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Impact of Welfare Sanctions on the Quality of Subsequent Employment — Wages, Incomes, and Employment Stability [*]

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Abstract

This study provides the first comprehensive analysis of sanction effects on post-welfare employment quality in Europe using the outcome variables daily wage, yearly income, and covering job stability with the durations of three employment states: employed, unemployed, and supplementary benefit receipt. Applying PSM, we estimate the treatment effects (ATT) of UB-II-sanctions in Germany based on a rich administrative data set. Novelties of this study are the analysis of post-welfare sanction effects also for *employed* welfare recipients (*"Aufstocker"*) and for *indirectly* affected employable household members.

Our analyses reveal highly significant and strongly negative effects of benefit sanctions on the quality of post-welfare employment in the short and long run. In terms of income and employment stability we find a catch-up process which is by far not strong enough to compensate the loss within two years. For *employed* welfare recipients the negative effects on income and job stability even exceed the effects for unemployed. Particularly striking are the remarkably strong and highly significant negative effects on *indirectly* affected unemployed household members.

JEL classification: I38, J24, J48, J64, J65, J68

Keywords: benefit sanctions, sanction effects, post-unemployment employment quality, employment stability, long-term effects, catch-up process, unemployment benefit policy, welfare policy

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1 Introduction

Since the vast restructurings of the unemployment insurance and welfare systems in many European countries over the last two decades, an increasing number of people are affected by the extensive monitoring and sanction systems implemented for employable welfare recipients. Under the paradigm shift from welfare to workfare, commonly referred to as 'activation policy', the work requirements, especially for employable welfare recipients, were strengthened, and compliance with them is kept under strong monitoring.

In Germany, under the new unemployment benefits II (UB II) system implemented in 2005 for needy job-seekers and their families, all employable family members are, in general, legally obliged to accept any job offers regardless of their occupational skills. In conjunction with the comprehensive monitoring and strict sanction regime, this can apply strong pressure to accept job offers that are detrimental to the individual's occupational development, and hence, can also be detrimental from a public welfare point of view.

The few existing studies on ex-post effects of benefit sanctions which look beyond employment entrance and (also) regard the *quality* of the ensuing employment find clearly adverse effects. This very young field of research is by far not sufficiently investigated, especially when it comes to welfare sanctions.

This article provides the first comprehensive study about the ex-post effects of welfare sanctions in Germany, that is the UB-II-sanctions, on the quality of subsequent employment, including aspects of employment stability. Applying propensity score matching (PSM), we estimate the average treatment effects on the treated (ATT) of sanctions during a former welfare spell on several aspects of subsequent employment's quality: initial daily wage, cumulative yearly incomes over two years, and cumulative yearly durations of three mutually exclusive employment states over two years. The latter outcome variables, in particular, mainly intended to reflect the stability of subsequent employment, reveal interesting and surprising insights which may severely affect the occupational development of the previously sanctioned, even in the longer run.

In contrast to previous studies which exclusively refer to *unemployed* sanctioned, we consider *employed* welfare recipients as well, in Germany referred to as the so-called *"Aufstocker"* which means "top-

up benefit recipients". Furthermore, this is the first study of sanction effects on post-unemployment
— respectively post-welfare — employment quality that analyses the sanction effects not only on the
sanctioned individuals but also on their employable household members. Concretely, we distinguish
between *direct* and *indirect sanctions*, whereby the latter refers to people who are indirectly affected
by sanctions against one of their related household members.

Accordingly, we address two main research questions: firstly, to what extent do welfare sanctions
which are *directly* imposed against the concerned individuals affect the quality of the subsequent
employment? And secondly, do sanctions imposed against a related household member affect the
quality of the subsequent employment of the *indirectly* concerned individuals? And, if yes, to what
extent? These questions shall be answered for initially *unemployed* as well as *employed* welfare
recipients.

The vast majority of the few previous European studies about benefit sanctions' impact on ensuing
job quality look at *unemployment insurance (UI) sanctions*. Two early comprehensive studies are
provided by Arni et al. (2013) for Switzerland, and van den Berg and Vikström (2014) for Sweden.
Arni et al. (2013) present one of the first empirical studies on benefit sanctions that go beyond
analyzing unemployment exits and also explores the impact on post-unemployment job quality. In
order to explore ex-ante effects, they separately analyze the impact of explicit warnings previous to the
sanction, which in some Swiss cantons are recorded by the employment agencies. They find subsequent
earnings reduced by warnings and sanctions. Employment stability, covered by subsequent employment
duration, is not affected by warnings but negatively affected by imposed sanctions. The net effect on
income over two subsequent years is also negatively affected by sanctions.

Another early and comprehensive study on post-UI-sanction employment quality by van den Berg
and Vikström (2014) analyzes the effect of the Swedish UI monitoring and sanction scheme on job
offer decisions and employment quality. Concretely, they distinguish between effects on wages and on
weekly working hours, specifically, full-time versus part-time employment. They find ex-post effects of
sanctions lowering the hourly wage and the weekly working hours, even in the long run. Sanctioned
people accept job offers with lower occupational level, which are "to some extent irreversible" and thus
lead to "a permanent human capital loss". Concluding, they state that monitoring the rejections of job
offers is less effective than monitoring the search effort.

A German study on job match quality by Caliendo et al. (2013) provides corresponding findings although not explicitly analyzing the effects of sanctions but the effects of the 'generosity' of the UI benefit system. They find that, despite of the disincentives of a generous UI benefit system on unemployment duration, the lower time pressure to find employment leads to better job match quality. In contrast, people who are under pressure to quickly find employment because their UI benefits are exhausted take up employment with lower wages and they are more likely to exit those employments.

Another study of the German UI system's impact on job match quality provided by van den Berg et al. (2016) finds that job offers by the employment agencies, accompanied with the threat of being sanctioned in the case of a refusal, as well as imposed sanctions, have adverse effects on the job match quality. Concretely, they find official job offers and sanctions to increase the transition rate into work at the expense of lower wages and less stable subsequent employment spells.

Besides the very early analyses of Schneider (2008, 2010) which provide the first comprehensive studies of the effects of *welfare sanctions* in Germany, regarding the effects on reservation wages, only van den Berg et al. (2015) have explicitly analyzed the effect of German welfare sanctions on the quality of subsequent employment. Schneider (2008, 2010) found no significant effects of sanctions on reservation wages. This might be due to the fact that she used survey data which were conducted shortly after the implementation of the new German unemployment benefit system in 2005, and that the implementation during the first year was accompanied by many difficulties involving the efficiency of the monitoring and sanction system. Van den Berg et al. (2015), with their study on young welfare recipients in Germany, found adverse effects of welfare sanctions on the job match quality which they captured by estimating the initial daily wages of the subsequent employment.

Despite the interesting and important findings of previous studies, predominantly on UI sanctions, a comprehensive study about the impact of *welfare sanctions* on subsequent employment's quality is still pending. With this study about the ex-post effects of welfare sanctions in Germany on the quality of subsequent employment, comprising different aspects of quality, including employment stability, we contribute to filling this gap.

2 Sample, variables, and methods

In this section, we give a brief overview of the data sample we use, the specification of the treatment, outcome and independent variables, and of our methodological approach.

2.1 Sample

We use a combined data set based on the 'Sample of Integrated Labour Market Biographies' (SIAB), a 2% sample derived from administrative data covering the years 2004 to 2010, merged with information on individuals' welfare sanctions (namely UB-II-sanctions) and on related household members. The latter are obtained from process-produced data of the German Federal Employment Agency (FEA). The combined data set is assembled and prepared by the Research Data Centre (FDZ) of the Institute for Employment Research (IAB) at the German FEA, and was provided to us exclusively for a comprehensive research project. This project consists of two parts: the first looks at the impact of welfare sanctions on probabilities of entering or leaving employment and welfare receipt; the other looks at the effects of welfare sanctions on the characteristics of subsequent employment, which is the focus of this article.

We use two yearly inflow samples of employable people into welfare receipt from 2007 and 2008. As there are no substantial differences, we present the results of the more current sample from 2008 and use the results of 2007 as a kind of robustness check. We analyze men and women separately, as well as the inflow cohorts of unemployed and employed welfare recipients.

2.2 Variables

We differentiate two kinds of binary *treatment variables*: direct and indirect sanctions. Direct sanctions refer to the condition where people are affected by sanctions imposed upon them directly. By 'indirect sanctions', we refer to the situation where people are only indirectly affected by welfare sanctions imposed upon one of their related household members.

In order to cover the quality of employment subsequent to the initial welfare spell in which the sanction of the treated was imposed, we generate the following kinds of *outcome variables*: daily wages and yearly incomes on the one hand, and cumulative durations of distinct employment states on the

other hand. Daily wages refer to the initial wage of the first employment the individual takes up after the initial welfare spell. If people should take up multiple jobs, the main employment is reported. We generate the cumulative variables of the yearly incomes by summarizing the earned income during the first year and the second year (each separately) after the initial welfare spell. The cumulative durations of employment states during the first and second year after the initial welfare spell can be divided into three mutually exclusive employment states: employed, unemployed, and 'supplementary' which means being employed while receiving supplementary welfare benefits. Hence, by 'employed', we refer to people who are merely employed — that is not receiving top-up welfare payments, and by 'unemployed', we refer to employable people without earned income receiving either unemployment insurance (UI) or welfare benefits, in Germany, unemployment benefits I (UB I) and unemployment benefits II (UB II), respectively.

As it is beneficial for our methodological approach to use only binary or metric variables as explanatory variables, we convert nominally and ordinally scaled *independent variables* into dummy variables. We classify and specify our independent variables as follows:

(a) Individual characteristics (binary):

Age groups: 15–17, 18–24, 25–34 (reference category), 35–44, 45–56.

Child under 3 years in the household: 0 = no (reference category), 1 = yes.

Partner living in the household: 0 = no (reference category), 1 = yes.

Nationality: 1 = German, 2 = EU-foreigner (reference category), 3 = non-EU-foreigner.

School education: 0 = no graduation (reference category), 1 = low (lower/general secondary school), 2 = middle (intermediate secondary school), 3 = high (high school).

Vocational degree: 0 = no (reference category), 1 = yes.

Federal state: registered in one of the 16 federal states in Germany (reference category: Bavaria).

(b) Inflow quarter and previous employment states (binary):

Quarterly inflow cohort (into welfare receipt): 01/2008 (reference category), 02/2008, 03/2008, 04/2008.

Duration of previous employment: up to 0, 3, 6, 9, 12 months (reference category),

duration of previous unemploymen: up to 0, 3, 6, 9, 12 months (reference category),

duration of previous 'supplementary' states: up to 0, 3, 6, 9, 12 months (reference category),

(all in months of the year previous to welfare receipt).

(c) Previous employment states and characteristics of previous employment (metric):

Duration of previous employment: during the year previous to welfare receipt (in days).

Duration of previous unemployment: during the year previous to welfare receipt (in days).

Duration of previous 'supplementary' states : during the year previous to welfare receipt (in days).

Daily wage of previous employment: (in Euros).

Cumulated income during the year previous to welfare receipt: (in Euros).

(d) Labor market indicators (metric):

Sanction rate: (according to: month, federal state),

unemployment rate: (according to: month, federal state),

vacancy rate: (according to: month, federal state),

rate of employable UB-II-recipients: in relation to the whole workforce in Germany (according to: month, federal state),

(all external variables published by the FEA).

2.3   Methods

As the assignment to the treatment is not random, we have to account for the selectivity of the treatment process. In order to estimate the average treatment effect on the treated (ATT) of welfare sanctions, we employ propensity score matching (PSM). Using the matching approach based on

propensity score is especially favorable for analyzing an extremely heterogeneous population like employable welfare recipients. To ensure that the use of PSM is appropriate, it should be based on a rich data set, such as the one we had access to for this analyses. In contrast to timing of events (ToE) approach which is more popular in this research field, and which can result in significantly biased effect estimations if restrictions imposed on the heterogeneity distribution are not justified, such assumptions are not required by the matching approach.

Despite the dynamic setting of the treatment, we do not need to apply dynamic matching approaches, like stratifying the spells of welfare duration, in order to deal with the missing start date problem in case of outcomes based on the spell duration. Such stratification, which can cause a significant bias, is not necessary for the analysis of post-spell outcomes like those we present in this article.

The results presented here are based on kernel matching (KM), while we use nearest neighbor matching (NNM) as one of several kinds of robustness checks. Concretely, we carry out NNM with $k = 5$ nearest neighbors and a caliper of 0.01, and kernel matching using an *Epanechnikov kernel* (EKM) with a bandwidth of 0.06 in order to optimize the matching quality which we checked beforehand for several variations of these kinds of matching procedures. For further details on our methodological approach, as well as on the checks of matching quality and robustness we conducted, we refer to our comprehensive article (see Hillmann and Hohenleitner (2019)) which focuses on the effects of welfare sanctions on spell-duration based outcomes, such as the probabilities of entering or leaving employment and welfare receipt.

3 Results

In this section, we present the estimations of the average treatment effects on the treated (ATT) of our PSM analyses based on kernel matching, for the inflow cohort 2008. The outcome variables, regarding wage, income, and durations of employment states shall indicate different aspects of the quality of employment following welfare sanctions.

3.1 Wage and cumulative income

The effect of welfare sanctions on the daily wage of the first employment subsequent to the initial welfare spell can be interpreted as an effect on the reservation wage of the sanctioned; in case of multiple jobs, the main employment is reported. The yearly income is cumulated over the first and the second year (each separately) after the initial spell and, if necessary, summarized over multiple jobs.

3.1.1 Direct sanctions

Table 1 shows the treatment effect of welfare sanctions imposed directly on the affected individuals upon the subsequent daily wage and yearly income.

All estimated treatment effects are highly negatively significant. The decrease of the absolute values of the daily wage induced by former welfare sanctions for men is higher than for women, and it is higher for initially unemployed than for initially employed (former) welfare recipients. These reductions of daily wages go along with the results of previous studies which, in the vast majority, found sanctions to clearly lower ensuing wages, which is generally interpreted as revealing reduced reservation wages. The fact that women's loss of the post-unemployment daily wage is lower than men's is presumably due to women's initially lower reservation wages.

The assessment that people with initially lower (reservation) wages have a lower scope to further reduce their (reservation) wages, and that this results in smaller negative effects of welfare sanctions on the reservation wages is supported by van den Berg et al. (2015). In their study of young welfare recipients in Germany, they find second sanctions caused little to no reductions in the reservation wages (compared to the first) and account for this by the already low reservation wages caused by the first sanction.

Table 1: Effects of direct sanctions on wage and income — 2008

Outcome	Unemployed		Employed	
variables	Men	Women	Men	Women
Daily wage	-7.16***	-6.88***	-5.88***	-4.99***
Yearly income (y1)	-2064.57***	-1587.89***	-3792.73***	-3149.49***
Yearly income (y2)	-949.39***	-874.19***	-2292.53***	-1696.11***

ATT of direct sanctions on *daily wage* of the first main employment after the initial spell of UB-II-receipt and on the cumulated *yearly income* of the first (y1) and second (y2) year after the initial UB-II-spell of former *unemployed* and *employed* UB-II-recipients (in Euros); significance levels: α=0.1*, α=0.05**, α=0.01***.

An initial loss of the daily wage may be less problematic if the formerly sanctioned were able to close this gap after a while. Therefore it is important to not merely rely on initial wage losses, but to focus on the development of income in the medium and long run. We here regard the effects on cumulated yearly incomes of the first year after the initial welfare spell as reflecting the development in the short and medium run, while the impact on the second year's income we regard as covering developments already in the longer-term.

Interpreting and comparing the results for wages and income, it has to be taken into account that changes in income are not necessarily due to changes in wages; they can also be caused by changes in the weekly working hours. Hence, sanction effects on income need not necessarily correspond with the effects on the daily wage.

Concerning the impact of welfare sanctions on yearly incomes subsequent to the initial welfare spell, we find, again, that men are more strongly affected than women, in terms of absolute values. However, in contrast to the daily wages, initially employed welfare recipients face a distinctively higher loss of subsequent yearly incomes than unemployed. This may also be due to the on-average higher earning potentials of the already employed compared to the unemployed, which increases the scope for possible decreases.

Furthermore, we see that the loss of income for the first year is noticeably reduced in the second year. Nevertheless, the losses are still severe, regarding the on-average already considerably smaller income prospectives of (former) welfare recipients compared to the working population as a whole. But what seems even more striking is that employed men, in particular, who face the largest decreases in income due to former sanctions, are the slowest to make up for this loss in the second year.

3.1.2 Indirect sanctions

Table 2 shows the treatment effect of welfare sanctions imposed against a related household member of the (indirectly) affected employable individuals, on the subsequent daily wage and yearly income.

We see a strong, but only slightly significant reduction in the average daily wage of unemployed men. All other estimated effects for *unemployed* people are strong and highly significant, where men face higher absolute losses of income than women, though the reduction in daily wages is slightly larger and much more strongly significant for women. Similar to the results for direct sanctioned, indirect

sanctioned only partly make up for the reduction of wages and earned incomes in the second year. So still severe income losses remain during the second year after the initial welfare spell.

Initial *employed* welfare recipients, in contrast, do not show any significant response to indirect sanctions, regarding their wages and incomes.

It is striking that, for unemployed people, the negative effects of indirect sanctions on their wages and incomes are even stronger than the effects of direct sanctions in absolute values. But these groups of unemployed are not identical, and thus not directly comparable, because the indirect sanctioned are restricted to households with more than one person ('multi-person households'), while direct sanctioned also include single households.

As the study of van den Berg et al. (2015) finds that sanction effects are lower for young welfare recipients in multi-person households than in single-person households, the conclusion seems evident that the discrepancy between the effects of direct and indirect sanctions might be driven by a possibly substantially higher responsiveness of parents in response to their sanctioned children.

Another reason for the seemingly higher responsiveness of the indirect sanctioned might be that people living with their partners may have a higher combined earned income at their disposal. Specifically, if the employed partner of an unemployed person is sanctioned, the willingness and ability to make concessions on the expected income of the unemployed might be higher than in case of singles.

3.2 Cumulated durations of employment states

The cumulative durations of employment states are intended to reflect, in a manner, employment stability, which is regarded as one aspect of employment quality. However, these variables do not necessarily reflect the stability of continuous spells, which might be more important for the affected

Table 2: Effects of indirect sanctions on wage and income — 2008

Outcome	Unemployed		Employed	
variables	Men	Women	Men	Women
Daily wage	-9.49*	-10.36***	-0.45	+0.24
Yearly income (y1)	-3953.78***	-2740.21***	-1217.61	-677.53
Yearly income (y2)	-2085.87***	-1648.49***	-382.25	-1094.40

ATT of indirect sanctions on *daily wage* of the first main employment after the initial spell of UB-II-receipt and on the cumulated *yearly income* of the first (y1) and second (y2) year after the initial UB-II-spell of former *unemployed* and *employed* UB-II-recipients (in Euros); significance levels: α=0.1*, α=0.05**, α=0.01***.

individuals; instead, these outcome variables cover a more superordinate notion of stability that focuses on the cumulated time periods an individual spends in the distinct employment states subsequent to welfare sanctions. This might be of greater relevance from a public welfare point of view.

3.2.1 Direct sanctions

Table 3 shows the treatment effect of welfare sanctions which are directly imposed against the affected individuals, on the cumulated durations of the subsequent employment states: employment, unemployment and 'supplementary', that is employment with top-up welfare benefits.

The initially *unemployed* welfare recipients show a clear and unambiguous pattern: the total duration of employment is strongly and significantly negatively affected, and the cumulative duration of unemployment is strongly and significantly positively affected by former welfare sanctions; this holds for at least two years after the initial welfare spell. The extent of the effects are roughly in the range of 10 to 20 days within the first two years after the initial spell. Hence, welfare sanctions against unemployed clearly affect their future employment states in the direction of shorter (cumulative) periods of employment and longer periods of unemployment.

The effect of former sanctions on the status of being employed with supplementary welfare benefits, however, is not statistically significant to any appreciable extent. That is, former welfare sanctions provoke a shift from employment predominantly towards unemployment, and to a negligible extent (if at all), towards employment with supplementary welfare receipt. The reduction of days in employment in favor of days in unemployment decreases from the first to the second year after the initial welfare spell, but still remains more than 50% of the shift in the first year.

Although, in the first year women are only slightly worse off than men, they make up for the loss of employment duration in the second year to a much lesser extent. While men's reduction of days in employment in the second year is around 55% of the first year, women's decrease of days in employment in the second year are still more than 70% of the first year. Regarding days in unemployment, of the increase of 18.27 days for women in the first year, more than 80% remains during the second year.

Compared to the unemployed, initially *employed* welfare recipients show a quite similar pattern in the first year, but a more different pattern in the second year after the initial welfare spell in which the sanction took place. In the first year, the highly significant loss of 29.51 employment days for

Table 3: Effects of direct sanctions on employment states — 2008

Outcome	Unemployed		Employed	
variables	Men	Women	Men	Women
Employment (y1)	-22.38***	-21.66***	-29.51***	-19.08*
Employment (y2)	-12.27***	-15.16***	-14.58*	-16.88*
Unemployment (y1)	+18.23***	+18.27***	+13.80**	+16.41**
Unemployment (y2)	+10.36***	+15.46***	+4.84	+11.78
Supplementary (y1)	-1.46	-0.94	-1.04	-14.83**
Supplementary (y2)	+1.07	-0.70	+3.64	-6.09

ATT of direct sanctions on the cumulated duration (in days) of unsubsidized *employment*, *unemployment*, and employment with *supplementary* UB-II-receipt during the first (y1) and second (y2) year after the initial UB-II-spell of former *unemployed* and *employed* UB-II-recipients; significance levels: α=0.1*, α=0.05**, α=0.01***.

men is considerably larger than for women with an average decrease of 19.08 employment days, which additionally is only weakly significant. But men make up for the loss by even a bit more than 50%, while women's loss of employment days in the second year is still considerably more than 80% of the first year's reduction.

In contrast to initially unemployed, employed people experiencing a welfare sanction do not just shift from employment towards unemployment; some of them seem to shift from mere employment, i.e. without top-up benefits, to employment with supplementary benefit receipt. But not to a considerable extent, as we get no significant positive results for the employment state 'supplementary'. Hence, the striking differences between higher employment decreases compared to lower unemployment increases might be explained by exits from labor force, as this so-called 'non-employment option' is the only option not covered by the mutually exclusive employment states. The 14.83 lost days in employment with supplementary welfare receipt for the first year of women also tend to be a shift towards exiting the labor market.

3.2.2 Indirect sanctions

Table 4 shows the treatment effect of welfare sanctions imposed against a related household member of the (indirectly) affected employable individuals, on the cumulated durations of the subsequent employment states.

It is striking that we get large and highly significant negative effects on the (cumulative) periods in employment for initially *unemployed* welfare recipients. Additionally striking is that these high losses

of around 60 employment days in the first year and around 45 days in the second year are not reflected by corresponding increases of periods in unemployment or 'supplementary'. This provides strong evidence for a substantial shift from unemployment to leaving the labor force. A similar deduction holds for initially *employed* women receiving top-up benefits, who also show a significant loss of days in 'supplementary' in the second year which is not reflected in any other employment state, and thus also provides strong evidence for a shift of employment states towards leaving the labor market.

These outstanding and surprising results about the effects of indirect sanctions may be caused by the following feasible constellations: as people within a welfare receiving household cannot leave the labor market separately from the remaining household members, two main possibilities come into question. Firstly, another household member may have increased the household's income to a sufficient extent to bring them out of welfare receipt; the previously indirectly sanctioned unemployed household members thus would be regarded as out of the labor force if they neither take up employment nor are registered as unemployed seeking employment.

Secondly, people leaving the labor market can do so by leaving the household and living on the income of other people, possibly a new partner. As outlined in our previous article on welfare sanctions, Hillmann and Hohenleitner (2015), focusing on the non-employment option, there are a bunch of other possibilities to live out of labor force. Besides living on partner's income, such alternatives could be living on parents' income, on assets, student's assistance (Røed and Westlie (2012)) or even on illegal work, begging or criminal activities (Machin and Marie (2004), Ames (2009), Götz et al. (2010), Schreyer et al. (2012), Wolff (2014), van den Berg et al. (2015)).

Table 4: Effects of indirect sanctions on employment states — 2008

Outcome	Unemployed		Employed	
variables	Men	Women	Men	Women
Employment (y1)	-58.18***	-61.19***	-36.47	-13.35
Employment (y2)	-45.86***	-46.69***	-19.41	-8.97
Umployment (y1)	+5.90	+7.64	-8.85	-4.39
Umployment (y2)	-22.53	+9.54	-10.08	+2.90
Supplementary (y1)	-2.17	3.65	+19.58	-1.31
Supplementary (y2)	-5.51	+1.14	-11.99	-17.93**

ATT of indirect sanctions on the cumulated duration (in days) of unsubsidized *employment*, *unemployment*, and employment with *supplementary* UB-II-receipt during the first (y1) and second (y2) year after the initial UB-II-spell of former *unemployed* and *employed* UB-II-recipients; significance levels: α=0.1*, α=0.05**, α=0.01***.

4 Summary and conclusion

In this evaluation of the ex-post effects of German welfare sanctions on subsequent employment quality based on administrative data, we have addressed two main questions: firstly, to what extent do sanctions which are *directly* imposed against the concerned individuals affect the quality of the subsequent employment? And secondly, do sanctions, imposed against a related household member affect the quality of the subsequent employment of the *indirectly* concerned individuals? And if yes, to what extent? Applying propensity score matching (PSM), separately conducted for initially *unemployed* and *employed* welfare recipients, as well as for men and women, each divided into direct and indirect sanctions as treatments, we find evidence for the following results.

Welfare recipients who experience sanctions in the form of temporary benefit cuts imposed against them *(direct sanctions)* show strong and highly significantly negative effects on the *daily wage* of the subsequent employment and on the *yearly incomes* during the two years after the initial welfare spell. This holds for men and women, both for initially unemployed as well as employed welfare recipients. Our findings go along with previous studies on *unemployed* people, although most of these studies focus on unemployment insurance sanctions. The results of our study expand previous research by also considering sanctions on *employed* welfare recipients.

Although employed people's subsequent *wages* are slightly less negatively affected than the wages of formerly unemployed, in terms of yearly *incomes*, however, *employed* people are considerably more negatively affected. Formerly employed face a reduction of their yearly income of around 3150 Euros (women) and 3790 Euros (men) in the first year after the initial welfare spell. Although the reduction of yearly income decreases in the second year, the catch-up process for employed, however is, on average, slower than for unemployed.

Our analyses of the effects of direct sanctions on the yearly cumulative durations of subsequent employment states, meant to reflect a kind of *employment stability*, show that sanctioned have significantly shorter durations in employment and are accordingly unemployed for longer. This holds for the initially unemployed with high significance, and with lower significance for the initially employed. Unemployed men and women lose around 22 days in employment in the first year and around 12 (men) and 15 (women) days in the second year after the initial welfare spell. Employed men in the first year,

however are worse off and lose almost 30 employment days, but make up for this loss more quickly than others in the second year, with only about 15 days of lost employment.

Our findings that (direct) sanctions have adverse effects on subsequent employment stability go along with previous studies on sanctions against *(unemployed) UI recipients*. Further analyses, namely of the sanction effects for *employed welfare recipients* (the so-called *"Aufstocker"*), provided for the first time by this study, show that the (employed) "top-up benefit recipients" also face significant adverse effects on their subsequent employment durations, as well as on their yearly incomes.

Another contribution to the body of investigations of sanction effects is that we also regard employable people, who are indirectly affected by sanctions against their household members *(indirect sanctions)*. Carrying out the same analyses for indirect sanctioned reveals interesting and surprising insights.

In terms of *wages and income*, indirect sanctions affect unemployed people surprisingly strongly, and generally with high significance. In the first year after the initial welfare spell, unemployed lose around 3950 Euros (men) and 2740 Euros (women) of earned income. In the second year, the loss is still strongly significant and considerably high — around 2085 Euros (men) and 1650 Euros (women). Employed people, in contrast, show no significant effects of indirect sanctions on their subsequent wages and incomes.

Concerning the effects of indirect sanctions on *employment stability*, we also find strongly significant adverse effects for initially unemployed and, with one exception, virtually no significant effects for employed. The negative impact of indirect sanctions on the duration in employment for previously unemployed is surprisingly high, with roughly 60 days in the first year and around 46 days in the second year, for women slightly more than for men. The most striking and surprising result, however, is that these losses in employment duration neither reflect the increased durations of unemployment, nor employment with top-up benefit receipt ('supplementary'). Thus, we must conclude that the loss of duration in employment is in favor of additional time out of the labor market ('non-employment' state). The mainly insignificant results for employed people show only one exception: employed women who are indirectly affected by a household member's sanction show around 18 days less in supplementary welfare receipt in the second year. This loss is evidently in favor of the non-employment state.

In conclusion, it is worth looking beyond welfare exit and employment entrance, and also regarding

the quality of employment subsequent to sanctions. Our analyses provide strong evidence that the findings of previous studies — mostly about sanctions against (unemployed) UI recipients — which reveal adverse effects of sanctions on employment quality in terms of wages, incomes and employment stability, also hold for unemployed as well as employed welfare recipients. Furthermore, our results show that even household members of the sanctioned who are employable but currently unemployed suffer surprisingly huge and significant adverse effects of sanctions against their family members. For employed household members the effects are predominantly statistically insignificant.

Altogether, our results show strong evidence that the averagely increased transition rates into employment found by most studies on sanction effects are at the expense of employment quality, and caused by higher willingness to make concessions on the quality of employment. As with previous studies which found those adverse effects continued in the long run, our findings show that, on the one hand, there is a notable catch-up process, but, on the other hand, this catch-up process is by far not strong enough to approach the outcomes of the non-sanctioned, even within a period of two years.

For political implications of these findings, the following should be considered. Generally, there is a trade-off between avoiding long-term unemployment and pushing unemployed towards sub-optimal employment which is detrimental to their occupational development. The trade-off can be seen from the individual's welfare point of view, as well as from a public welfare point of view. The empirical findings on short- and long-term effects of employment caused by enhanced pressure, however, provide strong evidence that in practice, the net effect of pushing people into detrimental employment by far exceeds the advantages of avoiding longer periods of unemployment. This holds for diverse factors which increase the pressure to take up sub-optimal employment, such as exhausted benefit payments (Caliendo et al. (2013)), being legally obliged to accept job offers with lower occupational level (van den Berg and Vikström (2014) and van den Berg et al. (2016)), the ex-ante effects of the threat to be sanctioned (Arni et al. (2013)), and the ex-post effects of imposed benefit and welfare sanctions.

Altogether, there are strong indications which give rise to concern that sanctioned welfare recipients and their unemployed household members accept jobs with worse conditions and lower occupational levels, which is to some extent irreversible, and thus leads to a permanent loss of earned income, employment stability, and human capital.

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References

Ames, A., 2009. Ursachen und Auswirkungen von Sanktionen nach §31 SGB II, Hans-Böckler-Stiftung Edition. Vol. 242 of Arbeit und Soziales. Hans-Böckler-Stiftung, Düsseldorf.

Arni, P., Lalive, R., van Ours, J. C., Dec. 2013. How effective are unemployment benefit sanctions? Looking beyond unemployment exit. Journal of Applied Econometrics 28 (7), 1153–1178.

Caliendo, M., Tatsiramos, K., Uhlendorff, A., Jun./Jul. 2013. Benefit duration, unemployment duration and job match quality: A regression-discontinuity approach. Journal of Applied Econometrics 28 (4), 604–627.

Götz, S., Ludwig-Mayerhofer, W., Schreyer, F., 2010. Sanktionen im SGB II: Unter dem Existenzminimum. IAB Brief Report 10/2010, Institute for Employment Research (IAB), Nuremberg.

Hillmann, K., Hohenleitner, I., Sep. 2015. Impact of welfare sanctions on employment entry and exit from labor force — Evidence from German survey data. HWWI Research Paper 168, Hamburg Institute of International Economics (HWWI), Hamburg.

Hillmann, K., Hohenleitner, I., Jan. 2019. Impact of welfare sanctions on employment and benefit receipt — Considering top-up benefits and indirect sanctions. HWWI Research Paper, Hamburg Institute of International Economics (HWWI), Hamburg.

Machin, S., Marie, O., 2004. Crime and benefit sanctions. CEP Discussion Paper 645, Centre for Economic Performance (CEP), London School of Economics and Political Science, London.

Røed, K., Westlie, L., 2012. Unemployment insurance in welfare states: The impacts of soft duration constraints. Journal of the European Economic Association 10 (3), 518–554.

Schneider, J., Apr. 2008. The effect of unemployment benefit II sanctions on reservation wages. IAB-Discussion Paper 19/2008, Institute for Employment Research (IAB), Nuremberg.

Schneider, J., 2010. Activation of welfare recipients: Impacts of selected policies on reservation wages,

search effort, re-employment, and health. Ph.D. thesis, Department of Economics, Free University of Berlin (FUB).

Schreyer, F., Zahradnik, F., Götz, S., 2012. Lebensbedingungen und Teilhabe von jungen sanktionierten Arbeitslosen im SGB II. Sozialer Fortschritt (SF) 61 (9), 213–220.

van den Berg, G. J., Hofmann, B., Uhlendorff, A., Jan. 2016. The role of sickness in the evaluation of job search assistance and sanctions. IZA Discussion Papers 9626, Institute for the Study of Labor (IZA), Bonn.

van den Berg, G. J., Uhlendorff, A., Wolff, J., Dec. 2015. Under heavy pressure: Intense monitoring and accumulation of sanctions for young welfare recipients in Germany. IAB Discussion Paper 34/2015, Institute for Employment Research (IAB), Nuremberg.

van den Berg, G. J., Vikström, J., Apr. 2014. Monitoring job offer decisions, punishments, exit to work, and job quality. The Scandinavian Journal of Economics 116 (2), 284–334.

Wolff, J., May 2014. Sanktionen im SGB II und ihre Wirkungen. IAB Comments 2/2014, Institute for Employment Research (IAB), Nuremberg.

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