

Do Caseworker Meetings Improve Welfare Recipients' Employment Prospects?

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Abstract

We study the effects of the first meeting between unemployed welfare recipients and their caseworker. Our analysis uses administrative data on first-time entrants to the German welfare system and tracks their employment trajectories over five years. The data come from a large subset of offices that report the date of the first scheduled meeting and whether it took place. To identify the meeting effect, we instrument whether the meeting takes place with weather conditions on the day of the scheduled meeting. Instrumental variable estimates show that the meeting persistently increases jobseekers' days in employment and their earnings over the five years following welfare entry. Additional analyses indicate that the meeting leads to one additional caseworker meeting and increases the probability of receiving a vacancy referral within the first year after welfare entry. It also raises the probability of finding stable employment. Heterogeneity analyses show that long-run effects are larger in offices with lower caseloads and a smaller share of caseworkers on fixed-term contracts, and are driven by jobseekers with comparatively strong initial employment prospects.

Keywords: Caseworker, Meeting, Unemployment, Welfare Receipt, Evaluation

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1 Introduction

In many OECD countries, a considerable share of individuals experience long-term unemployment or recurrent transitions between unstable employment and unemployment. For jobseekers who exhaust their entitlement to or do not qualify for unemployment insurance, means-tested welfare programs constitute the last safety net. Promoting sustained exits from welfare receipt is challenging, as welfare recipients often face barriers to employment, including low human capital, poor health, language deficiencies, or family responsibilities. Caseworkers aim to support welfare recipients in finding employment. In regular meetings, they counsel jobseekers, refer them to vacancies or active labor market programs, and may impose benefit sanctions in cases of non-compliance.

A growing literature shows that caseworkers improve jobseekers' employment outcomes (van den Berg *et al.*, 2014; Schiprowski, 2020). Moreover, evidence suggests that caseworker quality and caseworker style may be important mediators for these effects (Behncke *et al.*, 2010; Cederlöf *et al.*, 2025). While this evidence is convincing, existing research typically focuses on recipients of unemployment insurance (UI) benefits. This is despite the fact that a significant share of unemployed individuals is covered by means-tested welfare benefits. Compared with welfare recipients, UI recipients typically have much better prospects of rapidly finding employment, and caseworker support is mainly intended to ameliorate search frictions. Given the potentially severe barriers welfare recipients face with regards to labor market integration, it is unclear whether caseworker meetings also help welfare recipients transition into employment.

This study analyses the effects of a caseworker meeting on the employment chances of non-employed jobseekers in the German welfare system. Our focus lies on the first scheduled meeting of welfare recipients with their caseworker and we study the effect of the first meeting (not) taking place. During this first meeting, the caseworker undertakes a profiling of the welfare recipient's skills and constraints, develops (potentially long-term) goals, and defines milestones to achieve these goals. Treatment thus implies a set of clearly defined caseworker activities with potential ripple effects, as the first meeting taking place may shape the intensity and content of subsequent caseworker support. We study effects over a period of five years after the scheduled meeting, providing evidence on long-run meetings effects. We further analyze short-run effects on follow-up policy interventions (e.g., vacancy referrals, benefit sanctions) and characteristics of welfare recipients' first

job after unemployment (e.g., job stability). Finally, we consider heterogeneous effects by jobseeker, meeting, and contextual characteristics.

To account for the selection into the first meeting taking place and isolate its causal effect, we employ a weather instrumental variable (IV) strategy. Specifically, we use weather conditions on the day of the scheduled meeting to instrument whether the meeting actually took place.¹

Our analysis uses administrative data on first-time entrants to the German welfare system between April 2012 and March 2013. We focus on welfare recipients in offices that provide data on the scheduled date of the first meeting and whether this meeting took place or not. These offices make up around three quarters of all offices in our observation period. To these data we merge daily information on district weather conditions provided by the German Weather Service.

In a first step, we document that a substantial share of scheduled first meetings—around 40%—do not take place. Weather conditions are highly predictive for meeting occurrence. As instruments, we use district-level precipitation, hours of sunshine, and temperature measured on the day of the scheduled meeting. First-stage regression results show statistically significant and relevant effects of these instruments conditional on a broad set of fixed effects and covariates.

As our main result, we find that the first meeting has persistent positive effects on welfare recipients’ employment outcomes. Over the five years following welfare entry, the meeting increases total days employed and cumulative earnings by 95 days and Euro 10,000, respectively.² Inspecting dynamics, the effects on both days employed and earnings rise in the first year after welfare entry and remain relatively flat thereafter. Placebo analyses over the five-year pre-welfare period show no effect on days employed or earnings, supporting the robustness of these results.

We next examine potential mechanisms. The first meeting being held increases subsequent caseworker support, particularly direct job search assistance. In the first year

¹Weather information has been used in many other contexts as an IV or simply as an explanatory factor, including electoral participation (Damsbo-Svendsen and Hansen, 2023; Eisinga *et al.*, 2012; Persson *et al.*, 2014; Turner, 2024), physician appointment attendance (Collins *et al.*, 2003; Jamil *et al.*, 2011; Odonkor *et al.*, 2017; Pieper and DiNardo, 1998), and certain types of criminal activity (Blakeslee and Fishman, 2018; Horrocks and Menclova, 2011; Ishak, 2022; Jacob *et al.*, 2007). To our knowledge, our paper provides the first application of this IV strategy in the context of caseworker meeting effects.

²Days employed refers to days in employment that is subject to social security contributions and cumulative earnings to real earnings from any source of dependent employment, including minor employment.

after welfare entry, estimates show that the meeting leads to an additional caseworker meeting. This finding suggests that missed caseworker meetings cannot be immediately rescheduled, possibly a consequence of high caseloads of caseworkers. We further find an increase in the probability of receiving a vacancy referral by about 8 percentage points, while having little effect on ALMP participation or strong benefit sanctions, e.g., due to a refusal to participate in an ALMP. Moreover, we find evidence of improved first-job stability: the meeting increases the probability of finding a first job lasting more than six months by 20 percentage points.

We further document substantial treatment effect heterogeneity by office context. Using office-level caseload and the share of caseworkers on fixed-term contracts as proxies for average workload and tenure, respectively, we find that the effects of the first meeting are markedly larger in offices with low caseloads or a low share of fixed-term contracts among caseworkers. In these offices, effects on days employed are roughly 170 days over five years, with effects on earnings over 15,000 Euro. In other offices, the estimated effects are small and statistically insignificant.

Treatment effects also vary by jobseeker characteristics. Notably, grouping welfare recipients by their predicted employment probability, we find sizable effects for those with better than median employment prospects: the effect on days employed amounts to 165 days, with effects on earnings of around 14,000 Euro. For jobseekers with worse employment prospects, estimated effects are closer to zero and not statistically significant.

Our study contributes to the literature on caseworker meeting effects. While several studies show that intensified job search assistance—including more intensive caseworker support alongside additional services—increases jobseekers’ employment chances,³ several studies find that a single caseworker meeting can also affect employment outcomes.

Van den Berg *et al.* (2014) show that the employment exit rate of Danish UI recipients increases by around 25% during the week of a meeting for most jobseekers. For Swiss UI recipients, Schiprowski (2020) finds that losing a scheduled meeting due to an unplanned

³See, for example, Meyer (1995); Dolton and O’Neill (2002); Crépon *et al.* (2005); Graversen and Van Ours (2008); Blundell *et al.* (2004); van den Berg *et al.* (2020); Maibom *et al.* (2017); Manoli *et al.* (2018). Some of these studies consider welfare recipients. Bolhaar *et al.* (2020) study an intervention assigning welfare recipients in Amsterdam to different policy regimes. One regime involves intensified caseworker meeting counseling. Assignment to this regime has no detectable effects on the probability of employment or earnings up to 50 weeks after the intervention relative to the control group. Bobonis *et al.* (2022) show that intensified employment and support services for Canadian welfare recipients increase annual earnings over a 20-year period and full-time employment rates over a 12-year period.

caseworker absence increases unemployment duration by 14 days and reduces unemployment recurrence when the meeting was scheduled with a high-quality caseworker, measured by caseworker value added in reducing unemployment duration; losing a meeting with a low-quality caseworker has no effect. Van der Klaauw and Vethaak (2022) analyze a randomized intervention in which Dutch UI recipients attend an additional mandatory meeting after six months of unemployment, during which caseworkers may impose broader job search requirements. They find positive effects on employment probabilities in the months following the meeting, but these effects fade thereafter. For Germany, Schiprowski *et al.* (2024) find little evidence that UI recipients' search behavior changes in the weeks surrounding a meeting, while Homrighausen and Oberfichtner (2024) find no effects of meetings for German workers at risk of job loss on short-run labor market outcomes.

Our study contributes to this literature by examining, for the first time, the effects of a single caseworker meeting for welfare recipients. We focus on the first meeting, which has a clearly defined purpose of profiling jobseekers and formulating a search strategy. We analyze long-run effects over a five-year period to assess whether potential impacts are short-lived or persistent. We further provide evidence on mechanisms related to subsequent services and job characteristics. Finally, we examine heterogeneity across jobseeker and institutional characteristics to assess for whom and in which service environments caseworker meetings are most effective.

Our study also contributes to the broader literature on the role of caseworkers. Previous research shows that caseworker counseling style can affect jobseekers' employment outcomes (Behncke *et al.*, 2010; Nielsen and Rosholm, 2025). A growing literature further documents considerable caseworker value added in shaping jobseekers' employment prospects (Cederlöf *et al.*, 2025; Lagerström, 2011; Rasmussen, 2021; Ziegler, 2025). Our heterogeneity results are consistent with these findings.

2 Institutional Setting

In Germany, two types of benefits are available to support unemployed people. The first is the unemployment insurance (UI) benefit. Unemployed people can receive UI benefits for a limited duration, provided that they contributed to UI for a sufficient number of months during the 30 months prior to entering unemployment.

This study is concerned with recipients of the second benefit, a means-tested benefit that was known as unemployment benefit II in our observation window. It is regulated by the Basic Income Support for Jobseekers in Germany. We label unemployment benefit II recipients as welfare recipients in our study. The benefit is available to unemployed people but also employed people if their household's income is insufficient to achieve a minimum standard of living.

Households on welfare receive a basic cash benefit for day-to-day expenditures, benefits to cover the costs of accommodation and heating, and possibly benefits to cover additional individual costs (for example during pregnancy). The amount of the basic cash benefit depends on the type of household and other household members, in particular on the age of a household member. The basic cash benefit level at the beginning of 2013 was 382 Euro a month for welfare recipients in one-person households and for single parents. Each partner in couple household instead received 345 Euro.

The Basic Income Support for Jobseekers attempts to activate welfare recipients who are considered capable of working by a system of rights and duties and is implemented by job centers. The jobseekers receiving the benefit are supposed to make sufficient efforts to take up jobs or training. The job centers should support them by counseling and ALMP such as wage subsidies or training. This should enable welfare recipients to achieve earnings that help to reduce or end their dependence on welfare receipt. Two types of job centers exist. Some are administered entirely by municipalities (Approved Local Providers–ALP). The other job centers were run by staff of the municipalities and the German Federal Employment Agency (GFEA) as Joint Local Agencies (JLA).

The counseling of welfare recipients by their caseworkers is a key element of the Basic Income Support for Jobseekers. The job center assigns welfare recipients to a caseworker shortly after they enter the welfare system. An effective counseling by caseworker is only possible if their caseload (i.e., welfare recipients per caseworker) is not too high. In the period under review the job centers were supposed to achieve a caseload of no more than 75 (150) for welfare recipients aged 15 to 24 (at least 25) years. According to statistics of the personnel department of the GFEA, the average caseload in JLA in the years 2012 and 2013 reached these thresholds or was slightly lower.

Regular meetings of welfare recipients with their caseworkers support a structured counseling process that ultimately aims to end or reduce welfare benefit receipt through

their labor market integration. Usually, the first meeting is longer compared to follow-up meetings, as during this meeting the caseworker begins to implement an individual profiling process (Bähr *et al.*, 2019). The profiling aims to identify the welfare recipient’s employment prospects, strengths, personal and household situation as well as their employment impediments that need to be addressed. Based on the profiling, an individual integration strategy is developed with specific objectives as well as activities and interventions needed to reach this objective. In the observation period, this became the contents of a binding integration agreement.

Regular follow-up meetings provide additional counseling, e.g., to implement and monitor steps from the integration agreement or to update this agreement. Such steps often but not always aimed directly at integrating welfare recipients into work or training. Employment impediments and personal problems of welfare recipients sometimes had to be addressed first in the counseling process.

If a welfare recipient without good reason does not show up for a meeting, the caseworker can apply a benefit sanction. In the observation period such a sanction consisted of 10 percent cut of the basic cash benefit (so-called mild sanctions). The caseworker can further apply benefit sanctions for other infringements, for example, if the welfare recipient refuses to participate in an ALMP or to take up employment. In the observation period such a sanction consisted of 30 percent cut of the basic cash benefit for the first infringement and could lead to a complete withdrawal of benefits in case of repeated infringements within one year (so-called strong sanctions). The duration of a mild or strong sanction was three months. Caseworkers, however, do not necessarily apply a benefit sanction, but have some degree of freedom.

3 Data and Empirical Strategy

3.1 Data

For the analysis, we use administrative data provided by the GFEA. We rely on two main data sources. First, the *Unemployment Benefit II Recipient History* contains detailed information on periods of welfare receipt, welfare recipient socio-demographics, and household members. Second, the *Integrated Employment Biographies* contain information on periods of employment, unemployment, participation in ALMP, and socio-demographic

characteristics.

We focus on welfare recipients in JLA, which make up around three quarters of all job centers in Germany in the period of analysis. These job centers provide information on meetings from their appointment management systems that allow us to observe the date for which the first meeting is scheduled and whether it took place or not.

Our analysis focuses on entrants to the welfare system in the period between April 2012 and March 2013. The meeting data is only available from this period onward. We focus on individuals starting a period of welfare receipt without being employed or participating in long ALMP measures. This ensures that our analysis focuses on welfare recipients targeted by caseworker support. We focus on first-time entrants, defined as not having received welfare benefits in the last seven years before the current entry. We further focus on individuals aged 18 to 60 years and We exclude individuals receiving UI in addition to welfare benefits, as they may meet with an UI caseworker. Finally, we exclude welfare recipients who do not have a meeting scheduled within the first six months after entry.⁴ This leaves us with a sample of around 77,000 individuals.

The treatment variable we inspect is an indicator for whether the first meeting scheduled after inflow actually took place. The main outcome variables are, first, the number of days in employment that is subject to social security contributions and, second, the real gross earnings from any employment (including minor employment). We study these outcomes over five years after welfare entry.

The first column of table 1 shows the mean of selected variables in the sample. The average age lies at 33 years. Two thirds of the sample have a vocational degree. Around 40 % of scheduled meetings do not take place. On average, the first meeting is scheduled at 56 days after entry. Meeting invitations commonly come with the notification about a possible sanction in case of non-attendance. Meetings are rather evenly scheduled across

⁴Welfare recipients may not have a meeting scheduled within six months after welfare entry for different reasons. For example, some welfare recipients find a job before having a meeting. Another reason may be that caseworkers do not schedule a meeting with some welfare recipients as they are not required to immediately search for jobs, e.g., due to temporary sickness or childcare responsibilities. Appendix table A1 compares welfare recipients excluded due to this sampling restriction with sample members regarding several characteristics. This comparison shows that excluded welfare recipients are more often female, in a partnership, having children, or having a foreign nationality. This indicates that mothers caring for small children are part of the excluded group. The table further shows that the share of registered jobseekers in this group is around 85 %, whereas it is 96 % in the main sample. Additional analyses show that the welfare and unemployment spell for 34 % in the excluded group ends within approximately two months, whereas this is only the case for around 24 % in the main sample. This indicates that welfare recipients exiting benefit receipt quickly are also part of the excluded group.

the work week, slightly more often on Mondays, Tuesday, and Thursdays. Most meetings take place before noon and are scheduled for a duration of more than 45 minutes. Over the five years following entry, sample members spend on average around 571 days in employment and earn a total of around 42,000 Euro.

[Insert Table 1 about here]

Columns two and three of table 1 display the variable means by treatment status. Treated welfare recipients more often have a vocational degree, a schooling degree, or a partner. The labor market history in terms of prior earnings and (un)employment duration in the treatment and control group are relatively similar. Regarding meeting characteristics, the only notable difference is a higher share of notifications about a possible sanction in the treatment group.

When do welfare recipients in the control group have their first meeting that takes place after their first scheduled meeting not taking place? To answer this question, we find the first meeting that takes place for the control group within their welfare spell. For around 44 % of the control group, we do not find that a meeting takes place during the welfare spell. This could be due to exits from welfare before any scheduled meeting takes place or other scheduled meetings not taking place. For the remaining 56 % of the control group, the meeting takes place on average 181 days after entry to welfare and non-employment.

[Insert Figure 1 about here]

Figure 1 plots the main outcome variables by treatment status. In the years prior to inflow, there are no large systematic differences between treatment and control group regarding the outcomes. Starting around two years after welfare entry, days employed and earnings lie higher in the treatment group. Nonetheless, there may be unobserved differences between treated and untreated individuals, which is why we allow for selection on unobservables in our estimates.

3.2 Identification and Estimation

To estimate the causal effects of the first meeting, we apply an instrumental variable (IV) strategy. We use weather conditions to instrument whether a scheduled meeting takes

place. In doing so, we follow a broad literature in different disciplines that uses weather conditions to explain election participation (Damsbo-Svendsen and Hansen, 2023; Eisinga *et al.*, 2012; Persson *et al.*, 2014; Turner, 2024), attending doctor’s appointments (Collins *et al.*, 2003; Jamil *et al.*, 2011; Odonkor *et al.*, 2017; Pieper and DiNardo, 1998), or certain types of criminal activity (Blakeslee and Fishman, 2018; Horrocks and Menclova, 2011; Ishak, 2022; Jacob *et al.*, 2007). To the best of our knowledge, we are the first to inspect the effects of weather conditions on caseworker meeting occurrence and to use this information to estimate causal meeting effects.

To obtain the instruments, we use district-level data on daily weather conditions provided by the German Weather Service. More precisely, we use three instrumental variables: precipitation (mm), sunshine (hours), and average daily temperature (°C). We match these data to the administrative data based on welfare recipients’ district of residence and the date of their first scheduled meeting. Appendix table A2 shows sample descriptives of the instruments.

We employ a classical Two-Stage Least Squares (2SLS) approach with multiple instruments. Specifically, we estimate

$$D_i = \alpha + \psi' X_i + \phi' Z_i + \epsilon_i^D \quad (1)$$

$$Y_i = \beta + \Delta \hat{D}_i + \omega' X_i + \epsilon_i^Y, \quad (2)$$

where in the first-stage regression (1) we regress D_i , indicating whether the first scheduled meeting of person i with their caseworker took place, on instruments Z_i as well as a set of covariates and fixed-effects X_i . In the second-stage (2), we regress the outcome Y_i on the instrumented treatment $\hat{D}_i$ and control variables. To be precise, we control for jobseeker socio-demographic characteristics in terms of gender, age in years, and dummies for German nationality, no vocational degree, no schooling degree, in partnership, and any children in the household. In addition, we account for the district unemployment rate, long-term unemployment rate, and vacancy-unemployment ratio in the month of inflow. Regarding labor market history, we control for daily earnings and sector of the last job, and indicators for at least one day of UI receipt, minor employment, vocational training, and sanctions in the year prior to inflow. In addition, we control for the days in contributory employment, welfare receipt, unemployment, ALMP, and sanctions as well

as earnings in the last two and the last five years prior to welfare entry. Regarding the meeting, we control for whether the scheduled meeting included a sanction notification, the day of the week, the duration, the hour of the day, and whether the meeting was scheduled with the case management rather than the regular counseling services. Lastly, we include a set of fixed effects for the district, quarter of inflow, the number of months from inflow to meeting, and quarter of meeting.

Under exogeneity and monotonicity, Δ identifies a weighted average of local average treatment effects (LATE) for compliers (see Alvarez and Toneto, 2024). Exogeneity requires that the instruments are uncorrelated with unobserved characteristics of the job-seekers. Moreover, there must not be a direct effect of the instrument on labor market outcomes. Monotonicity requires that the instruments either weakly increase or decrease the chances of the meeting being held for everyone.

While the absence of a direct effect is plausible, uncorrelatedness needs further discussion as the timing of meetings may not be random. For example, job centers likely strive for welfare recipients to have their first meeting within a certain time frame. Combined with differential characteristics by the timing of inflow, e.g., due to seasonal workers entering welfare in the winter months when labor demand is low, this would give rise to a correlation between jobseeker characteristics and weather conditions. To ensure uncorrelatedness, we control for the timing of welfare entry, the time elapsed from inflow to the first meeting, and the quarter in which the meeting is supposed to take place. We further compare welfare recipients with the same sectoral employment experience, by including controls for the last sector the welfare recipient was employed. We argue that conditional on these controls, variation in weather on the day of the scheduled meeting is as good as random.

Monotonicity likely holds, too. From our own personal experience, anecdotal evidence, and the scientific evidence (e.g. Collins *et al.*, 2003; Gomez *et al.*, 2007; Horrocks and Menclova, 2011), we believe that precipitation generally discourages going outside, whereas sunshine and higher temperatures motivate individuals to do (fun) outside activities. We have difficulties imagining defier behavior along these margins, except regarding temperature. However, the maximum average daily temperature we observe on scheduled meeting dates lies below 30 °C, so our analysis does not include extreme temperatures. We further think that avoiding to go outside when temperatures are high is only likely to be a bigger

problem for the severely ill and elderly, who are not part of our sample.

4 Results

4.1 First Stage and Placebo Results

Panel A of Table 2 displays first stage coefficients for the instruments' effects on the likelihood of attending the first meeting. An additional mm of precipitation on the day of the meeting decreases the meeting probability by 0.1 percentage points. An increase in average daily temperature by one °C decreases the meeting probability by roughly one percentage point. Moreover, an additional hour of sunshine decreases it by 0.4 percentage points.⁵

Individually, these effects are highly statistically significant. Similarly, the F -statistic of 360.6 is above any reasonable threshold that would raise concerns about weak instruments (Staiger and Stock, 1997; Stock and Yogo, 2005). This provides evidence in support of the instrument strength.

[Insert Table 2 about here]

Before we turn to our main results, we consider 2SLS estimates on the cumulative number of days employed and earnings in the five years prior to welfare entry as a placebo check. If estimates were to differ substantially from zero, this would indicate instrument validity problems, for example, instrument correlation with unobserved characteristics. Note that in contrast to the other results presented, these estimates only control for the set of fixed-effects regarding district and meeting timing. Results in panel B of Table 2 show that coefficients for days employed and earnings are close to zero and far from conventional levels of statistical significance. This provides supportive evidence in favor of the exogeneity assumption.

⁵As we are not aware of any existing results that would allow us to explicitly quantify the complier population in our case with three continuous instruments, we re-ran our first stage regressions for sub-samples created by binary splits according to a wide array of observed characteristics. In most sub-samples, we find first-stage effects very similar to our main results, suggesting that compliance is a widespread phenomenon and thus, our IV estimates are unlikely to be specific to a narrow sub-population of welfare recipients.

4.2 Main Results and Effect Dynamics

Panel C of Table 2 shows 2SLS estimates on the cumulated number of days employed and earnings in the five years after welfare entry. The treatment effect lies at 95 days employment and € 10,000, respectively. Both estimates are statistically significant at least at the 5 percent level. These results demonstrate that realizing the first meeting has important impacts on long-run labor market outcomes of welfare recipients.⁶

To shed light on the dynamics of these effects, we run separate 2SLS regressions for the number of days employed and earnings each of the five years before and after welfare entry. Results are displayed in figure 2. Note, again, that placebo checks do not indicate significant meeting effects on outcomes in the years prior to welfare entry, underlining the validity of the dynamic IV analysis.

Results in figure 2 show that the meeting effect builds up in the first year after welfare entry and then remains relatively stable and statistically significant. The effect on days employed and earnings rises in the first year after welfare entry. It then lies at around 20 days employed in years 2 to 5 following welfare entry. For earnings, we see a similar pattern with an effect of more than 2,000 Euro in years 2, 3, and 5. The effect is lower and not statistically significant in year 4.

In line with previous research, these results show that caseworker meetings increase jobseekers' employment prospects in the short to medium run (e.g., van den Berg *et al.*, 2014; Schiprowski, 2020). We do not find that these effects fade out (van der Klaauw and Vethaak, 2022), but rather that they are lasting during the five-year observation period. This is similar to findings on persistent positive average effects of job search assistance or meetings (Dolton and O'Neill, 2002; Maibom *et al.*, 2017; Manoli *et al.*, 2018; Bobonis *et al.*, 2022).

4.3 Potential Mechanisms

What explains these persistent employment and earnings gains? Initially, we consider effects on other policy interventions within the first year after welfare entry. We then

⁶Our baseline specification assumes linear effects of the instrument on the treatment. As a sensitivity check, we first include all instruments as categorical variables and, second, include interaction terms of for these categorical variables. We thereby allow for non-linear instrument effects in a flexible way. Descriptives on the categorical instrumental variables are displayed in appendix table A3. The results of the sensitivity analysis displayed in appendix table A4 are similar to our baseline estimates. We thus conclude that our estimates are not sensitive to the instrument linearity assumption.

study whether the first meeting actually taking place shifts the types of jobs welfare recipients enter. Descriptives on these variables are provided in appendix table A5.

Other policy interventions First, effects on the number of follow-up meetings show how meeting occurrence shifts the total intensity of caseworker support received. Second, the first meeting taking place could shift the type and intensity of other policy interventions received. Notably, welfare recipients may receive more job search assistance, but may also be subject to stricter monitoring of their search efforts if they meet their caseworker. Further, caseworker meetings are typically necessary to prepare participation in ALMP, such as training or wage subsidies. We therefore study the effects on vacancy referrals as a measure of direct job search assistance, the days being sanctioned as a measure for monitoring intensity, and the days in ALMP to observe ALMP assignments.

[Insert Table 3 about here]

Results displayed in table 3 suggest that treated welfare recipients receive more intense caseworker support. The effect on the total number of meetings in the first year lies at around 2 meetings. As this includes the instrumented treatment, this estimate implies roughly one additional meeting for treated welfare recipients. This finding implies that scheduled caseworker meetings that do not take place are typically not rescheduled within a year (irrespective of whether they were still on welfare within a year), possibly reflecting high caseloads that leave few opportunities for immediate follow-up.⁷

Further, the first meeting taking place as planned increases direct job search assistance through vacancy referrals. The effect on the probability of receiving any vacancy referral within the first year lies at 8 percentage points and is highly statistically significant.

In contrast, our results do not suggest that meeting occurrence increases monitoring intensity. We do not find significant treatment effects on the days in strong sanctions that caseworkers may apply in case of, for example, jobseekers' insufficient job search effort or refusal to take up employment. Rather, meeting occurrence reduces sanctions caseworkers may apply for meeting non-attendance with an estimate of around -7 days. This could be partially a mechanical effect of a sanction that is caused by the meeting non-attendance. It implies that welfare recipients whose first meeting does not take place as scheduled

⁷To provide some evidence in this regard, we re-ran our regressions for individuals in relatively high and low caseload offices, showing larger effects on the total number of meetings in offices with high caseloads.

are more often subject to sanctions and that some meetings are not being held because jobseekers failed to attend without excuse.

Finally, we do not find a substantial shift in ALMP assignment. The estimated effect on the days spent in ALMP is negative, but not statistically significant.

First-job characteristics Next, we focus on the first job and we consider several characteristics: whether job duration exceeds six months as a measure of job stability and whether it is full-time or skilled employment. The latter is defined based on occupational codes that indicate the skill level required to perform a job.⁸

[Insert Table 4 about here]

First, we analyze whether the first meeting affects the probability to find any first job within our observation period. Results in the first column of table 4 show that the effect is relatively small and not statistically significant. The meeting taking place therefore does not substantially shift the probability to find any first job. Consequentially, the results for other first job characteristics we present in the following reflect not merely differences between those who do find any job and those who do not, but rather meeting effects on the probability to find a job with the just mentioned first job characteristics.

The result in table 4 suggest that the meeting increases the probability to have a job with a duration of six months by around 20 percentage points (column 2), which is a large effect. It further raises the probability to have a skilled job by around 6.5 percentage points (column 4). The probability to have full-time employment does not significantly change (column 3).

The results in this chapter show that meeting occurrence shifts the intensity and type of support welfare recipients receive and raises the stability of the first job welfare recipients find. The first meeting taking place particularly raises direct job search assistance through vacancy referrals, whereas monitoring intensity and ALMP participation do not to shift substantially. These results are in line with a number of studies that find positive effects of meeting attendance on vacancy referrals (van den Berg *et al.*, 2014; Schiprowski, 2020; Schiprowski *et al.*, 2024). This additional support, in turn, seems to help welfare recipients find more stable employment. These findings are consistent with potential effects

⁸Specifically, the 2010 German Classification of Occupations differentiates four skill levels. Skilled employment is defined as occupational codes two to four that are assigned to occupations that typically require at least a vocational degree.

of counseling and monitoring on job match quality (Crépon *et al.*, 2005; Rosholm, 2014) and may at least partially explain long-run effects on employment and earnings.

4.4 Heterogeneity Analyses

To better understand for whom and under what circumstances meeting occurrence increases long-run employment chances and earnings, we estimate heterogeneous treatment effects. We conduct binary sample splits along several dimensions and estimate effects on five-year average days employed and earnings for each of the two respective subgroups. In addition, we provide p -values that indicate whether subgroup differences in effects are statistically significant.

[Insert Table 5 and 6 about here]

Jobseeker characteristics We consider treatment effect heterogeneity in terms of jobseekers' gender, age, professional qualification, and predicted employment chances. For the latter, we take a median split of the predicted days employed over five years after inflow, which is obtained by regressing days employed on jobseeker characteristics based on random 2-fold sample splitting and cross-fitting. The results in panel (a) of tables 5 and 6 show that estimates tend to be larger for men, welfare recipients below the age of 30 years, and those with professional qualification. Subgroup differences are not statistically significant.

However, we find considerable heterogeneity by the predicted employment duration. For those with comparatively low predicted employment, the effects on days employed and earnings are around 14 days and 5,500 Euro, respectively, and do not differ significantly from zero. For those with comparatively high predicted employment, effects are statistically significant and lie at around 125 days and 14,000 Euro. Moreover, the difference in effects on days employed is statistically significant ($p = 0.029$), whereas the difference in effects on earnings does not quite reach conventional levels of statistical significance ($p = 0.138$).⁹

⁹The share of treated individuals does not substantially differ between those with high and low predicted employment probability. Thus, heterogeneous effects by the predicted employment probability are not a result of differential exposure to the treatment itself. Results are further qualitatively similar if we predict the employment probability based on a regression model for the control group only.

Meeting characteristics We consider the time from welfare entry until the first scheduled meeting (up to one month or later) and the meeting duration (up to 45 minutes or more). Results in panel (b) of tables 5 and 6 show that effects on days employed and earnings are significantly different from zero if the meeting is scheduled within the first month, but not if the meeting is scheduled later. Subgroup differences are however not statistically significant. Regarding meeting duration, we find that the effect on earnings of around 15,000 Euro is larger if the meeting duration exceeds 45 minutes compared to an effect of around 5,000 Euro if the meeting is shorter. This subgroup difference is statistically significant ($p = 0.092$). Effects on days employed point in a similar direction, but subgroup differences are not statistically significant.

Contextual characteristics We first consider the district-level unemployment rate to assess the relevance of the regional labor market context. We then consider office-level characteristics: The average caseload¹⁰ serves as a proxy to capture the office-average workload of caseworkers, the share of caseworkers with a fixed-term contract as a proxy for office-average caseworker tenure. In the German labor market, fixed-term contracts are almost exclusively given to new hires, so that the office share of fixed-term contracts is likely related to the share of caseworkers with a short tenure. For each variable, we take a median split.

Results are displayed in panel (c) of tables 5 and 6. Effects on days employed and earnings are positive and significant in regions with comparatively high unemployment, but not in regions with comparatively low unemployment. Yet, subgroup differences are not statistically significant.

We do, however, find significant heterogeneity by office-level characteristics. In below-average caseload offices, the treatment effects lie at 167 days employment and 15,000 Euro earnings—both statistically significant—whereas they are substantially lower for above-average offices at 23 days and 6,000 Euro, and not statistically significant. For days employed, subgroup differences are statistically significant ($p = 0.067$), but not for earnings. In offices with a low share of caseworkers on fixed-term contracts, treatment effects are substantially higher compared to offices with a high share. In the former, treatment effects are statistically significant, whereas they are not statistically significant in the latter.

¹⁰The caseload is measured as the total number of first inflows into welfare while non-employed relative to the number of caseworkers in the respective quarter.

Subgroup differences are also statistically significant ($p = 0.057$ for days employed and $p = 0.04$ for earnings).

The results from the heterogeneity analyses underline the relevance of jobseeker and contextual factors. Meeting effects are more pronounced for jobseekers with better employment chances. A possible explanation is that early intervention for this group is particularly relevant to avoid the negative consequences from long-term unemployment, e.g., human capital depreciation, discouragement, or stigmatization. By contrast, for those with worse employment chances the meeting seems not to matter much. A likely explanation for this phenomenon is that the most disadvantaged jobseekers among an already disadvantaged group of welfare recipients need other types of support – e.g., health interventions – before caseworker meetings may exert a positive influence on their labor market prospects.

Meeting effects are further more pronounced for meetings with a longer duration and for meetings in offices with comparatively low caseload and low caseworker share with fixed-term contracts. We acknowledge that workload and share of fixed-term contracts may correlate with other office-level characteristics, including office quality or office caseworker churn, which at least partly may explain such differences. We nevertheless think that the differences we find are interesting and indicative of the potential relevance of workload and caseworker tenure. These results suggest that the duration and quality of the interaction between caseworker and jobseekers matters.

Our results show positive coefficients for each subgroup considered, although often not statistically different from zero due to large standard errors. Nevertheless, in contrast to Manoli *et al.* (2018), our results do not indicate negative effects for any group.

5 Discussion

This study analyses the effects of the first caseworker meeting on non-employed welfare recipients' labor market trajectories over a time period of five years after welfare entry. We use administrative data that allow us to observe the date of the scheduled meeting and whether it took place or not. For identification, we rely on a weather IV strategy that to our knowledge has not been applied to study caseworker meeting effects. Specifically, we use weather on the day of the scheduled meeting as an instrument for the meeting being held. IV estimates show that the meeting has persistent positive effects on welfare

recipients' employment outcomes. Effects on days employed and earnings rise in the first year after welfare entry and stays positive throughout the five-year observation window.

Looking into potential mechanisms, we find that the first meeting taking place leads to one additional meeting and an increased probability to receive at least one vacancy referral within the first year after welfare entry. In contrast, missing the first meeting leads to a higher exposure to sanctions due to non-attendance, but not to substantial changes in exposure to other types of sanctions or active labor market policy measures. Furthermore, our results provide evidence that first-job stability increases in response to the first meeting taking place. In sum, positive long-run effects are potentially the result of the additional support treated welfare recipients receive and an increase in job stability.

Subsequent analyses document considerable meeting effect heterogeneity. Meeting effects on days employed are driven by offices with low caseload and a low share of caseworkers with fixed-term contracts. Results for earnings point in a similar direction. We think of office caseload and caseworker fixed-term contract share as proxies for office-average caseworker workload and caseworker experience. Further, the meeting effect on earnings (and similarly on days employed) is about three times as large if the meeting duration exceeds 45 minutes. These pronounced differences in effect sizes point to a potentially large role of the caseworker-jobseeker contact duration and caseworker quality.

Furthermore, we find that the first meeting has considerable long-run effects only for welfare recipients with better employment chances, defined as an above-median predicted employment duration. Possibly, early intervention for this group is particularly relevant to avoid the negative consequences of long-term unemployment, e.g., human capital depreciation, discouragement, or stigmatization.

Our results confirm the importance of caseworker meetings for unemployed jobseekers (e.g., van den Berg *et al.*, 2014; Schiprowski, 2020). In contrast to previous evidence for UI recipients, we provide evidence for unemployed welfare recipients, a group with comparatively weaker employment prospects. On average, caseworker meetings also improve outcomes for this group. However, these effects are concentrated among welfare recipients with relatively good employment prospects; those with poorer prospects benefit little from the meeting. This pattern may reflect that the latter require more specialized support, for example from caseworkers trained to handle complex cases. Moreover, the effectiveness of meetings appears to be context-dependent. Consistent with research highlighting the role

of caseworker characteristics (e.g., Behncke *et al.*, 2010; Cederlöf *et al.*, 2025), our results suggest that contact duration with caseworkers and their experience may be important intermediate factors.

By focusing on the first meeting between welfare recipients and their caseworker, our study examines a clearly defined and policy-relevant intervention. The results show that, for the average welfare recipient, early caseworker contact is important for long-term labor market integration. Policymakers should therefore ensure that jobseekers meet their caseworker early in the spell to discuss strategies to overcome benefit receipt. In light of our heterogeneous effects, providing caseworkers with sufficient time to support jobseekers appears particularly important. At the same time, caseworker meetings alone may not be sufficient for welfare recipients with poor employment prospects, who may require more intensive and specialized support.

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Tables and Figures

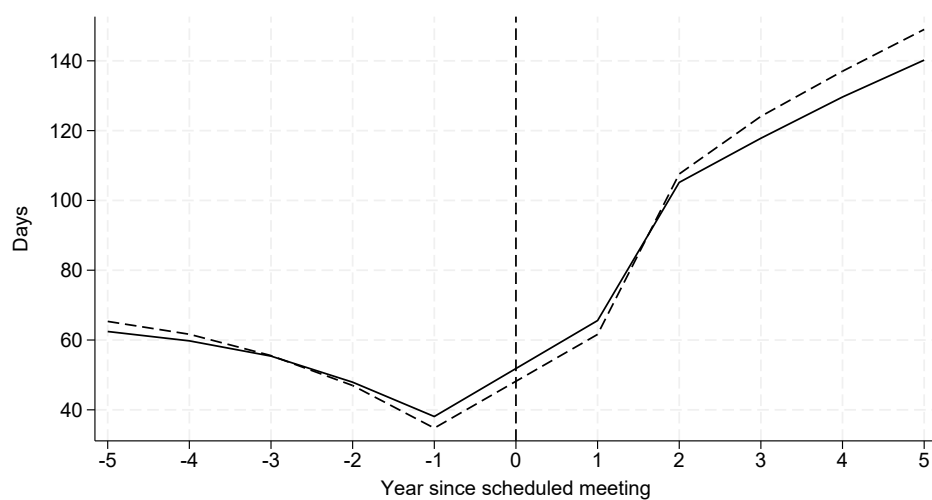
Table 1: Sample descriptives

	Sample	Meeting taking place	
		No	Yes
Meeting taking place	0.587		
Socio-demographics			
Female	0.434	0.429	0.438
Age	33.340	32.523	33.914
Foreign nationality	0.255	0.245	0.262
Vocational degree	0.611	0.585	0.629
Schooling degree	0.953	0.951	0.955
Partnership	0.292	0.275	0.304
Any children	0.200	0.195	0.204
Daily earnings in last job	28.810	28.818	28.805
Days employed last 7 years	391.137	384.868	395.541
Days unemployed last 7 years	131.619	129.306	133.243
Meeting characteristics			
Days until first scheduled meeting	56.242	56.104	56.340
Sanction notification	0.734	0.704	0.756
Monday	0.214	0.213	0.215
Tuesday	0.228	0.224	0.231
Wednesday	0.168	0.168	0.167
Thursday	0.237	0.233	0.239
Friday	0.154	0.163	0.147
Before noon	0.812	0.828	0.801
Duration < 45 min	0.299	0.311	0.290
Outcomes			
Days employed	570.667	558.397	579.289
Earnings	41,835.263	40,982.873	42,434.177
Observations	77,233	31,872	45,361

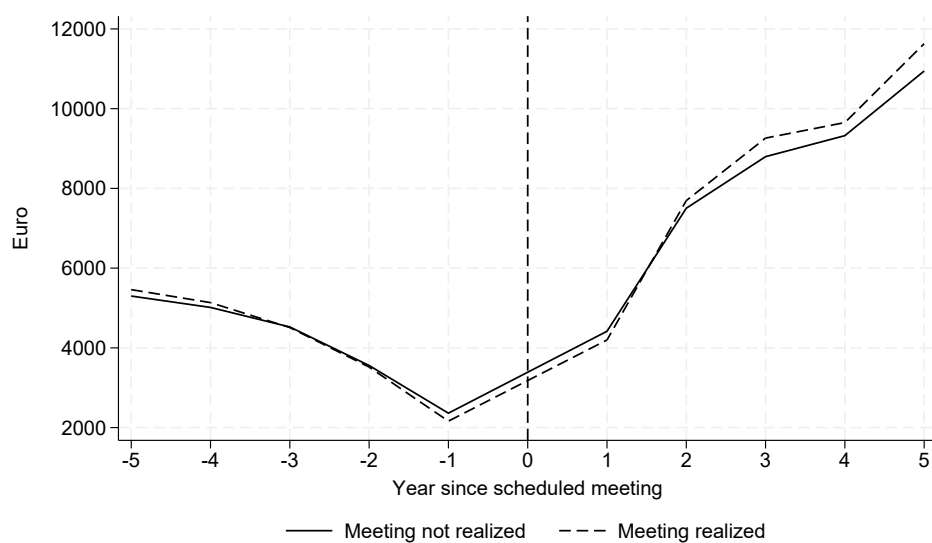
Note: This tables shows the mean of selected socio-demographic variables of sample members, characteristics of the first scheduled meeting, and the main outcome variables. Socio-demographics are measured at welfare entry, meeting characteristics on the meeting date, and outcomes over five years from welfare entry. Column (1) displays means for all sample members, columns (2) and (3) display means for the treatment and control group.

Figure 1: Annual means of main outcome variables

(a) Days employed



(b) Earnings (Euro)



Note: The figures display the main outcome variables annually five years before and after welfare entry. Panel (a) displays the sample average number of days in contributory employment and panel (b) the sample average earnings in Euro.

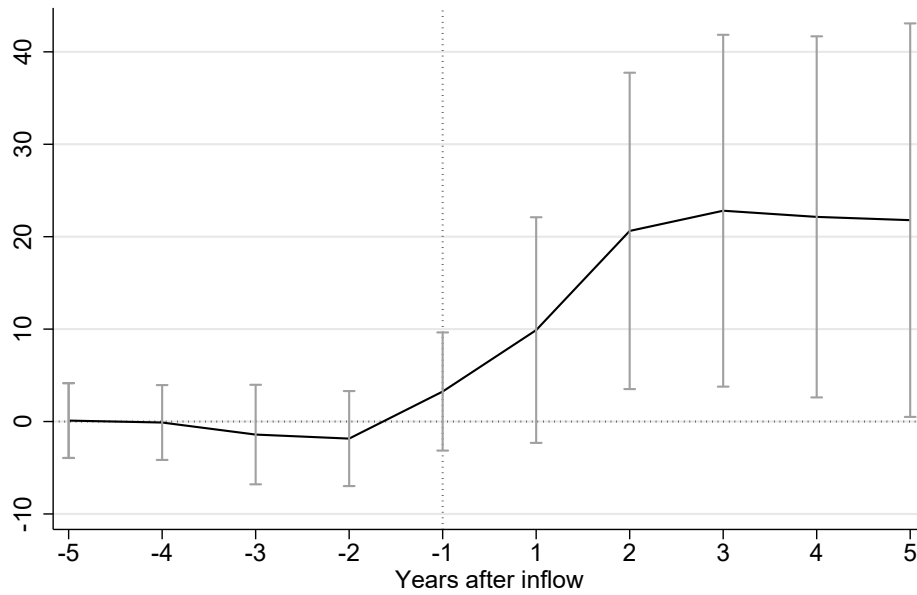
Table 2: Main IV regression results

Dependent variable	
(a) First stage	
	Meeting taking place
Precipitation (mm)	-0.00129*** (0.000494)
Sunshine (hours)	-0.00385*** (0.000528)
Average daily temperature (° C)	-0.0107*** (0.000388)
R^2	0.103
F -Statistic	360.6
N	77,233
(b) Placebo effects	
	Days employed Earnings
Meeting taking place	3.059 645.9 (27.48) (2247.1)
(c) Main effects	
	Days employed Earnings
Meeting taking place	94.66** 10,369.3*** (38.30) (3,152.1)
N	77,233 77,233

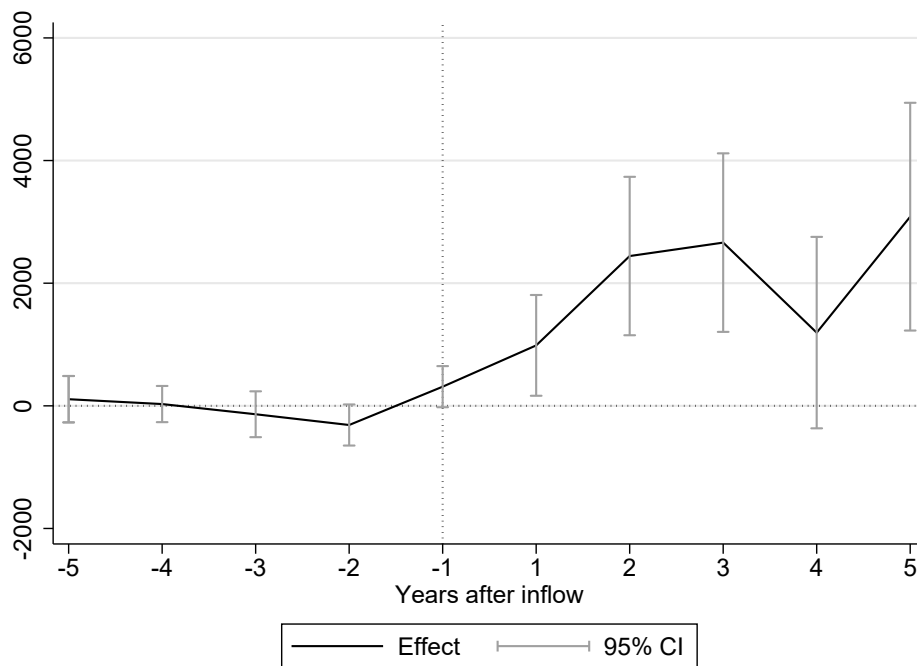
Note: This table shows the results from the 2SLS regression. Panel (a) shows estimated effects of the instruments on the likelihood of realizing the first meeting (first stage). Panel (b) shows results from a placebo 2SLS regression of days employed and earnings in the five years prior to welfare entry on the instrumented meeting taking place. Panel (c) shows the main results from a 2SLS regression of days employed and earnings in the five years after welfare entry on the instrumented meeting taking place. Placebo regressions only condition on district, inflow quarter, meeting quarter, and months to meeting fixed effects. Main regressions condition on the full set of covariates. Statistical significance at the 10/5/1% level is indicated by */**/***. Standard errors are clustered at the district level.

Figure 2: Dynamic IV regression results

(a) Days employed



(b) Earnings



Note: This graph depicts 2SLS estimates of dynamic effects of the first meeting on days employed and earnings in the five years prior and after welfare entry. All estimates condition on the full set of covariates. Standard errors are clustered at the district level.

Table 3: Effects on policy outcomes

	No. of meetings	Any vacancy referrals	Days in ALMPs	Days in mild sanctions	Days in strong sanctions
Meeting	1.937*** (0.114)	0.0774*** (0.0270)	-4.840 (3.845)	-7.284*** (1.573)	-0.787 (1.435)

Note: This tables shows 2SLS estimates of the effects of the first meeting on caseworker policy outcomes. All outcomes are measured over a span of one year after inflow. Statistical significance at the 10/5/1% level is indicated by */**/***. Standard errors are shown in parenthesis and are clustered at the district level. Mild sanctions for missing an appointment imply a benefit cut of 10 percent of the basic cash benefit for three months. Strong sanction for other infringements like refusing to accept a suitable job or program offer imply for a first infringement a 30 percent cut. They are higher if within one year the welfare recipient again does not comply to the related rules.

Table 4: Effects on employment quality of the first job

	Any first job	Job duration > 6 months	Full-time employment	Skilled employment
Meeting	0.0466 (0.0300)	0.201*** (0.0307)	0.0443 (0.0292)	0.0648** (0.0321)

Note: This tables shows 2SLS estimates of the effects of the first meeting on the quality of the first job. Statistical significance at the 10/5/1% level is indicated by */**/***. Standard errors are shown in parenthesis and are clustered at the district level.

Table 5: Effect heterogeneity – Days employed

	Sub-group 1	Sub-group 2	<i>p</i> -value 1v2
(a) Jobseeker characteristics			
Gender	male	female	
	116.6**	65.8	0.492
	(57.1)	(46.9)	
Age	< 30	≥ 30	
	96.8**	51.4	0.509
	(45.2)	(51.8)	
Training	no prof. qual.	with prof. qual.	
	60.7	125.1**	0.361
	(39.7)	(58.3)	
Pred. employment	low	high	
	13.4	165.0***	0.029
	(42.0)	(55.3)	
(b) Meeting characteristics			
Time until meeting	≤ 1 month	> 1 month	
	108.7**	62.7	0.592
	(47.1)	(71.7)	
Meeting duration	≤ 45 mins	> 45 mins	
	44.1	136.6***	0.202
	(53.8)	(48.4)	
(c) Regional and office characteristics			
Regional unemployment	low	high	
	64.0	122.7**	0.420
	(51.8)	(51.1)	
Office average caseload	low	high	
	166.6***	23.2	0.067
	(57.5)	(53.0)	
Office share of fixed-term caseworkers	low	high	
	171.6***	13.2	0.057
	(50.3)	(66.4)	

Note: This tables shows estimated effects of the first meeting actually taking place on days in contributory employment in the 5 years after inflow using 2SLS. All regressions condition on the full set of covariates. Statistical significance at the 10/5/1% level is indicated by */**/***. Standard errors are clustered at the district level.

Table 6: Effect heterogeneity – Earnings

	Sub-group 1	Sub-group 2	<i>p</i> -value 1v2
(a) Jobseeker characteristics			
Gender	male	female	
	11,740**	8,262**	0.571
	(4,754)	(3,882)	
Age	< 30	≥ 30	
	11,341**	4,324	0.227
	(3,839)	(4,356)	
Training	no prof. qual.	with prof. qual.	
	7,887***	12,288**	0.472
	(2,921)	(5,378)	
Pred. employment	low	high	
	5,549*	13,999***	0.138
	(2,835)	(4,948)	
(b) Meeting characteristics			
Time until meeting	≤ 1 month	> 1 month	
	14,051***	4,315	0.157
	(3,885)	(5,685)	
Meeting duration	≤ 45 mins	> 45 mins	
	4,978	15,310***	0.092
	(4,379)	(4,305)	
(c) Regional and office characteristics			
Regional unemployment	low	high	
	7,260	12,682***	0.370
	(4,419)	(4,122)	
Office average caseload	low	high	
	15,077***	5,735	0.149
	(4,708)	(4,448)	
Office share of fixed-term caseworkers	low	high	
	16,704***	3,366	0.040
	(4,435)	(4,734)	

Note: This tables shows estimated effects of the first meeting actually taking place on cumulated gross labor earnings in the 5 years after inflow using 2SLS. All regressions condition on the full set of covariates. Statistical significance at the 10/5/1% level is indicated by */**/***. Standard errors are clustered at the district level.

Online Appendix

Table A1: Descriptives on selectivity regarding any meeting during the first 6 months

	Main sample	No meeting within 6 months
Socio-demographics		
Female	0.434	0.506
Age	33.340	33.276
Registered as jobseeker	0.963	0.847
Foreign nationality	0.255	0.313
Vocational degree	0.611	0.613
Schooling degree	0.953	0.930
Partnership	0.292	0.382
Any children	0.200	0.285
Daily earnings in last job	28.810	24.211
Days employed last 7 years	391.137	319.915
Days unemployed last 7 years	131.619	108.169
Meeting characteristics		
Days until first scheduled meeting	56.242	502.456
Sanction notification	0.734	0.755
Monday	0.214	0.214
Tuesday	0.228	0.221
Wednesday	0.168	0.173
Thursday	0.237	0.243
Friday	0.154	0.150
Before noon	0.812	0.787
Duration < 45 min	0.299	0.265
Outcomes		
Days employed	570.667	572.322
Earnings	41835.263	39434.544
Observations	77,233	13,917

Note: This table shows the mean of selected variables for the main sample in column (1) and observations excluded because we do not observe a scheduled meeting between inflow to welfare to six months later in column (2).

Table A2: Descriptives of instrumental variables

	Mean	S.D.	Min.	Max.
Average precipitation (mm)	1.691	3.520	0.000	73.900
Average sunshine (hours)	3.611	3.950	0.000	16.000
Average temperature (degree Celsius)	7.528	7.710	-11.700	29.100

Note: This tables shows mean, standard deviation, minimum, and maximum of the instrumental variables used to instrument whether a meeting takes place. The data are provided by the German Weather Service for each district with daily precision and are calculated as daily averages. The table displays statistics calculated based on the main sample of around 77,000 welfare recipients.

Table A3: Descriptives of categorical instrumental variables

	Mean
Average precipitation (mm)	
1st tercile	0.058
2nd tercile	0.716
3rd tercile	0.226
Average sunshine (hours)	
1st tercile	0.155
2nd tercile	0.616
3rd tercile	0.229
Average temperature (degree Celsius)	
1st tercile	0.228
2nd tercile	0.541
3rd tercile	0.231

Note: This tables shows the mean of the categorical variables used to to instrument whether a meeting takes place in a sensitivity analysis. The data are provided by the German Weather Service for each district with daily precision and are calculated as daily averages. To generate categorical variables from the original measurements, we calculate for each instrument the 33rd percentile and the 67th percentile within meeting quarter, inflow quarter, district, and time until the first meeting. We generate binary variables indicating the first, second, or third tercile of each instrument. The table displays the shares of welfare recipients in each tercile for the main sample of around 77,000 welfare recipients.

Table A4: Sensitivity regarding instrument specification

	Linear Instruments	Categorical Instruments	Interacted categorical ins.
(a) Days employed			
Meeting	94.66** (38.30)	131.0** (54.13)	121.5** (53.72)
(b) Earnings			
Meeting	10,369*** (3,152)	11,114** (4,640)	10,412** (4,613)

Note: This tables shows 2SLS estimates of the effects of the first meeting on cumulated labor market outcomes. The columns compare results using different specifications for the instruments. Column one shows baseline results using the linear instruments. Column two uses categorical instruments (medium and high rainfall, sunshine and temperature using the 33 and 67 percentile) within cells created by the district, inflow quarter, meeting quarter and the number of months from inflow to meeting. Column three interacts these categorical instruments. Standard errors are shown in parenthesis and are clustered at the district level.

Table A5: Descriptives of policy and first-job outcomes

	Sample	Meeting taking place	
		No	Yes
Policy outcomes within 1 year after inflow			
Number of meetings	2.526	1.570	3.197
Any vacancy referral	0.583	0.568	0.593
Days in ALMP	27.653	27.175	27.989
Days in mild sanctions	5.841	8.982	3.635
Days in strong sanctions	4.548	5.527	3.861
First job characteristics			
Any first job	0.673	0.673	0.673
Job duration > 6 months	0.227	0.211	0.238
Full-time employment	0.458	0.460	0.457
Skilled employment	0.456	0.453	0.458
Observations	77,233	31,872	45,361

Note: This tables shows the mean of policy outcome variables measured within 1 year after inflow into welfare and non-employment as well as first job characteristic variables. Column (1) displays means for all sample members, columns (2) and (3) display means for the treatment and control group.