

Conditional Cash Transfers on the Labor Market: Evidence from Young French Jobseekers*

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Youth participation in programs designed to enhance their employability is usually low. This paper reports the results from the first randomized conditional cash transfer program in a labor market context: Young, unskilled jobseekers in France receive a monthly cash transfer for a two-year period totaling up to €4800, conditional on their participation in the French national career guidance program. Cash transfers lead to a significant increase in program participation (which mainly entails meetings with counselors), and sharply reduced drop-out rates. As a result, there is a large increase in the job offers, vocational training and career building workshops proposed to the young jobseekers. However, the jobseekers' response to these increased opportunities for employability investment is a precisely estimated zero. Moreover, we observe a significant reduction in employment over the first six months. The results point to a strong impact of financial incentives, but also to the need to condition incentives directly on outcomes of interest, rather than on intermediate targets.

Keywords: Conditional cash transfer, youth unemployment, randomized experiment

JEL: J68, J64, C93.

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1 Introduction

Many youth enter the job market with few qualifications and little to no knowledge of the job market. Across OECD countries, 38.4 million youths aged between 16 and 29 years (18% of their age group) are not in employment, education, or training (NEET). Two-thirds of them are not looking for a job, and only one in six has any tertiary education (Carcillo et al., 2015). Helping these young people to develop and achieve professional goals, as well as increase their overall human capital and employability, has been a policy priority across countries (Quintini et al., 2007). This paper evaluates the first randomized conditional cash transfer program in a labor market context. It assesses whether a monthly cash transfer conditional on participation in a large national employment program creates effective incentives to participate and engage with the program, increase employability investments, and improve employment outcomes.

Designing programs which are effective and attractive is not an easy task. Existing programs across major industrialized countries have focused on skill assessments, career planning, general or specialized training, job search assistance and employment experience through internships and subsidized job contracts. Whatever lever is used, such programs have a positive short-term effect at best, but do not build human capital to the degree necessary to improve long-term employment outcomes: In a recent meta-analysis of 113 impact evaluations, only one third of youth employment programs show positive effects on employment or earnings – and most of these are in low-income countries (Kluve et al., 2019).¹ Programs that help jobseekers find work tend to yield better results, but benefits are often temporary and may displace workers who are not supported by the programs (CrÃ©pon et al., 2013).

Available empirical evidence also points to a lack of attractiveness of these programs, resulting in low participation levels and high dropout rates. Heckman et al. (2000) have shown that participation rates in assistance programs are low, and Behaghel et al. (2014) found that less than 50% of those assigned to assistance programs in France actually attend.² Black et al. (2003) even show that assigning jobseekers to this type of program makes them rush to find employment to avoid attending. Certain studies also report that a majority of youth invest little energy in the programs offered, as they judge them to be ill-suited to their needs or do not see the point of a medium-term commitment to training or skills-building.³

¹A notable exception is the high-intensity Job Corps program in the U.S. (Schochet et al., 2008). See the meta-analyses by Card et al. (2018, 2010) for active labor market programs across all age groups, and reviews by LaLonde (2003) of U.S. programs; see Heckman et al. (1999) for a more general review.

²Schochet et al. (2008) reports high levels of dispersion in the length of time spent in the program in the Job Corps program. The assessment by Bloom et al. (1997) of the 1982 Job Training Partnership Act (JTPA) mention a participation rate of just two-thirds of those assigned.

³See LaLonde (2003). Ivry and Doolittle (2003) explain that: “the mixed results from studies of existing youth programs can be explained largely by the low enrollment of key subgroups of young people, inconsistent participation among enrollees, and high rates of attrition. Many of the young people who could benefit most

On a theoretical level, models of human capital investments and of behavioral economics have identified several potential factors likely to affect demand for employability investment. Heckman et al. (1999) propose a model which encompasses all services designed to improve job-market readiness, highlighting the role of opportunity costs and expected returns in terms of the perceived productivity of job searches and of the expected remuneration and stability of jobs.⁴ They also underscore the central role of financial constraints in the decision to invest, including when these constraints come from parents' incomes. In this case, paying a transfer to a young person with financial difficulties relieves him or her of those constraints. Behavioral economics models identify several reasons why the intrinsic motivation of young people can be low.⁵ Babcock et al. (2012) summarize the lessons to be learned from these findings when designing labor market policy. The first obstacle is that the perceived benefit of this investment plays a central role in the decision to enroll but is very difficult to gauge correctly.⁶ The second obstacle is that choosing an orientation strategy adds an extra degree of complexity to the task of assessing the benefits of a training program. Lastly, intertemporal preferences for the here and now can also be a determining factor in demand: young people may systematically favor low-paying, insecure jobs, which are easy to find, and delay investments in human capital to a later time. In this context, paying a young person a conditional transfer re-shifts the priority to choosing investments in employability.

Providing a transfer is one way of alleviating active financial constraints. Many countries have opted for the payment of a minimum benefit, which gives young people more leeway in their choice of a career track.⁷ Nevertheless, such systems can undermine incentives to get into and stay in the job market.⁸ For this reason, some transfer systems have evolved to ensure that incentives to paid work remain central.⁹ Unconditional transfers run the risk of being inefficient if low participation rates

from program services do not enroll at all, and a large proportion of those served do not participate long enough to earn education credentials, improve their work readiness and life management skills, and acquire the technical skills needed to compete effectively in the job market”.

⁴Cunha et al. (2006) also highlight similarities between human capital investments carried out in childhood and early adulthood and underscore the resulting poor outcomes expected from remedial programs such as those studied here. Recent research on the role played by psychological traits highlights the role of an external locus of control – the belief that life outcomes are determined by external factors. Underskilled youth could be more likely to have an external locus of control, which would limit their intrinsic drive to invest in programs offered. See Cobb-Clark (2014) for a review of the literature on locus of control.

⁵See Kreps (1997), for example, on the links between extrinsic incentives and intrinsic motivation.

⁶This phenomenon has been proven empirically by Spinnewijn (2015), who demonstrates that jobseekers tend to underestimate the return on job seeking activities. Also noteworthy is the mistrust young people can feel towards public institutions, which skews assessments of program participation benefits. Many youth have already experienced alienation by leaving school without a diploma.

⁷Various approaches exist: Austria, Germany, Portugal, Sweden and others have systems based on parental income when the young person is still dependent upon them, and on the young person's own income when they no longer depend on their parents. In Denmark, Finland and Netherlands, a minimum benefit is paid based solely on the young person's income regardless of whether they depend on their parents or not.

⁸Moffitt (2003) reviews the research conducted on the Aid to Families with Dependent Children program in the United States.

⁹This is true of the Earned Income Tax Credit (EITC), the Working Income Tax Benefit (WITB) in Canada,

among young people are due to weak intrinsic motivation, which is linked, for example, to an under-valuation of program returns or a biased preference for the here and now. In this paper we look at the payment of a minimum transfer which attempts to support human capital investment incentives for young people by making payment conditional on participation in a national career guidance program. We compare two cohorts selected randomly from a sample of young adults enrolled in the national program, differing only in that one is given a transfer which is conditional on attending the program. The young adults targeted by the service have poor job prospects. Typically, they have had serious issues at school and have dropped out or failed multiple times. Most live in social environments and areas which condemn their chances of integration, such as the isolated housing estates found in major cities. When they are *Not in Employment, Education or Training* (NEET), these young people are usually offered enrollment in a national career program, the “Contrat d’Insertion dans la Vie Sociale (CIVIS)”, called hereinafter the *standard program*. The CIVIS program is characterized by low attendance and a high dropout rate. The experiment consisted in offering 3,000 of these young adults a place in a new program: the “Revenu Contractualisé d’Autonomie”, called hereinafter the “experimental program”, identical to the standard program except for a monthly benefit payment. A €250 transfer is paid monthly the first year.¹⁰ The amount decreases gradually the second year (€240 in the first quarter down to €60 in the last quarter). In total, young adults can theoretically receive up to €4,800 over the course of the two-year program. The benefit is paid as long as the youth complies with the guidance program. If the youth fails to attend meetings or comply with the tasks stipulated by the program, his or her counselor may decide to suspend payment of the transfer in coordination with the Job Youth Center (JYC) director. Due to the diverse and partially non-contractable nature of tasks in a personalized guidance program, the key contractable behavior in practice was attendance of the meetings. Results show a significant increase in program participation. Because of the benefit, the program’s drop-out rate diminishes drastically. Young adults remain in the program for a longer period of time and have more meetings with their counselors: the number of months spent in the program went from 12.1 (in the standard program, without the transfer) to 21.7 months (in the experimental program, with the transfer) and the total number of interviews with a counselor increased from 8.1 to 14.6. Transfers received increased steeply by €1,868 (\$ 2,577) to a total of €2,132 (approximately \$ 2,942 in 2011).¹¹ This additional individual expense, though diminished, nevertheless applies to a potentially large group – 170,000 young adults in 2011 – thus representing

and the Working Tax Credit (WTC) in the U.K.

¹⁰In 2011, €250 equaled 23% of the net minimum wage (SMIC in France), and 54% of the minimum welfare benefit (Revenu de solidarité active, RSA), which young adults are only entitled to when they turn 25. The amount is the maximum allowed, since the program includes a taper rule: transfer amounts decrease as job revenue increases. The implicit tax rate associated with this rule is 24%.

¹¹This amount falls quite short of the €4,800 announced. We show that this is primarily due to the income taper rule.

a non-negligible direct financial commitment of about €318 i.e. \$ 438 million.

Study results show that this noted improvement in participation is not followed by enhanced commitment to the program. Recipients do not invest more in their employability. Despite being offered a significantly broader range of services (combined services of all types increased from 8.12 to 12.6 in the first semester), we observe null effects on a wide range of outcome behaviors, from enrollment in the trainings proposed by the caseworkers to sending job applications and searching for jobs online. Moreover, in the first six months, there is a decrease in full-time employment equal to three percentage points.¹² This effect is consistent with the disincentives traditionally associated with transfer payments and taper rules. Relatedly, we find that income increased by less than half of the theoretical transfer amounts. Benefits received as part of the program are initially diminished through the taper rule. We additionally observed substitution with other income sources, primarily employment income and transfers from friends or family. Lastly, variables collected to measure social integration show no notable improvement except in the confidence young people had in the JYC. We discuss the theoretical and empirical evidence for possible mechanisms: Using a principal-agent framework with a two-step effort task (meetings and training), agents may underinvest in effort relative to the principal's preferences due to risk aversion, impatience, financial constraints, and perceived returns to effort (through either self-efficacy or perceived program quality). Conditioning transfers on the first effort step (meetings) will be effective in the case of financial constraints, partially effective in the case of impatience or low perceived returns to effort, and ineffective in the case of risk aversion. Empirically, we find no evidence for financial constraints, perceived low returns to effort, caseworker quality, or labour market conditions as a mediating factor for our treatment effects. Present bias and impatience constitute a possible explanation if the effort costs for human capital investments are disproportionately higher than the effort costs of interacting with the caseworker. Our findings emphasize the importance of conditioning incentives directly on outcomes of interest, rather than on intermediary steps.

Section 2 provides a detailed description of the program and category of young adults concerned. Section 3 presents study design and collected data. Section 4 discusses the principle results regarding program participation, employability investment, employment, income and social integration. Section 5 assesses results found in each sub-sample of participants to determine whether there is heterogeneity in program outcomes. Section 6 analyses the robustness of the results and section 7 provides a conclusion.

¹²While this decrease could be linked to a locking-in effect caused by increased participation in the program, this is unlikely: meetings with counselors are spaced out, and there is no evidence of enhanced commitment to defining career goals.

2 Programs and Participants

2.1 Background on the Study Population

A considerable number of young people in France exit the education system early and with little in the way of qualifications. Using data from a large nationally representative survey carried out in 2010 with youths who left the education system in 2007 (“Generation 2007”, see Table 1), 18 % leave school without any diploma and 17 % only complete the equivalent of junior high. The survey further reveals substantial difficulties in entering the labor market: 21.7 % of respondents have mostly been unemployed (9.3 %) or inactive (12.5 %) in the three-year period after leaving school. These problems are linked: 58.6 % of those struggling with long-term unemployment or inactivity do not have a high school diploma, compared to xx % of those who found stable employment.

Assistance to youth between the ages of 16-25 who encounter problems finding work is provided by 450 Job Youth Centers (JYCs) located throughout France. 20.6 % of young people who finished school in 2007 went to a JYC at least twice by 2010. Among those who seek help at the JYC, youths without a high-school diploma are disproportionately represented (63.7 %, see column 3 in Table 1). These dropouts are also more likely to repeat a year in primary school, and to leave school at an early age. They are more likely to have parents who are immigrants, and to live in deprived neighborhoods.

Notably, not all young people who have trouble finding a job go to JYCs. The overall attendance goes from 20.6 % overall to 41.6 % for those struggling with unemployment or inactivity. It increases to 52.3 % for those who additionally lack a high school diploma.

2.2 The Guidance Program (G)

The JYCs offer a guidance program to facilitate labor market integration: the *Contrat d’Insertion dans la Vie Sociale*, which we will refer to as the ‘guidance program (G).’ Approximately 170,000 young adults enrolled in this program in 2011. It is a one-year program which may be extended for a second year, aimed at helping participants to establish a career plan (in the first three months), and then implement it.¹³ Participation is formalized by the signature of a contract. There is no financial assistance, except for the reimbursement of selected job search costs. Meetings with the counselor are offered at least once a month, in addition to the possibility to call or email as required. The program acts as a platform to identify and steer participants towards employability investments that are best suited to their individual skills and situation: training courses (typically offered by partner companies), career workshops, subsidized job contracts, or job shadowing at companies. If participants enroll in a course or find short-term work, they remain in the program,

¹³Very hard-to-place jobseekers are allowed to extend more than once. They are offered an enhanced version of the program which includes more frequent meetings with their JYC counsellor.

and are expected to remain in touch with their counselor. They leave the program when they secure an employment contract of at least six months, when they reach the end of the program, or when the program contract is revoked by the counselor, typically following lack of participation. A known concern with the guidance program is that participants invest little effort, and dropout rates are high: in 2011, only 27 % of participants exited the program into long-term employment; 15 % left after being enrolled for the maximum of two years, and 58 % dropped out either during the program, or because their counselor did not extend their contract after one year (usually because the participant has stopped contact with the JYC) (Dares, 2014).

2.3 Guidance + Conditional Cash Transfer (G+CCT)

In late 2008, the French Ministry of Youth launched an initiative for innovative policies to address key difficulties faced by young adults. The French government’s 2009 Green Paper on Youth (Livre Vert de la Jeunesse, 2009) identified a lack of financial independence as an important concern: In France, adults below 25 years are not eligible for welfare payments.¹⁴ Unless they have previously paid into the unemployment insurance, young adults may find themselves in precarious situations without a guaranteed minimum income. The resulting financial constraints may hinder human capital investment, and thus labor market integration. The Green Paper recommended that new forms of youth cash transfers be tested to address this problem.

Policymakers decided on a monthly cash transfer, conditional on participation in the national guidance program. Formally a new program, titled *Revenu Contractualisé d’Autonomie*, the program was identical to the existing one except for the provision of financial assistance. We thus refer to it as ‘guidance + cash (G+CCT).’ Participants received €250 per month in the first year, and a digressive amount in the second year (€240 monthly the first quarter; €180 monthly the second quarter, €120 the third and €60 the fourth), for a maximum total of €4,800 over two years (see Figure 1a). Transfers were subject to participation, formalized in a program contract between the JYC and the jobseeker. Contracts clearly stated the conditions for termination: *“the contract shall be terminated if: the beneficiary fails to meet his or her commitments; if he or she does not come to appointments set by the counselor without just cause, or refuses, without just cause, training or employment opportunities suggested by the counselor which comply with the career plan defined in the contract. Should this occur, and after the beneficiary has been given a chance to explain, the counselor shall terminate the contract on legitimate grounds and notify the beneficiary by registered mail”*. While contracts specified a broad definition of program participation, the key enforceable criterion in practice was the attendance of the monthly meetings with the counselor. Importantly, the amount of the transfer was tapered off in relation to employment income, and designed to hit zero once a participant made €1,050 – the minimum monthly salary as of April

¹⁴The guaranteed minimum income scheme (*Revenu de Solidarité Active*, or *RSA*) starts from age 25.

2011. The tapering implied a linear tax on employment income of $250/1050=24\%$ (see Figure 1b).¹⁵ Employment revenue includes wages, unemployment insurance and training compensation. The tapering of the program thus directly interacts with the employability investments it seeks to promote: A participant who starts a certified training course would earn €325 per month, but see their conditional cash transfer reduced by €78. Similar, an apprentice would earn €470 in the first year, but see their transfer reduced by €113.

3 Experimental Study Design and Data

3.1 Experimental Study Design

A nationwide randomized study was implemented to evaluate the effect of conditional cash transfers on participation in the guidance program, dropout rates, employability investments, and employment. A call for applications to take part in the study was issued to the 427 JYCs in France. Of these, 82 JYCs agreed to participate. The randomization design posed a challenge: An individual-level randomization was not feasible for ethical and political reasons – control group participants would have learned about the transfers, and complained about preferential treatment by the JYC. Randomization at the level of the JYC would have yielded limited statistical power, and created endogenous selection in who registers for the guidance program (this invalidates the design because we observe only those who register). We solve these selection and power issues by randomizing *within* each JYC, based on whether individuals signed up for the standard guidance program in February or in March 2011. This was done as follows: First, registrations for the standard guidance program were observed in February and March 2011, yielding 5498 new enrollees in the participating 82 JYCs. At this time, there was no public information about the experimental cash transfers, and it is unlikely that participants had any knowledge of this possibility when they signed up. Once registration lists for February and March were closed, the JYCs were paired according to existing characteristics, including the number of youths per counselor and the proportion of youths with a high school degree. Members of each pair were then randomly assigned to either group F or M. Group F JYCs contacted all subjects who had registered in February, and offered them to switch to a new contract including cash transfers (G+CCT). Group M JYCs did the same for subjects who registered in March. For both groups, cash transfers started in April. Compliance is high but imperfect: 82 percent of those offered the cash transfer contract accepted it. Across JYC groups, 2661 subjects were assigned to the treatment group (G+CCT),

¹⁵This figure is not particularly high given the tapers involved in other social transfer systems. Welfare transfers in France (RSA) impose an implicit tax rate of 38% on income; the rate for housing benefits – the primary form of transfer in France – is 35% . Low-income families receiving both welfare and housing benefits face a combined tax of over 75%. Internationally, rates vary from 15% for the WITB (Canada) and 21% for the EITC (US) to 50% for the TANF (US) and 65% for the Universal Credit (UK).

and 2837 to the control (G). Figure 2 illustrates the locations of the JYCs on a map of France, and Table 2 breaks down the sample by JYC group, registration month, and treatment status.

3.2 Data

The empirical analysis uses administrative data from the JYCs, as well as surveys carried out 12 and 24 months after randomization.

The JYCs collect information when youths first register at the center. This includes demographics, as well as information regarding the subject’s housing situation, resources, and past experience in the labor market. Administrative records trace all exchanges between registered youths and their counselors (meetings, phone calls, emails), as well as the details of these exchanges (dates, content keywords). This allows us to observe effects on participation and engagement with the program. The records also contain rich information on the service provided by the counselors: the content of the program and all the offers made to participants while in the program, including job offers, opportunities for training or career building services, proposals and matching. This is key to assessing whether more meetings with the counselor led to more opportunities for the participants. Finally, counselors recorded details on participants’ current situation during the meetings - specifically, whether they were employed, unemployed, or in training at that time. Contrast to the regular public employment service, JYCs maintain records of registered youths (and keep an assigned counselor) even when participants return to employment. A major drawback of the administrative records is that they stop when participants lose contact with the JYC. We thus rely on the administrative data mainly to measure effects on program participation and opportunities offered by the JYC. In addition to the administrative records, two individual phone surveys were carried out: a midline survey after 12 months (April 2012) and an endline survey after 24 months (April 2013). Each survey lasted 25 minutes, and elicited detailed labor market outcomes including employment, training, career building, and job search. Employment outcomes included all employment events (full and part time) on a monthly basis over the past twelve months. The survey also asked about income and sources of income, expenses, social integration and personality traits (locus of control, patience, life satisfaction).

While the surveys provides more comprehensive outcomes than the administrative records, the response rates were both low and differential across treatment groups: Response rates to the midline and endline survey are 60 % and 40 %, respectively, in the control group (Table 2). Response rates are 5-6 % higher in the treatment group, likely due to increased willingness to participate due to the cash transfers. We take the resulting risks to the internal and external validity of the study seriously: Section 6 and Appendix A investigate the robustness of our estimates to differential survey response rates. First, Table A1 shows that observable characteristics from administrative records are balanced across treatment groups in all relevant samples: the administrative sample,

the midline survey sample, and the endline survey sample. Second, we compare the treatment effect on administrative outcomes across all three samples. Third, we use various alternative estimation methods for our treatment effects, including additional control variables, the non-response bias correction proposed in Behaghel et al. (2015), and the implementation of Lee bounds (Lee, 2009).

3.3 Balance Check and Sample Description

Table A1 shows the balance of administrative variables across randomized treatment and control groups. We verify the randomization is balanced in all three samples that are relevant for the analysis: The first set of columns uses administrative records for the entire sample, the second set of columns restricts to midline survey respondents, and the last set restricts to endline survey respondents.

Observable characteristics are well balanced across groups. In the full sample, we reject the equality of means between the treatment and control group in only two of 44 variables (having children, and having started a training before registering for the program). In the midline sample, three variables have different means at the 10 % significance level; one at the 5 % level and another at the 1 % level. In the endline sample, only one variable is not balanced at the 10 % significance level. The joint hypothesis of equal means in all variables is not rejected in any of the samples. This is particularly reassuring in light of the differential attrition discussed in the previous section. Young people who enrolled in the standard program in February and March 2011 are young (mean: ?? years) compared to the age range required for enrollment in the experimental program (18-22 years old). Participants in the study have few qualifications and most dropped out of school at the high school or basic vocational level. Only 30 % of them have a driver’s license, which is an important but expensive asset for social inclusion in France (see footnote 19). Despite their young age, only 62 % still live with their parents. Roughly one in thirty has no stable housing or is homeless. At the time of JYC registration, personal income levels are very low at €77 a month on average. Consistent with the low income levels, we observe that participants are highly disconnected from the job market. The number of days spent in employment (training) in the three months preceding randomization (the first quarter of 2011) is 6.7 (6.4). Only 14.5 % of participants declare having worked during that quarter, and 13.5 % were in training.

3.4 Estimation

We estimate Intent-To-Treat (ITT) effects by applying ordinary least squares to the model:

$$y_{m,i} = \alpha + \beta_{ITT}Z_i + \gamma X_i + \lambda_m + \epsilon_{m,i} \quad (1)$$

where y is the outcome of interest for individual i , Z is an indicator for assignment to the cash

transfer group (G+CCT), X_i is a vector of observable characteristics from administrative records (those in Table A1), and λ_m is a JYC fixed effect. The error term $\epsilon_{m,i}$ allows for clusters at the JYC level. We include X_i to improve the precision of estimates, and to account for residual differences between treatment and control. The coefficient β_{ITT} estimates the ITT effect of being offered the cash transfer program (G+CCT), relative to the control group which received the standard guidance program (G) without cash transfers.

Given imperfect compliance (82 percent accepted to switch to a contract with cash transfers), we additionally estimate Treatment-on-the-Treated (TOT) effects. The TOT estimates the effect of participating in the cash transfer program (G+CCT), rather than just receiving the offer. We thus estimate

$$y_{m,i} = \alpha + \beta_{TOT}T_i + \gamma X_i + \lambda_m + \epsilon_{m,i} \quad (2)$$

where T_i is a dummy variable for participants who accepted the cash transfer program. The endogeneity of the participation decision is addressed by instrumenting T_i with the random assignment to treatment, Z_i . The identifying assumption is that the offer of the cash transfer program did not in itself change jobseekers' behaviour, other than through encouraging them to participate. Finally, to look at heterogeneity in our results in relation to a subsample identified by a dummy variable I (see Section 5), we estimate an equation in which the treatment group variable interacts with the I dummy and the $(1-I)$ dummy:

$$y_{m,i} = \alpha + \beta_{ITT,I}Z_i \times I_l + \beta_{ITT,1-I}Z_i \times (1-I_l) + \delta I_l + \gamma X_i + \lambda_m + \epsilon_{m,i} \quad (3)$$

Regressions use the I variable as an additional control variable (if it is not in X_i already). The $\beta_{ITT,I}$ and $\beta_{ITT,1-I}$ coefficients represent the impact of being assigned to the program on the $I=1$ subsample and on the $I=0$ subsample.

4 Results

4.1 Increased Program Attendance

Figure 3 shows the estimated ITT effects on enrollment and participation in the program. As outlined in 2.2, participants left during the program when they found stable employment, or when the counselor terminated their contract due to lack of participation. Figure 3a shows enrollment rates, estimated using equation 1. The dotted line is the mean enrollment in the control (group G) for a given month. It also shows a 95 % confidence interval for the treatment effect (coefficient β_{ITT} in equation 1). We show the evolution of the treatment group (G+CCT) by adding the estimated

ITT effect to the control mean, represented by a solid line.¹⁶ Months are numbered starting January 2011, thus program registrations occur in months 2 and 3, and cash transfers start in month 4. Figure 3a shows a steep decline in enrollment rates in the first year in the standard guidance program (G), with a sharp drop in months 14 and 15, and a leveling off at 20 % enrollment in the second year. The sharp drop in months 14 and 15 is related to the program design: After 12 months of registration, counselors need to actively re-enroll participants, otherwise the contract terminates. In contrast, terminating a contract at other times requires an active decision from the counselor. It is thus common that participants who miss several appointments in a row are not immediately excluded from the program, but simply not re-enrolled (in our data, ?? percent are not re-enrolled). In stark contrast, no drop after the first year appears in the cash transfer group (G+CCT), and enrollment rates remain around 70 percent throughout the second year. This may reflect higher participation of the jobseekers, but it is confounded by the counselor’s discretion: altruistic counselors may be reluctant to terminate contracts because they do not want to deprive jobseekers of much-needed cash transfers. We thus look to more objective measures of participation: registered meetings and other exchanges.

Figure 3 shows the average number of counselor meetings by month per jobseeker. Unlike program enrollment, average monthly meetings decrease at a more steady rate over the two years in the standard program (G). If each enrolled participant went to one scheduled meeting per month, and dropped-out participants did not, this unconditional average should trace enrollment exactly. While the decline in monthly meetings is equally visible in the cash transfer group (G+CCT), the number of meetings is consistently higher until the end of the program. This suggests that the cash transfers had real impacts on program participation. The rate of overall exchanges with the JYC counselor (including emails and calls) closely mirrors the rate of meetings (Appendix Figure ??), and also shows consistent treatment effects throughout the program. Similarly, the proportion of participants who are no longer in contact with the JYC after a given month is considerably lower in the treatment group (Appendix Figure ??).

Table 3 summarizes the estimated effects on program participation, both in terms of ITT and TOT. The top panel serves as a first stage for the TOT estimates, and confirms that the control group did not have access to the cash transfers, while 82% of the treatment group accepted them. The second (third) panel of the table show that the offer of (participation in) the cash transfer program increased the average months of program enrollment by 7.9 (9.6) from an average of 11.4 (12.1). The number of meetings over the two-year period increased by 5.3 (6.5) from an average of 7.3 (8.1).¹⁷ The table further shows the total payments received from the JYC during the program:

¹⁶Relative to the presentation of unconditional means, this improves precision through the inclusion of JYC fixed effects and control variables.

¹⁷This result from JYC records can be cross-validated with information from the midline survey in April 2012: Respondents were asked how many meetings were held in the last three months (months 10 to 12 of the cash transfer pro-

While only €237 (€264) were paid without the cash transfers (mostly reimbursements of job search costs), cash transfers increased the program cost by €1530 (€1868) per jobseeker over two years. To summarize, Figure 3 and Table 3 suggest that young jobseekers are extremely responsive to financial incentives for program participation. Jobseekers offered conditional cash transfers remain enrolled in the career guidance program for longer periods of time. They maintain a more active relationship with the JYC, have more meetings and other exchanges, and are less likely to lose contact over time. This increased participation comes with a high price tag: Abstracting from the program’s stated objective to ease financial constraints, each additional meeting cost the government €287 ($=1865/6.5$) in financial incentives in the form of CCTs.

4.2 Participants Are Offered More Opportunities But Do Not Seize Them

A central question is whether longer program participation and more meetings translate into more information and more opportunities for the jobseekers. Table 4 presents treatment effects on administrative records from the JYC.

Administrative records register and encode the content of meetings and exchanges with each participant. For the sake of simplicity, we use simple indicators on whether information was provided on job opportunities, training courses, or career planning services in a given meeting, and then sum these indicators across all meetings the participant attended. The JYC data further records instances in which youths were matched with providers of these job offers, training courses, and career services. Finally, the JYC counselors record new information on employment periods, training, internships and apprenticeships during every exchange, or retroactively to update a participant’s file. This includes jobs and trainings obtained via a channel other than the JYC. However, impacts on employment and training estimated using JYC records are biased upwards given the differential participation by treatment status: Participants in the cash transfer group were observed for longer periods. Table 4 presents Intent-to-Treat effects on the information a counselor gives to a participant (top panel), service matching (middle panel), and action actually taken (bottom panel). Effects are reported for the first three months, the first six months, and the first year. To keep track of any differential reporting, the table also shows enrollment rates and numbers of meetings for each time horizon.

The table shows a clear link between program participation and increased exposure to information on available services and opportunities (top panel). Counselors report an average of 5.2 events where they provided any kind of information on services – including health and housing services – in the

gram). Treatment significantly increased JYC meetings in three months by 0.77, from a control mean of 1.58. Interestingly, there is no drop in the number of meetings with other service providers: 0.33 meetings were held with the Public Employment Service (ITT effect 0.00), and 1.27 meetings with temporary employment agencies (ITT effect -0.02).

control group in the first quarter following randomization. Assignment to the cash transfer program leads to a significant increase of 2.8 events per participant. This increase of 48% is roughly in line with the increase in meetings by 69% (1.26/1.82) observed in the first quarter. Disaggregating information by type (employment, training, career planning), or changing the time horizon to six months or one year, yields very similar results: Assignment to cash transfers increases the exposure to information about services by roughly 50 percent, with all effects significant at the 1% level. The middle panel of Table 4 shows that the additional information is followed by an increase in service matching. In the first three months of the program, participants are matched with career planning services twice as often in the treatment group (0.28) than in the control (0.14). Rates of matching with training and job offers also increase significantly. All effect sizes are 30 percent and larger, and persist after six months and one year. Our results suggest that greater participation in the program entails an increased series of opportunities and actual offers made.

The bottom panel of Table 4 shows employment and training outcomes, as recorded by the counselor during meetings. The observed rates of re-employment and training are the same for the treatment and control groups. The same applies to human capital investments, which include training courses, company internships and apprenticeships. As noted previously, these outcomes are skewed by the fact that treated participants come to more meetings, and thus counselors observe them for a longer period (this likely explains the positive estimates after 1 year). However, counselors do monitor whether participants signed up for the services the counselor matched them to. We would thus be able to observe if the increase in matched services translates to an increase in services taken up. Therefore, the absence of effects cannot be merely due to reporting bias, but suggests that participants do not seize the increased opportunities provided.

4.3 No Impact on Employability Investments

We obtain further information on human capital investments from two surveys: a midline survey after 12 months (April 2012) and an endline survey after 24 months (April 2013). Table 5 presents the results, distinguishing outcomes into longer-term human capital investments (top panel), and short-term job search activities (bottom panel). We follow Kling et al. (2007) in establishing an index for each outcome category.¹⁸

We looked at a wide range of outcomes to assess employability investments, including formal

¹⁸ Following Kling et al. (2007), we standardize variables by subtracting the control group mean and dividing by the control group standard deviation before summing them. In addition, unlike in the paper quoted, we also standardize the outcome variable again for a standard deviation of 100 in the control group. Doing so gives a clearer picture of the detection capacity of the evaluation protocol. A standardized variable demonstrates a minimum detectable effect 2.8 times the standard deviation estimated by the variable with a statistical power of 80 % and p-value of 5 % (Bloom, 1995). In essence, this means that our protocol is able to detect a minimum effect of between 9 and 10 % of a standard deviation: a weak minimum detectable effect compared to the literature (9.3 % = 3.5×2.83 for the job seeking effort index and 9.9 % = 3.3×2.82 for human capital investment index).

investments like apprenticeship programs, internships, number of courses completed, certified training and obtaining a driver’s license. Other outcomes capture subjective aspects, such as having an established career plan, or self-assessed prospects of finding suitable employment. This wide range of outcome variables reflects the targeted nature of the program: Counselors suggest investments suitable for the jobseekers’ individual situation, rather than promoting individual measures. Tables 3 and 4 show that treated participants attend more meetings and receive more recommendations and services. If participants follow their counselors’ recommendations, we thus expect responses to treatment spread over a variety of investment types, rather than bunched on specific types.

The results largely confirm the administrative records: We detect no effect on any type of employability investment, with the exception of driver’s licenses: the number of participants who start a course to obtain their driver’s license is 3 percentage points higher in the treatment group, with a mean of 41.9 % in the control group.¹⁹ We estimate a precise zero effect on the overall index of investment (see footnote 18 on minimum detectable effects), and conclude with high statistical power that the treatment has no impact on human capital investment.

In addition to human capital investments with a longer time horizon, the surveys also ask about job search behavior: actively seeking work, usage of different search channels, the distance participants are willing to travel for a job, and their willingness to move to take an indefinite term job contract. The bottom panel of Table 5 shows that treatment does not change job search behavior at all. Both on individual job search outcomes, and on an overall job search index, we obtain zero treatment effects with high precision.

4.4 Short-Term Negative Impact on Employment

Employment was a key targeted outcome of our study. The ultimate long-term goal of the program was to give participants improved access to high-quality jobs. This was to be achieved by increasing employability investments and job search. In the short-term, several effects were possible and expected: First, increased investment in human capital (especially trainings and apprenticeships) may initially and temporarily reduce employment rates (a “locking-in” effect). Second, transfers weaken the incentive to work (a classic income effect). Third, the tapering of cash transfers imposed an implicit tax rate of 24 % on employment income during the program (Section 2.3). This is likely to reinforce disincentives to work and encourage part-time work over full-time work. The surveys contain comprehensive information on employment outcomes. For each month of the study, we observe whether participants worked, if the job(s) lasted the whole month or not, and if employment contracts were full- or part-time. We combine both surveys to establish a

¹⁹ Obtaining a driver’s licence in France is a lengthy and expensive process. Learners must pass a demanding theory exam and complete a minimum of 20 driving lessons (average: 32), then register for the driving exam and wait for a spot to open. Average costs are around €1800. Due to the distance of underprivileged neighbourhoods from town centres, a driver’s licence is seen as a key asset in a young adult’s search for employment.

two-year timeline of employment: results for the first 12 months are obtained from the April 2012 survey while results for months 13-24 are obtained from the April 2013 survey. Figure 4 shows employment access rates, estimated using equation 1. As for program participation (4.1), the dotted line is the mean rate in the control (group G) for a given month. It also shows a 95 % confidence interval for the treatment effect (coefficient β_{ITT} in equation 1). The rate in the treatment group is obtained by adding the estimated ITT effect to the control mean, represented by a solid line. Figure 4 presents the rate of employment in full-time (4b) and part-time (4c) contracts for a given month. Appendix Figure XX shows the overall employment, as well as an employment volume index which takes different values depending on whether participants worked the whole month or part of the month, in full- or part-time contracts.

Results clearly show that the experimental program has a negative impact in the first six months on full-time employment, though not on part-time employment. This is most consistent with a classic disincentive to work from transfers

Given the lack of impact on employability investments and job search, and the fact that JYC meetings take place only once per month, "locking-in effects" are not plausible. Instead, the result is consistent with classic income effects as well as substitution effects from the tapering of cash transfers. However, negative effects on employment are both small in magnitude and short-lived: Table 6 presents the results in ITT (left panel) and ToT (right panel) for the first six months, the first year, and the second year. In the first six months, the employment rate (full- or part-time) declines by 7.5 % from a control mean of 2.41 months. By the second year, the effect has disappeared. Finally, the surveys provide valuable insights on the type and quality of the employment contracts obtained. Table 7 presents treatment effects on the type of contract (short-term, permanent, contracts through temp agencies, apprenticeship or internship), on formal or informal employment, on subsidized jobs, and on the type of employer (public or private). We find that the cash transfer program has no impact on the type of job found, with the exception of a slightly higher rate of informal employment, as well as public-sector employment (significant at the 10% level, [robust/not robust] to multiple hypothesis testing).

4.5 Income, Consumption, and Social Integration

In addition to providing financial incentives for participation in the guidance program, a key motivation of the cash transfer scheme was to relieve financial constraints. We hypothesized that financial constraints may keep youths in low-skill, insecure employment, and prevent them from investing in human capital to obtain more long-term, secure employment. One reason why we may fail to see such investments (Section) is that the program was not successful in relieving financial constraints. We investigate this possibility by studying the effect of the program on income from different sources. Table 8 shows treatment effects of the cash transfer program on participants'

income in March 2012 (March 2013), i.e. in month 12 (24) of the program, obtained during the midline (endline) survey in April 2012 (2013). The left and middle panels present ITT effects of offering the cash transfer program (G+CCT), while the right panel estimates TOT effects for the 82% of treated subjects who accept the cash transfer contract.

Overall, we find that treatment group income in March 2012 is €40 higher than that of the control group (€602 on average). The program only marginally increases the resources of participants, despite the fact that, in month 12 of the program, subjects were still entitled to the maximum theoretical transfer amount of €250. This is not a concern in itself, if the transfers allowed participants to move away from short-term, low-skill work, and invest more into their future. However, the table further shows that income from the JYC increased by only €87 on average. Substitution of income between sources is present but moderate: The increase in JYC income is associated with a decrease of €47 in other income, of which employment income (€26, not significant), parents (€10), and other non-work sources (€11). What, then, explains the gap between the observed income from the JYC and the theoretical transfer of €250? A more detailed look at the data reveals a combination of income tapering and imperfect compliance: Those who accepted the cash transfer program received €125 ($102 + 23$) from the JYC (TOT panel in Table 8), and earned €435 ($465 - 30$) from work. Income tapering reduces their transfer amount by $0.24 \times 435 = €104$. This accounts for €229 ($125 + 104$) of the transfer. The remaining difference is explained by the fact that 6.4% of cash transfer participants dropped out of the program before month 12.

Our results suggest that participants largely chose not to substitute away from existing sources of employment income, and thus received reduced cash transfers. Two explanations are possible: First, financial constraints are not a significant barrier to human capital investment. Rather, young people stay in low-skill occupations out of choice. Second, financial constraints do prevent youths from investing in human capital. However, our cash transfers are simply not large enough to overcome them, thus forcing youth to remain in low-skill occupations for subsistence.

We find suggestive evidence for the second explanation: Young people seem to face significant financial constraints, and the cash transfer program does not measurably alleviate them (Table 9). In the midline survey after one year, 27.7% of participants reported having had trouble to pay bills in the past 12 months, 24.4% forwent medical care for financial reasons (despite a heavily subsidized public health care system), 13.7% forwent training, 45% overdrafted their bank account, and 19.4% went a day without a meal due to lack of money. None of these outcomes are significantly affected by the cash transfer program (Table 9). While the existence of financial constraints does not prove that they are binding for human capital investment, our results do suggest that the cash transfer program may have been too small to significantly impact participants' economic situation. So where did the extra income go, and what about other measures of wellbeing? The midline survey additionally elicited key expenditures, including 'temptation goods' like nights out, restaurants,

tobacco, and their phone (not included in the endline survey). We find precisely estimated zero impacts across this spending category, as well as on the size of the largest expenditure in the last 12 months. In contrast, treated participants were 5 percentage points more likely (control mean: 45%) to report putting savings aside over the last 12 months. We elicited savings contributions over the past three months (month 9-12), and found that treated subjects saved €37 more on average (an increase of 18%) than the control group. Remembering the €40 increase in overall income (Table 8), it appears that participants used the cash transfers to increase neither their consumption nor their investment, but simply saved the surplus. This may seem puzzling, but it is consistent with the possibility of financial constraints to human capital investments: the cash transfers are too small to allow youths to abandon low-skill jobs and start training courses, but they are sufficient to allow saving for such investments. This explanation requires either income-generating activities or human capital investments to be indivisible. We explore this and other mechanisms theoretically and empirically in Section 5.

Appendix 10 shows effects on mobility, social integration, trust in public institutions, and personality characteristics. We find mixed effects on participants' reported main mode of transport: All participants move away from public transport, and towards driving, between the midline and endline survey (likely an effect of age). Despite the increased driving licenses, treated participants are slightly *less* likely to use their car. This is consistent with the licenses being seen as a job qualification rather than as a lifestyle good, and also ties in with the increased savings behaviour. Furthermore, we see a sustained improvement in the trust of young jobseekers into the JYC: Participants in the cash transfer group were 7.8 percentage points more likely to have trust in the JYC after 24 months of the program (control: 69.9%). This is notable progress: unemployed youths in France are known to be highly mistrustful of public institutions. Mistrust constitutes a primary pitfall for employment programs (ADD CITATION). Building trust is notoriously difficult, and schemes have been implemented specifically to address this obstacle (Pole Emploi 2015). While cash transfers appear to improve trust in the specific institutions, we find no effects on deeper personality characteristics such as locus of control, patience, or life satisfaction, as well as on social integration (number of friends).

5 Evidence for Mechanisms

The following section seeks to understand the mechanisms behind the observed treatment effects (or the lack thereof). We start by introducing a theoretical framework using a modified principal-agent model to fix ideas. We discuss various reasons why the agent may underinvest in effort (human capital investment) relative to the principal, even when both care equally about the outcome (employment). We derive empirical predictions for each, and test these using our data.

5.1 Theoretical Framework: Benchmark Case

Consider a task – finding employment – which requires two successive levels of effort. In a first step, the agent needs to meet with the caseworker, $e_1 \in \{0,1\}$, incurring a cost $\psi_1 \equiv \psi(e_1)$. During the meeting, she learns about the required second step to find a job, $e_2 \in \{0,1\}$, which costs an additional $\psi_2 \equiv \psi(e_1 + e_2) - \psi(e_1)$. Effort e_2 can be thought of as the specific training, apprenticeship, or direct job search that is most suitable for the jobseeker.²⁰ Jointly exerting e_1 and e_2 results in a probability of employment $P(\bar{Y} = 1 | e_1 = e_2 = 1) \equiv \pi_2$, while the baseline probability of finding a job without effort is $P(\bar{Y} = 1 | e_1 = e_2 = 0) \equiv \pi_0$. We denote by $\Delta\pi = \pi_2 - \pi_0$ the difference between the two. Going to the meeting by itself does not increase the probability of employment: $P(\bar{Y} = 1 | e_1 = 1, e_2 = 0) \equiv \pi_1 = \pi_0$, thus exerting e_1 without e_2 is dominated (this will change later). Finally, we denote by \bar{Y} the value to the agent of finding a job, and by \underline{Y} the outside option of unemployment. In a static, risk-neutral benchmark case, the agent invests in effort e_1 and e_2 if

$$\pi_2 \bar{Y} + (1 - \pi_2) \underline{Y} - \psi_1 - \psi_2 \geq \pi_0 \bar{Y} + (1 - \pi_0) \underline{Y} \quad (4)$$

and thus if

$$\Delta\pi(\bar{Y} - \underline{Y}) \geq \psi_1 + \psi_2 \quad (5)$$

Inequality 5 represents the optimality condition for a risk-neutral social planner, who shares the agent’s valuation of employment as well as effort disutility. In the following subsections, inequality 5 will serve as a benchmark for evaluating underinvestment in effort. While distinct from a principal-agent model in that the agent directly cares about Y , and the social planner cares about effort disutility, there are parallels in that the social planner and the agent may disagree about the optimal effort level.²¹ The social planner is able to contract on some types of effort (attending meetings), but not on others (sending job applications). Specifically, the social planner will be able to offer a transfer t conditional on exerting e_1 , but cannot contract on e_2 .

²⁰We keep effort cost ψ_2 deterministic and constant here. It is plausible to model ψ_2 as a stochastic draw from a distribution $F(\psi_2)$: By meeting the caseworker (exerting e_1), the agent learns how much effort will be required to find a job. Whether effort e_1 is exerted is a function of the prior $E(\psi_2)$. Effort e_2 is then exerted for ψ_2 realizations below a threshold value $\bar{\psi}_2$. A cash transfer conditional on e_1 makes more people learn ψ_2 , and thus exert e_2 iff it is cheap enough. Because the meeting cost ψ_1 is sunk at the point of exerting e_2 , the cash transfer does not affect the threshold value $\bar{\psi}_2$. Summing up, allowing for stochastic draws from the effort cost distribution would mostly predict heterogeneity in treatment effects by effort type: “Cheap effort” like web search and job applications should increase, while “expensive effort” like long-term training and apprenticeships should not respond. Because we do not see any heterogeneity by effort type, we abstract from this possibility, and assume for simplicity that ψ_2 is deterministic.

²¹If the social planner/principal did not care about effort disutility, underinvestment in effort would follow trivially. We shut down this channel and focus our attention on less mechanical ones.

5.2 Risk and Time Preferences

An immediate channel for underinvestment relative to the preferences of a patient and risk-neutral social planner are diverging risk and time preferences. Effort costs are certain, finding a job is risky. Also, the benefits of employment are likely to accrue with some delay. It is straightforward to add concave utility $u(c)$ ($u'(c) > 0$, $u''(c) < 0$) to inequality 4. Utility is assumed to be additively separable between consumption and effort, $u(c) - \psi(e)$. We assume that a human capital investment yields returns (if any) in τ periods, which are discounted by a factor D_τ . With two time periods, it makes no difference whether we consider pure exponential discounting ($D(\tau) = \delta^\tau$) or hyperbolic discounting ($D(\tau) = \beta\delta^\tau$), although very high rates of short-term discounting would point to the latter rather than the former (Kaur et al. 2015; Augenblick 2017). We further include background consumption \underline{Y} in the search period, which will cancel out for the moment, but become relevant later. With risk aversion and discounted employment returns, the agent exerts effort iff

$$\begin{aligned} & u(\underline{Y}) - \psi_1 - \psi_2 + D_\tau [\pi_2 u(\bar{Y}) + (1 - \pi_2) u(\underline{Y})] \\ \geq & u(\underline{Y}) + D_\tau [\pi_0 u(\bar{Y}) + (1 - \pi_0) u(\underline{Y})] \end{aligned} \quad (6)$$

or

$$D_\tau [\Delta\pi(u(\bar{Y}) - u(\underline{Y}))] \geq \psi_1 + \psi_2. \quad (7)$$

Comparing inequality 7 to a risk-neutral and patient social planner or principal ($u''(c) = 0$ and $D_\tau = 1$), the agent underinvests in effort. Underinvestment increases in discounting and risk aversion (formally, effort increases in D_τ and $u''(c) < 0$).

5.2.1 Adding Conditional Cash Transfers

The social planner can offer a transfer t conditional on exerting effort e_1 (meeting attendance), but cannot contract on e_2 (human capital investment or job search). The transfer is immediate, certain, and large enough to make e_1 dominant: $u(\underline{Y} + t) - \psi_1 > u(\underline{Y})$. The agent is willing to additionally exert e_2 iff

$$\begin{aligned} & u(\underline{Y} + t) - \psi_1 - \psi_2 + D_\tau [\pi_2 u(\bar{Y}) + (1 - \pi_2) u(\underline{Y})] \\ \geq & u(\underline{Y} + t) - \psi_1 + D_\tau [\pi_0 u(\bar{Y}) + (1 - \pi_0) u(\underline{Y})] \end{aligned} \quad (8)$$

which simplifies to

$$D_\tau [\Delta\pi(u(\bar{Y}) - u(\underline{Y}))] \geq \psi_2. \quad (9)$$

Inequality 7 and 9 differ in that the transfer eliminates the effort cost of the meeting ψ_1 . By covering part of the total effort cost, $\psi_1 + \psi_2$, the transfer moves the agent closer to the margin. To the extent that less risk averse and more patient agents are closer to the margin, they may be more likely to respond to the transfer. In all cases, the impact of the transfer is limited to removing the effort cost ψ_1 – the exact size of the transfer is irrelevant.

An important caveat is that the model abstracts from the role of the transfer as an unemployment insurance: The transfer t is paid during the job search period, but not during the subsequent employment period. If agents received $\underline{Y} + t$ as an outside option to \bar{Y} , transfers would mechanically crowd out investment in e_2 (the return to effort is reduced to $\Delta\pi(u(\bar{Y}) - u(\underline{Y} + t))$), and thus employment. While such crowd-out effects are both plausible and observed in our data, they are temporary – transfers are limited in time. This modelling choice thus represents a long-term view of human capital investment and job search.

5.2.2 Theoretical Predictions: Risk and Time Preferences

The predictions of the model can be summarized as follows:

1. Impatience and risk aversion negatively predict human capital investment and job search.
2. Transfers conditional on meeting attendance will increase human capital investment, job search, and employment.
3. With indivisible effort e_2 (like apprenticeships), effort will respond more to transfers for more patient or less risk-averse agents.
4. If effort e_2 is divisible (e.g. job applications), it should respond to cash transfers regardless of risk or time preferences, i.e., there will be no treatment effect heterogeneity (conditions 7 and 9 hold with equality).

5.2.3 Empirical Evidence: Time Preferences

Appendix B shows heterogeneous treatment effects across available measures of candidate mechanisms, estimated using equation 3. Unfortunately, we do not have a measure of risk preferences. However, the predictions in Subsection 5.2.2 are closely aligned for risk and time preferences. The predictions for time preferences can be studied using a simple proxy for patience from the baseline survey: Participants were asked whether they were willing to wait a given amount of time (between 6 months and one day) to receive a €250 prize, when the alternative is to receive €200 today. The left panel of Table B1 shows estimated treatment effects of the cash transfer on relatively ‘impatient’ participants – those with a below-median willingness to wait (60 days or less). The right panel shows treatment effects for relatively ‘patient’ participants (more than 60 days). The

last column of Table B1 tests for equality of treatment effects across the two subgroups. Tables B2 to B7 are set up analogously. We focus our attention on a smaller set of key outcome variables: a composite employment index for the first year and second year (see Table 6 for more information about the questions used), composite indices for human capital investment and job search (see Table 5), income in March 2013, levels of savings in March 2013, perceived financial constraints, and key variables from the administrative records related to services provided by the JYC.

Prediction 1 requires a comparison of means between the two subgroups in Table B1: As expected, more patient jobseekers invest significantly more in human capital (through apprenticeships or trainings) than their impatient counterparts. In contrast, they invest significantly less into job search. This stands in contrast with our highly stylized model, but it is intuitive when allowing differential delays of returns to effort e_2 : Human capital investments have more delayed returns than immediate job search, and will thus be relatively preferred by more patient agents.

We find no support for Predictions 2-4. In particular, key outcomes (human capital, search and employment) do not increase with the transfers, and there is no heterogeneity across subgroups. We find weak support for a crowd-out of employment among impatient participants, but the difference is not significant. Overall, the available evidence does not support time preferences as a binding constraint to human capital investment.

5.3 Financial Constraints

Suppose instead that the agent is prevented from investing in effort simply because she cannot afford to. Specifically, suppose that there is a minimum subsistence constraint c_L with $u(c) = -\infty$ for $c < c_L$. The agent needs to work in informal or low-skilled labour to earn c_L , with a time cost of ψ_L . An easy way to incorporate this subsistence constraint into the model is by microfounding the utility from unemployment as $\underline{Y} \equiv v(c_L) - \psi_L$, where $v(c)$ takes the functional form previously assumed for $u(\underline{Y})$.²² The effort cost of human capital investment, $\psi_1 + \psi_2$, also represents a time cost (e.g., of participating in vocational training). The agent faces a time budget T which makes it impossible to invest in human capital and low-skill labour at the same time. Assuming that the cost of monthly meetings ψ_1 is small, and noting that $\psi(e)$ is linear if effort represents time, the time constraint is summarized as

$$\psi_1 + \psi_2 \leq \psi_L < \psi_1 + \psi_L \leq T < \psi_1 + \psi_2 + \psi_L \quad (10)$$

Given condition 10, the social planner's benchmark for optimality of human capital investment becomes

$$\Delta\pi(\bar{Y} - \underline{Y}) \geq \underline{Y} + \psi_1 + \psi_2 = c_L - (\psi_L - \psi_1 - \psi_2), \quad (11)$$

²²Similarly, the utility from employment $u(\bar{Y})$ can be microfounded as $u(\bar{Y}) \equiv v(c_H) - \psi_H$, where c_H represents the consumption level when employed, and ψ_H represents the time cost of (formal or high-skill) employment.

which is assumed to hold. Condition 11 differs from condition 5 in that the agent needs to give up \underline{Y} during the search period in order to obtain an expected $\Delta\pi(\bar{Y} - \underline{Y})$ in the employment period.²³ However, the subsistence constraint means that this is not an option: Human capital investment is risky given $\pi_2 < 1$, and any chance to incur $U(c) = -\infty$ is unacceptable. Thus, the agent exerts ψ_L and obtains c_L , despite lower returns. As in the benchmark case, exerting e_1 without e_2 is strictly dominated.

5.3.1 Adding Conditional Cash Transfers

As in the previous subsection, the social planner can offer a transfer t conditional on exerting effort e_1 . If $t \geq c_L$, the subsistence condition is satisfied with meeting attendance alone, and e_1 becomes dominant. Since human capital investment has higher returns than low-skilled labour (inequality 11), the agent exerts e_1 and e_2 .

More plausibly, the conditional cash transfer covers only part of the subsistence constraint, $t < c_L$. The effort response to the cash transfer then relies on divisibility of low-skilled labour: With the current assumption of an indivisible c_L costing ψ_L (such as low-skill or seasonal work projects with a minimum time commitment), the cash transfer has no effect on human capital investment: As long as the agent cannot afford to give up c_L , she cannot invest in e_2 . Meeting attendance e_1 will respond given $\psi_1 + \psi_L \leq T$. Note that divisibility of e_2 is irrelevant: The amount of job search that the agent can fit into the time constraint is not affected by the transfer.

It is worth to consider an extension where low-skill work ψ_L is divisible, akin to an hourly wage: $\lambda\psi_L$ yields λc_L for $\lambda \leq 1$. Keeping e_2 indivisible, the transfer needs to be sufficiently large to free up enough time for human capital investment: e_2 will respond iff

$$\frac{c_L - t}{c_L} \psi_L + \psi_1 + \psi_2 \leq T \quad (12)$$

Finally, suppose that both low-skill work and human capital investment are divisible ($\psi_1 + \gamma\psi_2$ yield an increase of $\gamma\Delta\pi$ in the probability of finding employment, for $\gamma \leq 1$). Given higher proportional returns for human capital investment (from conditions 10 and 11, $\psi_2 < \psi_L$ and $\Delta\pi(\bar{Y} - \underline{Y}) \geq \underline{Y}$), e_2 is now guaranteed to respond. The agent chooses γ to make the time constraint $\frac{c_L - t}{c_L} \psi_L + \psi_1 + \gamma\psi_2 = T$ hold with equality.

5.3.2 Theoretical Predictions: Financial Constraints

The predictions of the model can be summarized as follows:

1. Financial constraints negatively predict human capital investment and job search, with a stronger impact on more time-consuming activities.

²³The adjusted optimality condition with risk aversion and time discounting is $D[\Delta\pi(u(\bar{Y}) - u(\underline{Y}))] \geq v(c_L) - (\psi_L - \psi_1 - \psi_2)$ with $v(c)$ concave.

2. If income-generating activities during unemployment (low-skill or informal labour) are indivisible, human capital investment will not react to a transfer that less than perfectly covers subsistence consumption.
3. If income-generating activities during unemployment are divisible, human capital investment will respond to the conditional cash transfer. Divisible activities (like job search) will respond more than indivisible activities (like apprenticeships), with the latter depending on the size of the transfer.

5.3.3 Empirical Evidence: Financial Constraints

To identify the subsample of participants most likely to experience financial constraints, we use the financial constraints index collected in the midline survey (see Table 9 for more information about the questions used). To address endogeneity to treatment status, we predict this index for control group subjects, using only administrative variables that existed prior to the study. We then extrapolate these predictions to the treatment group, and split the sample into two subgroups using the median control value.

Table B2 shows treatment effect heterogeneity by probability to face financial constraints. Effects are broadly similar across groups. In line with Prediction 1 for financial constraints, mean human capital investment is lower for financially challenged youths (this difference reverses for job search). However, the difference in means is explained with control variables and JYC fixed effects, and thus not significant. In line with Prediction 2, but not Prediction 3, human capital and search effort do not respond to cash transfers, with no differential effect. As with impatient youths in Subsection 5.2.3, we find weak support for a crowd-out of employment among financially constrained youths, but the difference is not significant. While there is no treatment effect heterogeneity on key outcomes, the probability of facing financial constraints itself is strongly reduced by the cash transfer, and only in the group most likely to face them. Overall, our results are consistent with either (a) financial constraints not being a barrier to employability investments, or (b) financial constraints are a barrier, but low-skill work is indivisible, and transfers are too small to fully cover subsistence needs.

5.4 Returns to Effort

A large class of possible frictions is contained in the mapping from e_2 to \bar{Y} . So far, we assumed that the agent learns during the caseworker meetings (e_1) which human capital or employability investments (e_2) are most suitable to help her find employment. The return to these investments is captured in $\Delta\pi = \pi_2 - \pi_0$, the increase in the probability to find a job. The agent and the social planner may disagree about $\Delta\pi$ for various reasons:

1. **Program quality:** The model captures program quality in the information which the

caseworkers give to the jobseekers. If the caseworkers recommend human capital investments which are not suitable for the jobseeker, and will not lead to higher chances of employment, then $\Delta\pi$ may be small or zero, and the optimality condition $\Delta\pi(\bar{Y} - \underline{Y}) \geq \psi_1 + \psi_2$ may be violated. It is conceivable that a central planner is not aware of this fact, while the jobseeker realizes that the proposed investments are not profitable.

2. **Perceived program quality:** Independent of the true quality of the program, the jobseeker may *perceive* the quality to be low. Specifically, the jobseeker may believe that the suggested human capital investments are not profitable. The agent's investment decision depends on her belief $\Delta\tilde{\pi}$ rather than on the true value, and thus generates equivalent predictions. A key difference is that higher levels of human capital investment e_2 should be associated with higher levels of employment in the data, although this correlation is likely to have many empirical confounds (e.g. a shorter unemployment spell implies less time to search).
3. **Internal beliefs and locus of control:** An increasing body of evidence points to the importance of agents' beliefs about themselves and their ability to succeed for economic behaviour (Bernard et al. 2018; McKelway 2018; Haushofer et al. 2019). Even if agents believed the program to be high quality, and the recommended human capital investments to be profitable *a priori*, they may still be convinced that they would not be able to succeed. In particular, they may believe that their life is not in their own hands, and that hiring decisions depend on external factors rather than their own actions. Alternatively, they may believe that they would not be able to successfully complete a given investment (say, an apprenticeship) in the first place. In this simple model, such beliefs about own ability and agency are also captured in $\Delta\tilde{\pi}$, and thus theoretically equivalent to perceived program quality.
4. **Labor market conditions:** A final possibility which we mention here is that labour market conditions for the target population are extremely difficult, with an excess supply of low-skilled workers. Labor market conditions enter the model through the probability of finding a job, π_0 and π_2 . First, note that a low baseline probability π_0 does not affect the model in any way, conditional on the return to investment $\Delta\pi$. While perhaps counterintuitive, this holds true even with risk aversion, as expected utility is linear in probabilities. Labor market conditions become relevant to the extent that they affect the return to investment, $\Delta\pi = \pi_2 - \pi_0$. In this case, they generate the same predictions as low program quality.

5.4.1 Adding Conditional Cash Transfers

The effect of a low believed return $\Delta\tilde{\pi}$ is straightforward. The investment condition for e_2 is unlikely to hold (see condition 7 when including time and risk preferences):

$$\Delta\tilde{\pi}(\bar{Y} - \underline{Y}) \geq \psi_1 + \psi_2, \quad (13)$$

where objective underinvestment depends on whether $\Delta\tilde{\pi}$ reflects the true return $\Delta\pi$ or not. Analogue to Section 5.2.1, offering a transfer t conditional on meeting attendance e_1 changes the investment condition to

$$\Delta\tilde{\pi}(\bar{Y} - \underline{Y}) \geq \psi_2. \quad (14)$$

As in previous subsections, the transfer moves the agent closer to the margin by covering the cost ψ_1 , regardless of the exact size of the transfer.

5.4.2 Theoretical Predictions: Returns to Effort

The predictions of the model can be summarized as follows:

1. Any variable that affects perceived or real returns to effort negatively predicts human capital investment and job search. Examples include perceived and real program quality, locus of control and internal beliefs, as well as labor market conditions which affect the return to search effort.
2. Low real returns, but not low perceived returns, predict the absence of a relationship between human capital investment and employment.
3. Transfers conditional on meeting attendance will increase human capital investment, job search, and employment, at the margin.
4. To the extent that agents with low (perceived) returns are farther away from the margin, there will be treatment effect heterogeneity by measures capturing (perceived) returns to effort. Low (perceived) returns predict smaller treatment effects.

5.4.3 Empirical Evidence: Program Quality

Since both control group and treated participants are exposed to the CIVIS program, the program itself cannot be evaluated directly. However, program quality is mostly determined by the information and the services provided by the caseworkers (captured in the model as the recommended action e_2 with return $\Delta\tilde{\pi}$). We derive a proxy for caseworker quality, following the idea that jobseekers will not return to a caseworker who provides poor or unsuitable information, does not listen to the jobseekers' situation, and does not target services to their specific situation. We

obtain the universe of administrative jobseeker records from 2010, the year before the experiment started, and group jobseekers by the caseworker who followed them. Caseworker quality is then measured as the proportion of jobseekers who drops out of the program after first meeting their caseworker, one year before the experiment. "High quality" indicates that a caseworker had a below-average proportion of drop-outs, relative to his or her JYC (we de-mean quality at the JYC level to allow for different jobseeker populations). Unfortunately, this background information can only be matched to the caseworkers of two thirds of our participants, which reduces our sample size further. Table B3 shows treatment effect heterogeneity using the caseworker quality proxy. Prediction 1 of Subsection 5.4.2 finds support in the data: Average human capital investment and average search are higher with high-quality caseworkers. This difference is significant for human capital investments (controlling for JYC fixed effects), but not for search. In contrast to Prediction 2, there is a very strong positive relationship ($p < 0.01$, not shown in the table) between human capital investment and employment volume, both after 1 and 2 years. This is consistent with high real program returns, though it (i) assumes that the observed human capital investments are those recommended by the caseworkers, and (ii) abstracts from the obvious endogeneity of human capital investment. We find no support for Predictions 3 and 4 in the data.

5.4.4 Empirical Evidence: Locus of Control

Table B4 studies heterogeneity by a measure of locus of control, which captures participants' internal beliefs about their returns to exerting effort. In line with Prediction 1, mean human capital investment is significantly higher for those with an internal locus of control – i.e., for those who believe their life is shaped by their own actions, rather than by external factors. Interestingly, and similar to the findings for patience, search effort is significantly lower for those with an internal locus, consistent with a more long-term focus on building human capital. Prediction 2 does not apply to perceived, as opposed to real, returns. Again, there is little support for Predictions 3 and 4 in the data. Employment volume after 1 year actually *decreases* for those with an internal locus, again consistent with a short-term focus on human capital building rather than immediate job search. The effect disappears after 2 years. Outside the predictions of the model, it is notable that income increases from the transfer are entirely driven by participants with an *external* locus of control. This makes sense: Those with an internal locus are more likely to actively manage their income sources, and potentially crowd out or supplement income as needed. In contrast, those with an external locus are more likely to surrender their financial situation to external circumstances, in this case receipt of the conditional cash transfer.

5.4.5 Empirical Evidence: Labor market conditions

In order to proxy the labor market conditions faced by our jobseekers, we obtained administrative records of the local youth unemployment rate, specific to each JYC catchment area. The variation is substantial: The unemployment rate for 16-25 year olds ranges from 12.7 to 58.4 percent across JYCs, with the median jobseeker facing an unemployment rate of 25 percent. In terms of the model, the local unemployment rate is a determinant of π_0 , and potentially affects $\Delta\pi$. Table B5 studies heterogeneity by whether jobseekers face a local unemployment rate above or below the median. We find that mean human capital investment does not differ significantly with the local unemployment rate. However, search effort is substantially higher in *tougher* labor market conditions, consistent with a lower $\Delta\pi$ but strong income effects. In line with tougher conditions forcing youths to search more, more search effort *negatively* predicts employment volume in the overall sample (not shown in the table). As with other candidate mechanisms, we find little support for heterogeneous treatment effects of cash transfers on effort and employment. However, meeting attendance increases significantly more in areas with high unemployment, and income increases only in those areas. The evidence suggests that jobseekers in high-unemployment areas have few alternatives to search, and are heavily reliant on external financial help.

5.4.6 Empirical Evidence: Labor market connectedness

We additionally examined heterogeneity in terms of a subject's connection with the labor market. We measured how connected participants were based on the fact that the standard program has two tracks: a standard track and an intensive one, with more frequent meetings and closer monitoring. The intensive track is reserved for young adults identified by counselors as having particularly serious integration issues when they enroll. Subjects enrolled in the standard program or intensive experimental program are considered as being more disconnected from the labor market. Table B6 presents our findings. As in the previous table, estimated effects in both groups are very similar. Some significant differences in human capital investments do appear where labor market status is concerned. Subjects who were the most disconnected from the labor market invested more than less disconnected subjects in the treatment group, while they invested less in the control group. It is an interesting outcome. An analysis of the different components of the index shows that the biggest improvements are found in self-assessments of employment prospects. Table B7 additionally shows that no significant difference is found between men and women.

5.5 Summary of Evidence on Mechanisms

Summing up the available evidence, we find little support for heterogeneous treatment effects of cash transfers on human capital investment and employment by patience, financial constraints,

and various channels mediating the returns to effort. All examined mechanisms predict positive treatment effects of cash transfers on effort, at least at the margin. This leads us to two possible explanations for the absence of effects, which both center around the divisibility of effort:

First, human capital investment and search effort may be indivisible. The cash transfer effectively eliminates the cost of meeting attendance ψ_1 from the agent’s incentive constraint, regardless of the size of the transfer (as long as it compensates ψ_1). Regardless of which mechanism causes underinvestment in effort, removing ψ_1 moves the agent closer to the margin. If employability investments are divisible, they will respond to the program. If, on the other hand, human capital investment or search is indivisible, and their cost ψ_2 is large relative to ψ_1 , a cash transfer conditional on meeting attendance will not produce effects. This explanation is consistent with time preferences or program returns as channels for underinvestment. The data supports these in the sense that they predict baseline levels of human capital investment.

Second, financial constraints can explain the lack of an effort response if income-generating activities are not perfectly divisible, and the cash transfer covers less than the subsistence needs. In support of this, we find some evidence that mean human capital investment is lower for financially challenged youths.

Finally, and outside of the model, we observe that several factors predict the choice between human capital investment and search effort: Patience, an internal locus of control, and the absence of financial constraints all predict a more long-term orientation in human capital investment, and a reduced focus on immediate job search. We will explore this finding theoretically in future revisions.

6 Robustness

The midline and endline surveys provide very useful information in addition to the administrative records, but have weaker response rates, which are higher in the treatment group than the control group (see Table 2). This raises a doubt as to the internal and external validity of the results obtained via these surveys.

The issue can be addressed by looking at Tables 2 and A1. Table 2 shows that the response rate is significantly linked to individual characteristics found in the administrative records. Table A1 shows that for each survey, both groups of respondents in the treatment and control groups are balanced (based on variables from the administrative records, recorded before the study began). These results can lead to two conclusions: on the one hand, survey respondents are specific, which implies that external validity may be compromised. On the other hand, both groups of respondents in the treatment and control groups are identical, which suggests that internal validity is less challenged. We pursued our study by carrying out additional analyses. We were fortunate to have at our disposal many pertinent outcome variables from the administrative records and therefore for the

entire sample. We could therefore measure program impact on three different subsamples: the entire sample, midline survey respondents and endline survey respondents. We formally tested for possible differences in program impact between these three groups using a statistical test built based on the estimate of the model below:

$$\begin{aligned}
y_{m,i} = & a + cZ_i + dZ_iM_i(1-E_i) + eZ_i(1-M_i)E_i + fZ_iM_iE_i \\
& + g_1M_i(1-E_i) + g_2(1-M_i)E_i + g_3M_iE_i + x_ib + \sum_m \alpha_m I_m + u_{m,i}
\end{aligned} \tag{15}$$

where M_i and E_i are dummies for respondents of the midline and endline surveys respectively, and Z_i is always the assignment variable for the treatment group. The c coefficient is the effect on the entire sample. The d coefficient measures the difference between participants who took part in the midline but not the endline survey and overall effect. The coefficients e and f measure the corresponding quantities for the groups which took part in the endline but not the midline (e) and in both the mid- and endline surveys (f). The hypothesis $d=e=f=0$ therefore equals the lack of effect of response behavior on estimated impact. If the hypothesis is not rejected, neither internal nor external validity are compromised.

Results appear in Table A2. The first set of columns lists the results of the estimate on the entire sample, while the second and third sets present the results of the estimate when analysis is limited to either respondents in the midline or endline survey, respectively. The last column presents results from the previously described test (on the nullity of the d , e and f coefficients in model 15). Each line represents a variable. We selected the central variables from the administrative records: number of meetings with a caseworker, and the total number of actions recorded by the caseworker. Actions are recorded by type: employment and training; putting a participant in touch with someone concerning job offers or training opportunities, and jobs and courses already started or completed. These variables are calculated either for the first quarter (top panel), the first semester (middle panel) or the first year (bottom panel). We found that impacts stemming from assignment to the treatment group are very similar for all variables. Test results confirm this convergence. Most of the time, the tested hypothesis is widely accepted. It was only rejected once at the 5 % significance level and twice at the 10 % level, for all 24 tests performed.

Figure A1 (a) presents the same type of results: the impact of the experimental program on the average number of meetings per month either for the entire sample or for survey respondents only. The graph clearly shows that the estimated profile for program impact on the number of meetings is very close for each estimate (standard errors are not included in the graph to keep it simple). At last, more traditional series of tests looked at alternative estimators for a set of variables selected from the midline and endline surveys. Results appear in Table A3. The first set of columns recalls

the results of the specification discussed above: the estimate of equation (1) when control variables are introduced, the results of which are presented in certain tables in section 4. The second set of columns presents the results of the estimate of equation (??) (without control variables). The third set presents the results obtained by correcting for sample selection bias resulting from non-response, using the method developed by Behaghel et al. (2015). In this procedure, only individuals who were reached after a certain number of attempts are included in the treatment group (which has a higher response rate), so that final response rates in both groups are identical (18 calls for the midline survey, with a 59 % response rate in treatment and control groups – see A1 b). The two last sets of columns present bound estimates, as developed by Lee (2009).²⁴

Results show that the Lee bounds are not very informative: estimated intervals are very large. Most of the time, they include zero, and when they do not, it is clear, given the standard errors, that the confidence interval for at least one bound would systematically include zero. Results converge well with the three alternate estimation methods used. Rebalancing response rates in the treatment and control groups, in particular, yielded very similar results to those obtained without doing so. Lastly, results obtained using estimates without control variables are coherent with those obtained for the two other procedures (not significantly different), but point estimates differ slightly. Nevertheless, the same conclusions apply to all variables in the Table.

7 Conclusion

This paper presents the results of a large-scale randomized controlled trial conducted in France to assess the increased investments young jobseekers make in their employability. The sample was composed of young, unskilled jobseekers. This population has significant problems finding its place on the labor market. Deciding to invest in one’s employability, however, is not simple. These jobseekers are often trapped in a circuit of multiple low-skill jobs which offer little new experience. We looked at a career guidance program aimed at helping these individuals establish a career plan and follow the necessary steps to achieve it. The program is characterized by a high drop-out rate and poor levels of commitment on the part of participants.

The study involved the creation of a monetary transfer system conditional on the participation of enrollees in the support program. Our assessment was a unique opportunity to measure the impact and scope of financial incentives in the demands for employability investments of young, unskilled jobseekers.

Results fall quite short of expectations. Physically speaking, the young jobseekers do participate more; they go to the job center offering the program more often, and schedule more meetings. But their increased involvement remains superficial. They are offered more opportunities for

²⁴These last estimates do not include control variables or JYC dummies.

training and services to improve their employability, as well as actual job opportunities which would provide experience, but they do not seize them.

We also observed a lower rate of participation on the labor market in the first six months of the program. While this trend may be due to a well-known “locking-in” effect, the fact that no difference is observed in participants’ real commitment to the program in terms of taking part in training courses or career planning activities suggests that transfers curiously act as a disincentive to finding new employment. The program is very expensive nevertheless. The program’s additional transfer alone increases the per-person cost of the program by €1,868, from €264 to €2,132. Approximately 170,000 people enroll in the program every calendar year. The additional cost is therefore $1,868 \times 170,000 = \text{€}318$ million. The program also offered 6.5 additional meetings per participant, increasing the total from 8.1 to 14.6. For 170,000 jobseekers, this would represent an additional 1.1 million meetings were offered. We were unable to quantify the cost of these additional meetings for the JYCs. One of the main findings of the study was the key effects of financial incentives on the behavior of young jobseekers in the program. Participation in the program is one example; limited rates of employment in the early stages of the program is another. Program impact stops where the incentives stop and no differences are found between subjects with financial difficulties and subjects without. In theory, the conditional nature of transfers should have affected commitment to the program, career planning and the completion of the various steps of the career plan. In practice, however, implementing transfers on a conditional basis is quite complicated. The only real incentives provided by the program were related to the meetings with counselors.

An alternative model could take conditionality to the next level, for example by paying part of the transfer only once significant steps towards finding employment are accomplished. Babcock et al. (2012) suggest using such a mechanism in the more general context of unemployment insurance. Our results are consistent with this mechanism in that they illustrate the risk of incentives remaining a half measure. Conditional transfer payments have been the subject of many studies of school enrollment in developing countries. Baird et al. (2011) show that making a payment conditional enhances participation. Barrera-Orsorio et al. (2011) show that making a payment partly conditional on school marks has an effect on results. Nevertheless the actual form this strategy should take is not clear. Results obtained on a theoretical level by Benabou and Tirole (2003), as well as evidence found in an experimental setting (Ariely et al., 2009) suggest that a financial reward for efficiency can be counterproductive. Providing incentives sends a signal which people try to interpret, inferring things about a hidden part of themselves or about what they are being encouraged to do. Political discourse conveys both the idea of making transfers conditional and of giving young seekers independence. One of the initial models presented in the 2009 Green Paper on Youth involved providing young jobseekers with a lump sum paid when they achieved specific stages of their career plan, to both increase the perceived return and to make career-related achievement easier.

Nor is it certain that conditional transfers are the only option to explore. For instance Benhassine et al. (forthcoming) show that in Morocco, to improve education, a non-conditional transfer system which is labeled however – provided to recipients with a clear message that it is meant to improve their children’s participation at school – produces better results than a standard conditional transfer system. Blattman et al. (2014) show that in Uganda, providing poorly educated young people with transfers to finance existing projects that have been identified as promising yields very good results. Recipients benefit from training, invest in the physical capital of a revenue-generating activity and increase their long-term income substantially. Of course, these results are linked to different populations and contexts and cannot be directly transposed onto the context of young school drop-outs in underprivileged French suburbs. They are proof, however, that alternative methods can work. The initial findings of studies conducted on this same sample do tend to confirm that healthcare, housing and mental health support programs – accessible to young jobseekers while they are in the labor market and form an opinion of public institutions – can have a significant impact on training and integration.

The main conclusion of our study is that the right way to improve incentives to invest in employability remains to be found. This is a crucial issue with serious implications for society and various alternative models must be tested rigorously. Stopping in midstream, as does the program studied here, may reward compromise with many a drawback rather than advantages.

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Table 1: Youth Diploma and Labor Market integration

| | Whole sample (1) | Difficult LM integration (2) | Attended JYC (3) |
|--|------------------------|------------------------------------|------------------------|
| Repeated at least one year in primary school | 17.5 | 27.7 | 27.1 |
| No diploma | 18.0 | 36.3 | 37.3 |
| Junior high school diploma | 17.0 | 22.3 | 26.4 |
| High school diploma | 23.0 | 17.8 | 21.4 |
| Above high school | 42.0 | 23.5 | 15.0 |
| Left school | | | |
| At or before 16 | 3.0 | 6.7 | 5.9 |
| At 17 or 18 | 18.6 | 32.8 | 35.0 |
| At 19 or 20 | 27.4 | 27.7 | 33.6 |
| At 21 or 22 | 21.7 | 15.6 | 16.4 |
| Older than 22 | 29.3 | 17.2 | 9.1 |
| Environment | | | |
| Both parents born abroad | 12.1 | 17.8 | 15.7 |
| At least one parent born abroad | 21.9 | 27.7 | 26.5 |
| Father works | 80.7 | 74.2 | 77.4 |
| Father clerical or blue collar worker | 53.6 | 67.0 | 70.5 |
| Live in deprived suburbs | 8.3 | 12.4 | 12.5 |
| Attended JYC at least twice | 20.6 | 41.9 | 100.0 |
| Employment path | | | |
| Direct access to stable employment | 57.2 | 0.0 | 23.5 |
| Delayed access to employment | 12.0 | 0.0 | 20.4 |
| Long-term unemployment | 9.3 | 42.6 | 24.6 |
| Inactivity and labor market dropout | 12.5 | 57.4 | 19.6 |
| Back to school or training | 9.0 | 0.0 | 11.9 |
| # observations | 24579 | 21.7 | 20.6 |

The Generation 2007 survey is a large representative national survey about youth labor market integration for youth exiting the educational system in 2007. The survey was conducted in 2010, three years after youth left the educational system. Column (1) provides averages for the entire sample, column (2) the averages for youth experiencing either long-term unemployment or a shift to inactivity during the three years between 2007-2010, column (3) provides averages for youth who attended Job Youth Centers twice or more in the three-year period .

Table 2: Youth assignment and Surveys

| | | | | Survey response rates | | | | | |
|------------------------|------|------|------|---------------------------------------|---------|------|--------|---------|--------|
| | | | | Differential response rates | | | | | |
| | | | | Controlling for Paires and Covariates | | | | | |
| JYC Type M Type F | | | | # | Control | | | | |
| Test | 2661 | 1372 | 1289 | Midline | 3413 | 59.3 | 6.0*** | 5.8*** | 6.1*** |
| Control | 2837 | 1455 | 1382 | Endline | 2310 | 39.5 | 5.3*** | 4.7 *** | 5.0*** |
| Total | 5498 | 2827 | 2671 | Admin. | 5487 | 99.8 | 0.02 | -0.02 | -0.004 |

Experiment records, midline and endline surveys

In its left panel the table gives the number of youth in the Treatment and Control groups and the number of them coming from Type M JYCs (at which youth registered in March are assigned to treatment) or Type F ones. In its right panel the table provides information about the surveys. Midline survey information is on the first row and endline information on the second row. The table first gives the response rate in the control group and then the differential response rate as well as its significance under various specifications. The last specification includes control variables which are the variables listed in table A1. Standard errors are robust to heteroskedasticity and are clustered at the Job Youth Center level. * corresponds to a parameter significant at the 10 % level, ** at the 5 % level and *** at the 1 % level.

Table 3: Impact of the Cash program on the number of month in program and transfers received from the JYC

| | Obs | Mean | Participation | std | sign |
|--|------|---------------------|---------------|------|-------|
| Take up Cash Program | 5492 | 0.00 | 0.82 | 0.01 | *** |
| Intention To Treat parameter | | | | | |
| | Obs | Mean | Coefficient | std | sign |
| Months in program | 5486 | 11.4 | 7.9 | 0.3 | *** |
| Total number of meetings | 5492 | 7.3 | 5.3 | 0.5 | *** |
| Transfer from JYC | 5492 | 237 | 1530 | 89 | *** |
| Treatment On the Treated parameter | | | | | |
| | Obs | Counterfactual mean | Coefficient | std | Sign. |
| Months in program | 5486 | 12.1 | 9.6 | 0.4 | *** |
| Total number of meetings | 5492 | 8.1 | 6.5 | 0.5 | *** |
| Transfer from JYC | 5492 | 264 | 1868 | 91 | *** |
| Administrative records | | | | | |
| <p>The first column gives the number of individuals, then the control group mean, the coefficient of the treatment parameter, its standard error and its significance. The upper panel provides Intention To Treat estimates obtained from an OLS regression including the test variable, a set of JYC dummy variables and the set of control variables listed in table A1 (see equation 1). The lower panel provides information about the Treatment On the Treated parameter in which the Cash Program participation variable is instrumented by the assignment variable (see equation 2). The control group mean is in this case an estimate of the counterfactual mean. The first line of the upper panel provides results of the corresponding first stage regression. Standard errors are robust to heteroskedasticity and are clustered at the Job Youth Center level. * corresponds to parameter significant at the 10% level, ** at the 5% level and *** at the 1% level.</p> | | | | | |

Table 4: Services received from JYC

| | # obs | 1st quarter | | | 1st semester | | | 1st year | | | | | |
|--|-------|-------------|-------|------|--------------|------|-------|----------|------|-------|-------|------|------|
| | | Mean | Coef | std | sign | Mean | Coef | std | sign | Mean | Coef | std | sign |
| Number of events in which information about different type of services were provided – JYC file | | | | | | | | | | | | | |
| Any type | 5492 | 5.22 | 2.84 | 0.35 | *** | 8.12 | 4.48 | 0.48 | *** | 13.48 | 7.15 | 0.70 | *** |
| Related to jobs | 5492 | 3.03 | 1.64 | 0.29 | *** | 4.62 | 2.51 | 0.37 | *** | 7.45 | 4.15 | 0.56 | *** |
| Related to training | 5492 | 0.89 | 0.37 | 0.09 | *** | 1.51 | 0.71 | 0.14 | *** | 2.64 | 1.16 | 0.22 | *** |
| Related to career | 5492 | 0.94 | 0.63 | 0.11 | *** | 1.38 | 0.96 | 0.17 | *** | 2.37 | 1.39 | 0.29 | *** |
| Number of matching with services – JYC file | | | | | | | | | | | | | |
| Job offer | 5492 | 0.47 | 0.13 | 0.05 | ** | 0.72 | 0.23 | 0.06 | *** | 1.09 | 0.46 | 0.11 | *** |
| Training | 5492 | 0.15 | 0.05 | 0.02 | *** | 0.29 | 0.11 | 0.03 | *** | 0.53 | 0.16 | 0.04 | *** |
| Career planning | 5492 | 0.14 | 0.14 | 0.04 | *** | 0.21 | 0.17 | 0.04 | *** | 0.33 | 0.21 | 0.06 | *** |
| Number of human capital investments and training courses started and month with reported employment – JYC file | | | | | | | | | | | | | |
| # training started | 5492 | 0.50 | 0.02 | 0.02 | . | 0.83 | 0.03 | 0.05 | . | 0.83 | 0.03 | 0.05 | . |
| # HC investment started | 5492 | 0.62 | 0.02 | 0.03 | . | 1.09 | 0.04 | 0.05 | . | 2.27 | 0.19 | 0.10 | * |
| # months with employment | 5492 | 0.70 | 0.04 | 0.03 | . | 1.52 | 0.07 | 0.06 | . | 2.77 | 0.18 | 0.09 | ** |
| Still in program | 5492 | 0.95 | 0.01 | 0.01 | * | 0.88 | 0.06 | 0.01 | *** | 0.40 | 0.40 | 0.04 | *** |
| # individual meetings | 5492 | 1.82 | 1.26 | 0.11 | *** | 2.92 | 2.04 | 0.17 | *** | 5.82 | 3.15 | 0.24 | *** |
| From midline survey | | | | | | | | | | | | | |
| # months with employment | 3413 | 1.08 | -0.09 | 0.04 | ** | 2.41 | -0.18 | 0.07 | ** | 5.23 | -0.18 | 0.12 | . |

Administrative records and midline survey April 2012.

The table provides Intention To Treat estimation of variables related to services provided by the JYC. Estimates are obtained in the same way as described in table 7. The table has three panels. The left panel provides events recorded over the first quarter following random assignment, the second panel information recorded over the first semester and the last panel over the first year. The upper panel provides the number of events in which general information about services was received, the intermediate panel provides the number of matches with job offers or human capital investments that occurred through the JYC. The third panel provides the number of human capital investments registered at the JYC and months with reported employment. On the last line the table also provides employment information from the midline survey.

Table 5: Human Capital and Search

| | Index | April 2012 Survey – 3417 | | | | April 2013 Survey – 2310 | | | |
|----------------------------------|-------|--------------------------|------|-----|-------|--------------------------|------|-----|-------|
| | | Mean | Coef | std | Sign. | Mean | Coef | std | Sign. |
| Human capital investment | | | | | | | | | |
| Apprenticeship | 1 | 6.8 | 0.8 | 0.8 | . | 6.4 | 0.4 | 1.0 | . |
| Internship | 1 | 2.6 | -0.3 | 0.6 | . | 1.4 | -0.6 | 0.6 | . |
| Training | | | | | | | | | |
| Number over 1 year (×100) | 1 | 56.0 | -2.2 | 2.6 | . | 48.0 | -4.6 | 2.9 | . |
| At least one certified | 1 | 30.8 | -0.6 | 1.5 | . | 17.5 | -1.0 | 1.8 | . |
| Forwent for financial reason | | 13.7 | -0.4 | 1.3 | . | 12.6 | 2.2 | 1.5 | . |
| Driver’s license | 1 | 41.9 | 3.0 | 1.3 | ** | 42.6 | 1.8 | 2.1 | . |
| Perceived Employment Prospects | | | | | | | | | |
| Improved | 1 | 44.3 | 3.5 | 1.8 | * | 46.2 | 3.1 | 2.2 | . |
| Same | | 24.3 | -0.3 | 1.7 | . | 26.5 | -1.6 | 1.7 | . |
| Reduced | | 21.5 | -1.7 | 1.5 | . | 21.9 | -0.4 | 1.9 | . |
| Career Plan | | | | | | | | | |
| Has one | 1 | 45.2 | -0.4 | 1.7 | . | 48.2 | -0.6 | 2.1 | . |
| Has ideas | 1 | 36.9 | 0.3 | 1.6 | . | 34.0 | 0.7 | 2.0 | . |
| No idea | | 17.8 | 0.2 | 1.4 | . | 17.4 | -0.5 | 1.6 | . |
| Has necessary diploma | | 18.4 | -1.4 | 1.4 | . | 22.0 | -0.5 | 1.6 | . |
| Human Capital Index | | 0.0 | 1.9 | 3.5 | . | 0.0 | -1.0 | 4.1 | . |
| Search behavior | | | | | | | | | |
| Search for a job | | 56.2 | -0.0 | 1.5 | . | 51.5 | 2.8 | 2.6 | . |
| Intensity of use of channels | | | | | | | | | |
| Web search | 1 | 19.3 | -2.0 | 1.1 | * | 21.7 | 1.5 | 1.8 | . |
| Temporary help agency | 1 | 20.9 | -1.0 | 1.4 | . | 20.3 | 0.2 | 1.7 | . |
| Send resumes | 1 | 36.7 | 1.2 | 1.5 | . | 33.6 | 0.1 | 2.4 | . |
| Direct job application | 1 | 28.1 | -1.0 | 1.7 | . | 27.3 | 0.0 | 2.1 | . |
| Number of firms | 1 | 4.8 | -0.2 | 0.3 | . | 4.5 | -0.0 | 0.3 | . |
| Search Index | | -0.0 | -2.6 | 3.3 | . | -0.0 | 1.4 | 4.9 | . |
| Maximum commute time | | 35.9 | 0.7 | 0.7 | . | 36.1 | 0.3 | 1.1 | . |
| Move if indefinite term contract | | 20.0 | 1.1 | 1.4 | . | 20.1 | 0.8 | 1.9 | . |

Midline and endline surveys April 2012 and April 2013.

Estimates are obtained applying OLS to equation 1, adding a whole set of JYC dummy variables and the set of control variables listed in table A1. The table also presents human capital and job search indexes. They are obtained by only selecting relevant components in the table which are then standardized and summed (the sum is standardized again so as to get a better idea of the power).

Table 6: Impact on employment : Intention To Treat and Treatment On the Treated

| | Intention To Treat parameter | | | Treatment On the Treated parameter | | |
|-----------------------|------------------------------|-------|------|------------------------------------|------------------|------------------|
| | Control mean | Coef | std | Sign. | Relative to mean | Relative to mean |
| | (a) | (b) | | (b/a) | (c) | (d/c) |
| First semester | | | | | | |
| Any type | 2.41 | -0.18 | 0.07 | ** | -0.1 | 2.31 |
| Employment index | 1.89 | -0.20 | 0.06 | *** | -0.1 | 1.79 |
| First year | | | | | | |
| Any type | 5.23 | -0.18 | 0.12 | . | -0.0 | 5.10 |
| Employment index | 4.09 | -0.24 | 0.11 | ** | -0.1 | 3.97 |
| Second year | | | | | | |
| Any type | 6.31 | -0.03 | 0.17 | . | -0.0 | 6.24 |
| Employment index | 5.05 | 0.00 | 0.16 | . | 0.0 | 4.97 |
| | | | | | -0.03 | 0.19 |
| | | | | | 0.00 | 0.18 |
| | | | | | | 0.1 |

Midline and endline surveys April 2012 and April 2013.

The table has a left and a right panel. The left panel provides results about Intention to Treat estimation see table while the right panel provides information about Treatment On the treated estimation See table 3 for details. The table also includes in each case the impact relative to the mean in the control group (last column).

Table 7: Quality of Employment

| | April 2012 Survey: 3417 | | | | April 2013 Survey: 2310 | | | |
|-----------------------|-------------------------|------|-----|-------|-------------------------|------|-----|-------|
| | Mean | Coef | std | Sign. | Mean | Coef | std | Sign. |
| Employed | 45.4 | 2.5 | 1.6 | . | 52.1 | 0.4 | 2.0 | . |
| Type of Contract | | | | | | | | |
| Indefinite term | 9.9 | -0.0 | 1.0 | . | 14.4 | 0.6 | 1.6 | . |
| Fixed term | 18.0 | 0.7 | 1.4 | . | 19.5 | -1.7 | 1.6 | . |
| Temporary help | 5.7 | 0.8 | 0.8 | . | 5.2 | 1.5 | 1.0 | . |
| Internship | 2.6 | -0.3 | 0.6 | . | 1.4 | -0.6 | 0.6 | . |
| Apprenticeship | 6.8 | 0.8 | 0.9 | . | 6.4 | 0.4 | 1.0 | . |
| Other | 2.3 | 0.5 | 0.6 | . | 4.1 | 0.2 | 1.0 | . |
| With/Without Contract | | | | | | | | |
| Subsidized | 9.2 | -0.2 | 1.2 | . | 8.7 | 1.7 | 1.3 | . |
| With contract | 42.1 | 1.2 | 1.6 | . | 49.6 | -0.1 | 1.9 | . |
| Without contract | 2.9 | 1.4 | 0.7 | * | 2.6 | 0.4 | 0.7 | . |
| Type of Employer | | | | | | | | |
| Private | 32.8 | -0.3 | 1.5 | . | 36.5 | 1.0 | 2.0 | . |
| Public | 8.3 | 1.7 | 1.0 | * | 10.1 | -0.3 | 1.3 | . |

Midline and endline surveys April 2012 and April 2013.

The table provides results of Intention To Treat estimations of outcome variables related to the quality of employment. If there is no employment the variable is zero. See table 5.

Standard errors are robust to heteroskedasticity and are clustered at the Job Youth Center level. * corresponds to a parameter significant at the 10% level, ** at the 5% level and *** at the 1% level.

Table 8: Income March 2012 and March 2013

| | Intention To Treat parameter | | | | Treatment On the Treated parameter | | | |
|------------------------|------------------------------|------|----------------|-------|------------------------------------|------|----------------|-------|
| | Midline Survey | | Endline Survey | | Midline Survey | | Endline Survey | |
| | Control mean | Coef | std | Sign. | Control mean | Coef | std | Sign. |
| Any type | 602 | 40 | 16 | ** | 731 | -10 | 20 | . |
| From JYC | 33 | 87 | 6 | *** | 8 | 6 | 3 | * |
| Not from JYC | 569 | -46 | 16 | *** | 723 | -16 | 20 | . |
| From Activity | 483 | -26 | 16 | . | 676 | -5 | 21 | . |
| Wage | 372 | -11 | 15 | . | 491 | -5 | 24 | . |
| Odd jobs | 18 | -3 | 3 | . | 24 | -6 | 6 | . |
| Unempl. benefits | 78 | -7 | 7 | . | 138 | 5 | 12 | . |
| Training allowance | 15 | -4 | 3 | . | 22 | 2 | 4 | . |
| Neither work nor YC | 86 | -21 | 6 | *** | 47 | -10 | 7 | . |
| Parents | 37 | -10 | 3 | *** | 41 | -12 | 5 | ** |
| Other | 49 | -11 | 5 | ** | 6 | 2 | 4 | . |
| Relative to mean (d/c) | | | | | | | | |
| | | | | | (c) | (d) | | |
| | | | | | 569 | 47 | 18 | *** |
| | | | | | 23 | 102 | 6 | *** |
| | | | | | 547 | -54 | 18 | *** |
| | | | | | 465 | -30 | 18 | * |
| | | | | | 359 | -13 | 17 | . |
| | | | | | 19 | -4 | 3 | . |
| | | | | | 72 | -9 | 8 | . |
| | | | | | 16 | -4 | 3 | . |
| | | | | | 81 | -24 | 7 | *** |
| | | | | | 39 | -12 | 4 | *** |
| | | | | | 43 | -13 | 6 | ** |

Midline survey April 2012 and endline survey April 2013

The table has three panels. The first two panels provide ITT estimates on income variables following the same procedure as described in table 5. The last panel provides instrumental variation estimates of Treatment On the Treated parameters following the same procedure as described in table 3. The table also includes in each case the impact relative to the mean in the control group (last column).

Table 9: Expenditures – April 2012 Survey

| | Obs | Mean | Coef | std | Sign. |
|---|------|-------|------|------|-------|
| Temptation goods over last month | | | | | |
| Number of restaurants | 3304 | 2.2 | 0.0 | 0.1 | . |
| Nights out | 3276 | 2.1 | -0.1 | 0.1 | . |
| Tobacco | 3413 | 29.6 | 1.5 | 1.8 | . |
| Phone | 3390 | 55.6 | -3.4 | 5.8 | . |
| Temptation goods index | 3219 | 0.0 | 0.0 | 3.6 | . |
| Financial constraints over last 12 months | | | | | |
| Largest purchase in last 12 months | 3117 | 660.3 | 33.6 | 44.7 | . |
| Saved money in last 12 months | 3413 | 45.4 | 5.0 | 2.1 | ** |
| Amount saved 1st quarter 2012 | 3299 | 210.8 | 36.8 | 17.3 | ** |
| Financial constraints over last 12 months | | | | | |
| Pbs paying bills | 3413 | 27.7 | -0.2 | 1.7 | . |
| Pbs paying rent | 3413 | 18.1 | -0.8 | 1.7 | . |
| Pbs paying taxes | 3413 | 8.7 | -0.1 | 1.0 | . |
| A day without a meal | 3413 | 19.4 | -1.1 | 1.4 | . |
| Forewent medical care | 3413 | 24.4 | -0.7 | 1.4 | . |
| Bank overdraft | 3413 | 45.0 | -1.7 | 1.7 | . |
| Forwent training for financial reason | 3413 | 13.7 | -0.4 | 1.3 | . |
| Budget constraint index ^a | 3413 | 0.0 | -2.8 | 4.0 | . |

Midline survey April 2012

The table provides Intention To Treat estimates on various types of expenses in March 2012. The estimation procedure is the same as described in table 5. ^a – The estimation of standardized variables appearing in the “Financial constraints over last 12 months” panel rescaled to have a 100 std

Table 10: Mobility and Integration

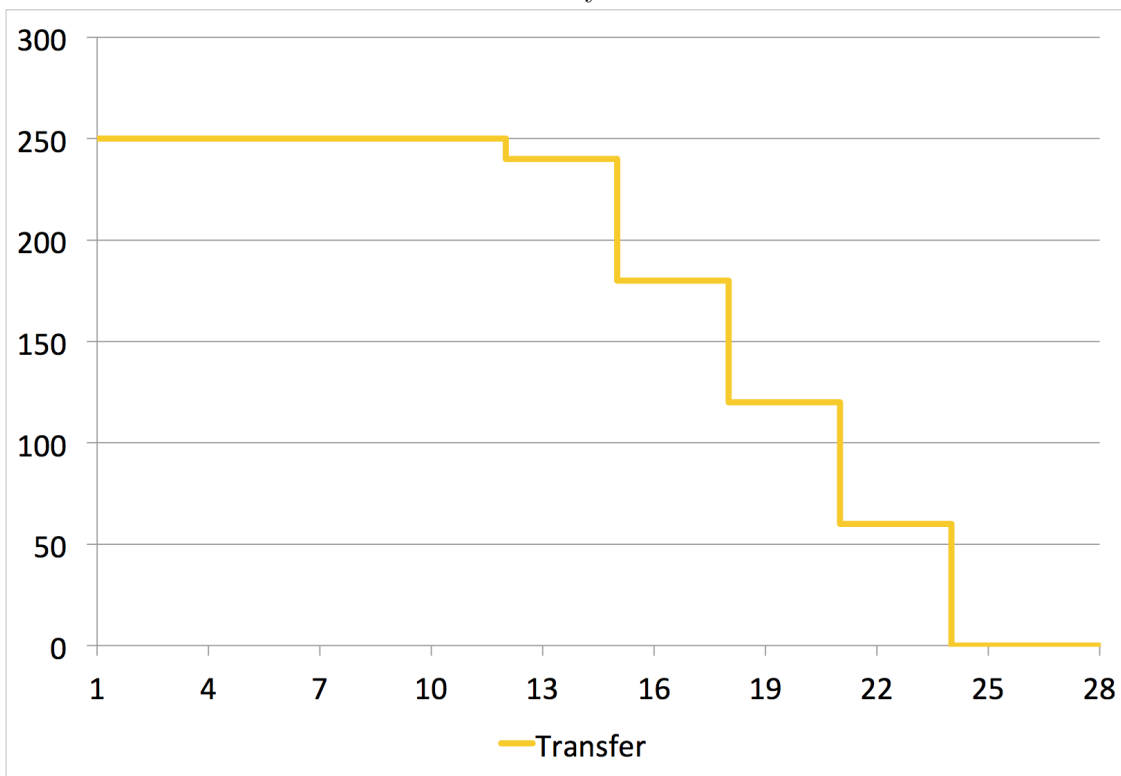
| | April 2012 Survey – 3417 | | | | April 2013 Survey – 2310 | | | |
|------------------------------------|--------------------------|------|------|-------|--------------------------|------|------|-------|
| | Mean | Coef | std | Sign. | Mean | Coef | std | Sign. |
| Mobility : mainly uses | | | | | | | | |
| Foot | 9.3 | -0.5 | 1.2 | . | 7.9 | 0.0 | 1.1 | . |
| Bike | 1.7 | 0.3 | 0.5 | . | 1.9 | 0.2 | 0.8 | . |
| Public transport | 37.5 | 2.8 | 2.0 | . | 29.6 | 3.3 | 2.0 | * |
| Parents | 2.8 | -1.1 | 0.5 | ** | 1.6 | -0.2 | 0.6 | . |
| Scooter | 5.1 | -0.9 | 0.8 | . | 3.6 | 0.7 | 0.8 | . |
| Car | 43.7 | -0.5 | 1.4 | . | 55.4 | -4.1 | 2.0 | ** |
| Trust | | | | | | | | |
| School | 64.0 | 3.9 | 1.7 | ** | 66.4 | 0.3 | 2.2 | . |
| Health Care System | 84.1 | 1.1 | 1.6 | . | 82.7 | -2.0 | 1.6 | . |
| JYC | 81.2 | 6.6 | 1.2 | *** | 69.9 | 7.8 | 1.9 | *** |
| Justice system | 53.8 | 2.3 | 1.6 | . | 56.3 | -2.9 | 2.3 | . |
| Sum | 2.83 | 0.14 | 0.04 | *** | 2.75 | 0.03 | 0.06 | . |
| Personality traits and integration | | | | | | | | |
| Number of days | | | | | | | | |
| ready to wait for 20% | 97.7 | 0.4 | 3.2 | . | 101.9 | -6.8 | 3.9 | * |
| Locus of control [/20] | 10.8 | 0.0 | 0.1 | . | 10.1 | -0.0 | 0.2 | . |
| Life satisfaction | 71.2 | 0.9 | 0.6 | . | 71.7 | -0.5 | 0.9 | . |
| No friends | 5.4 | 1.9 | 0.9 | ** | 6.4 | 0.0 | 1.0 | . |
| Number of friends | 4.0 | -0.1 | 0.1 | . | 4.2 | 0.1 | 0.1 | . |
| Owes money to relatives | 16.4 | -2.5 | 1.0 | ** | 15.4 | 0.8 | 1.6 | . |

Midline and endline surveys April 2012 and April 2013.

The table provides Intention To Treat estimates on outcome variables related to mobility (panel 1), trust (panel 2), some personality traits and integration (panel 3) in March 2012 and March 2013. The estimation procedure is the same as described in table 5.

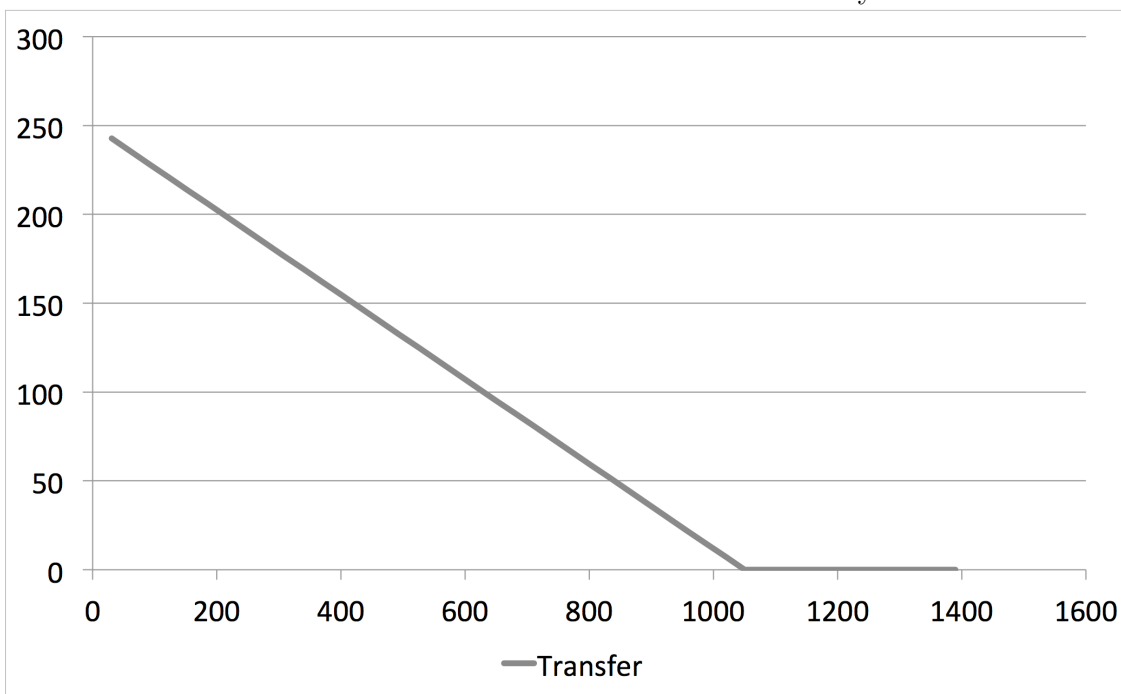
Figure 1: Cash transfer schemes

Scheduled month by month transfer



(a)

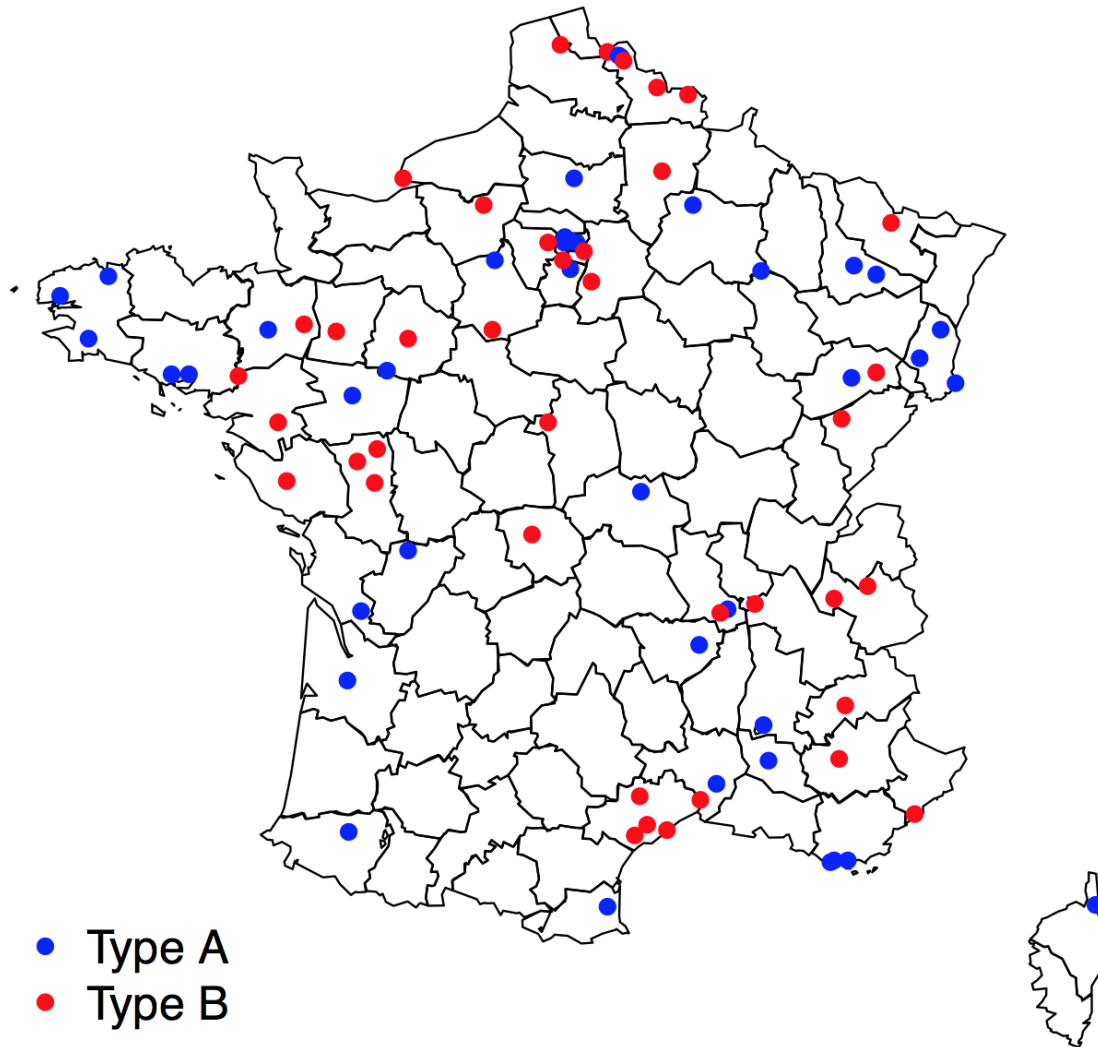
Transfer as a function of incomes from activity



(b)

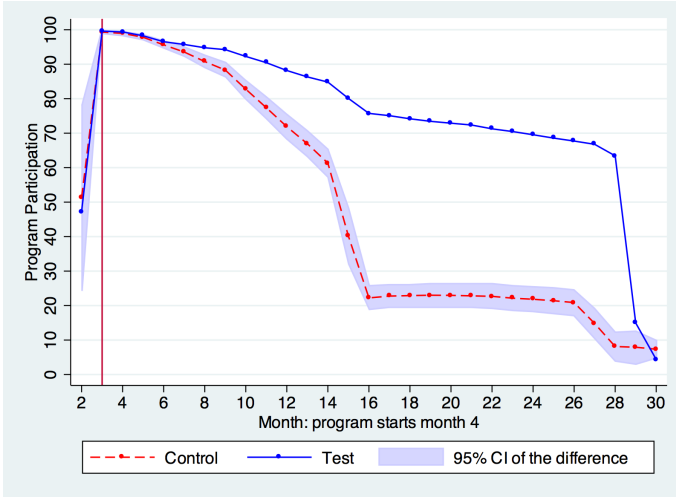
The graph on the upper panel presents the pattern of maximum possible transfers related to the transfer program. The graph on the lower panel presents actual transfers as a function of income from activity. These incomes include wages, unemployment benefits, and internship and training allowances. The upper limit to receive a positive transfer corresponds to the level of the 2011 minimum wage

Figure 2: JYC Map

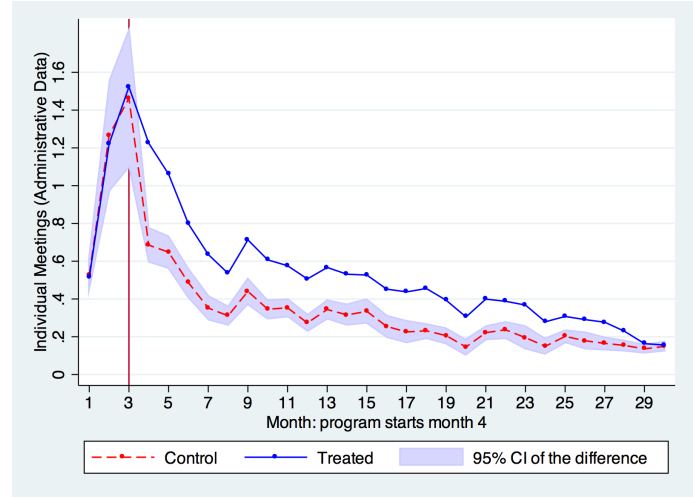


Map indicating JYC participating in the experiment. Blue dots identify type M JYC where youth registered in March were assigned to the Cash program and youth registered in February to the control group. Red dots identify type F JYC where youth registered in February were assigned to the transfer program and youth registered in March to the control group. Randomization was implemented the 1st of April after all lists were closed.

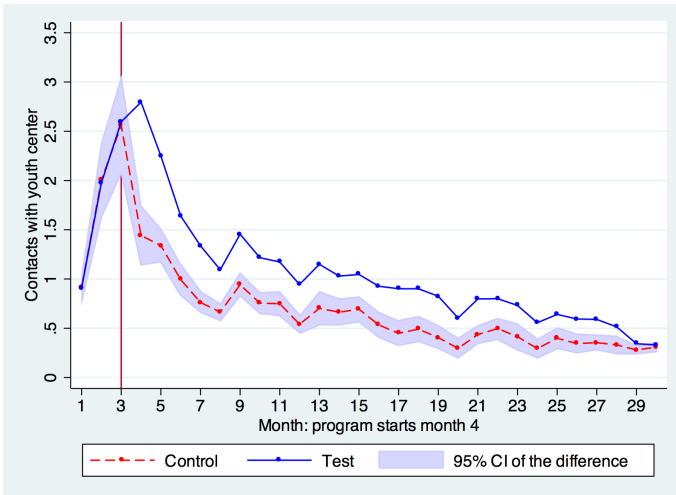
Figure 3: Participation in the program: dropout - meeting - contacts with JYC



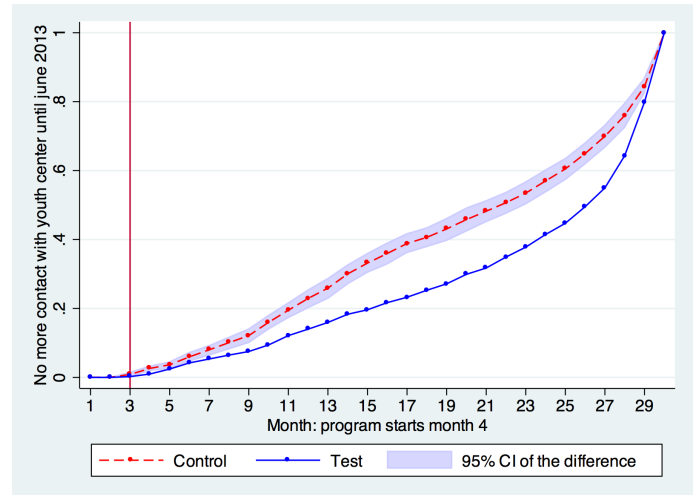
(a)



(b)



(c)



(d)

Administrative records.

Each graph presents the profile of the monthly mean of the considered variable for the two groups of youth: youth assigned to the transfer program (blue line) and youth assigned to stay in the *standard* program (red line). The shaded area around the red line corresponds to the confidence interval at the 5 % level resulting from estimation of equation 1 for the monthly variable considered. Actually the blue line is obtained by adding the mean in the control group (reported on the red line) to the estimated treatment parameter.

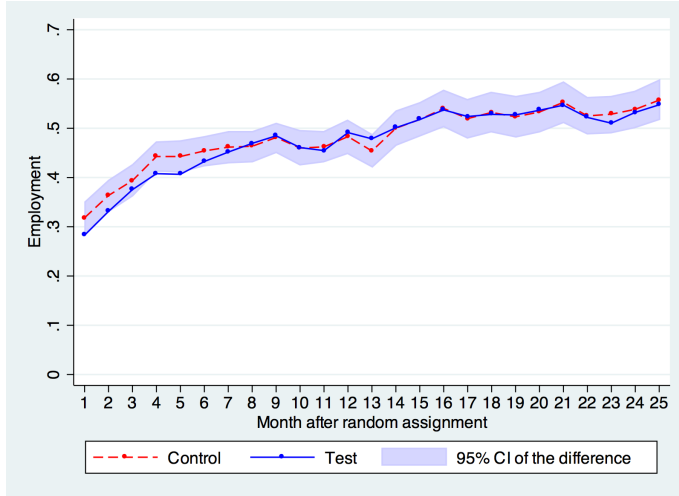
(a) : Month by month variable indicating whether the youth is still officially registered in either the career program or the transfer program

(b) : Month by month number of meetings with a caseworker at the JYC

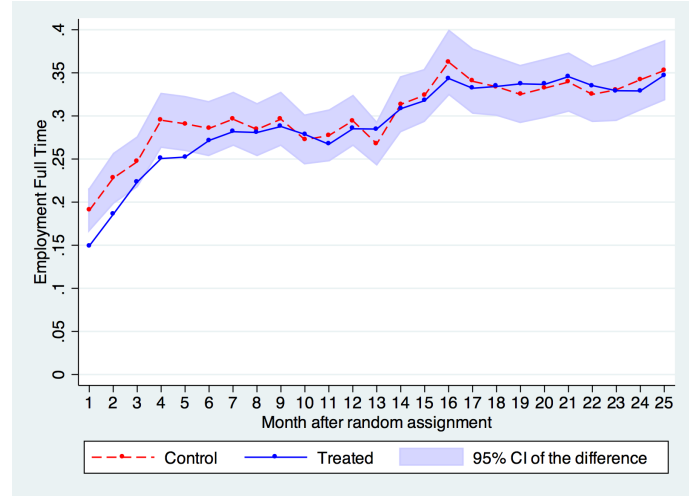
(c) : Month by month number of registered exchanges with a caseworker at the JYC

(d) : Share of youth that will have no more contact with the JYC after the date considered up to June 2013

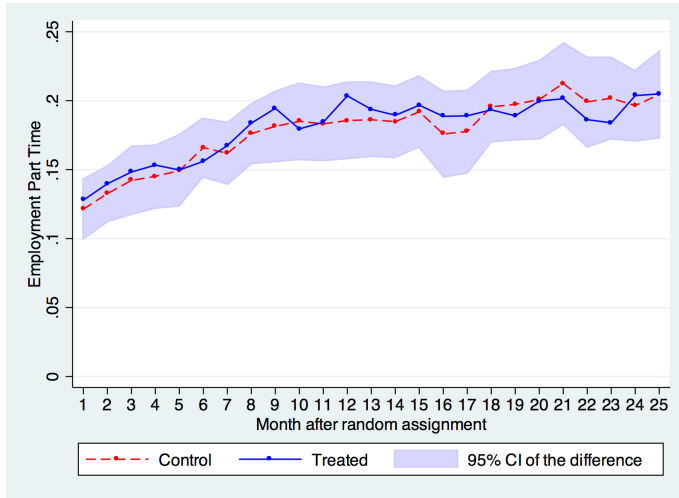
Figure 4: Month by month Employment



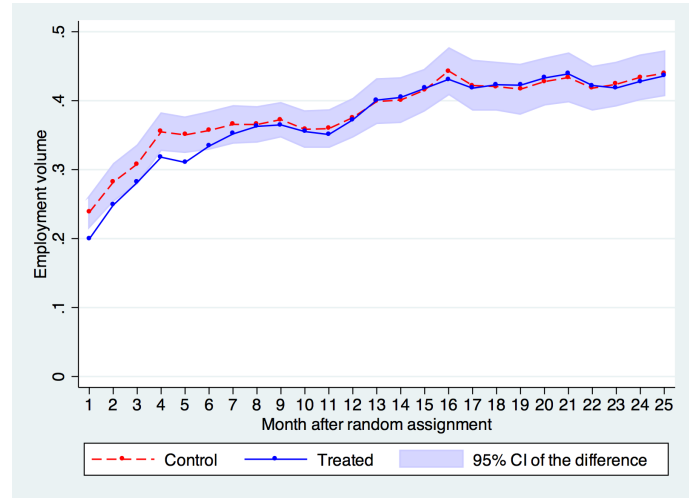
(a)



(b)



(c)



(d)

Midline survey April 2012 and endline survey April 2013

The graph presents the monthly profiles of employment for youth in the two assignment groups, following the procedure described in Figure 3. Information used for month 1 (April 2011) to 13 (April 2012) comes from the retrospective calendar in the midline survey. Information used for month 14 (May 2012) to 25 (April 2013) also comes from the endline survey

(a) : 1 if in employment at least once during the month

(b) : 1 if in employment with a full-time contract at least once during the month

(c) : 1 if in employment with a part-time contract at least once during the month

(d) : Employment index 1 if in employment with a full-time contract for the whole month; 2/3 if in employment with a part-time contract for the whole month or had at least one full-time contract but not for the whole month; 1/3 if had at least on part-time contract but not for the whole month and no full-time employment during the month.

Online Appendix

A Robustness to Attrition

Table A1: Balance across survey samples

| | Whole sample | | | Respondents to survey | | | | | |
|---|--------------|------|-------|-----------------------|------|-------|---------|------|-------|
| | Cont | Coef | Sign. | Midline | | | Endline | | |
| | Cont | Coef | Sign. | Cont | Coef | Sign. | Cont | Coef | Sign. |
| Demographics | | | | | | | | | |
| Aged 18 | 23.2 | -2.1 | . | 21.8 | -1.4 | . | 21.3 | -1.3 | . |
| Aged 19 | 22.8 | 1.4 | . | 22.3 | 2.8 | * | 22.5 | 2.8 | . |
| Aged 20 | 22.7 | 0.2 | . | 24.2 | -1.9 | . | 24.8 | -2.7 | . |
| Aged 21 | 18.6 | 0.3 | . | 18.9 | 0.0 | . | 18.0 | 1.9 | . |
| Aged 22 | 12.7 | 0.2 | . | 12.7 | 0.5 | . | 13.3 | -0.7 | . |
| Male | 48.2 | 0.4 | . | 45.8 | 1.3 | . | 46.2 | 0.8 | . |
| Foreigner | 4.6 | 0.2 | . | 4.3 | 0.0 | . | 3.7 | 1.2 | . |
| Non married | 92.2 | -0.5 | . | 92.1 | 0.1 | . | 93.6 | -0.4 | . |
| Has children | 4.0 | 1.4 | ** | 3.3 | 2.4 | *** | 3.2 | 1.1 | . |
| Diploma | | | | | | | | | |
| Driver's license | 30.5 | -1.8 | . | 34.3 | -3.6 | ** | 34.8 | -2.8 | . |
| Above high-school | 2.4 | -0.3 | . | 2.9 | -0.9 | * | 3.2 | -1.3 | * |
| High-school diploma and eq | 29.5 | -0.6 | . | 34.1 | -1.3 | . | 37.1 | -1.3 | . |
| Vocational | 26.4 | 0.6 | . | 28.1 | -1.0 | . | 28.2 | -1.4 | . |
| Dropout vocational high-school | 34.1 | -0.2 | . | 29.5 | 1.8 | . | 25.8 | 3.4 | . |
| Left school at 16 | 7.6 | 0.6 | . | 5.4 | 1.3 | . | 5.6 | 0.5 | . |
| Housing and resources | | | | | | | | | |
| Parents | 62.2 | -1.5 | . | 65.6 | -0.7 | . | 68.6 | -1.6 | . |
| Other family | 9.9 | 0.6 | . | 9.3 | 0.2 | . | 8.8 | -0.7 | . |
| Self | 15.7 | 0.7 | . | 14.9 | 0.6 | . | 13.2 | 1.7 | . |
| Friends | 5.6 | -0.4 | . | 4.8 | -0.6 | . | 4.3 | -0.6 | . |
| Precarious | 3.4 | 0.4 | . | 2.4 | 0.3 | . | 1.7 | 0.7 | . |
| Has resources | 16.0 | 0.9 | . | 16.2 | 0.0 | . | 15.6 | 0.5 | . |
| Amount | 74.4 | 1.8 | . | 78.7 | -7.3 | . | 75.4 | 3.0 | . |
| Medical insurance | 43.0 | -1.4 | . | 44.7 | -2.2 | . | 46.6 | -1.7 | . |
| Type of program and reasons for joining the JYC | | | | | | | | | |
| Enhanced program | 42.3 | 0.9 | . | 35.6 | 3.1 | . | 32.1 | 3.8 | . |
| Administration | 10.8 | 0.8 | . | 9.7 | 1.0 | . | 9.9 | 0.2 | . |
| PES | 27.5 | 0.3 | . | 28.7 | 1.2 | . | 29.8 | 0.6 | . |
| Relatives | 31.8 | -1.0 | . | 32.7 | -2.4 | . | 31.8 | -0.8 | . |
| Self | 17.0 | 0.0 | . | 16.3 | 0.3 | . | 16.8 | -0.7 | . |
| Relationship with JYC, employment and training 1st quarter 2011 | | | | | | | | | |
| # Contacts | 5.5 | -0.0 | . | 5.5 | 0.1 | . | 5.4 | 0.1 | . |
| # Meetings | 3.3 | 0.0 | . | 3.3 | 0.1 | . | 3.3 | 0.1 | . |

Continued on next page...

... table A1 continued

| | Cont | Coef | Sign. | Cont | Coef | Sign. | Cont | Coef | Sign. |
|--|------|------|-------|------|------|-------|------|------|-------|
| # days in employment | 6.7 | 0.1 | . | 7.0 | 0.2 | . | 7.4 | 0.6 | . |
| # days in training | 6.4 | 1.0 | . | 6.5 | 0.8 | . | 6.5 | -0.1 | . |
| Started job | 11.2 | -0.1 | . | 11.7 | -0.7 | . | 11.3 | 1.2 | . |
| In employment | 14.5 | 0.3 | . | 14.9 | 0.1 | . | 15.5 | 1.8 | . |
| In FT employment | 10.6 | 0.0 | . | 11.4 | -0.7 | . | 11.2 | 1.5 | . |
| In ITC employment | 1.7 | -0.2 | . | 1.2 | 0.6 | . | 1.5 | 0.0 | . |
| In subsidized employment | 3.0 | 0.4 | . | 3.3 | 0.2 | . | 3.8 | 0.2 | . |
| Started training | 8.7 | 2.0 | * | 8.6 | 2.4 | * | 8.8 | 1.5 | . |
| In training | 13.4 | 2.1 | . | 13.4 | 2.0 | . | 12.8 | 1.8 | . |
| Started apprenticeship | 0.3 | -0.1 | . | 0.2 | -0.1 | . | 0.2 | 0.0 | . |
| In apprenticeship | 1.0 | -0.0 | . | 0.7 | 0.1 | . | 0.5 | 0.2 | . |
| Started internship | 4.9 | -0.5 | . | 5.1 | -0.6 | . | 5.0 | -0.0 | . |
| In internship | 5.0 | -0.5 | . | 5.2 | -0.6 | . | 5.0 | -0.0 | . |
| In School | 0.7 | 0.3 | . | 0.8 | 0.3 | . | 0.6 | 0.5 | . |
| Global Test ($\chi^2(40)$ under H_0) | 5492 | 68.3 | . | 3413 | 12.3 | . | 2310 | 79.2 | . |
| Sign Transfer Program | 0.0 | 81.9 | *** | 0.1 | 85.0 | *** | 0.0 | 86.5 | *** |

Administrative records.

The table has three set of columns. In each set the control mean variable appears first, then the difference between treatment and control resulting from the estimation of equation (??) and lastly the test result. At the bottom of the table also appears the p-value for the joint significant test and the result of the proportion of youth assigned to treatment group sign- ing for the cash program. The first set of column considers the whole sam- ple, the second set respondents to the midline survey and the last one re- spondents to the endline survey. Standard errors are robust to heteroskedastic- ity and are clustered at the Job Youth Center level. * corresponds to pa- rameter significant at the 10% level, ** at the 5% level and *** at the 1% level.

Table A2: ITT effect on administrative outcomes across survey samples

| | Whole Sample | | | | Midline Respondents | | | | Endline Respondents | | | | Test |
|--|--------------|------|------|------|---------------------|------|------|------|---------------------|-------|------|------|---------|
| | Mean | coef | std | sign | Mean | coef | std | sign | Mean | coef | std | sign | p-value |
| Outcome variables computed over the first quarter | | | | | | | | | | | | | |
| Number of action from JYC | | | | | | | | | | | | | |
| # meetings | 1.82 | 1.26 | 0.11 | *** | 1.86 | 1.34 | 0.12 | *** | 1.91 | 1.35 | 0.12 | *** | 14.4 |
| Any type | 5.22 | 2.84 | 0.35 | *** | 5.30 | 2.89 | 0.38 | *** | 5.43 | 3.01 | 0.46 | *** | 44.7 |
| Job | 3.03 | 1.64 | 0.29 | *** | 3.11 | 1.61 | 0.30 | *** | 3.29 | 1.57 | 0.36 | *** | 95.4 |
| Training | 0.89 | 0.37 | 0.09 | *** | 0.94 | 0.35 | 0.10 | *** | 0.96 | 0.41 | 0.12 | *** | 54.4 |
| # of matching initiated by JYC | | | | | | | | | | | | | |
| Job offer | 0.47 | 0.13 | 0.05 | ** | 0.48 | 0.11 | 0.05 | * | 0.49 | 0.13 | 0.07 | * | 97.7 |
| Training | 0.15 | 0.05 | 0.02 | *** | 0.15 | 0.04 | 0.02 | ** | 0.16 | 0.03 | 0.02 | . | 84.3 |
| # of action started | | | | | | | | | | | | | |
| Emp P3 | 0.70 | 0.04 | 0.03 | . | 0.74 | 0.05 | 0.04 | . | 0.74 | 0.09 | 0.05 | * | 44.7 |
| Training | 0.50 | 0.02 | 0.02 | . | 0.50 | 0.02 | 0.03 | . | 0.50 | 0.02 | 0.05 | . | 63.6 |
| Outcome variables computed over the first semester | | | | | | | | | | | | | |
| Number of action from JYC | | | | | | | | | | | | | |
| # meetings | 2.92 | 2.04 | 0.17 | *** | 3.05 | 2.16 | 0.18 | *** | 3.11 | 2.16 | 0.19 | *** | 10.1 |
| Any type | 8.12 | 4.48 | 0.48 | *** | 8.42 | 4.56 | 0.51 | *** | 8.56 | 4.68 | 0.59 | *** | 39.0 |
| Job | 4.62 | 2.51 | 0.37 | *** | 4.85 | 2.44 | 0.39 | *** | 5.00 | 2.46 | 0.47 | *** | 88.9 |
| Training | 1.51 | 0.71 | 0.14 | *** | 1.63 | 0.71 | 0.15 | *** | 1.70 | 0.71 | 0.18 | *** | 37.9 |
| # of matching initiated by JYC | | | | | | | | | | | | | |
| Job offer | 0.72 | 0.23 | 0.06 | *** | 0.76 | 0.20 | 0.07 | *** | 0.77 | 0.22 | 0.09 | ** | 97.1 |
| Training | 0.29 | 0.11 | 0.03 | *** | 0.30 | 0.10 | 0.03 | *** | 0.33 | 0.06 | 0.04 | * | 28.3 |
| # of action started | | | | | | | | | | | | | |
| Emp P3 | 1.52 | 0.07 | 0.06 | . | 1.61 | 0.08 | 0.07 | . | 1.67 | 0.10 | 0.09 | . | 99.4 |
| Training | 0.83 | 0.03 | 0.05 | . | 0.86 | 0.04 | 0.06 | . | 0.88 | -0.00 | 0.08 | . | 68.1 |
| Outcome variables computed over the first year | | | | | | | | | | | | | |
| Number of action from JYC | | | | | | | | | | | | | |
| # meetings | 5.82 | 3.15 | 0.24 | *** | 6.09 | 3.37 | 0.27 | *** | 6.17 | 3.24 | 0.27 | *** | 1.1 |
| Any type | 13.48 | 7.15 | 0.70 | *** | 14.27 | 7.28 | 0.73 | *** | 14.32 | 7.20 | 0.73 | *** | 36.8 |
| Job | 7.45 | 4.15 | 0.56 | *** | 7.90 | 4.25 | 0.61 | *** | 7.96 | 4.18 | 0.63 | *** | 87.9 |
| Training | 2.64 | 1.16 | 0.22 | *** | 2.90 | 1.10 | 0.25 | *** | 2.98 | 1.07 | 0.27 | *** | 22.1 |
| # of matching initiated by JYC | | | | | | | | | | | | | |
| Job offer | 1.09 | 0.46 | 0.11 | *** | 1.16 | 0.45 | 0.12 | *** | 1.13 | 0.49 | 0.14 | *** | 81.7 |
| Training | 0.53 | 0.16 | 0.04 | *** | 0.57 | 0.13 | 0.04 | *** | 0.58 | 0.10 | 0.05 | * | 8.4 |
| # of actions started | | | | | | | | | | | | | |
| Emp P3 | 2.77 | 0.18 | 0.09 | ** | 2.97 | 0.23 | 0.12 | * | 3.11 | 0.21 | 0.17 | . | 79.9 |
| Training | 0.83 | 0.03 | 0.05 | . | 0.86 | 0.04 | 0.06 | . | 0.88 | -0.00 | 0.08 | . | 50.1 |
| Nb obs | 5492 | | | | 3413 | | | | 2310 | | | | |

Administrative records, midline and endline surveys April 2012 and April 2013.

The table provides Intention To Treat estimates on administrative variables. The table has three panels and a last column. Each panel provides ITT results obtained in the same way as described in table 7. The first panel provides results obtained on the whole sample registered in the study. The second panel provides results obtained for the subsample of midline respondents and the last panel results for endline respondents. The last column is related to the ITT estimation of an equation extending equation 1 to include a variable corresponding to individuals responding both surveys, individuals responding only to the midline survey and individuals responding only to the endline survey as well as their interactions with the treatment variable. The results reported in the last column provides the p-value of the F-test corresponding to the joint nullity of those interacted variables $\chi^2(3)$.

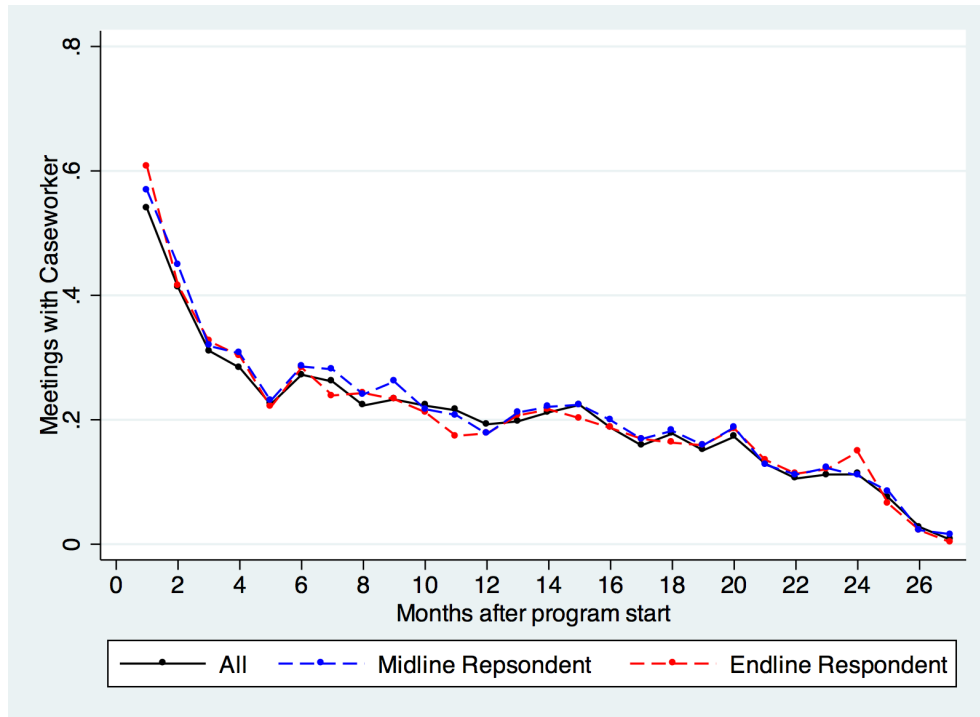
Table A3: Bounding of Treatment Effects

| | Actual | | Without control | | Same Resp. rate | | Lee bounds | | | |
|------------------|--------|------|-----------------|------|-----------------|------|------------|------|-------|------|
| | Coef | std | Coef | std | Coef | std | Lower | | Upper | |
| Employment | | | | | | | | | | |
| Employment index | -23.7 | 10.8 | -36.3 | 11.6 | -26.1 | 11.0 | -93.8 | 17.4 | 13.5 | 15.6 |
| Investment | | | | | | | | | | |
| Human Capital | 1.9 | 3.5 | 3.1 | 3.8 | 1.5 | 3.6 | -19.3 | 4.5 | 18.1 | 4.4 |
| Job seeking | -2.6 | 3.3 | -2.0 | 3.2 | -1.8 | 3.5 | -22.6 | 5.0 | 4.9 | 3.9 |
| Income | | | | | | | | | | |
| All | 40.3 | 15.8 | 35.1 | 17.0 | 41.2 | 16.5 | -54.4 | 22.5 | 100.8 | 21.6 |
| From work | -22.0 | 15.6 | -36.5 | 16.5 | -24.5 | 16.3 | -127.9 | 24.3 | 14.4 | 20.1 |
| Savings | 36.8 | 17.3 | 27.0 | 18.0 | 41.6 | 18.2 | -92.8 | 20.7 | 49.9 | 16.8 |

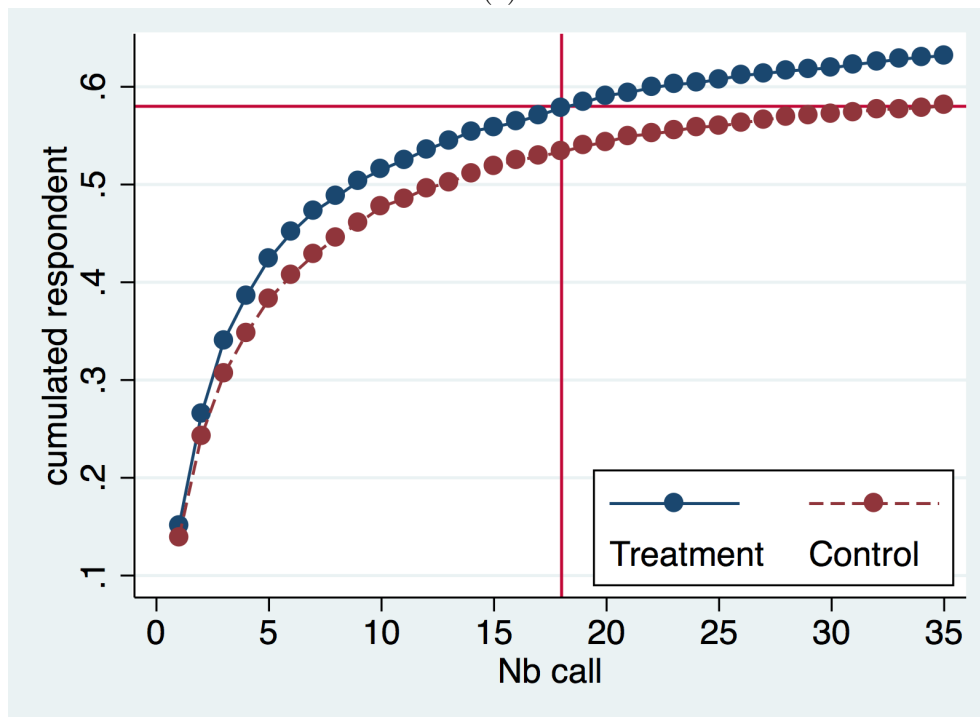
Midline survey April 2012

The table provides various estimates of ITT parameters. The first panel provide actual results obtained following the procedure described in table 7. The second panel provides results obtained by removing control variables (but keeping JYC dummy variables). The third panel provides results obtained by removing individuals reached in the treatment group after more than 18 calls. Eliminating these “most difficult to reach” individuals in the treatment group leads to identical response rates in treatment and control groups (see figure A1 (b)). The last panel provides Lee bounds.

Figure A1: Robustness



(a)



(b)

Administrative records, midline and endline survey, April 2012 and April 2013.

The top graph presents the monthly impact of being assigned to the transfer program on the total number of meeting using three samples: the whole sample (in black) the sample of respondent to the midline survey (blue) and the sample of respondent to the endline survey (red)

The bottom graph presents the response rate in both assignment groups as a function of the number of calls. The sample used in the robustness table A3 is obtained by selecting in the treatment group individuals answering after a number of attempts lower or equal to 18.

B Appendix Heterogeneity Tables

Table B1: Heterogeneity – Time Preferences

| | Obs | Mean | Impatient | | | | Patient | | | |
|-----------------------------|------|--------|-----------|-------|------|--------|---------|-------|------|-------|
| | | | Coef | std | sign | Mean | Coef | std | sign | equal |
| Midline variables | | | | | | | | | | |
| Employment volume | 3373 | 3.92 | -0.28 | 0.15 | * | 4.26 | -0.16 | 0.14 | . | . |
| Human Capital index | 3373 | -5.14 | 2.78 | 4.31 | . | 4.95 | 2.32 | 5.29 | . | . |
| Search index | 3373 | 4.58 | -1.06 | 5.24 | . | -4.24 | -5.14 | 4.57 | . | . |
| Income | 3373 | 580.52 | 40.80 | 21.34 | * | 629.25 | 40.77 | 23.56 | * | . |
| Amount saved | 3268 | 171.10 | 39.25 | 22.96 | * | 252.89 | 35.90 | 24.49 | . | . |
| Financial constraints index | 3373 | 10.78 | -2.95 | 5.46 | . | -10.14 | -2.83 | 5.25 | . | . |
| Endline variables | | | | | | | | | | |
| Employment volume | 1906 | 4.84 | 0.04 | 0.26 | . | 5.25 | 0.30 | 0.26 | . | . |
| Administrative variables | | | | | | | | | | |
| Months in program | 3370 | 11.94 | 7.86 | 0.43 | *** | 12.23 | 8.05 | 0.47 | *** | . |
| Total number of meetings | 3373 | 8.13 | 5.00 | 0.57 | *** | 7.77 | 6.04 | 0.60 | *** | * |
| Training over first quarter | | | | | | | | | | |
| –proposed | 3373 | 94.42 | 31.30 | 12.21 | ** | 95.45 | 38.49 | 10.13 | *** | . |
| –matched | 3373 | 15.52 | 2.83 | 2.64 | . | 15.55 | 5.90 | 2.25 | ** | . |
| –started | 3373 | 47.75 | 4.41 | 4.17 | . | 53.47 | 0.10 | 3.68 | . | . |

Administrative records, midline and endline survey, April 2012 and April 2013.

See notes of Table B2.

Table B2: Heterogeneity – Financial constraints

| | Obs | Mean | Probability of financial constraint | | | | | Mean | Coef | std | sign | equal |
|-----------------------------|------|--------|-------------------------------------|------|-----|-------|-------|------|------|-----|------|-------|
| | | | Low | | | High | | | | | | |
| Midline variables | | | | | | | | | | | | |
| Employment volume | 3413 | 4.41 | -0.19 | 0.15 | . | 3.75 | -0.29 | 0.15 | * | . | . | . |
| Human Capital index | 3413 | 4.16 | -2.92 | 4.21 | . | -4.42 | 6.78 | 5.27 | . | . | . | . |
| Search index | 3413 | -4.21 | -2.91 | 4.62 | . | 4.47 | -2.26 | 4.37 | . | . | . | . |
| Income | 3413 | 604 | 38 | 21 | * | 600 | 42 | 22 | * | . | . | . |
| Amount saved | 3299 | 272 | 22 | 25 | . | 146 | 52 | 23 | ** | . | . | . |
| Financial constraints index | 3413 | -23.45 | 4.20 | 4.47 | . | 24.92 | -9.88 | 5.91 | * | ** | ** | ** |
| Endline variables | | | | | | | | | | | | |
| Employment volume | 2310 | 5.37 | 0.02 | 0.19 | . | 4.67 | -0.02 | 0.21 | . | . | . | . |
| Administrative variables | | | | | | | | | | | | |
| Months in program | 5486 | 11.56 | 8.01 | 0.34 | *** | 11.15 | 7.76 | 0.41 | *** | . | . | . |
| Total number of meetings | 5492 | 7.06 | 5.28 | 0.47 | *** | 7.53 | 5.37 | 0.53 | *** | . | . | . |
| Training over first quarter | | | | | | | | | | | | |
| –proposed | 5492 | 0.86 | 0.33 | 0.09 | *** | 0.93 | 0.39 | 0.11 | *** | . | . | . |
| –matched | 5492 | 0.14 | 0.05 | 0.02 | ** | 0.16 | 0.05 | 0.02 | ** | . | . | . |
| –started | 5492 | 0.46 | 0.03 | 0.04 | . | 0.53 | 0.00 | 0.03 | . | . | . | . |

Administrative records, midline and endline survey, April 2012 and April 2013.

The table presents the results of the estimation of equation 3. Standard errors are clustered at the JYC level. The left part of the table presents the results for young adults who are least likely to perceive financial constraints and the right part the results for those who are most likely to to perceive financial constraints. The last column of the table corresponds to the test of a same effect in the two groups. Each panel first provides the mean over the population considered in the control group then the estimated value of the impact coefficient and the the estimated standard error as well as the result of the test of a null effect. The variables we consider are mainly from the midline survey (employment, training and search indexes, income, savings and perceives constraints) although we also consider the employment index for the endline survey. We also consider some administrative variables corresponding to proposals, matching and training courses started as well as the number of months registered in the program and the number of meetings.

Table B3: Heterogeneity – Caseworker Quality

| | Obs | Mean | Low quality | | | | High quality | | | |
|-----------------------------|------|--------|-------------|-------|------|--|--------------|-------|-------|------------|
| | | | Coef | std | sign | | Mean | Coef | std | sign equal |
| Midline variables | | | | | | | | | | |
| Employment volume | 2315 | 4.20 | -0.25 | 0.20 | . | | 4.18 | -0.21 | 0.20 | . |
| Human Capital index | 2315 | -7.33 | 9.38 | 6.25 | . | | 9.50 | -6.78 | 6.67 | . |
| Search index | 2315 | -4.82 | 3.84 | 6.05 | . | | 1.79 | -6.11 | 5.08 | . |
| Income | 2315 | 606.49 | 50.89 | 29.40 | * | | 590.63 | 51.38 | 28.61 | * |
| Amount saved | 2237 | 192.95 | 55.83 | 28.98 | * | | 241.37 | 33.17 | 31.12 | . |
| Financial constraints index | 2315 | -0.17 | -7.52 | 6.18 | . | | -4.07 | 0.93 | 6.40 | . |
| Endline variables | | | | | | | | | | |
| Employment volume | 1576 | 4.76 | 0.18 | 0.29 | . | | 5.22 | 0.12 | 0.29 | . |
| Administrative variables | | | | | | | | | | |
| Months in program | 3710 | 11.46 | 7.87 | 0.36 | *** | | 11.46 | 8.22 | 0.50 | *** |
| Total number of meetings | 3710 | 6.97 | 5.37 | 0.53 | *** | | 7.75 | 5.15 | 0.44 | *** |
| Training over first quarter | | | | | | | | | | |
| –proposed | 3710 | 77.68 | 40.80 | 11.09 | *** | | 88.30 | 25.07 | 8.02 | *** |
| –matched | 3710 | 14.11 | 5.41 | 2.60 | ** | | 15.00 | 5.85 | 2.70 | ** |
| –started | 3710 | 48.01 | -1.36 | 3.82 | . | | 52.16 | 2.89 | 4.85 | . |

Administrative records, midline and endline survey, April 2012 and April 2013. Caseworker quality is measured as the proportion of jobseekers who drops out of the program after first meeting their caseworker, using administrative records from the universe of jobseekers in 2010 (the year before the experiment started). "High quality" indicates that a caseworker had a below-average proportion of drop-outs, relative to his or her JYC.

See notes of Table B2 for outcome variable definitions.

Table B4: Heterogeneity – Locus of Control

| | Obs | Mean | External | | | | Internal | | | |
|-----------------------------|------|--------|----------|-------|------|--|----------|-------|-------|------------|
| | | | Coef | std | sign | | Mean | Coef | std | sign equal |
| Midline variables | | | | | | | | | | |
| Employment volume | 3270 | 3.77 | -0.14 | 0.15 | . | | 4.46 | -0.40 | 0.18 | ** |
| Human Capital index | 3270 | -5.00 | 5.59 | 4.97 | . | | 5.16 | -1.38 | 4.90 | . |
| Search index | 3270 | 4.42 | -1.55 | 5.70 | . | | -4.35 | -3.36 | 4.26 | . |
| Income | 3270 | 557.96 | 69.94 | 22.86 | *** | | 650.52 | 7.69 | 20.25 | . |
| Amount saved | 3170 | 202.38 | 37.82 | 22.10 | * | | 225.93 | 33.54 | 24.12 | . |
| Financial constraints index | 3270 | 7.62 | -4.44 | 5.16 | . | | -7.78 | -0.68 | 4.42 | . |
| Endline variables | | | | | | | | | | |
| Employment volume | 1851 | 4.75 | 0.33 | 0.23 | . | | 5.42 | 0.01 | 0.28 | . |
| Administrative variables | | | | | | | | | | |
| Months in program | 3268 | 12.27 | 7.76 | 0.46 | *** | | 11.82 | 8.30 | 0.42 | *** |
| Total number of meetings | 3270 | 8.17 | 6.02 | 0.66 | *** | | 7.60 | 5.34 | 0.50 | *** |
| Training over first quarter | | | | | | | | | | |
| –proposed | 3270 | 102.53 | 24.13 | 13.04 | * | | 86.45 | 45.84 | 10.90 | *** |
| –matched | 3270 | 17.42 | 1.07 | 2.86 | . | | 14.02 | 6.63 | 2.28 | *** |
| –started | 3270 | 51.13 | -1.51 | 4.65 | . | | 49.94 | 6.15 | 4.34 | . |

Administrative records, midline and endline survey, April 2012 and April 2013.

See notes of table B2.

Table B5: Heterogeneity – Local Youth Unemployment Rate

| | | Low | | | | High | | | | |
|-----------------------------|------|--------|-------|-------|------|--------|-------|-------|------|-------|
| | Obs | Mean | Coef | std | sign | Mean | Coef | std | sign | equal |
| Midline variables | | | | | | | | | | |
| Employment volume | 3380 | 4.70 | -0.27 | 0.16 | . | 3.56 | -0.23 | 0.14 | . | . |
| Human Capital index | 3380 | -2.15 | 1.65 | 5.19 | . | 2.32 | 1.65 | 4.70 | . | . |
| Search index | 3380 | -4.41 | 0.11 | 4.22 | . | 4.46 | -4.60 | 4.87 | . | . |
| Income | 3380 | 674.00 | 19.05 | 23.29 | . | 539.01 | 57.23 | 19.05 | *** | . |
| Amount saved | 3269 | 216.47 | 37.79 | 25.22 | . | 208.56 | 33.90 | 24.23 | . | . |
| Financial constraints index | 3380 | 5.37 | -5.82 | 5.93 | . | -4.55 | -0.05 | 5.12 | . | . |
| Endline variables | | | | | | | | | | |
| Employment volume | 2288 | 5.31 | 0.15 | 0.19 | . | 4.83 | -0.14 | 0.25 | . | . |
| Administrative variables | | | | | | | | | | |
| Months in program | 5426 | 11.13 | 7.40 | 0.36 | *** | 11.65 | 8.31 | 0.54 | *** | . |
| Total number of meetings | 5432 | 6.74 | 4.16 | 0.45 | *** | 7.82 | 6.58 | 0.63 | *** | *** |
| Training over first quarter | | | | | | | | | | |
| –proposed | 5432 | 67.46 | 27.47 | 8.63 | *** | 107.63 | 45.63 | 14.25 | *** | . |
| –matched | 5432 | 10.18 | 5.81 | 2.35 | ** | 20.08 | 4.83 | 2.54 | * | . |
| –started | 5432 | 49.81 | 1.14 | 2.98 | . | 50.07 | 1.80 | 4.08 | . | . |

Administrative records, midline and endline survey, April 2012 and April 2013.

See notes of table B2.

Table B6: Heterogeneity – Disconnect from labor market

| | | Low | | | | High | | | | |
|-----------------------------|------|-------|-------|------|------|--------|-------|------|------|-------|
| | Obs | Mean | Coef | std | sign | Mean | Coef | std | sign | equal |
| Midline variables | | | | | | | | | | |
| Employment volume | 3413 | 4.56 | -0.25 | 0.13 | * | 3.24 | -0.21 | 0.19 | . | . |
| Human Capital index | 3413 | 6.55 | -5.61 | 4.02 | . | -11.84 | 14.30 | 5.97 | ** | *** |
| Search index | 3413 | -3.90 | -1.28 | 3.84 | . | 7.05 | -4.83 | 5.87 | . | . |
| Income | 3413 | 646 | 43 | 18 | ** | 521 | 36 | 26 | . | . |
| Amount saved | 3299 | 254 | 34 | 22 | . | 133 | 41 | 25 | . | . |
| Financial constraints index | 3413 | -9.89 | -1.14 | 4.03 | . | 17.87 | -5.56 | 6.12 | . | . |
| Endline variables | | | | | | | | | | |
| Employment volume | 2310 | 5.54 | -0.05 | 0.18 | . | 4.03 | 0.11 | 0.30 | . | . |
| Administrative variables | | | | | | | | | | |
| Months in program | 5486 | 11.15 | 8.22 | 0.35 | *** | 11.63 | 7.43 | 0.42 | *** | ** |
| Total number of meetings | 5492 | 6.82 | 5.54 | 0.49 | *** | 7.96 | 5.06 | 0.51 | *** | . |
| Training over first quarter | | | | | | | | | | |
| –proposed | 5492 | 0.83 | 0.32 | 0.09 | *** | 0.98 | 0.43 | 0.12 | *** | . |
| –matched | 5492 | 0.13 | 0.04 | 0.02 | ** | 0.18 | 0.07 | 0.03 | *** | . |
| –started | 5492 | 0.42 | 0.01 | 0.03 | . | 0.61 | 0.02 | 0.03 | . | . |

Administrative records, midline and endline survey, April 2012 and April 2013.

See notes of table B2.

Table B7: Heterogeneity – Gender

| | Obs | Mean | Female | | | Male | | | | |
|-----------------------------|------|-------|--------|------|------|-------|-------|------|------|-------|
| | | | Coef | std | sign | Mean | Coef | std | sign | equal |
| Midline variables | | | | | | | | | | |
| Employment volume | 3413 | 3.71 | -0.18 | 0.15 | . | 4.53 | -0.31 | 0.16 | * | . |
| Human Capital index | 3413 | -4.41 | -0.64 | 4.87 | . | 5.21 | 4.72 | 5.30 | . | . |
| Search index | 3413 | 2.55 | -4.48 | 4.93 | . | -3.01 | -0.49 | 4.52 | . | . |
| Income | 3413 | 568 | 46 | 20 | ** | 642 | 34 | 25 | . | . |
| Amount saved | 3299 | 195 | 35 | 20 | * | 230 | 39 | 28 | . | . |
| Financial constraints index | 3413 | 3.33 | -2.49 | 4.67 | . | -3.94 | -3.16 | 5.92 | . | . |
| Endline variables | | | | | | | | | | |
| Employment volume | 2310 | 4.56 | 0.10 | 0.22 | . | 5.62 | -0.10 | 0.25 | . | . |
| Administrative variables | | | | | | | | | | |
| Months in program | 5486 | 11.61 | 7.63 | 0.32 | *** | 11.07 | 8.15 | 0.43 | *** | . |
| Total number of meetings | 5492 | 7.51 | 5.26 | 0.49 | *** | 7.08 | 5.40 | 0.54 | *** | . |
| Training over first quarter | | | | | | | | | | |
| –proposed | 5492 | 0.93 | 0.40 | 0.11 | *** | 0.85 | 0.33 | 0.10 | *** | . |
| –matched | 5492 | 0.16 | 0.05 | 0.02 | ** | 0.15 | 0.05 | 0.02 | ** | . |
| –started | 5492 | 0.52 | 0.01 | 0.04 | . | 0.47 | 0.03 | 0.03 | . | . |

Administrative records, midline and endline survey, April 2012 and April 2013.

See notes of table B2.