	-0.018 (0.023)	0.015 (0.020)	0.016 (0.017)	0.003 (0.010)	0.038 (0.021)	0.039 (0.037)	-0.061 (0.031)	-0.042 (0.035)	0.022 (0.029)	0.003 (0.020)
51-65	-0.0446 (0.025)	0.0242 (0.030)	0.0193 (0.029)	-0.00734 (0.027)	0.0253 (0.018)	-0.0169 (0.013)	0.00616 (0.037)	0.0140 (0.049)	-0.00252 (0.044)	-0.0364 (0.040)	-0.00363 (0.028)	0.0224 (0.028)
Not employed	-0.011 (0.029)	-0.079 (0.055)	-0.002 (0.034)	0.082 (0.051)	0.013 (0.017)	-0.003 (0.031)	0.036 (0.036)	0.058 (0.078)	-0.024 (0.040)	-0.146* (0.079)	-0.012 (0.031)	0.088* (0.046)
Employed	-0.002 (0.018)	-0.009 (0.018)	-0.023 (0.0214)	0.007 (0.0164)	0.025 (0.0136)	0.002 (0.00840)	0.032 (0.0220)	0.005 (0.0324)	-0.055 (0.0288)	-0.010 (0.0283)	0.023 (0.0249)	0.006 (0.0184)
Urban	-0.002 (0.019)	-0.016 (0.020)	-0.025 (0.024)	0.015 (0.018)	0.027* (0.015)	0.000 (0.010)	0.029 (0.024)	0.016 (0.038)	-0.040 (0.031)	-0.020 (0.033)	0.011 (0.026)	0.004 (0.020)
Rural	0.000 (0.021)	-0.005 (0.021)	-0.012 (0.024)	0.003 (0.019)	0.012 (0.015)	0.002 (0.008)	0.024 (0.026)	-0.003 (0.032)	-0.052 (0.034)	-0.017 (0.029)	0.029 (0.029)	0.0204 (0.021)
No	-0.012 (0.016)	-0.014 (0.018)	-0.024 (0.022)	0.011 (0.016)	0.035** (0.015)	0.003 (0.008)	0.023 (0.021)	0.008 (0.032)	-0.044 (0.030)	-0.017 (0.028)	0.021 (0.026)	0.009 (0.019)
Yes	0.0206 (0.022)	-0.285 (0.254)	-0.0259 (0.025)	0.413 (0.259)	0.00529 (0.015)	-0.128 (0.153)	0.0539 (0.0293)	-0.134 (0.207)	-0.0552 (0.033)	-0.295 (0.301)	0.00133 (0.028)	0.429 (0.250)
Sample	2004-2007						2006-2007					

Note: Controls excluded from table include quadratic in distance to adjusted cutoff, municipality-year of residence effects. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Figures

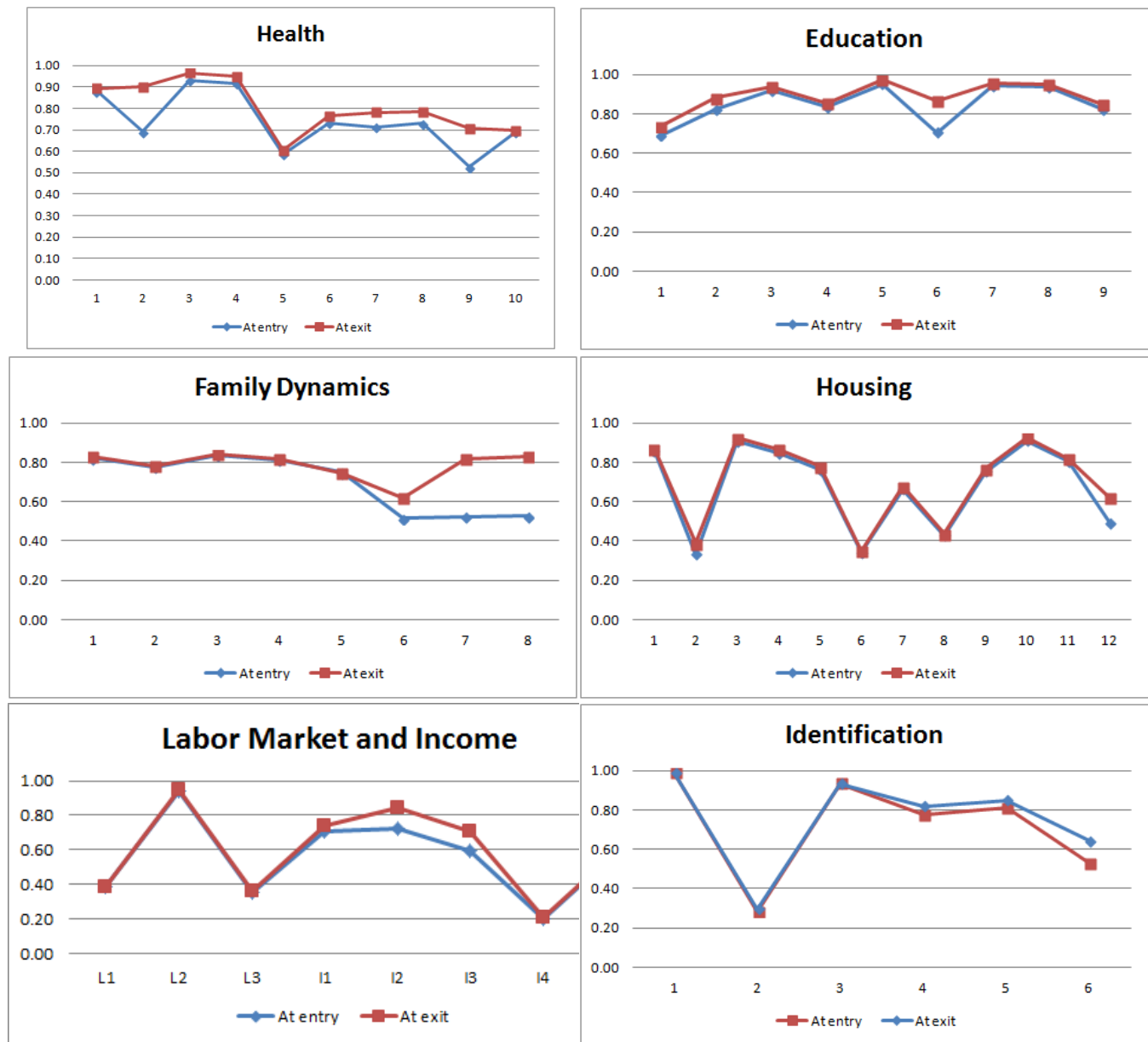


Figure 1: Proportion of CS families with minimum conditions verified at entry and exit of intensive phase.

Note: The sample includes families that entered in CS in the four months preceding the register in the Puente data set (for Dec. 2003, Sept. 2004, Sept. 2005 and Aug. 2006), and it records also the minimum conditions after the intensive phase. Since we restrict the sample to families we observe in the Puente data set entering in program in specific points in time and at exit, the sample includes 32298 (out of 241892; 22,533 families entered in CS in 2003 and 9,765 started in 2004) families. Although only 2 cohorts of participants are used in the graphs, the figures presented for very similar to those obtained if we just use all families we observe entering in CS four months prior to the Puente date or after exiting the intensive phase.

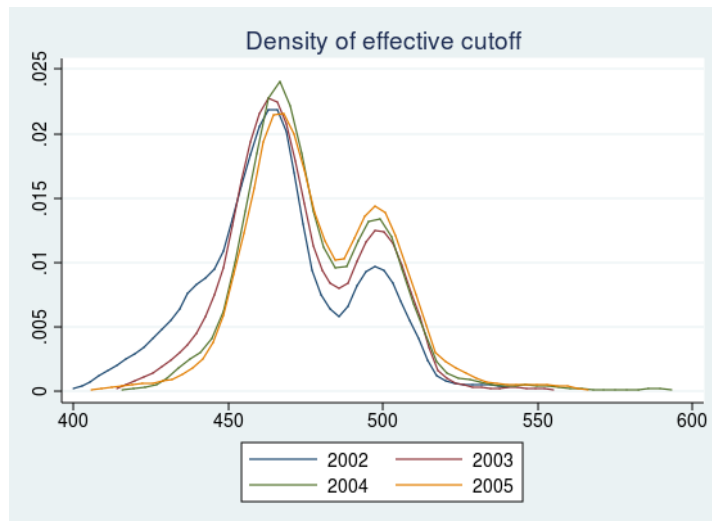


Figure 2: Distribution of effective cutoffs

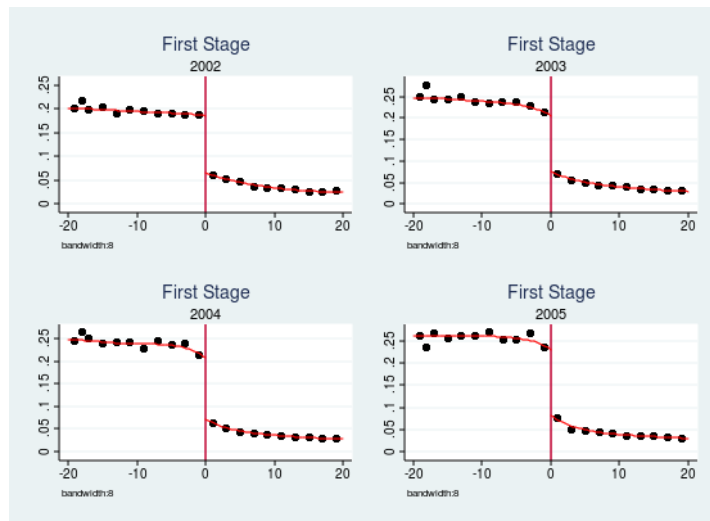


Figure 3: Average Participation in CS among eligible and non-eligible.
 Note: Local Linear Regression Estimates, bandwidth 8 CAS-points. Kernel Epanechnikov.

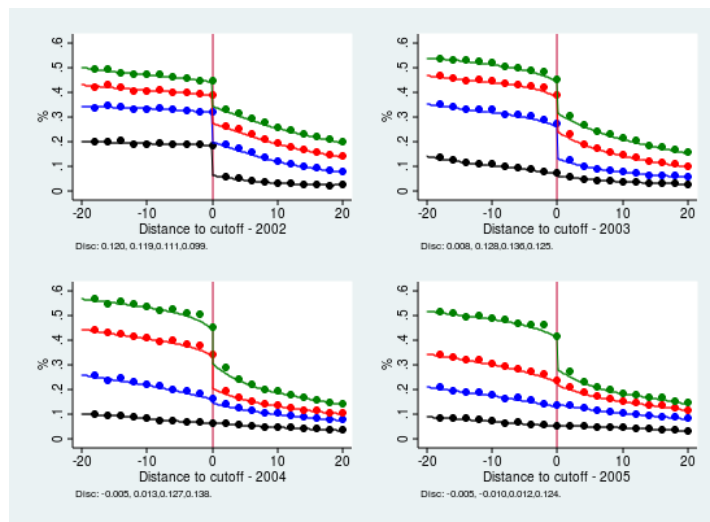


Figure 4: Local Linear Regression Estimates: cumulative entry in CS.

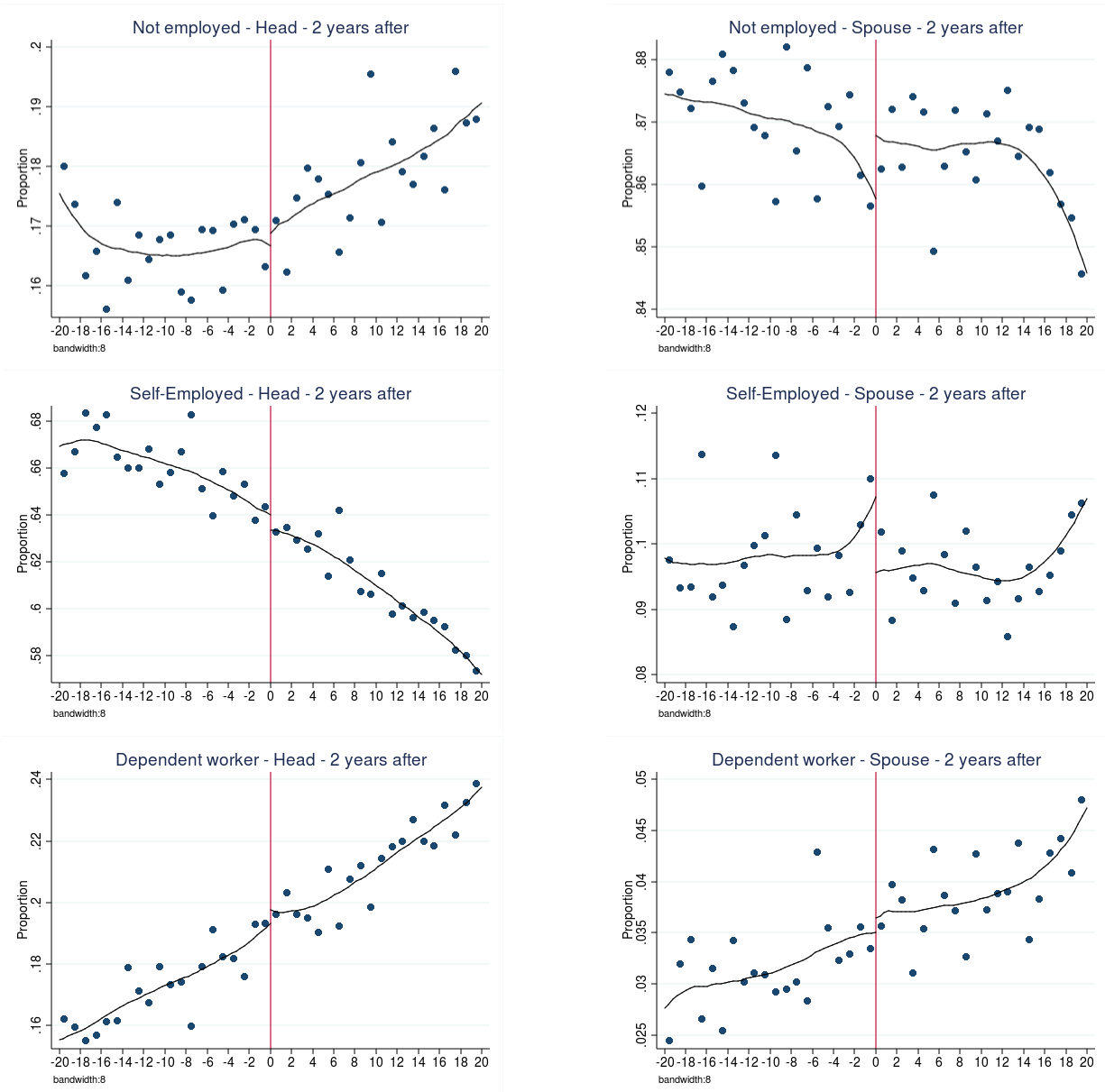


Figure 5: Average outcomes by eligibility status, Bandwidth = 8.

Note: The continuous lines in Figure present local linear regression estimates of several outcomes on percentage distance to cutoff. The bandwidth was set to 2. Circles in figures represent the mean outcome by cell within intervals of 2 points of distance to cutoff. The kernel triangle was used.

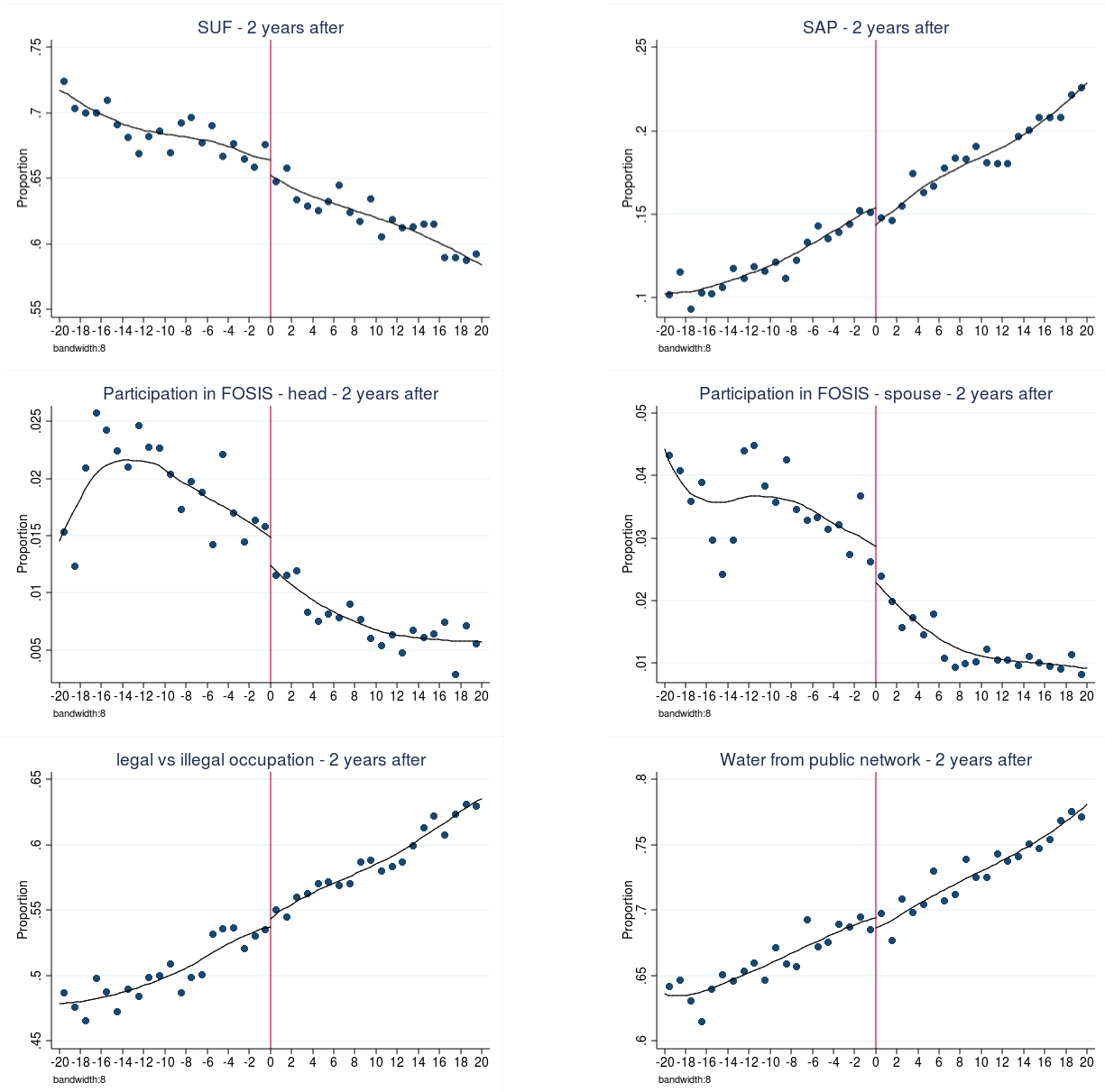


Figure 6: Average outcomes by eligibility status, Bandwidth = 8.

Note: The continuous lines in Figure present local linear regression estimates of several outcomes on percentage distance to cutoff. The bandwidth was set to 2. Circles in figures represent the mean outcome by cell within intervals of 2 points of distance to cutoff. The kernel triangle was used.

A Tables

Table A.1: Definition of variables used.

Variables	Data available		Associated minim cond
	CAS	FPS	
Participation SUF SAP FOSIS	2000-2006 2000-2006 external source 2004-2007.	2007-2008	G1
Labor market and Income Employment status	2000-2006	2007-2009	L1
Hours worked/week Self-employed	2000-2006	2007-2009	
Dependent	2000-2006	2007-2009	
Contract Temporary work Imputed Income	2000-2006 2000-2006	2007-2009 2007-2009	
Housing Legal occupation of house	2000-2006	2007-2009	C1
Owner of house (if legal occupation) Sewage connected	2000-2006 2000-2006	2007-2009 2007-2009	C5
Water from public network	2000-2006	2007-2009	C3

Definition of variables used (cont.).

Variables		Data available		Associated minim cond
		CAS	FPS	
Housing Adequate roof	The roof is made of material such shingle, tile or slate, with inner lining. As opposed to zinc or slate, without inner lining, phonolite, straw, broom sedge, reed, cane, based on elements such as cardboard, cans, bags.	2000-2006		C6
Adequate walls	The walls are made of brick/concrete blocks, masonry stone (with inner lining); mud; or all but at least one wall of the house is built with the previous materials. As opposed to mud thatch, drywall; to partition unlined; waste (as cardboard, cans, bags); or a combination of materials that excludes brick/concrete blocks, masonry stone (with inner lining); mud.	2000-2006		C6
Water Heating	1 if the family owns boiler, which can be powered by gas, electricity, solar energy, kerosene or wood.	2000-2006		C6
Fridge	1 if family owns a refrigerator in good condition and that it is functioning.	2000-2006		C8
Overcrowding	All rooms in the house, excluding restrooms, kitchen (if used only as such), cellars and store areas.			
Other outcomes all children enrolled in school	Indicators of enrolment in school for all children in family in a given age group enrolled in school (6-11, 12-14, 15-18, 19-24). The first three groups are chosen according to the schedule of the Subvencion Escolar (school subsidy). All indigent children in grades 7-8 of basic level or in the four years of the medium level are eligible to Subvencion Escolar (regardless of passing grade or not). Indicator of enrollment.		2007-2009	E3
all children in preschool age	Indicator for health check-ups.		2007-2009	E1
in preschool	Indicator for health check-ups.		2007-2009	H4
all children with controls by family (<8y)	Indicator for health check-ups.		2007-2009	H7
all elderly with controls by family (≥65)			2007-2009	
Someone in family had problems w/ alcohol/drugs			2007-2009	
Any training program	Any adult 18-65 in family attended a training program.		2007-2009	
OMIL	At least of the unemployed members of the family is registered at OMIL		2007-2009	L3

Table A.2: List of Minimum Conditions to be met by families.

Identification	
I1	That all family members are registered in the Civil Registry.
I2	All members of the family have an identity card.
I3	The family has their current CAS updated at the Municipality of residence.
I4	That all men over 18 have their military situation solved.
I5	That all adult members of the family have regularized their bureaucracy, as appropriate.
I6	All members of the family with a disability, should have the disability certified by COMPIN (<i>Comisi' n Medica, Preventiva e Invalidez</i>) and registered in the National Disability.
Health	
H1	Family service registered in the Primary Health Care.
H2	That pregnant women have their health checks updated.
H3	That children under 6 have their vaccinations updated.
H4	Children under age 6 have their health checks updated.
H5	That women 35 years and older have the Pap test updated.
H6	Women who use birth control are under medical supervision.
H7	That elderly are under medical supervision.
H8	All members of the family who have a chronic illness are under medical supervision.
H9	That family members with disabilities that can be rehabilitated, are participating in a rehabilitation program.
H10	That family members are informed on health and self-care.
Education	
E1	That preschoolers attend a nursery school program.
E2	That in the presence of a working mother and in the absence of another adult who can take care of the younger children, these should be incorporated in some form of child care.
E3	That children up to 15 years are attending an educational establishment.
E4	That children who attend preschool, primary or secondary, benefit from assistance programs appropriate school.
E5	That children over age 12 are literate.
E6	That children with disabilities who are able to study are incorporated into the educational system, regular or special.
E7	That there is an adult responsible for the child's education and that is in regular contact with the school.
E8	That adults have a positive and responsible attitude towards education and school, recognizing the value of the child's participation in formal educational processes.
E9	That adults are literate.
Family Dynamics	
F1	That exists in the daily practices of family conversation about topics such as habits, times and places for recreation.
F2	The family has adequate mechanisms to deal with conflicts.
F3	That there are clear rules of coexistence within the family.
F4	That there is an equitable distribution of household tasks (among all family members, regardless of the sex of its members and according to the age of each.)
F5	Family knows about community resources and development programs in the local network (sports clubs, community centers, community organizations).

List of Minimum Conditions to be met by families (cont).

Family Dynamics (cont.)	
F6	If there is domestic violence, the people directly involved in this situation are incorporated into a program of support (at least know the alternatives and are in the process of joining).
F7	That families who have children in the protection system somewhere visit them regularly.
F8	That families with a young member in the correctional system, support him/her and be part of the rehabilitation program.
Housing	
C1	The family has its housing situation clarified regarding tenure of the house and site in which they live.
C2	If the family wants to apply for housing, she should be doing it.
C3	Access to clean water.
C4	They have an adequate power system.
C5	They have a system of proper sewage disposal.
C6	That house is not raining, not flooded and is well sealed.
C7	That housing has at least two habitable rooms.
C8	That each family member has his bed with basic equipment (sheets, blankets, pillows).
C9	They have basic equipment for feeding the family members (pots and pans, crockery and cutlery for all family members).
C10	They must have a proper system of garbage disposal.
C11	That the home environment is free from pollution.
C12	That the family has access to the subsidy payment of potable water consumption, if applicable.
Labor Market	
L1	At least one adult family member works on a regular basis and have a stable salary.
L2	No child under 15 years drop out of school to work.
L3	That people who are unemployed are registered in the Municipal Information Office (OMIL).
Income	
G1	That the members of families entitled to SUF have it (at least are applying to it).
G2	That family members entitled to Family Allowance (<i>Asignación Familiar</i>) have it
G3	That family members entitled to PASIS (welfare pension) have it (at least are applying to it).
G4	The family has income above the poverty line.
G5	The family has a budget organized according to their resources and priority needs.

Table A.3: Labor market programs to which families have access .

Programs exclusively for CS families	
<p>Job Placement Empleo (desenlace dependiente) - Employment (dependent work)</p> <p>Bonificación a la contratación - Hiring bonus</p> <p>PROFOCAP - Program for Training and Employment Bonificación Jóvenes - Hiring bonus for youth</p>	<p>FOSIS</p> <p>SENCE</p> <p>CONAF</p> <p>SENCE</p> <p>Equip individuals so that they can take a job through: (1) training and technical support for strengthening and capacity development, (2) job training courses, (3) services for placement in companies, (4) training and technical support after placement in the workplace. For hiring new workers in the company, belonging to the CS. It subsidizes up to 50% of a minimum monthly wage per worker, for a period of up to six months. In addition to a contribution for optional training for companies contracting individuals for two or more months and an optional contribution for the costs of transportation. Training and employment program with actions in activities preferably related with agro-forestry or the development of local production, enabling income generation. Insert young beneficiaries of CS between 18 and 29 years in a job. It subsidizes the hiring of workers contributing with 50% of the minimum wage for a period of between 1-4 months, renewable for 4 months. In addition, there is funding for job training (optional) to CLP370,000 (785USD) per beneficiary (92 hours minimum). Employees receive bonuses collation and transport of up to CLP55,000 (120USD) per month, for the days actually worked.</p>
<p>Self-Employment Empleo (desenlace independiente) - Employment (independent work)</p> <p>Microemprendimiento (PAME) - Micro-enterprise</p> <p>Microemprendimiento indígena urbano - Micro-enterprise for indigenous in urban areas</p> <p>Program de Apoyo a la Producción Familiar para el Autoconsumo - Support Program for Subsistence Production</p>	<p>FOSIS</p> <p>FOSIS</p> <p>CONADI</p> <p>FOSIS</p> <p>Contribute to develop an independent economic activity. Includes (1) training and technical support for strengthening and capacity development, (2) job training, remedial or upgrade skills; (3) training and technical support for the formulation of business plans, (4) training and technical support for the marketing of goods and services, (5) training and technical support for the management of the economic activity, (6) monitoring the implementation of economic activities. Became PAME in 2006. The program funds projects comprising two lines sequential intervention: (1) support for micro firms, (2) finance microenterprise (fund management capital and support in the process of acquisition of assets, inputs and services). Provides technical assistance, training and training support, under a self-managed participatory on issues related to production activities that generate their subsistence. The goal is to finance productive initiatives for indigenous beneficiaries of CS. To increase disposable income of rural families at extreme poverty, through savings generated by food production. It comprises 3 services: (1) Access to technology simple and user-friendly to produce, prepare and preserve food efficiently (savings in water, firewood inputs); (2) Training in the use, management and repair of the technologies implemented in conjunction with materials and supplies (family visits and workshops and talks, advice in handling the family budget, analyzing and supporting savings and reallocation of resources to production for home consumption, and support the equitable distribution of tasks in activities such as site preparation for planting, care of the garden, cooking in family); (3) Educational support to improve eating habits with basic information on food preparation and nutrition. These activities are carried out within team monthly visits (each lasting at least 45 min) and conducting workshops and lectures (at least 3 workshops, a minimum of 4 hours each). The intervention lasts for nine months, and its basic steps are: diagnosis (one month), development of action plan (1 month), implementation (3 months), accompaniment (3 months) and closing (1 month).</p>

Labor market programs to which families have access (cont.).

Programs exclusively for CS families		
<p>Employability Habilitación sociolaboral - Job Skills Competencias Laborales Mujeres - Job skills for women Apoyo al empleo juvenil (PEJ) - Youth Employment Support</p>	<p>SENCE PRODEMU FOSIS</p>	<p>Includes job readiness workshops and motivational work for users requiring employability skills. For participants in OMIL. Training program for women that includes developing job skills, both technical and occupational training. It is expected to ensure the involvement of women in other employment programs and in PAME. The goal is to provide employment and skills for better placement. To help unemployed youth between 18 and 24 to improve their employability through the application of a specific job placement plan and to participate in public and private employment programs.</p>
Program of preferential access to CS families		
<p>Job Placement Empleo Extra (desenlace dependiente) - Employment (dependent work) Self-Employment Empleo Extra (desenlace independiente) - Employment (independent work) Apoyo a Actividades Economicas (AAE) - Support for Economic Activities Programa Fortalecimiento de Iniciativas Microempresariales (FIM) - Program for Strengthening of Microenterprise Initiatives</p>	<p>FOSIS FOSIS FOSIS FOSIS</p>	<p>See Empleado (desenlace dependiente). See Empleado (desenlace independiente). Includes: (1) financing productive investment, (2) providing specialized services (Consulting and Technical Assistance, etc.), (3) Access to Credit (lines: credit subsidy; Guarantee Fund, and Revolving Fund) - Funding for development projects supporting the environment (lines: Shares Investment Viability; Workspaces Collective, among others). The goal is to contribute to the consolidation of small units that were supported by the FOSIS at levels 1 and/or 2. That is, initiatives supported by FIM include pre-production units, microenterprises and microentrepreneurs who have graduated from the PAME and AAE from FOSIS, and/or that are in an increasing level of development and require support to be linked to the network development services. Therefore, FIM works with all the production units to show that their revenue is stable, with development potential and work on gaps faced in the commercial and administrative areas and support with legal issues for participation in other programs. In this context, the program aims to contribute to further consolidation of microenterprise.</p>
<p>Employability Competencias Laborales (PNCL) - Job Skills Program Programa Apoyo a Emprendimientos Sociales (PES) - Social Enterprise Support Program</p>	<p>FOSIS FOSIS</p>	<p>Oriented towards leveling studies and social training. To contribute to the beneficiaries and beneficiaries improve their employability, through certification of their capabilities. Pilot in 2007. Offers support to initiatives that offer some community service and want to expand. It includes workshops and courses related to the activity or occupation developed, which are certified by technical training centers, universities and other institutions. Also, each participant receives a financial contribution to the purchase of materials or tools that facilitate the delivery of quality care to its clients. The program provides guidance in the process of formalizing the business.</p>
<p>Promocion/Desarrollo (Social Development)</p>	<p>FOSIS</p>	<p>Generic objectives, intervening in various dimensions of poverty. It works on social problems as 1) Habitability, 2) Social Capital (participation and use of social networks) 3) Family Dynamics (family relationships and / or domestic violence); 4) Education (dropout and / or school performance)</p>

Table A.4: Selection of families to CS.

	(1) N	(2) Mean 2002	(3) Within R2	(4) Municipality Coeff/SE	(5) Within R2	(6) Neighborhood Coeff/SE
SAP	522,426	0.06	0.0474	-0.0034 (0.0061)	0.0897	-0.0116** (0.0055)
SUF	341,364	0.43	0.0713	0.1206*** (0.0041)	0.1197	0.1132*** (0.0039)
Housing						
Adequate walls	534,496	0.74	0.0504	-0.0660*** (0.0049)	0.0919	-0.0629*** (0.0035)
Adequate ceil	534,496	0.65	0.0523	-0.0785*** (0.0047)	0.0933	-0.0732*** (0.0033)
Legal occupation of house	534,496	0.29	0.0486	-0.0406*** (0.0040)	0.0906	-0.0425*** (0.0034)
Water from public network	534,496	0.74	0.0473	0.0064 (0.0082)	0.0892	-0.0063 (0.0051)
Sewage connected	534,496	0.25	0.0483	0.0055*** (0.0007)	0.0904	0.0061*** (0.0007)
Fridge	534,496	0.20	0.0473	0.0041 (0.0046)	0.0892	0.0028 (0.0042)
Water Heating	534,496	0.00	0.0474	-0.1021*** (0.0105)	0.0894	-0.0987*** (0.0100)
Electricity meter	532,882	0.36	0.0475	0.0074*** (0.0020)	0.0896	0.0111*** (0.0018)
CAS and Employment						
CAS	534,496	469.75	0.0707	-0.0041*** (0.0002)	0.1123	-0.0042*** (0.0002)
Head is employed	534,454	0.66	0.0505	0.0597*** (0.0036)	0.0918	0.0541*** (0.0033)
Spouse is employed	292,176	0.15	0.0585	0.0290*** (0.0041)	0.1127	0.0269*** (0.0038)
Imputed income	411,812	0.85	0.0530	0.0749*** (0.0032)	0.0974	0.0695*** (0.0033)
Demographics						
Age of head	534,496	44.21	0.0624	-0.0041*** (0.0001)	0.1020	-0.0038*** (0.0001)
Single headed	534,496	0.46	0.0557	-0.0925*** (0.0041)	0.0967	-0.0885*** (0.0039)
Male head	534,496	0.64	0.0488	-0.0418*** (0.0027)	0.0908	-0.0422*** (0.0025)
Years of schooling	534,491	4.78	0.0474	0.0017** (0.0007)	0.0893	0.0014** (0.0007)
Presence of children	534,496	0.66	0.0869	0.2094*** (0.0050)	0.1251	0.2024*** (0.0049)
Family Size	534,496	3.57	0.0864	0.0539*** (0.0012)	0.1257	0.0530*** (0.0011)
Family belongs to dominant ethnicity in neighborhood	161,519	0.87	0.0507	-0.0156** (0.0063)	0.1154	-0.0176*** (0.0059)
Rural	534,496	0.66	0.0474	-0.0188** (0.0088)	0.0892	-0.0006 (0.0110)
Minutes family takes to nearest health center	274,594	31.46	0.0543	0.0004*** (0.0001)	0.1065	0.0003*** (0.0001)

Note: The table includes univariate correlations of selected family and their neighborhood characteristics measured the first a family is observed in CAS between 2002 and 2005. Only families that are eligible to CS according to the official cutoff are included in the table. Columns 3-4 present correlations within municipality; columns 5-6 present correlations within neighborhood. Robust standard errors in parentheses, clustered by municipality of residence. ***p<0.01, **p<0.05, *p<0.1

Table A.5: Reduced Form Estimates: Employment type (cohorts 2002-2006).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(5)	(6)	(7)	(8)
Years after start	2		4		6		8		6		8	
RF	Self-Employed Head	Spouse	Dependent worker Head	Spouse	Self-Employed Head	Spouse	Dependent worker Head	Spouse	Self-Employed Head	Spouse	Dependent worker Head	Spouse
Basic	-0.003 (0.005)	0.002 (0.006)	0.007 (0.006)	-0.000 (0.005)	-0.004 (0.005)	-0.002 (0.003)	-0.003 (0.006)	-0.004 (0.009)	0.006 (0.007)	0.001 (0.008)	-0.003 (0.007)	0.003 (0.007)
Control Mean	0.173	0.868	0.629	0.0958	0.198	0.0360	0.220	0.759	0.449	0.146	0.331	0.0950
N	136,674	88,627	136,674	88,627	136,674	88,627	116,764	55,383	116,764	55,383	116,764	55,383
18-35	0.014* (0.008)	0.001 (0.006)	-0.018** (0.007)	-0.006 (0.004)	0.018** (0.009)	0.006 (0.009)	-0.015* (0.008)	-0.002 (0.008)	-0.009 (0.011)	0.000 (0.015)	0.001 (0.012)	-0.001 (0.012)
36-50	0.00760 0.00614	0.00243 0.00626	-0.00978 0.00551	-0.00122 0.00407	0.00172 0.00837	0.00589 0.00882	-0.00579 0.00771	0.000134 0.00826	-0.0123 0.0114	0.0119 0.0144	-0.00280 0.0112	0.00968 0.0118
51-65	-0.00300 0.00818	0.00130 0.00703	0.0115 0.00668	-0.000158 0.00384	0.00135 0.0108	-0.0209 0.0101	-0.00513 0.00944	0.0181 0.00889	-0.00831 0.0122	-0.00416 0.0162	0.00835 0.0111	0.0185 0.0145
No	0.014 (0.009)	0.000 (0.005)	0.022*** (0.006)	-0.000 (0.003)	-0.010 (0.010)	0.002 (0.008)	0.019** (0.008)	0.004 (0.007)	-0.022* (0.012)	0.006 (0.012)	0.011 (0.011)	0.004 (0.010)
Yes	0.00465 0.00579	0.00977 0.0115	-0.00961 0.00502	-0.0109 0.00701	0.00611 0.00691	-0.00275 0.0144	-0.0106 0.00654	-0.00296 0.0103	-0.0108 0.00935	-0.0231 0.0198	-0.00657 0.00883	-0.00261 0.0149
Urban	0.015** (0.006)	0.004 (0.006)	-0.001 (0.005)	-0.001 (0.004)	0.016** (0.007)	0.007 (0.008)	0.001 (0.007)	0.006 (0.007)	-0.004 (0.010)	0.002 (0.013)	0.004 (0.010)	0.007 (0.011)
Rural	-0.00374 0.00700	-0.00487 0.00511	-0.00777 0.00556	-0.00309 0.00351	-0.00630 0.00787	-0.00671 0.00792	-0.0108 0.00760	-0.00103 0.00738	-0.0211 0.0104	-0.00702 0.0129	-0.0101 0.0101	-0.00627 0.0117
No	0.005 (0.006)	0.000 (0.005)	-0.007 (0.005)	-0.002 (0.004)	0.009 (0.007)	0.002 (0.008)	-0.008 (0.007)	0.002 (0.007)	-0.008 (0.010)	-0.003 (0.012)	-0.009 (0.009)	0.001 (0.010)
Yes	0.00619 0.00759	0.0305 0.0424	0.00128 0.00605	0.0464 0.0343	-0.00532 0.00944	-0.0555 0.0538	0.0112 0.00758	0.0641 0.0462	-0.0234 0.0112	0.0642 0.0749	0.0117 0.00982	0.0177 0.0526
Sample	2004-2009				2006-2009				2008-2009			

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. Coefficients in bold in odd columns reject the null effect of no effect when we adjust the p-values to allow for correlation in all outcomes to be tested (following the procedure suggested by Romano and Wolf, 2005). Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated (standard errors obtained by block bootstrap for 2SLS estimates - lock is municipality of residence). * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A.6: Reduced Form Estimates: labor market participation and job search (cohorts 2002-2006).

Years after start Variable	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)		(11)		(12)			
	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse		
	Panel A: Basic																									
Basic	0.007 (0.010)	0.011 (0.010)	0.006 (0.008)	-0.002 (0.004)	0.004 (0.007)	0.004 (0.008)	0.007 (0.006)	0.000 (0.003)	-0.013 (0.009)	0.000 (0.003)	0.000 (0.003)	0.004 (0.008)	0.004 (0.008)	0.007 (0.006)	0.000 (0.003)	-0.013 (0.009)	0.000 (0.003)	0.004 (0.008)	0.004 (0.008)	-0.003 (0.009)	0.004 (0.008)	0.004 (0.008)	0.004 (0.008)	0.004 (0.008)	-0.000 (0.004)	
Control Mean	58,493	36,472	20,236	30,624	110,755	69,448	36,131	57,401	81,848	50,653	26,455	41,640	41,640	81,848	50,653	26,455	41,640	41,640	81,848	50,653	26,455	41,640	41,640	81,848	50,653	26,455
N	0.671	0.170	0.0413	0.0206	0.697	0.188	0.0535	0.0208	0.711	0.198	0.0627	0.0224	0.0224	0.711	0.198	0.0627	0.0224	0.0224	0.711	0.198	0.0627	0.0224	0.0224	0.711	0.198	0.0627
	Panel B: Not employed before 2002																									
Not employed before 2002	0.027** (0.011)	0.014 (0.009)	0.013* (0.008)	-0.000 (0.004)	0.010 (0.008)	0.005 (0.008)	0.014** (0.006)	0.001 (0.003)	-0.011 (0.011)	0.003 (0.009)	0.003 (0.009)	0.012 (0.008)	0.012 (0.008)	0.014** (0.006)	0.001 (0.003)	-0.011 (0.011)	0.003 (0.009)	0.012 (0.008)	0.012 (0.008)	0.003 (0.009)	0.003 (0.009)	0.012 (0.008)	0.012 (0.008)	0.012 (0.008)	-0.000 (0.004)	
Employed before 2002	-0.00115 0.00881	-0.0168 0.0190	0.000509 0.00881	-0.0160 0.00973	-0.0101 0.00628	-0.0101 0.00628	-0.00450 0.0148	-0.00615 0.00662	-0.0159 (0.008)**	-0.0204 0.0158	-0.0204 0.0158	-0.00715 0.00856	0.00239 0.00804	-0.00715 0.00856	-0.00615 0.00662	-0.0159 (0.008)**	-0.0204 0.0158	-0.00715 0.00856	0.00239 0.00804	-0.0204 0.0158	-0.0204 0.0158	-0.00715 0.00856	-0.00715 0.00856	0.00239 0.00804	0.00239 0.00804	
	Panel C: Area of residence																									
Urban	0.035*** (0.011)	0.021* (0.011)	0.009 (0.008)	0.002 (0.005)	0.025*** (0.008)	0.015* (0.009)	0.010 (0.007)	0.003 (0.004)	0.004 (0.010)	0.004 (0.010)	0.004 (0.010)	0.006 (0.009)	0.006 (0.009)	0.010 (0.007)	0.003 (0.004)	0.004 (0.010)	0.004 (0.010)	0.006 (0.009)	0.006 (0.009)	0.004 (0.010)	0.004 (0.010)	0.006 (0.009)	0.006 (0.009)	0.006 (0.009)	0.000 (0.005)	
Rural	-0.0310 (0.011)***	-0.00106 0.0101	0.000173 0.00840	-0.00507 0.00426	-0.0254 (0.008)***	-0.00983 0.00837	0.000616 0.00690	-0.00245 0.00335	-0.0352 (0.010)***	-0.00985 0.00964	-0.00985 0.00964	0.000397 0.00862	-0.000689 0.00453	-0.0352 (0.010)***	-0.00985 0.00964	-0.00985 0.00964	0.000397 0.00862	0.000397 0.00862	-0.00985 0.00964	-0.00985 0.00964	0.000397 0.00862	0.000397 0.00862	-0.000689 0.00453	-0.000689 0.00453	-0.000689 0.00453	
	Panel D: Female-headed family																									
No	0.006 (0.009)	0.001 (0.009)	0.001 (0.009)	-0.000 (0.007)	-0.000 (0.007)	0.002 (0.007)	0.002 (0.007)	0.002 (0.007)	-0.015* (0.009)	-0.015* (0.009)	-0.015* (0.009)	-0.004 (0.009)	-0.004 (0.009)	0.002 (0.007)	0.002 (0.007)	0.002 (0.007)	0.002 (0.007)	-0.015* (0.009)	-0.015* (0.009)	-0.015* (0.009)	-0.015* (0.009)	-0.015* (0.009)	-0.015* (0.009)	-0.015* (0.009)	-0.004 (0.009)	
Yes	0.0197 (0.011)*	0.0127 0.00806	0.0127 0.00806	0.00733 0.00942	0.00733 0.00942	0.0121 (0.007)*	0.0121 (0.007)*	0.0121 (0.007)*	-0.0131 0.0110	-0.0131 0.0110	-0.0131 0.0110	0.00966 0.00869	0.00966 0.00869	0.0121 (0.007)*	0.0121 (0.007)*	0.0121 (0.007)*	0.0121 (0.007)*	-0.0131 0.0110	-0.0131 0.0110	-0.0131 0.0110	-0.0131 0.0110	0.00966 0.00869	0.00966 0.00869	0.00966 0.00869	0.00966 0.00869	
Sample	2007-2008						2007-2009						2007-2009													

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A.7: Reduced Form Estimates: Housing.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Outcome	Legal occupation	Owner if legal occup.	Sewage connected	Water from network	Adequate roof	Adequate walls	Heating	Fridge
Years after start	2							
	Panel A: Condition met before 2002							
Not met	-0.004 (0.006)	0.014 (0.011)	0.020*** (0.006)	-0.004 (0.005)	-0.017** (0.008)	-0.024*** (0.008)	-0.003 (0.004)	0.009 (0.007)
Met	-0.013** (0.006)	-0.0121 (0.009)	-0.032*** (0.008)	0.00314 (0.004)	0.012** (0.005)	0.007* (0.004)	-0.038** (0.018)	0.022*** (0.008)
	Panel B: Area of residence							
Urban	-0.014** (0.006)	-0.029** (0.012)	-0.042*** (0.008)	0.018*** (0.005)	0.019*** (0.006)	0.017*** (0.005)	-0.012*** (0.004)	0.034*** (0.008)
Rural	0.00587 (0.007)	0.0130 (0.013)	0.063*** (0.007)	-0.023*** (0.007)	-0.00685 (0.007)	-0.021*** (0.006)	0.00603 (0.004)	-0.00778 (0.009)
Years after start	4							
	Panel C: Condition met before 2002							
Not met	0.003 (0.005)	0.024 (0.028)	0.007 (0.011)	-0.007 (0.006)	0.005 (0.014)	-0.010 (0.014)	-0.012 (0.008)	0.016 (0.013)
Met	0.009* (0.005)	0.006 (0.019)	-0.011 (0.015)	0.00422 (0.005)	0.0133 (0.011)	0.0121 (0.009)	0.0388 (0.039)	0.045*** (0.016)
	Panel D: Area of residence							
Urban	0.003 (0.005)	0.004 (0.022)	-0.030** (0.013)	0.017*** (0.005)	0.015 (0.013)	0.010 (0.009)	-0.015* (0.009)	0.038** (0.015)
Rural	0.008 (0.005)	0.025 (0.024)	0.037*** (0.013)	-0.023*** (0.008)	-0.001 (0.012)	-0.005 (0.011)	-0.008 (0.009)	-0.0001 (0.014)

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. Coefficients in bold in odd columns reject the null effect of no effect when we adjust the p-values to allow for correlation in all outcomes to be tested (following the procedure suggested by Romano and Wolf, 2005). Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

B Robustness Checks

Table B.1: First Stage Estimates.

	(1)	(2)	(3)	(4)
Year	2002	2003	2004	2005
	Panel A: Effective cutoff 5-points below original			
1[Eligible]	-0.042*** (0.005)	-0.038*** (0.006)	-0.043*** (0.005)	-0.054*** (0.005)
Observations	203,378	236,748	232,162	223,263
Mean	0.193	0.230	0.239	0.264
	Panel B: Effective cutoff 5-points above original			
1[Eligible]	-0.005* (0.003)	-0.015*** (0.002)	-0.018*** (0.002)	-0.015*** (0.003)
Observations	256,964	297,775	296,700	290,769
Mean	0.0381	0.0426	0.0392	0.0411
	Panel C: Effective cutoff 2-points below original			
1[Eligible]	0.041*** (0.005)	0.060*** (0.005)	0.073*** (0.006)	0.076*** (0.007)
Observations	219,198	255,285	251,286	242,960
Mean	0.123	0.141	0.138	0.154
	Panel D: Effective cutoff 2-points above original			
1[Eligible]	0.057*** (0.004)	0.067*** (0.004)	0.072*** (0.005)	0.086*** (0.006)
Observations	240,459	279,629	277,241	270,093
Mean	0.0491	0.0515	0.0459	0.0476
	Panel E: CAS as running variable			
1[Eligible]	0.129*** (0.008)	0.158*** (0.007)	0.170*** (0.008)	0.186*** (0.009)
Observations	229,804	267,339	264,205	256,517
Mean	0.0569	0.0635	0.0573	0.0647

Note: The dependent variable is an indicator that takes value 1 if the family started CS in a given and 0 otherwise (for the years of 2003, 2004 and 2005, entrants in previous years have missing in the dependent variable since entrants in the previous years cannot re-enrol in the intensive phase).

For panels A-D the controls excluded from table include cubic in distance to the effective cutoff and municipality-year of residence fixed effects. Panel E uses as controls cubic in CAS and municipality-year of residence fixed effects. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table B.2: First Stage Estimates: cumulat.

Entrants up to	(1) 2002	(2) 2003	(3) 2004	(4) 2005
	Panel A: Effective cutoff in 2002			
1[Eligible]	0.123*** (0.008)	0.116*** (0.010)	0.109*** (0.009)	0.099*** (0.009)
	Panel B: Effective cutoff in 2003			
1[Eligible]	0.014*** (0.003)	0.148*** (0.007)	0.163*** (0.008)	0.148*** (0.008)
	Panel C: Effective cutoff in 2004			
1[Eligible]	-0.004* (0.002)	0.022*** (0.004)	0.153*** (0.008)	0.179*** (0.008)
	Panel D: Effective cutoff in 2005			
1[Eligible]	-0.003 (0.002)	-0.003 (0.003)	0.030*** (0.005)	0.159*** (0.008)

Note: This table is the parametric version of table 4. The dependent variable is an indicator that takes value 1 if the family started CS in any year prior to the one in column, and zero otherwise.

The horizontal panels correspond to different running variables, corresponding to the different cut-offs. Therefore, the controls excluded from table include cubic in distance to the effective cutoff and municipality-year of residence fixed effects. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table B.3: Impact of CS: Sensitivity to the choice of functional form.

	(1)	(2)	(3)	(4)
Years after start	Basic	2 Distance Quadratic Quartic		CAS Cubic
Participation				
SUF	0.022*** (0.008)	0.019*** (0.006)	0.023*** (0.008)	0.020*** (0.006)
SAP	0.002 (0.006)	0.005 (0.005)	0.003 (0.006)	0.006 (0.004)
FOSIS participation (head)	0.002 (0.002)	0.006*** (0.002)	0.002 (0.002)	0.006*** (0.001)
FOSIS participation (spouse)	0.008*** (0.003)	0.012*** (0.002)	0.009*** (0.003)	0.012*** (0.002)
Labor market				
Not employed (head)	-0.003 (0.005)	-0.005 (0.004)	-0.002 (0.005)	-0.004 (0.004)
Self-employed (head)	0.007 (0.006)	0.006 (0.005)	0.007 (0.006)	0.005 (0.005)
Dependent worker (head)	-0.004 (0.005)	-0.001 (0.004)	-0.005 (0.005)	-0.001 (0.004)
Not employed (spouse)	0.002 (0.006)	-0.003 (0.004)	0.000 (0.006)	-0.003 (0.004)
Self-employed (spouse)	-0.000 (0.005)	0.003 (0.004)	0.001 (0.005)	0.003 (0.004)
Dependent worker (spouse)	-0.002 (0.003)	-0.001 (0.003)	-0.001 (0.004)	-0.001 (0.003)
Housing				
Legal occupation of house	-0.005 (0.006)	-0.004 (0.005)	-0.004 (0.006)	-0.003 (0.005)
Owner of house (if legal occupation)	-0.010 (0.011)	-0.001 (0.008)	-0.007 (0.011)	-0.004 (0.008)
Water from public network	0.005 (0.005)	0.007* (0.004)	0.005 (0.005)	0.010** (0.004)
Adequate roof	0.007 (0.005)	0.003 (0.004)	0.007 (0.006)	0.003 (0.004)
Adequate walls	0.000 (0.005)	-0.001 (0.004)	0.000 (0.005)	-0.002 (0.004)
Heating	-0.004 (0.004)	-0.001 (0.003)	-0.004 (0.004)	-0.002 (0.003)
Fridge	0.015** (0.007)	0.018*** (0.005)	0.014* (0.007)	0.019*** (0.006)
Other				
all children 6-11 enrolled in school	0.014 (0.012)	0.008 (0.010)	0.014 (0.013)	0.006 (0.009)
all children 12-14 enrolled in school	0.006 (0.010)	0.007 (0.007)	0.004 (0.011)	0.006 (0.007)
all children 15-18 enrolled in school	-0.006 (0.021)	-0.007 (0.017)	-0.001 (0.022)	-0.007 (0.017)
all children in preschool age in preschool	0.025 (0.067)	0.018 (0.054)	0.027 (0.068)	0.025 (0.052)
all children with controls by family (<8y)	0.000 (0.007)	0.000 (0.005)	-0.001 (0.007)	0.002 (0.005)
all elderly with controls by family (≥65)	0.054 (0.056)	0.027 (0.043)	0.048 (0.056)	0.020 (0.041)
Someone in family had problems w/ alcohol/drugs	0.000 (0.007)	-0.001 (0.006)	-0.002 (0.008)	-0.003 (0.006)
Any training program	-0.002 (0.008)	-0.006 (0.007)	-0.003 (0.008)	-0.006 (0.007)
Adults employed enrolled in OMIL	0.130* (0.077)	0.138** (0.062)	0.119 (0.081)	0.142** (0.059)

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. "C. Mean" in the mean of the outcome for those at most 4-CAS points above the cutoff. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table B.4: Impact of CS: Sensitivity to trimming sample around cutoff.

Years after start Distance in CAS-points	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	10		20		30		50		100	
	N	ITT	N	ITT	N	ITT	N	ITT	N	ITT
Participation										
SUF	46,337	0.005 (0.011)	84,889	0.022*** (0.008)	120,176	0.022*** (0.007)	182,428	0.015*** (0.006)	297,212	-0.033*** (0.007)
SAP	54,060	0.010 (0.008)	103,483	0.002 (0.006)	151,131	0.004 (0.005)	241,917	0.012*** (0.004)	433,303	0.019*** (0.005)
FOSIS participation (head)	70,935	0.002 (0.003)	131,953	0.002 (0.002)	189,464	0.005*** (0.002)	296,593	0.008*** (0.001)	516,894	0.010*** (0.001)
FOSIS participation (spouse)	51,628	0.004 (0.004)	95,307	0.008*** (0.003)	136,059	0.011*** (0.002)	210,508	0.013*** (0.002)	362,896	0.018*** (0.002)
Labor market										
Not employed (head)	73,953	-0.006 (0.007)	136,674	-0.003 (0.005)	195,582	-0.000 (0.004)	305,357	-0.000 (0.004)	529,646	0.006* (0.004)
Self-employed (head)	73,953	0.008 (0.008)	136,674	0.007 (0.006)	195,582	0.004 (0.005)	305,357	0.002 (0.004)	529,646	-0.002 (0.004)
Dependent worker (head)	73,953	-0.002 (0.007)	136,674	-0.004 (0.005)	195,582	-0.004 (0.004)	305,357	-0.001 (0.004)	529,646	-0.004 (0.003)
Not employed (spouse)	47,669	-0.008 (0.007)	88,638	0.002 (0.006)	127,183	-0.004 (0.005)	198,121	-0.004 (0.004)	343,886	-0.005* (0.003)
Self-employed (spouse)	47,669	0.012* (0.007)	88,638	-0.000 (0.005)	127,183	0.003 (0.004)	198,121	0.002 (0.004)	343,886	0.004 (0.003)
Dependent worker (spouse)	47,669	-0.004 (0.005)	88,638	-0.002 (0.003)	127,183	0.001 (0.003)	198,121	0.002 (0.002)	343,886	0.001 (0.002)
Housing										
Legal occupation of house	73,947	-0.004 (0.009)	136,662	-0.005 (0.006)	195,569	-0.003 (0.005)	305,335	-0.005 (0.005)	529,625	-0.004 (0.005)
Water from public network	73,947	0.011 (0.007)	136,662	0.005 (0.005)	195,569	0.006 (0.004)	305,335	0.007** (0.004)	529,625	-0.001 (0.005)
Heating	59,056	0.001 (0.005)	112,557	-0.004 (0.004)	163,810	-0.003 (0.003)	260,576	-0.003 (0.002)	462,931	0.016*** (0.004)
Fridge	59,056	-0.001 (0.011)	112,557	0.015** (0.007)	163,810	0.018*** (0.006)	260,576	0.013*** (0.005)	462,931	0.003 (0.005)
Other										
all children 6-11 enrolled in school	5,886	0.016 (0.016)	9,223	0.014 (0.012)	11,939	0.008 (0.011)	16,010	0.006 (0.009)	22,510	-0.002 (0.007)
all children 12-14 enrolled in school	3,832	0.026* (0.014)	6,056	0.006 (0.010)	7,747	0.003 (0.009)	10,515	0.013 (0.008)	14,753	0.011 (0.008)
all children in preschool age in preschool	1,666	0.046 (0.070)	2,541	0.025 (0.067)	3,307	0.029 (0.058)	4,558	0.018 (0.048)	6,195	0.041 (0.044)
all children with controls by family (<8y)	4,693	0.001 (0.009)	7,360	0.000 (0.007)	9,553	0.005 (0.007)	12,926	-0.000 (0.005)	17,960	0.002 (0.004)
Any training program	13,408	-0.008 (0.009)	21,641	-0.002 (0.008)	28,525	-0.009 (0.008)	39,995	-0.003 (0.007)	59,939	0.009* (0.005)
Adults employed enrolled in OMIL	971	0.121 (0.116)	1,573	0.130* (0.077)	2,144	0.095 (0.068)	3,218	0.121** (0.048)	4,728	0.068 (0.042)

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. "C. Mean" in the mean of the outcome for those at most 4-CAS points above the cutoff. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table B.5: Impact of CS: Choice of Fixed Effects.

	(1)	(2)	(3)	(4)
Years after start FE	Basic	Municip Year	² Neighb Year	Neighb-year
Participation				
SUF	0.022*** (0.008)	0.022*** (0.008)	0.025*** (0.008)	0.027*** (0.010)
SAP	0.002 (0.006)	0.000 (0.006)	-0.000 (0.006)	0.001 (0.006)
FOSIS participation (head)	0.002 (0.002)	0.002 (0.002)	0.001 (0.002)	0.001 (0.002)
FOSIS participation (spouse)	0.008*** (0.003)	0.008*** (0.003)	0.008*** (0.003)	0.007** (0.003)
Labor market				
Not employed (head)	-0.003 (0.005)	-0.002 (0.005)	-0.002 (0.005)	-0.003 (0.006)
Self-employed (head)	0.007 (0.006)	0.006 (0.006)	0.007 (0.006)	0.010 (0.007)
Dependent worker (head)	-0.004 (0.005)	-0.004 (0.005)	-0.005 (0.005)	-0.007 (0.006)
Not employed (spouse)	0.002 (0.006)	0.002 (0.006)	0.003 (0.006)	0.003 (0.007)
Self-employed (spouse)	-0.000 (0.005)	0.000 (0.005)	0.002 (0.005)	0.001 (0.006)
Dependent worker (spouse)	-0.002 (0.003)	-0.002 (0.004)	-0.004 (0.004)	-0.004 (0.004)
Housing				
Legal occupation of house	-0.005 (0.006)	-0.006 (0.006)	-0.006 (0.006)	-0.005 (0.006)
Water from public network	0.005 (0.005)	0.003 (0.005)	0.000 (0.004)	-0.001 (0.004)
Heating	-0.004 (0.004)	-0.004 (0.004)	-0.006 (0.004)	-0.005 (0.004)
Fridge	0.015** (0.007)	0.014** (0.007)	0.012* (0.007)	0.013* (0.008)
Other				
all children 6-11 enrolled in school	0.014 (0.012)	0.011 (0.012)	0.014 (0.018)	0.022 (0.019)
all children 12-14 enrolled in school	0.006 (0.010)	0.008 (0.010)	-0.009 (0.018)	-0.012 (0.018)
all children 15-18 enrolled in school	-0.006 (0.021)	-0.008 (0.020)	-0.015 (0.035)	-0.013 (0.041)
all children in preschool age in preschool	0.025 (0.067)	0.008 (0.062)	-0.034 (0.124)	-0.018 (0.152)
all children with controls by family (<8y)	0.000 (0.007)	0.001 (0.006)	-0.003 (0.009)	-0.004 (0.011)
all elderly with controls by family (≥65)	0.054 (0.056)	0.048 (0.051)	0.153 (0.107)	0.132 (0.136)
Any training program	-0.002 (0.008)	-0.000 (0.008)	-0.001 (0.010)	-0.001 (0.011)
Adults employed enrolled in OMIL	0.130* (0.077)	0.081 (0.074)	0.039 (0.190)	0.089 (0.218)

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. "C. Mean" in the mean of the outcome for those at most 4-CAS points above the cutoff. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table B.6: Impact of CS not conditioning on presence in data prior to 2002.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Years after start	C. Mean	N	² ITT	N	⁴ ITT	N	⁶ ITT
Participation							
SUF	0.599	152,805	0.026*** (0.007)	85,058	0.025*** (0.008)	25,674	0.031* (0.017)
SAP	0.128	156,037	0.005 (0.004)	25,560	0.008 (0.009)	NA	
FOSIS participation (head)	0.0108	213,535	0.004*** (0.001)	103,222	0.003** (0.001)	NA	
FOSIS participation (spouse)	0.0178	144,149	0.008*** (0.002)	73,567	0.003 (0.002)	NA	
Labor market							
Not employed (head)	0.171	226,738	-0.005 (0.004)	196,157	-0.010** (0.005)	114,242	0.007 (0.008)
Self-employed (head)	0.602	226,738	0.004 (0.005)	196,157	0.005 (0.005)	114,242	-0.009 (0.007)
Dependent worker (head)	0.227	226,738	0.001 (0.004)	196,157	0.005 (0.005)	114,242	0.002 (0.007)
Not employed (spouse)	0.847	138,326	0.001 (0.005)	89,145	-0.001 (0.007)	46,227	-0.003 (0.012)
Self-employed (spouse)	0.106	138,326	-0.002 (0.003)	89,145	0.003 (0.006)	46,227	0.002 (0.010)
Dependent worker (spouse)	0.0479	138,326	-0.002 (0.005)	89,145	-0.002 (0.006)	46,227	0.001 (0.009)
Housing							
Legal occupation of house	0.548	226,680	-0.002 (0.004)	195,782	0.008** (0.003)	113,794	-0.001 (0.003)
Owner of house (if legal occupation)	0.769	57,730	-0.008 (0.009)	45,375	0.004 (0.006)	NA	
Water from public network	0.720	226,680	0.007* (0.004)	195,782	0.009** (0.004)	113,794	0.002 (0.006)
Adequate roof	0.811	172,960	0.003 (0.005)	41,492	0.013 (0.010)	NA	
Adequate walls	0.880	172,960	-0.001 (0.004)	41,492	0.009 (0.007)	NA	
Heating	0.0616	172,960	-0.003 (0.003)	41,492	-0.006 (0.007)	NA	
Fridge	0.441	172,960	0.013** (0.006)	41,492	0.019* (0.011)	NA	
Other							
all children 6-11 enrolled in school	0.956	19,779	0.019** (0.008)	56,945	0.004 (0.006)	40,736	-0.012 (0.009)
all children 12-14 enrolled in school	0.982	11,347	-0.000 (0.007)	34,236	0.003 (0.003)	25,764	-0.004 (0.003)
all children 15-18 enrolled in school	0.851	13,809	-0.013 (0.015)	43,176	0.003 (0.008)	33,790	0.011 (0.009)
all children in preschool age in preschool	0.547	7,558	0.020 (0.033)	20,904	-0.016 (0.016)	10,164	-0.017 (0.023)
all children with controls by family (<8y)	0.992	20,516	0.001 (0.005)	50,970	-0.000 (0.003)	33,907	-0.007** (0.003)
all elderly with controls by family (≥65)	0.621	6,217	0.031 (0.036)	26,528	0.025 (0.016)	23,822	-0.021 (0.018)
Someone in family had problems w/ alcohol/drugs	0.0349	53,775	-0.002 (0.004)	154,664	0.002 (0.003)	114,242	0.003 (0.003)
Any training program	0.0394	48,277	0.008 (0.006)	133,934	0.002 (0.003)	96,563	-0.001 (0.003)
Adults employed enrolled in OMIL	0.336	3,249	0.093** (0.047)	10,245	0.043* (0.025)	7,942	0.016 (0.027)
Sample		2004-2008		2006-2009		2008-2009	

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. "C. Mean" in the mean of the outcome for those at most 4-CAS points above the cutoff. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table B.7: Impact of CS: Use all observations per family.

	(1)	(2)	(3)	(4)
Years after start			2	
Distance in CAS-points	N	Basic ITT	All observations/family N	ITT
Participation				
SUF	84,889	0.022*** (0.008)	105,423	0.021*** (0.007)
SAP	103,483	0.002 (0.006)	113,834	0.002 (0.006)
FOSIS participation (head)	131,953	0.002 (0.002)	160,678	0.003** (0.002)
FOSIS participation (spouse)	95,307	0.008*** (0.003)	117,794	0.009*** (0.002)
Labor market				
Not employed (head)	136,674	-0.003 (0.005)	169,305	-0.006 (0.004)
Self-employed (head)	136,674	0.007 (0.006)	169,305	0.002 (0.005)
Dependent worker (head)	136,674	-0.004 (0.005)	169,305	0.004 (0.005)
Not employed (spouse)	88,638	0.002 (0.006)	106,632	-0.002 (0.005)
Self-employed (spouse)	88,638	-0.000 (0.005)	106,632	0.002 (0.005)
Dependent worker (spouse)	88,638	-0.002 (0.003)	106,632	-0.000 (0.003)
Housing				
Legal occupation of house	136,662	-0.005 (0.006)	169,283	-0.003 (0.005)
Water from public network	136,662	0.005 (0.005)	169,283	0.006 (0.005)
Heating	112,557	-0.004 (0.004)	125,716	-0.003 (0.003)
Fridge	112,557	0.015** (0.007)	125,716	0.015** (0.007)
Other				
all children 6-11 enrolled in school	9,223	0.014 (0.012)	17,374	0.007 (0.009)
all children 12-14 enrolled in school	6,056	0.006 (0.010)	11,515	0.005 (0.006)
all children in preschool age in preschool	2,541	0.025 (0.067)	4,884	0.009 (0.040)
all children with controls by family (<8y)	7,360	0.000 (0.007)	13,834	0.004 (0.004)
Any training program	21,641	-0.002 (0.008)	39,435	-0.002 (0.005)
Adults employed enrolled in OMIL	1,573	0.130* (0.077)	2,629	0.079* (0.048)

Note: Controls excluded from table include cubic in distance to adjusted cutoff, municipality-year of residence effects. "C. Mean" in the mean of the outcome for those at most 4-CAS points above the cutoff. Robust standard errors are reported in brackets clustered at municipality of residence when eligibility is evaluated. * significant at 10%; ** significant at 5%; *** significant at 1%.

C Figures

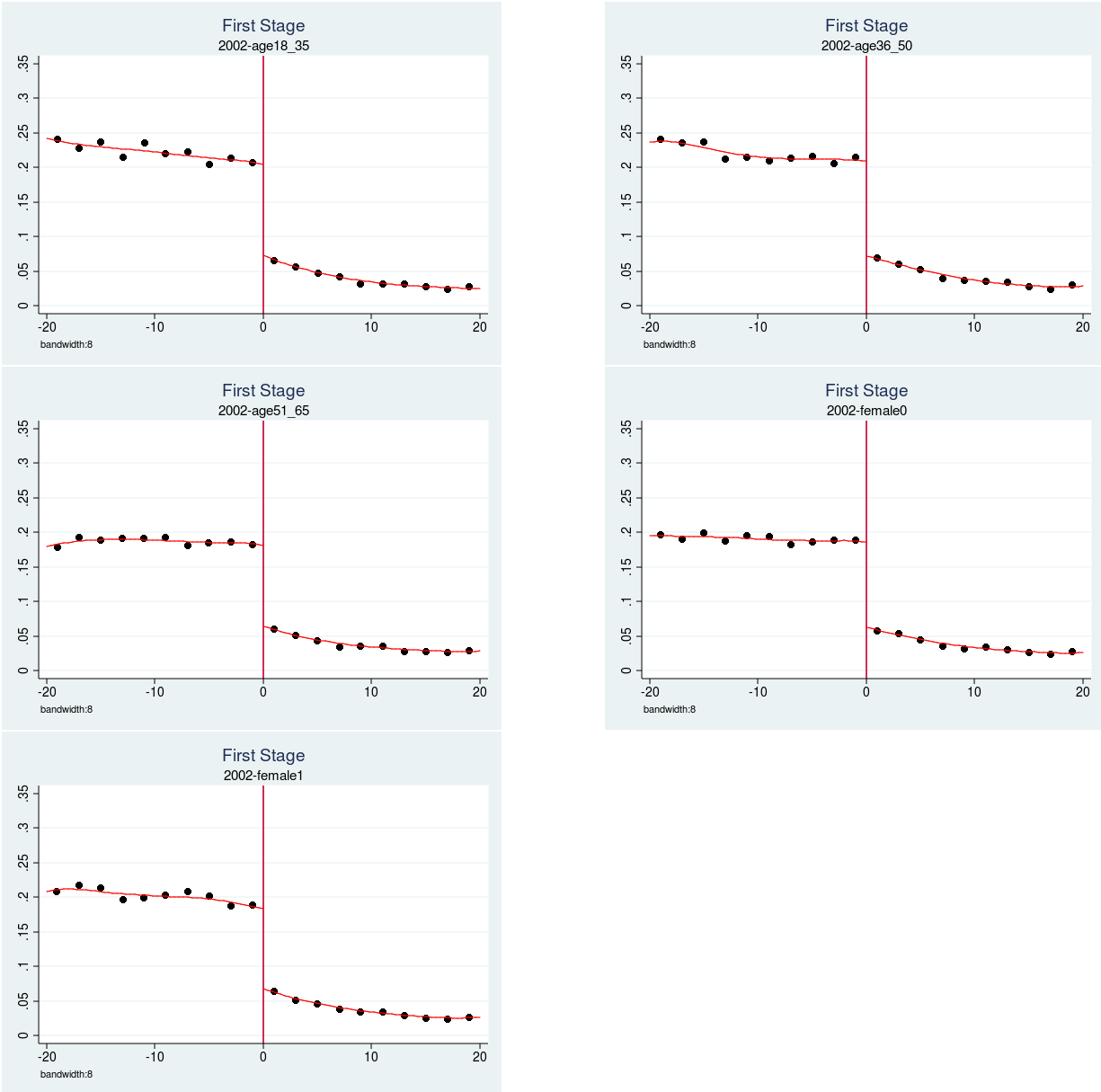


Figure C.1: Average participation by eligibility status, Bandwidth = 2.

Note: The continuous lines in figure presents local linear regression estimates of entry in CAS in 2002 on distance to cutoff. The bandwidth was set to 8. Circles in figures represent the mean outcome by cell within intervals of 2 points of distance to cutoff. The kernel triangle was used. The dashed lines are 95% confidence intervals.

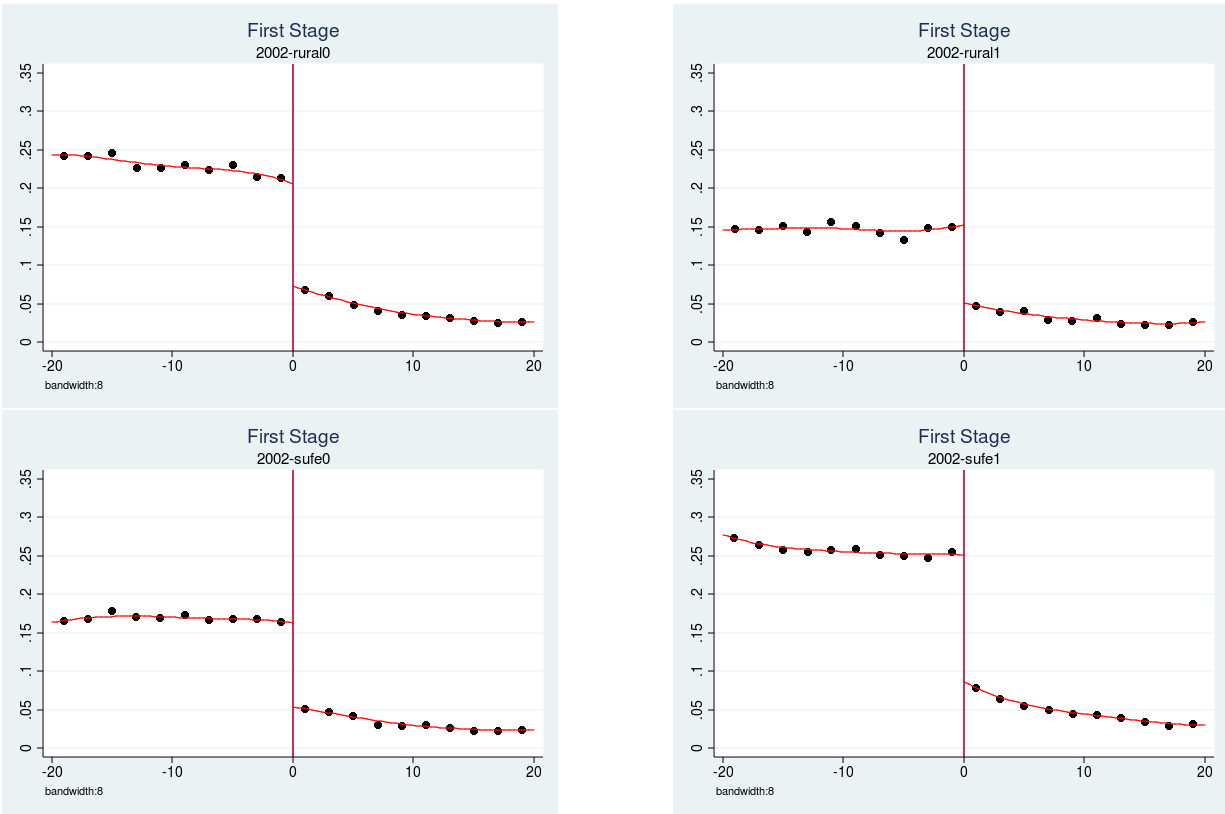


Figure C.2: Average participation by eligibility status, Bandwidth = 2.

Note: The continuous lines in figure presents local linear regression estimates of entry in CAS in 2002 on distance to cutoff. The bandwidth was set to 8. Circles in figures represent the mean outcome by cell within intervals of 2 points of distance to cutoff. The kernel triangle was used. The dashed lines are 95% confidence intervals.

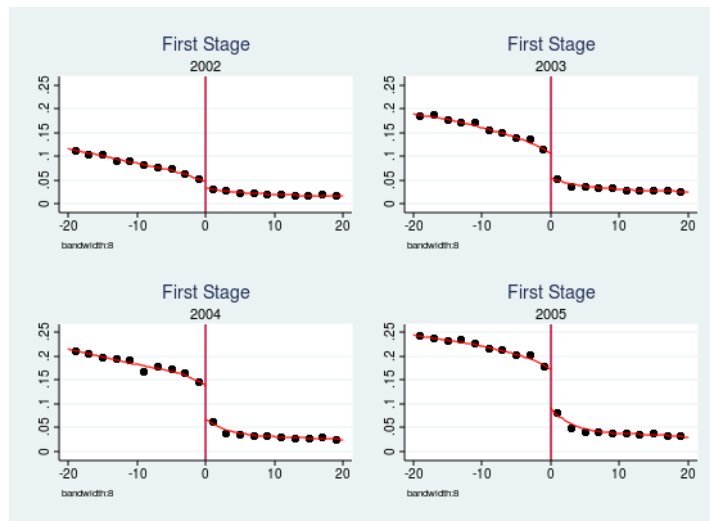


Figure C.3: Average Participation in CS among eligible and non-eligible (defined by the official cutoff).

Note: Local Linear Regression Estimates, bandwidth 8 CAS-points. Kernel Epanechnikov.

D Estimating the Endogenous CS Eligibility Cutoffs

For each municipality and year, there exists an unknown CAS score above which families are not eligible to participate in the program. If we group families by CAS score and compute mean CS participation in each group, we should observe a large decline in participation at the effective cutoff score. We follow a statistical procedure that replicates this intuition.

Within each municipality and year, we define a grid along the CAS distribution, with intervals of two CAS points. To ensure that there are families on either side of each grid point, g , we construct the grid on the range $[CAS_{imt}^{\min} + 20, CAS_{imt}^{\max} - 20]$. Then, for each g , we define a hypothetical eligibility dummy, $E_{imt}^g = 1 [CAS_{imt} \leq g]$, and run the following regression:

$$D_{imt} = \alpha + \beta E_{imt}^g + \varepsilon_{imt} \quad (7)$$

where D_{imt} takes a 1 if family i in municipality m enters CS in year t , and 0 otherwise. We exclude families who joined CS one year or more ago from the regression sample: they are not potential year t CS applicants. As our CS cutoff for a particular municipality and year, we choose the g that maximizes the R^2 of equation (7), following Chay et al. (2005) and Card et al., 2008. For the sake of precision, we exclude municipalities with less than 50 families and municipalities without CS participants.

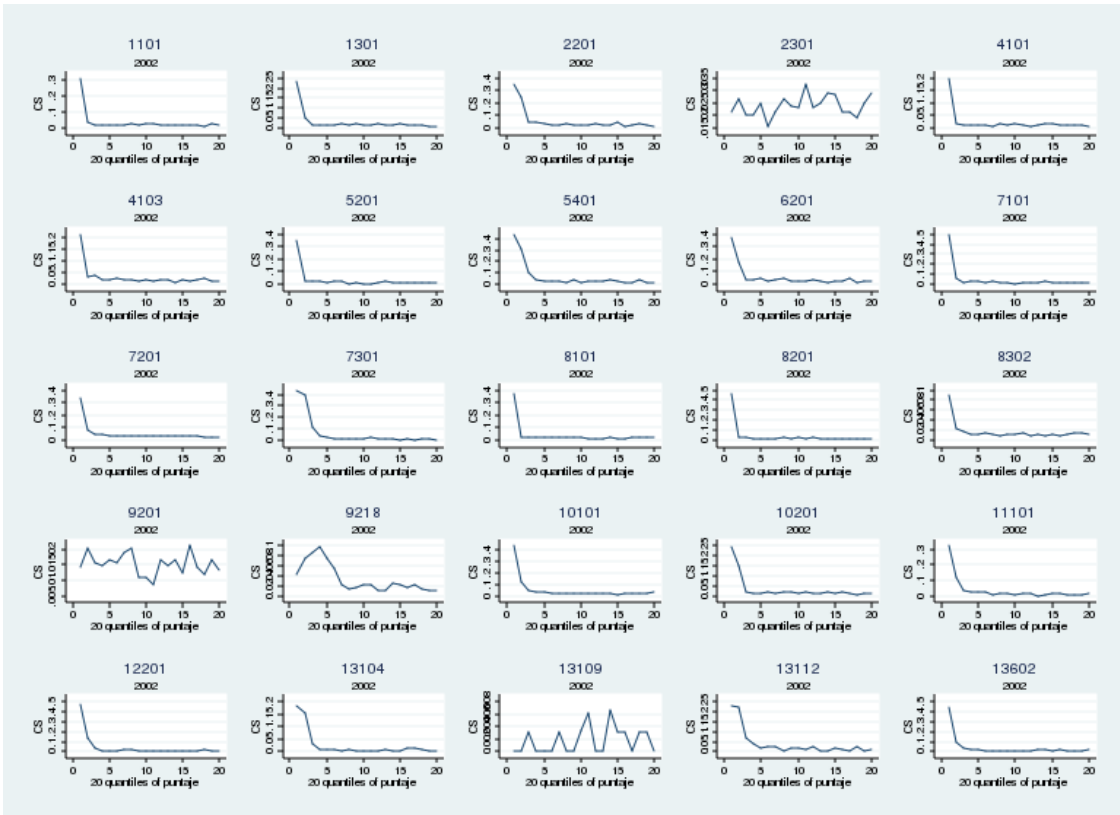


Figure D.1: Entry of families in CS in 2002 along the distribution of CAS within each municipality. Note: The graphs include the average participation in each municipality by each ventile of the distribution of CAS.

E Calculation of adjusted p-values

This appendix describes our algorithm for calculating familywise adjusted p-values. It is based on Algorithms 4.1 and 4.2 of Romano and Wolf, 2005.

Let T be the sample size and $s = \{1, \dots, S\}$ the number of hypothesis to test. Consider an individual test statistic $z_{T,s} = \widehat{\beta}_{T,s} / \widehat{\sigma}_{T,s}$, where $\widehat{\beta}_{T,s}$ is the estimated coefficient on the Head Start eligibility indicator and $\widehat{\sigma}_{T,s}$ is the corresponding standard error.

We obtain the data dependent critical values as in Algorithm 4.2 of Romano and Wolf, 2005. That is,

1. Define the labels r_1, \dots, r_S and the numerical values of R_0, R_1, \dots as below.
2. Generate M ($M = 1000$) bootstrap data matrices $X_T^{*,1}, \dots, X_T^{*,M}$.
3. From each bootstrap data matrix $X_T^{*,m}$, compute the individual test statistics $z_{T,1}^{*,m}, \dots, z_{T,S}^{*,m}$, where $z_{T,s}^{*,m} = (\widehat{\beta}_{T,s}^{*,m} - \widehat{\beta}_{T,s}) / \widehat{\sigma}_{T,s}^{*,m}$.
4. Then, for $1 \leq m \leq M$, compute $\max_{T,j}^{*,m} = \max_{R_{j-1}+1 \leq s \leq S} (z_{T,r_s}^{*,m})$. Compute \widehat{d}_j as the $1 - \alpha$ empirical quantile of the M values $\max_{T,j}^{*,1}, \dots, \max_{T,j}^{*,M}$.

Then, the step-down method presented in their Algorithm 4.1 is:

1. Re-label the hypotheses in descending order of the test statistics $z_{T,s}$: strategy r_1 corresponds to the largest test statistic and strategy r_S to the smallest one.
2. Set $j = 1$ and $R_0 = 0$.
3. For $R_{j-1}+1 \leq s \leq S$, if $0 \notin [\widehat{\beta}_{T,r_s} - \widehat{\sigma}_{T,r_s} \widehat{d}_j, \infty)$, reject the null hypothesis H_{r_s} .
4. If no (further) null hypotheses are rejected, stop. Otherwise, denote by R_j the total number of hypotheses rejected so far and, afterward, let $j = j + 1$. Then return to step 3.

F Interpretation of effects and moving cutoffs

Let

- Y_{1d}^t = outcome at time t if in the program for d periods
- Y_0^t = outcome at time t if not in the program
- E^t = eligibility at time t
- D^t = participation at time t

Assume that once you enter in the program you stay there forever.

F.1 One year effect

$$\begin{aligned}
 & E(Y^1|E^0 = 1) - E(Y^1|E^0 = 0) = \\
 & E[Y_{11}^1|D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 1] \Pr[D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 1] + \\
 & + E[Y_0^1|D^1(E^0 = 1) = 0, D^1(E^0 = 0) = 0] \Pr[D^1(E^0 = 1) = 0, D^1(E^0 = 0) = 0] + \\
 & + E[Y_{11}^1|D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 0] \Pr[D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 0] + \\
 & - E[Y_{11}^1|D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 1] \Pr[D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 1] - \\
 & - E[Y_0^1|D^1(E^0 = 1) = 0, D^1(E^0 = 0) = 0] \Pr[D^1(E^0 = 1) = 0, D^1(E^0 = 0) = 0] - \\
 & - E[Y_0^1|D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 0] \Pr[D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 0] \\
 & = E[Y_{11}^1 - Y_0^1|D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 0] \Pr[D^1(E^0 = 1) = 1, D^1(E^0 = 0) = 0]
 \end{aligned}$$

And this is simply the usual LATE expression.

G Data

G.1 The Ficha CAS and the CAS score

The ficha CAS is used to compute the CAS score (index of unsatisfied basic needs), and it is used as an instrument for targeting most social programs in Chile since 1980. This register covers around 30% of the Chilean population and it includes 50 variables grouped into 9 categories. The index is used to determine eligibility several programs, some of them use CAS score to rank the applicants and serve those in more need, whereas other programs use CAS as one of the variables to be considered when determining eligibility status.

The CAS is a continuous index that results from a weighted average of underlying variables. The variables that enter the score have different weights and are concerned to four main areas: housing conditions (wall, floor, ceiling, overcrowding, water access, sewage, shower), property type, education of family members, occupation, income, and ownership of durables (fridge, boiler, tv). Housing and education of the head of family or spouse represent almost half of the weight of the index.

The Ficha considers the family as the unit of reference, which is defined as a group of persons that live together, whether or they not are relatives, and who share some kind of income and auto-recognize themselves as a family. Different families living in the same house may have a different CAS-score as long as they have different characteristics of income, education and activity. The unit of application of this survey is the household, so each time someone or a family applies for a Ficha, the entire household will be surveyed. The questionnaire is filled by the head of family, and only under his/her authorization other member may fill the questionnaire.

The Ficha is valid for a period of two years, as long as families do not change their address. This is a survey that should be filled at family's house and in order to attest the credibility of information provided 20% of all valid surveys are randomly chosen to be re-interviewed by a supervisor and all surveys with invalid entries are revised and if necessary households are re-interview (Ministry of Planning, 2003).

This data does not intend to represent the Chilean population. An individual or family that intends to apply for a social program will do it at the office supplying the program or at the municipality. So the data set excludes all families who have not applied for any social benefit. However, it is important to notice that we do not necessarily need the whole population to do a proper evaluation. Indeed, the population of interest is the population of beneficiaries and potential beneficiaries of the program, and there was a strong effort on the part of the government to make sure that most of the poor did have a Ficha CAS when the program was implemented in 2002.

The variables used to construct the CAS score are as follows:

1. Walls: The variable combines the material of the walls and the area of residence. The result is a total of 81 categories, each with a recording the quality score of the walls in relation to the residence (e.g., the most extreme climates require higher quality of construction).
2. Floor: It is constructed from a combination of the flooring material and the area of residence in the country. In this case one obtains a total of 63 categories.
3. Roof: As in the previous cases, the material is constructed by combining the roof area of residence, obtaining a total of 72 categories.
4. Overcrowding: This variable is constructed as the ratio between the number of people and the number of bedrooms.

Table G.1: Relative Weights of Each Variable in the CAS score.

Area	Weight	Sub area	Weight	Variables	Weight	
Housing	0.26	environmental protection	0.4	Walls	0.35	
				Floor	0.35	
				Ceiling	0.3	
		Overcrowding sanitation and comfort	0.22	0.38	Persons/bedroom	1
					Water	0.35
					Sewage	0.3
Bath-tub	0.35					
Education	0.25			Years of schooling of head	1	
Occupation	0.22			Highest occupational category of the couple	1	
Income/Wealth	0.27	Income	0.43	Family per capita income	1	
		Site	0.13	Property	1	
		Appliances	0.44	Fridge	0.5	
				Water Heater	0.5	

5. Water: The variable is constructed on the basis of indicators of the availability water utility, how one enters the item into the house or if necessary carry it from elsewhere.
6. Sewage: Distinguishes between areas of urban or rural residence and one gets a total of 18 categories for nine sewage disposal systems and two areas of residence.
7. Shower: Refers to the availability of shower in the home, which can be exclusive or shared with other homes in the same place. Also differenced by the availability of hot water.
8. Education: This variable is referred to the years of education taken by the head of household and it is truncated at 18 years of schooling.
9. Occupation: This variable is based on the highest "employment status" among the chief of household and spouse (if applicable). The classification is based on the occupational category, resulting in a total of nine categories.
10. Family income per capita.
11. Ownership of the site where the home is located (own, leased or shared).
12. Refrigerator.
13. Availability of water heater.

G.2 The Ficha de Proteccion Social

In 2007 the instrument to select families into the program was replaced by the Ficha de Proteccion Social. This new targeting instrument aims at assessing the household income generating capacity

and its vulnerability to shocks. This is a significant change from the CAS, which weighed heavily on assets and durables ownership, making it more persistent. The FPS considers the needs of different members in the household according to equivalence scales. The unit of reference is the family defined as a household, that is, individuals that live together and share family expenditures.

Whereas the CAS (2000-2006) score is valid for 2 years (for example, the 2004 wave of CAS contains data on families who (re-)enrolled between January 2003 and December 2004), the FPS-score (2007-2009) is updated monthly.³²

As Ficha CAS, FPS has information on each family's member date of birth, education, income and labor market participation, house ownership and its conditions. Ficha CAS contains information on participation on welfare programs and this allows us to measure effectiveness of Chile Solidario to help families taking these programs. FPS contains variables related with use of health facilities, school attendance by children, disability status of members and alcohol and drugs use of family members. These changes aimed to improve the selection of the potential beneficiaries of social programs and benefits, accounting not only their socioeconomic status, but also to different needs and specific situations, such as disability, old age, unemployment, low income, illness, among other vulnerabilities. Therefore, the FPS scores resulting from the application of the Ficha combine three elements: 1) the income-generating capacity of each of the members of family; 2) the income of the family, obtained from the sum of those resources come from retirements, pensions, widow's (permanent income) and income reported by people; 3) family needs according to their size and composition: the age of its members and their dependency status, so they are used for questions relating to health and disability.

G.3 Constructing the administrative panel (Consolidado CAS and FPS)

The data we use is a panel formed using Ficha CAS and FPS that includes individuals surveyed between March 1998 and May 2008. We performed the following checks to each cross section of the data:

- We drop repeated observations in 2000, 2001 and 2007, which correspond to least to two identical rows of data.;
- We recode the individual identifier, RUT (Rol Unico Tributario) or RUN (Rol Unico Nacional)³³, to missing if it is too small (1000 or less) and flag observations with the same identifier³⁴. We verify whether individuals have valid identifier, this is important because is

³²The following reasons may cause a change in the score: 1) death if a family member; 2) if an individual receives a new pension or enters retirement, or turns 60, the cross-check between data-bases means that score changes automatically; 3) the family should also notify the municipality if child is born, if it changes the address or if the head of household changes. Therefore, unlike CAS, updates to the FPS-score may be come via two methods: 1) What is called "por sistema" (by the system): which includes the history of deaths and age changes; or 2) By request.

³³The national identification number in Chile is the RUT (Rol Unico Tributario); sometimes it is called RUN (Rol Unico Nacional). It is used as a national identification number, tax payer number, social insurance number, passport number, driver's license number, for employment, etc., and it allows us to merge the several administrative data sets used in the paper. Since year 2004 every born baby has a RUT number; before it was assigned at the moment of applying to get the ID card. Each individual in the data set is identified by a unique combination of RUT and *digito verificador*. The *digito verificador* is either a letter or number that is assigned to each RUT by an algorithm that ensures the authenticity of RUT.

³⁴An individual without documents can be identified by a missing RUT and a digito 1 in Ficha CAS or an entry of RUT equal to date of birth in FPS. Foreign individuals have RUN 1 in FPS.

the combination RUT-*digito verificador* that allows us to merge the several waves of CAS Consolidado, FPS and these with data from other sources. We consider that an individual possess a valid RUT if it fulfils several requirements: (i) if it is larger than 50,000, (ii) if the *digito verificador* is correctly assigned, and (iii) if it is not missing. Individuals with invalid or missing RUT tend to have lower income, less years of education, to be in families with lower CAS and in larger families, are less likely to be head of family and to be younger than 18;

- We check if two individuals with the same combination RUT-*digito verificador* are the same person. Two individuals surveyed in the same year with the same RUT, digito verificador, gender, date of birth, region, province and municipality of residence, number of survey, relationship to head of family, name and surname and CAS are considered the same person, so we keep only one observation per year;
- As CAS index is assigned to the family, we dropped families with CAS varying within family;
- We found a few observations of heads of family whose parents or grandparents are younger than the head (on average 1500 out of 6 millions individuals per wave), which we flag but do not exclude from data given the small proportion of cases.

All income related variables are top coded at the 99th percentile and all income values are deflated to May 2008 using the monthly CPI (Banco Central de Chile, 2008). We have some concerns regarding the quality of income data in 2006: for 179394 observations (35% out of 506051 nonmissing observations) the period of income reported is 0, which is an unassigned code.

Table G.2: Entry in CAS and FPS system.

year	First survey										Total
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
2000	911451	0	0	0	0	0	0	0	0	0	911451
2001	591928	1007589	0	0	0	0	0	0	0	0	1599517
2002	411449	761596	492069	0	0	0	0	0	0	0	1665114
2003	407838	478048	430662	363590	0	0	0	0	0	0	1680138
2004	390184	529435	175638	307440	375248	0	0	0	0	0	1777945
2005	371145	508127	212268	120912	320014	354134	0	0	0	0	1886600
2006	116321	159658	66801	51642	52090	27969	239109	0	0	0	713590
2007	301902	404250	155137	107885	107335	96040	57938	474205	0	0	1704692
2008	437427	502430	219427	154967	154910	142719	88950	413452	622539	0	2736821
2009	469306	527809	238250	169572	168932	156477	98665	394302	586865	404427	3214605
Total	4408951	4878942	1990252	1276008	1178529	777339	484662	1281959	1209404	404427	17890473

Note: Number of households with a valid CAS/FPS score in each year vs. the year they are first observed in the system.