



# **Workplace Injuries and Receipt of Benefits from Workers Compensation and SSDI**

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# Workplace Injuries and Receipt of Benefits from Workers' Compensation and Social Security Disability Insurance

## Abstract

We use data from the Health and Retirement Study (HRS) and matched Social Security Administration (SSA) data to study two questions. First, we examine evidence on whether workers who suffer permanently disabling injuries covered by workers' compensation (WC) subsequently end up on Social Security Disability Insurance (SSDI). Second, under some conditions, SSDI benefits are supposed to be reduced for workers receiving WC benefits ("offsets"). Offsets are most relevant for workers with WC-compensable, permanently disabling injuries. Our analysis captures data on WC benefit receipt from the HRS and links it to SSA data on WC and SSDI recipients. We find that SSA appears to be missing data on WC benefits for a sizable share of WC-benefit recipients, and that the frequency of SSDI benefit reduction because of the WC offset seems surprisingly low.

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## Introduction

Workers injured on the job in the United States are potentially eligible for workers' compensation (WC) indemnity benefits. Although in most cases injuries and benefits are temporary and lead to little lost work time and medical benefits only, around 20% entail lost work time sufficient to qualify for indemnity benefits. Over 80% of these benefits are temporary, meaning that benefits end when the person returns to work. The remainder (around 17%) involve permanent disabilities that lead to longer-term ("permanent") benefits or a lump-sum settlement.<sup>1</sup>

Disabled workers in the U.S. — whether or not the disabilities result from one's job — are also potentially eligible for Social Security Disability Insurance (SSDI) benefits. We explore whether workers sometimes draw disability benefits from both programs. We present evidence on our core question: Do workers injured in the workplace, who get permanent partial disability (PPD) or permanent total disability (PTD) benefits under WC, subsequently go onto SSDI and receive SSDI benefits as well, potentially for the same injury for which they may already be fully compensated.

We also explore whether, when workers are eligible for both programs' benefits, SSDI benefits appear to be appropriately reduced ("offset"). There are offsets built into the programs designed to prevent dual receipt of disability benefits when these benefits exceed a given threshold relative to prior earnings. But the offsets are difficult to implement, and recipients are incentivized to try to preserve eligibility for both programs' benefits.

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<sup>1</sup> See Dolinschi (2017, Tables 2.6 and 2.12), for data on 18 generally larger states (covering a disproportionate share of all claims).

We study these questions using survey data from the Health and Retirement Study (HRS), as well as restricted data from the Social Security Administration (SSA) that can link to the HRS data. It is not possible to definitively establish whether injured workers are getting benefits from both programs without the mandated offsets being applied (“double dipping”). However, we are able to obtain evidence suggesting that this may be occurring. The type of behavior observed in the data appears to be generated from cases where a worker is receiving permanent WC benefits, but SSA does not appear to be aware of these benefits. Owing to complicated interactions between WC and SSDI, we may be observing only part of the problem. In particular, for some states (called “reverse offset” states), state WC benefits are supposed to be reduced rather than SSDI benefits.<sup>2</sup> We have no data with which to measure whether this is occurring.

This research is clearly important to Social Security and WC policy. For SSDI, the nonreverse offset states are most relevant. In these states, SSDI payments are supposed to be reduced to offset WC benefits. Thus, if workers are double-dipping, a better system of tracking SSDI enrollees who are or have been compensated by WC, and to apply the appropriate offsets, could reduce SSDI expenditures without depriving disabled workers of their entitled compensation. In reverse offset states when the appropriate offsets are not applied, state WC systems may be spending more than programmatically mandated for injured workers’ compensation.

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<sup>2</sup> Laws that prevailed during the period covered by the data are described in part here: ([https://www.workerscompensation.com/news\\_read.php?id=27207&type=2](https://www.workerscompensation.com/news_read.php?id=27207&type=2)). Reverse offsets were prohibited in 1981, but 15 states were grandfathered. In principle, going on SSDI after receiving WC benefits should generate the same reduction in benefits either way. Some initiatives under the Trump Administration sought to eliminate reverse offsets. See, e.g., <https://ascenddisability.com/reverse-offsets-disability-compensation-issues/>.

A policy issue also cuts across both types of states. In particular, if workers experience permanently disabling injuries that should be fully compensated by WC but instead go on to SSDI, then WC experience ratings (basing insurance premiums, in part, on historical claims) may not be creating incentives to promote workplace safety. This may lead to more individuals with disabling workplace injuries, additional costs to both systems, and diminished worker well-being.<sup>3</sup>

We study two empirical issues regarding workplace injuries and WC and SSDI benefits. First and foremost, we attempt to measure the extent to which workers injured on the job — especially those suffering permanently-disabling injuries — receive both WC and SSDI benefits. Second, and more provisionally, we study offsets — in this paper focusing on whether SSDI benefits are being reduced appropriately for WC-compensated workers. We cannot fully answer this question, and will explore additional evidence in future research. Our evidence at this point speaks more to the questions of whether SSA appears to be aware of whether disabled workers were injured on the job, are receiving WC benefits, and calculating and applying required offsets.

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<sup>3</sup> For a primer on WC experience rating, see National Council on Compensation Insurance (NCCI) (n.d.). As this document explains, experience rating serves two functions. It tailors insurance costs to the actual costs of insuring different employers, which reduces insurance providers' incentive to avoid high-cost employers. It also provides employers incentives to reduce WC losses from workplace injuries.

## **Workers' compensation and Social Security disability insurance**

### *Workers' compensation*

Many workplace injuries covered by WC are temporary. When workers experience temporary injuries, if they have more than a specified number of lost work days (seven days is the most common across different states' WC systems), they are eligible for WC benefits until they return to work.<sup>4</sup> These "temporary disability benefits" are based on prior earnings.<sup>5</sup> Temporary disability benefits are usually "total" rather than partial, i.e., based on a worker's maximum benefit; they can be "partial" (or fractional) when the worker can return to work on a limited basis. This paper does not focus on injuries that turn out to be temporary; if a worker who suffers such an injury later ends up on SSDI, it is likely for a different injury or illness and need not be work-related.

A much smaller number of injuries are permanent. Permanent injuries can prevent future work entirely, or lead to permanent partial limitations on future work. Reflecting this, permanent injuries are "rated" as either "partial" or "total." Permanent total disability entails a disability rating of 100% and implies a complete loss of work capacity.<sup>6</sup> (To the best of our understanding, this closely parallels SSDI's definition of disability, except that, in SSDI, the disability need not be permanent but must be expected to last for 12 months

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<sup>4</sup> See McLaren and Baldwin (2017, Table C) and <https://www.policygenius.com/blog/state-by-state-guide-to-workers-compensation/>. WC claims that do not result in temporary benefits are referred to as "medical only," as the medical costs are still covered by WC but no indemnity benefits are paid for lost work time.

<sup>5</sup> These benefits are typically (but not always) based on a percentage of prior earnings (a replacement rate) up to a maximum (Victor 1989).

<sup>6</sup> See <https://www.nasi.org/education/types-of-workers-compensation-benefits/>.

or longer.<sup>7</sup>) Permanent partial disability covers injuries that are permanent but do not completely limit one's ability to work. These entail ratings of less than 100%. Permanent disability status is triggered by having a severe impairment after reaching maximum medical improvement.<sup>8</sup>

Workers' compensation for permanent injuries can be in the form of ongoing payments or lump-sum settlements.<sup>9</sup> In either case, the benefits are based on future earnings loss and/or impairment.<sup>10</sup> The benefits for permanent disability are referred to as "permanent partial disability" (PPD) benefits, or "permanent total disability" (PTD) benefits. Compensation for permanent disability can also include medical care and sometimes vocational rehabilitation (Clayton 2003/2004) — which, as discussed below, may be an important determinant of whether offsets are applied. PPD benefit

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<sup>7</sup> See <https://www.ssa.gov/disability/professionals/bluebook/general-info.htm>.

<sup>8</sup> There are some subtleties across states. Most states have a maximum length of time one can be on temporary disability, after which it becomes permanent. But not all do, and instead allow unlimited weeks of temporary disability (possibly requiring continuing certification that the injury is still preventing return to work). (See <https://www.policygenius.com/blog/state-by-state-guide-to-workers-compensation/>.) Our sense from experts is that those who remain on temporary benefits long-term (in the state where that can happen) have less severe injuries. Coupled with SSDI's quite restrictive definition about qualifying disability, we suspect that even in states where workers can be on temporary WC benefits long-term, it is those on permanent WC benefits who are most likely to also potentially go on SSDI, and hence this issue of defining temporary vs. permanent WC benefits will have little influence on our core results described later (about joint receipt of WC and SSDI).

<sup>9</sup> Benefits can be determined in a number of different ways, depending on the state, including basing the benefits on actual lost wages, on loss of earnings capacity, as well as "scheduled" compensation for specific injuries (like for loss of use of a body part). See Barth (2003/2004). Use of lump-sum settlements varies by state. For current differences by state, see McLaren and Baldwin (2017, Table C), and <https://www.policygenius.com/blog/state-by-state-guide-to-workers-compensation/>.

<sup>10</sup> See <https://www.policygenius.com/blog/state-by-state-guide-to-workers-compensation/> and Barth (2003/2004).



determination can be more complicated because of questions about remaining work capacity. As a result, PPD determination is, perhaps, particularly likely to lead to litigation and lump-sum settlements.<sup>11</sup>

In the case of either PPD or PTD benefits, employers and injured employees often reach an agreement for a lump-sum settlement that resolves the case and terminates the claim. Alternatively, permanently disabled employees may get benefits on a weekly or monthly basis. There are many variations across states in how disability is determined, what the benefit level is, and whether the state uses lump-sum payments for permanent disability as a matter of course. The determination that a worker is permanently totally disabled is closest to the definition of disability that qualifies one for SSDI (Clayton 2003/2004). Similarly, PTD benefits are the most similar to SSDI benefits. They are, as described above, based on inability to work.

States differ in whether PTD or PPD benefits end at or near retirement age, commonly the eligibility age for Social Security retirement benefits, or are payable until death. In some states they may end if a person returns to work. Some states impose a maximum total amount paid, and some states pay benefits for a maximum number of weeks (for PPD benefits).<sup>12</sup>

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<sup>11</sup> See, e.g., <https://www.nolo.com/legal-encyclopedia/how-get-permanent-partial-disability-benefits-through-workers-comp.html>.

<sup>12</sup> There are many variations and complications by state. See <https://www.policygenius.com/blog/state-by-state-guide-to-workers-compensation/>

### *Social Security disability insurance*

SSDI is available for disabled workers who qualify based on a recent “work test”<sup>13</sup> plus a given number of quarters worked based on their age, tied to the period prior to claiming benefits. Eligibility is based on an inability to work due to a medical condition expected to last at least one year or to result in death.<sup>14</sup> The definition of disability in terms of ability to work is very similar to that for permanent disability under WC, although the ability to obtain SSDI for a disability that may end after more than 12 months is different.

### *Offsets*

In principle, the two programs coordinate to avoid paying benefits that over-compensate for disability — in the sense of being too high relative to predisability earnings. Specifically, there are supposed to be offsets between WC and SSDI. In most states, SSDI benefits are supposed to be reduced when combined SSDI and WC benefits are too high, but in some states the offsets can go in the other direction, with WC benefits being reduced (“reverse offsets”; see Clayton 2003/2004). The general goal of these offsets is that either SSA or the state WC system reduces benefits so that combined SSDI and WC benefits do not exceed 80% of prior earnings (Murphy et al. 2020, Table 19).<sup>15</sup>

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<sup>13</sup> For more on SSDI tests, see [https://ca.db101.org/ca/programs/income\\_support/ssdi/program2a1.htm](https://ca.db101.org/ca/programs/income_support/ssdi/program2a1.htm)

<sup>14</sup> For details, see SSA (n.d.).

<sup>15</sup> There appear to be some states where reverse offset rules differ from this 80% rule. For example, North Dakota simply reduces PTD WC benefits by 50% once a beneficiary starts receiving SSDI, and Minnesota allows a dollar-for-dollar reduction against SSDI benefits once

However, the offset process is not simple. Much of the problem pertains to the complex nature of the information required and the difficulty of accessing that information. As observed by Clayton (2003/2004): “Calculating offsets requires an understanding of each workers’ compensation law, agency, and rules; obtaining appropriate authorizations for release of information from the applicant or beneficiary; and obtaining the record of payments or settlement agreements from the workers’ compensation agency or payor... But many of the records are in paper files and are not available electronically ...” (p. 13). Moreover, it can be difficult to get details on WC benefits paid: “[SSA] also needs to know, when presented with a case, whether workers’ compensation benefits are already being paid or have been paid for the disability they have accepted” (Clayton 2003/2004, p. 14). Part of the problem, to be sure, is that WC benefits data available to SSA are self-reported by workers; there are not automated data matches with state WC systems (O’Leary et al. 2012), and provision of the information is voluntary (SSA Form, OMB No. 0960-0247).<sup>16</sup> The problems can be especially complicated with lump-sum settlements, which make it hard to calculate the appropriate WC benefit payments in order to apply the 80% rule.

The 1965 Social Security Amendments created the 80% offset rule and allowed states to pass legislation to reduce WC payments as opposed to reducing SSDI benefits

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an insurer has paid out \$25,000. See <https://www.policygenius.com/blog/state-by-state-guide-to-workers-compensation/>.

<sup>16</sup> SSA Form 546 (<https://www.ssa.gov/forms/ssa-546.pdf>), which we believe is the form SSA uses to capture WC benefits, says: “Furnishing us this information is voluntary. However, failing to provide us with all or part of the information could prevent us from making an accurate and timely decision on your benefit eligibility.” For more details on this form, see: <https://secure.ssa.gov/apps10/poms.nsf/lnx/0452140005>.

in order to keep benefits under the 80% cap.<sup>17</sup> The Omnibus Budget Reconciliation Act of 1981 ended the option of states to enact these offset provisions.<sup>18</sup> All states that had passed offset provisions prior to February 18, 1981, were grandfathered in, and reduce WC benefits instead of SSDI. The states where these offset rules apply are referred to as “reverse offset states.” A list of them can be found in Appendix Table A1.

Perhaps because of these complications and the financial stakes involved, it appears that attorneys help workers to avoid or reduce the offsets between WC and SSDI benefits.<sup>19</sup> Some of the material these attorneys provide point to the different ways offsets can be reduced or avoided. Specifically, one issue is that it can be difficult to even determine how a lump-sum settlement should be offset against SSDI, which prompts one law firm to suggest the following: “When a person receives a lump-sum settlement from workers’ compensation, an effective strategy for reducing the Social Security offset is to state in the settlement agreement that the lump sum is meant to be spread out over the rest of the individual’s life. Often this method greatly decreases the offset or even eliminates it entirely.”<sup>20</sup> A second issue is that medical payments are not offset, which appears to create an incentive to receive more of one’s benefits in the form of “future medical” benefits: “Lawyers also will draft the settlement agreement to exclude medical and legal expenses from the lump sum that is counted for Social Security. Social Security

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<sup>17</sup> See <https://www.ssa.gov/policy/docs/ssb/v65n4/v65n4p3.html>.

<sup>18</sup> See <https://secure.ssa.gov/poms.nsf/lnx/0452105001>.

<sup>19</sup> They may simultaneously help workers get permanent WC benefits *and* apply for SSDI.

<sup>20</sup> See <https://www.nolo.com/legal-encyclopedia/minimize-how-much-workers-compensation-will-lower-social-security-payments.html>. Spreading the lump-sum out in this way reduces the per period WC benefits and hence makes it less likely that the 80% threshold for imposing offsets will apply.

will exclude these expenses from being used to calculate the offset if the language in the settlement document is clear. If this language is not included in the settlement agreement, Social Security may ask for documentation of medical and legal expenses before disregarding those amounts from the offset calculation.”<sup>21</sup> These considerations and the indirect or anecdotal evidence we have offered strongly suggest that offset mechanisms may not always work as intended, although as pointed out in the Introduction, it remains for future research to examine more direct evidence on the application of WC offsets in SSDI.<sup>22</sup>

## **Prior research**

There is evidence that injured workers who get WC benefits also go on SSDI. Some of this evidence is indirect, some more direct. One line of research has looked at the coincidence of rising SSDI rolls with declining WC benefits, to ask whether the latter can explain the former (e.g., McInerney and Simon 2012; Buffie and Baker 2015, Victor 2019). For example, Victor (2019) claims that cost shifting from WC to SSDI has been minor. The evidence in McInerney and Simon (2012) concurs, although Buffie and Baker (2015) conclude the opposite, and suggest that people are turning to SSDI because of increasing difficulties in getting WC benefits. However, this evidence does not directly address the question of dual eligibility but is focused, instead, on the general question of

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<sup>21</sup> See <https://www.disabilitysecrets.com/resources/disability/how-workers-compensation-benefits-offset-social>. As an additional example, see: <https://jimglaserlaw.com/will-my-workers-comp-settlement-affect-my-disability-payments/>.

<sup>22</sup> To be clear, we are not critical of attorneys for trying to help their clients reduce WC offsets in SSDI as their job is to advocate for their clients. Some of these examples, though, may suggest ways that the regulations might be reformed to ensure that the offsets are applied as intended.

whether SSDI has, to some extent, become a substitute for WC compensation — that is, whether *changes* in WC benefits explain *growth* in SSDI. Such evidence is relevant to the question of whether substitution of SSDI for WC weakens the incentives provided by the WC-system experience rating, but does not speak to double-dipping or offsets.

Other evidence focuses on measuring the dual receipt of WC and SSDI benefits. O’Leary et al. (2012) match state WC data for New Mexico to Social Security data. They estimate that 7% of WC beneficiaries receive SSDI benefits. This study is limited to one state, with evidence restricted to asking whether any workplace injury with WC indemnity benefits (lost work time) predicts SSDI receipt. It does not necessarily measure whether people receive or have received benefits from both programs that could trigger offsets. However, workplace injuries deemed permanently disabling would be more likely to raise the issue of applying offsets in SSDI benefits, and this study does not break out permanently disabling injuries among those with enough lost work time to qualify for indemnity benefits.

Evidence from more comprehensive SSA data provides a few alternative estimates of the percentage of SSDI recipients who received state WC benefits or had a pending claim. Parent et al. (2012, Table 2) report a 6.9% figure. For data from 2005, SSA (2006, Table 1 and 31) reports that 9.1% of SSDI workers receiving benefits had also filed for WC or public disability benefits (PDB).<sup>23</sup> By 2019, this group had fallen to 5.2% of SSDI worker recipients (SSA 2020, Tables 1 and 31). Not all SSDI recipients

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<sup>23</sup> By “workers,” we mean those not receiving SSDI as dependents. To the best of our knowledge, PDB programs are for federal, state, and local government employees outside the WC system. In the HRS data, there are separate questions about WC and PDB. We use only the former. The SSDI offset rules apply to both WC and PDB benefits.

filing for WC were receiving offsets. For example, in 2019 data (SSA 2020, Table 31), 431,702 workers are listed as currently receiving SSDI and WC (or PDB), which is 5.2% of all workers receiving SSDI.<sup>24</sup> Of these, only 54,155 (12.5%) are reported as having an offset due to WC receipt versus 288,488 (66.8%) reported as having no offset due to “High average current earnings.”<sup>25</sup> A very small number (32,812, 7.6%) are reported as “Social Security Disability Insurance (reverse offset).”<sup>26</sup> This is clearly much smaller than the share of population in reverse offset states and, hence, we think this measures individuals whose benefits would have been reduced by the cap if not for being in a reverse offset state.

To preview what we suggest later, we are surprised by the large share of people drawing both SSDI and WC who are not having their SSDI benefits reduced (66.8%).<sup>27</sup>

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<sup>24</sup> Curiously, Table 19 of Murphy et al. 2020, which cites many of the same numbers from the SSA reports, includes an additional category labeled “SSDI Previously Offset by WC or PDB,” and indicates that this number is slightly larger than the number currently receiving SSDI and WC or PDB. However, Figure 7 in the same source labels these individuals as having a “Previous Connection with WC/PDB.” Only the second description of this high number makes sense, as a count of people with WC injuries in the past before they went on SSDI. Otherwise there would have to be a huge number of people who were: (i) on SSDI and WC; (ii) had SSDI benefits offset; and (iii) had the WC benefits ended while remaining on SSDI. It does not seem plausible that, as Table 19 would suggest, this number is more than six times larger than the number currently receiving SSDI and WC benefits with an SSDI offset. Conceivably one could have received WC benefits in the past, had an offset, but the WC benefits ended – for example, because WC permanent disability benefits ended at the age of eligibility for Social Security. However, in this case the individual would also move off of SSDI, and would not be counted in this table.

<sup>25</sup> The 54,155 figure is the sum of SSDI-recipient workers with offsets who received SSDI plus WC only, plus those who received SSDI and both WC and public disability benefits. High average current earnings refers to the 80% rule, suggesting that for these individuals the combined monthly total of their SSDI and WC benefit is less than 80% of their prior earnings.

<sup>26</sup> Of the remaining 55,662, 48,908 are described as “Entitlement to Workers’ Compensation or public disability benefits is pending,” and 6,754 are receiving an offset due to receipt of PDB.

<sup>27</sup> One might think this share is high because it includes people in reverse offset states about whom SSA does not do the offset calculation. However, the tables report the share “Social

This motivates our attempts to more fully measure the extent to which SSA applies offsets, using the combined HRS and SSA data.

## **Our approach**

Except for O’Leary et al. (2012), past work is based on SSA data only and, hence, does not study or account for the for potential difficulty SSA has in determining WC receipt. In light of the existing evidence from the SSA data discussed in the preceding section, it is useful to explain what we potentially gain from using the HRS data matched with the SSA data.

We use HRS data on WC receipt, benefits, and the injury, which allow us to measure program benefits and participation independently. The HRS, in addition to capturing WC receipt, also has self-reported information on whether the workplace injury was determined to be permanent or temporary, as well as the rating for permanent disability. Thus, we can characterize SSDI receipt for those HRS respondents who report getting WC benefits, and also tie SSDI receipt to details on their WC-compensable injuries. Only one other paper, by Reville and Schoeni (2003/2004), uses HRS data to ask whether workplace injuries result in SSDI participation. It only uses data from the 1992 wave of the HRS, however, and does not use data on WC receipt. Instead, it only links self-reported work impairments, and whether they are reported to have been caused at work, to SSDI participation.

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Security Disability Insurance (reverse offset),” and this share is small. In addition, the share in this category relative to “High average current earnings” appears roughly equal to the share of workers in reverse offset states, leading us to believe that the “High average current earnings” category includes those in reverse offset states for whom SSA deems the 80% rule to be non-binding, rather than the full set of those in reverse offset states.



In addition to using the HRS data to measure WC receipt, we look in detail at the information on SSDI offsets in the matched SSA data. Because we could potentially detect more WC receipt than SSA is aware of, we could, in principle, obtain a lower estimate of the share receiving both SSDI and WC who have their SSDI benefits reduced by the offset. We also are able to document differences by the type of state (reverse offset or not) based on special permission we received from the HRS to do restricted matching between the HRS, SSA, and geographic data (subject to disclosure requirements).

Using the HRS data matched to restricted SSA data permits us to measure a number of things. First, merging the HRS and SSA data lets us determine, through a directly calculated offset or through other indicators, whether SSA is aware of individuals getting WC. Restricted data help us to identify any additional individuals who have received SSDI and whether the SSA is aware of any additional WC receipt. We then use state-level data to divide the sample into individuals who lived in states with reverse offset programs when they went on SSDI and those who did not.<sup>28</sup> We also then provide a basic check to ensure that the individuals who report SSDI or WC receipt in the publicly available data disproportionately show up as entering SSA data as disabled. Finally, we use SSA data to isolate individuals in the publicly available data who actually receive SSDI (excluding some who self-report receiving SSDI in the HRS). We also use data (from SSA) on the timing of initial SSDI receipt and data (from the HRS) on the timing of WC benefit receipt to isolate dual recipients for whom these dates are sufficiently close to make it likely that SSDI benefits were awarded for a WC-compensable injury.

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<sup>28</sup> We explain below how we use the HRS data to do this assignment of states.

Using the matched data, we can potentially detect SSDI recipients who are getting WC benefits for permanently disabling injuries. Information available in the matched SSA data gives some indication of a few important types of cases, including: whether SSA is offsetting WC benefits; whether SSA has knowledge of WC receipt; and for the unknown cases, whether they are for individuals who lived in a reverse offset state or not. In the latter cases, SSA has knowledge, in principle, of WC benefits, whereas for those residing in reverse offset states there might be no reason for SSA to have this information or to record it in the data.

## **Data**

We begin with publicly available HRS data to identify individuals who report receiving SSDI and WC. In the HRS data, we identify those who report having received WC benefits, and those who report receiving SSDI benefits.

For WC, HRS respondents are first asked a series of questions (which we do not repeat here) that indicate whether they received WC benefits. They are then asked variations on the question “In what year did you start receiving [Workers’ Compensation] benefits?” We use their answers to these questions to categorize them as receiving WC or not.<sup>29</sup>

Similarly, HRS respondents were asked a series of questions in most years (which we do not repeat here) that indicate whether they received SSDI. They were then asked, “In what year did you start receiving [Social Security disability income] benefits?” We use

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<sup>29</sup> In our initial tabulations we include individuals who answered “Don’t Know” or “Not Ascertained” regarding time of receipt of WC.

their answers to categorize those receiving SSDI benefits.<sup>30</sup> In HRS surveys in 1994, 1996, and 1998 respondents were not asked about SSDI and Supplemental Security Income (SSI) separately. We categorize individuals responding affirmatively as receiving SSDI benefits if they answered that they received one or the other but did not also report receiving SSI income in the household income questionnaire section of the HRS. This potential for misreporting or mismeasuring SSDI receipt is part of our motivation, in later analyses, to use only SSDI receipt as reported by SSA.

We focus almost of our analysis on the HRS subsample that we can match to the restricted SSA data. This subsample is restricted for two reasons: First, HRS respondents had to consent to the data matching; and second, matched data are available only for those who have received Social Security benefits of some type. We present some simple tabulations comparing this subsample to the full HRS sample, by way of examining whether the matched subsample appears to be representative with respect to our questions of interest.

We then sharpen our analysis to make more accurate use of the data. First, we restrict attention to those receiving SSDI as confirmed in the SSA data. Second, we limit the HRS-reported cases of WC receipt to those close in time to the beginning of SSDI as reported in the SSA data. This increases the likelihood that we are observing SSDI for a WC-compensable injury. In particular, we remove individuals who report WC receipt more than three years after their SSDI award date.

We also capture whether the workplace injury was deemed temporary or

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<sup>30</sup> In our initial tabulations we include individuals who answered “Don’t Know” or “Not Ascertained” regarding time of SSDI benefit receipt.

permanent, and in the latter case the disability rating. HRS respondents were asked “What type of disability did you receive?” with the options “100% Permanent,” “Partial Permanent,” “100% Temporary,” and “Partial Temporary.” We use these answers to assign the WC injury as either permanent or temporary. Based on a prompt to interviewers (“PROBE if necessary referring to Workers’ Compensation”), respondents were asked, “What percentage did you receive?” We use their answers to report their disability rating where available.<sup>31</sup> Since our focus is on injuries that might lead to SSDI receipt, we only report the rating for permanent injuries. There is a good amount of nonresponse, “don’t know,” “not ascertained,” or “refused” in response to the rating questions.

Our key analysis studies the information contained in the SSA data that is potentially informative about offsets. We explain this in more detail in the results section below, but briefly, we can measure the incidence of reported nonzero offsets, whether SSA does an offset calculation but does not record an offset, and whether WC benefit receipt appears to be unknown to SSA. We can also examine how this depends on whether one was or was not in a reverse offset state (based on the merge to the HRS geographic data).

The first file we use is the SSA Cross-Year Respondents Benefit File. From this file, we use variables that indicate WC (or PDB) offset amounts, a flag for computation of

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<sup>31</sup> Strictly speaking, in states that use lost wages to determine benefits (“wage-loss” states) there is not a disability rating. Given how the HRS poses the questions, respondents may still report a percentage of earnings replaced, although alternatively this may explain why, as shown below, the rating is not reported by some respondents.

the WC offset, and some other variables that help interpret these.<sup>32</sup>

The second file we use is the annual Disability Analysis File (DAF). This file provides more information on the subset of individuals who receive SSA funds. It helps identify any additional individuals who receive SSDI and whether SSA is aware of any additional WC receipt.<sup>33</sup> This file has information on whether a person is receiving SSDI, the benefit due, and the actual benefit paid, (which can be lower because of other obligations such as Supplemental Medicare Insurance premiums).

For our analysis, we try to determine whether an individual lives in a reverse offset state or not. The DAF records the state of residence for a recipient at the date SSDI was awarded. We use this information to help identify individuals who lived in reverse offset states. We also use information from the Cross-Wave Geographic Information — State File. This file tracks state of residence for HRS respondents in each wave. We assign individuals as residing in an offset state if we observe them living in that state in the wave prior to WC receipt. We cannot do this perfectly because we do not have state of residence prior to 1992 (the first survey year for the original HRS cohort) or the first year they enter the survey (for later cohorts). We do have state of residence at age 10 and

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<sup>32</sup> We classify SSA as being aware of WC claims if there are positive values for variables that indicate amount of WC offset (variables *amofwcon* and *oamofwcon* in the data set) or if there are flags for whether the benefit amount has been recomputed due to a “redetermination of workers compensation offset” (variables *rcc* and *orcc* in the data set). Additionally we code SSA as being aware of WC claims for individuals who have had a computation/insured status code of “workers compensation/megacap offset” (variables *CIS1* and *OCIS1* in the data set) or individuals who ever have their monthly ledger account file status defined as “Suspense status: WC offset” (variables *LAF* and *OLAF*, defined for each month, in the data set).

<sup>33</sup> The DAF provides the amount of WC income received for individuals on SSI (who could also be on SSDI; see <https://www.ssa.gov/redbook/eng/supportsexample.htm>). We code any individuals with positive values for these variables (*IUA\_WC*, defined for each month, in the data set) as receiving WC and SSA being aware of that fact.

state of birth for most individuals, and use the later of the two for individuals who receive WC benefits prior to their initial appearance in the HRS. The HRS state of residence data are used only for individuals lacking SSA data on state of residence at the date of SSDI award.<sup>34</sup>

## Results

### *WC receipt, SSDI receipt, and WC disability in the HRS data*

We begin our analysis with the HRS data in isolation, as reported in Column (1) of Table 1.<sup>35</sup> Of our 40,169 HRS respondents, a bit over 10% report receiving SSDI benefits (4,152), while 2.2% (901 respondents) report having received WC benefits.<sup>36</sup> The share of SSDI recipients who also report WC benefits is 6.8% (283/4,152), close to the estimates reported earlier. The comparison with Parent et al. (2012), who report a 6.9% figure, is perhaps most apt because it covers a period near the midpoint of the HRS

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<sup>34</sup> In principle, one could have experienced a WC-compensable injury and then moved before applying for SSDI. But we prefer the SSA data because of the issues with establishing state of residence in the HRS data. Moreover, as described above, we restrict attention in our most definitive analysis to those with WC-compensable injuries and SSDI receipt occurring within a narrow time frame.

<sup>35</sup> The only evidence we report from the restricted data is tabulations of the variables of interest disaggregated by the categories we created using publicly available data. Data cells were merged or excluded if the cell size was less than three. See <https://hrs.isr.umich.edu/data-products/restricted-data/disclosure-limitation-review>.

<sup>36</sup> Murphy et al. (2020, Table 17) report a WC incidence rate per 100 full-time employees in 2018 of 2.8%, declining to 0.9% for cases with days away from work. These percentages should be lower than the HRS because they are per year whereas the HRS, in principle, captures WC benefits at any time in the past. (However, if WC injuries tend to occur for the same people over time, which seems likely because the incidence rate is strongly tied to industry and occupation, then the lifetime incidence and per-year incidence need not be very far apart.) They should be higher because they are per worker rather than per person. So roughly speaking these percentages seem in the ballpark of the HRS estimates.

years we use. Given that the latter estimate comes from SSA data, the similarity of these two estimates suggests that SSA may not be missing many dual benefit recipients. In this case, the important question becomes whether offsets are applied to benefits, and whether they are applied correctly (although we do not consider the latter question in this paper).

The share of WC recipients who report SSDI benefits is much higher — 31% (283/901) — than the share of SSDI recipients who report receiving WC. Given that disabilities of SSDI recipients need not be work related, we view this latter percentage as high. It reinforces the importance of questions about the consequences — such as weakened experience rating incentives — of shifting support for disabled workers injured on the job to SSDI.

Of those who received WC benefits, 40.3% (363/901) report a temporary disability, and 20.5% (185/901) report a permanent disability. The latter group (185 respondents) are more relevant to our analysis. It is unclear why the combined share reporting temporary or permanent disability is so much lower than the share reporting WC benefits, since benefits ought to be of only one type or the other. However, as we noted earlier, there is a good deal of nonresponse on some of the more detailed WC questions. People may not report benefits paid for a short time as a temporary disability, although nothing in the survey questions prompts them to omit such benefits.<sup>37</sup> The reporting of the disability rating is quite complete, reported for 161 of the 185 reporting a permanent disability. The

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<sup>37</sup> The question about incidence is simply: “Did you ever apply for disability benefits from any other program, such as Supplemental Security Income, Veterans Administration, or Workers’ Compensation?”

average disability rating for these cases is high, 79.3%.<sup>38</sup>

Column (1) next reports on the respondents who report receiving both SSDI and WC benefits. As noted above, this is a large share of WC recipients — 283 out of 901, or 31%. Note that, as we would expect if these data were valid, the share reporting a permanent WC disability is higher. For those reporting both WC and SSDI benefits, the share reporting a permanent WC disability (among those responding) is 43.9% ( $75/(75+96)$ ), compared to 33.8% among all WC recipients. Correspondingly, the disability rating among those who receive both WC and SSDI benefits is higher, at 88.3%, pointing to those with more severe, permanent WC-compensable disabilities being more likely to go on SSDI.

Column (2) reports a subset of the numbers from Column (1), where we supplement the information on receipt of SSDI and WC benefits from information in the SSA data. There is no information from the SSA data on temporary versus permanent disabilities or disability ratings. However, note that we do identify additional cases with either SSDI or WC (mainly SSDI, which of course makes sense since these are SSA data).

Our core analysis of interest is based on the HRS data matched to the SSA data. Thus, Column (3) of Table 1 reports the same calculations as Column (1) (and the limited additional cases like those reported in Column (2)), but for the HRS respondents for whom the SSA data are available. The SSA data are available for just under half of the

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<sup>38</sup> These average ratings may be biased upward because if a respondent indicates total disability, then a 100% rating is auto-filled. If they do not indicate total disability, they have to provide a rating.



total. This is partly because some respondents did not consent to the matching.<sup>39</sup>

However, on our key variables of interest, these data look quite similar to the full HRS sample, with the important exception that a much larger share report SSDI. This largely occurs because one can only show up in the SSA data if one is receiving some benefits from SSA.<sup>40</sup> Thus, the share receiving SSDI is 15.5% (3,102/19,949), higher than in Column (1). But the share receiving WC is similar, at 2.4% (472/19,949).

Interestingly, of those reporting a WC disability and reporting whether it is permanent or temporary, 38.2% ( $97 / \{97 + 157\}$ ) report a permanent disability. This is a bit higher than the percentage in Column (1) that reports a permanent disability (33.8%). Given that receiving SSDI is associated with being represented in Column (3), the higher share on permanent disability in the Column (3) subsample provides an indication that workers with permanent WC disabilities are more likely to go on SSDI. (However, the average disability rating for those with permanent disabilities is a shade lower in Column (3).)

Table 2 provides some additional information on HRS self-reports of SSDI versus SSDI receipt recorded in the SSA data. This comparison is of interest because, for SSDI, we have these two alternative sources of measurement; for WC, in contrast, we have only the HRS (aside from the very small number identified in the SSA data).<sup>41</sup> We report two types of evidence: first, the benefit type when HRS respondents enter the SSA data;

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<sup>39</sup> It appears that about half of this drop-off is due to consent. In the HRS data, the consent rate is about 75%, which is consistent with an earlier figure reported in Olson (1999).

<sup>40</sup> Olson (1999) also discusses some administrative reasons why there may not be SSA matched data even when someone is receiving SSA benefits and may have consented.

<sup>41</sup> As noted in the conclusion, there is another source of much more complete data on WC benefits in WC insurance claims files. But we cannot, at this point, match these to SSA data.

and second, how well self-reported SSDI matches the SSA data. This table, in our view, suggests that there is some over-reporting of SSDI in the HRS.

Column (1) repeats Column (3) of Table 1, for reference. Column (2) shows that 82.3% (195/237) of those who, in the HRS, say they received both WC and SSDI, enter the SSA data as disabled — i.e., receiving disability benefits.<sup>42</sup> However, if we do not condition on receiving WC, this percentage is lower (75.6%, or 2,345/3,102). Columns (3) to (5) show the other possible classifications at entry.<sup>43</sup> Although a majority enter the SSA data as “Retired” (61.7%, or 12,306/19,949), only 7.2% (17/237) of workers who report receiving both WC and SSDI enter the SSA data as retired. Again, this suggests that SSDI reporting in the HRS is not too badly overstated for those who also report WC benefits, which is reinforced by the very high share of those with permanent WC disabilities who appear in the SSA data (90.4%, or 47/52) since “Disabled at Entry” has nothing to do with WC.

Finally, Column (6) reports the number of individuals within each classification (by row) that SSA records as ever receiving SSDI payments. Relative to the 2,345 who report receiving SSDI and enter as disabled, 91.6% (2,149) are also recorded in the SSA data as getting SSDI.<sup>44</sup> In contrast, a lower percentage (69.3%, or 2,149/3,102) of the total number of HRS respondents who report getting SSDI have this receipt verified in the matched SSA data. This lower percentage may be attributable to the HRS questions

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<sup>42</sup> The variable definition (*DOEITOB*) is: “Benefit data: Type of benefit at date of initial entitlement.” The cases coded as disabled at entry report “2. Disabled worker.”

<sup>43</sup> Note that in some cases cells are combined, because of reporting rules for the restricted data.

<sup>44</sup> The 2,149 may include a small number of cases where a person initially received SSA benefits (as widow or child) but subsequently received SSDI benefits based on their own work history and disability.

sometimes combining SSDI and SSI, potential confusion between SSDI and other programs, and the possible multiple rounds of applying for SSDI contaminating self-reporting of SSDI receipt. Because of this issue, our analysis of offsets below also considers the subset of people for whom the SSA data verify SSDI receipt, and these numbers should be viewed as more definitive.

Recall, importantly, that dual receipt of WC benefits for a permanent disability and of SSDI benefits does not necessarily imply that required offsets are not being applied. First, in reverse offset states there can be even a full offset of WC benefits against SSDI and no offset would appear in the SSA data. Second, given the offset formula, an injured worker with high prior earnings may appropriately receive both WC and SSDI benefits. Thus, we next turn to evidence on offsets.

### *Offsets*

Table 3 provides the information on offsets. Column (1), which repeats (3) from Table 1, shows that, in the matched data, there are 52 people who receive WC and SSDI benefits and report a permanent disability. Of these, Column (2) shows that 14 are reported in the SSA data as having SSDI benefits offset, and Column (3) shows that for an additional six, the data indicate that SSA knows of the WC benefits but did not offset benefits (that is, Columns (2) and (3) are mutually exclusive). Thus, we might conclude that offsets are being calculated (and applied when appropriate) to 38.4% (20/52) of those receiving both types of benefits who have a permanent disability, and 26.9% (14/52) have an offset applied. This offset percentage is higher than SSA data indicate for dual eligibles (e.g., 12.5% in the 2019 data; SSA (2020, Table 31)). However, it should be higher because the calculation is limited to those reporting a permanent WC disability.

In contrast, 61.5% (32 across Columns (4) and (5), divided by 52) appear to be unknown to SSA and hence not offset. At least for the 16 cases in Column (5), who are not in a reverse offset state, there is no clear reason SSA would be considering an offset (which we assume means the person would appear in Column (2) or (3) instead). It is unclear that for a reverse offset state there would be a reason for SSA to do an offset calculation, so it is possible that the “unknowns” in Column (4) reflect these cases. Even if we assume the only cases that should be known to SSA are those in the last column, there appears to be a fairly high percentage of permanent disability cases drawing both WC and SSDI benefits with no indication of SSA knowledge with which to potentially apply an offset (30.8%, or 16/52).

Table 4's Column (1) reports similar calculations to those in Column (1) of Table 3, with several important differences: (i) It restricts to those with SSDI benefits reported by SSA; (ii) it begins with the third row (individuals receiving SSDI); and (iii) the last four rows use more explicit timing information to identify WC-compensable injuries near the date of beginning SSDI receipt. Restricting to individuals who receive SSDI benefits from SSA and report a WC permanent disability results in 40 individuals. We find that SSA calculated or recorded an offset for 31% of them (13/40). Limiting further to individuals who receive SSDI payments after WC receipt or within three years prior results in 34 permanently disabled individuals who are receive both WC and SSDI. Similar to what we discussed above, as reported in Column (5), we find there are 12 cases of individuals receiving both SSDI and WC benefits without an offset who are not in a reverse offset state (35.2%), with no knowledge of WC benefits indicated in the SSA data. This suggests a fairly high percentage of permanent disability cases drawing both WC and SSDI benefits with no indication of SSA knowledge with which to potentially apply an

offset. The restriction to SSA-confirmed SSDI recipients reduces our sample size, but still seems to suggest that there is a sizable fraction of individuals receiving both SSDI and WC who are not having benefits offset when, perhaps, required.

We emphasize that our “unknown” classification is based on many flags for WC offset calculations and is not necessarily a definitive flag for whether SSA knows about past WC. Nonetheless, we would argue that our approach of combining outside survey data capturing WC benefits (especially) that may not be reported to SSA is novel and valuable.<sup>45</sup>

*Potential issues aside from SSA knowing about WC benefits*

The data to here suggest that SSA may be missing some information about whether SSDI recipients also receive WC benefits. Additionally, we noted other issues regarding offsets, in particular the potential for manipulation of WC permanent disability awards to minimize offsets. There is some evidence in the data that this may be occurring.

Note that, although the number of observations is very small, the disability rating is higher (95.0%, Column (3) of Table 3) for those with no offset, but for whom WC receipt is known to SSA, than for those with an offset (82.3%, Column (2) of Table 3). (We cannot do this comparison for Table 4 because of cell-size reporting restrictions when using multiple, restricted data sets matched to the HRS.) All else the same, we would expect higher WC benefits and, hence, more offsets with a higher disability rating, so the data suggest that SSDI offsets may not be applied appropriately. Conceivably, this

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<sup>45</sup> We believe SSA has another data set that may have more comprehensive information on WC receipt for SSDI beneficiaries (the Workers’ Compensation and Disability Benefit file). However, this data file is not currently matched to the HRS.

happens because those with the highest disability ratings have WC awards more easily manipulated by attorneys to reduce offsets (e.g., by shifting benefits to future medical expenses).

Other data also suggest that the rate of offset application is surprisingly low. SSA (2019, Table 31) reports that 66.7% of joint SSDI and WC (or PDB) recipients have no offset because of the 80% rule: That is, their combined benefits are below 80% of prior earnings.<sup>46</sup> Such a high share would imply that most workers drawing benefits from both programs have combined benefits below 80% of prior earnings. State WC systems have maximum payments,<sup>47</sup> as does SSDI, and hence prior earnings could be a good deal higher than combined benefits for some workers. However, injuries are more common for lower-earning workers (Boden 2005), and benefits are more generous for low earners.<sup>48</sup> Moreover, we have shown that those drawing benefits from both programs have a high incidence of permanent disabilities and high permanent disability ratings, implying higher benefits, making the 80% rule more likely to apply. Thus, it is surprising that the majority of workers qualifying for both programs would have benefits below 80% of prior earnings. This question is worthy of more exploration, especially in light of the scope for

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<sup>46</sup> This percentage is close to our percentage based on the sum of our two “unknown” columns (72.0%, based on Table 4). If we exclude Column (4) – those in reverse offset states – the percentage is much lower. We are not certain that SSA data would necessarily indicate “unknown” for those in reverse offset states.

<sup>47</sup> This varies by state, but the permanent total maximum is often around two-thirds of the prior wage subject to a weekly maximum. See, e.g., <https://www.policygenius.com/blog/state-by-state-guide-to-workers-compensation/>. SSA lists the maximums here: <https://secure.ssa.gov/poms.nsf/lnx/0452150045>.

<sup>48</sup> SSDI pays 90% of the first \$996 of AIME, 32% of the AIME up to \$6,002, and 15% of the AIME above that up to the maximum \$3,124 (in 2021), and WC benefits are often two-thirds of earnings (below the maximum).

manipulating WC payments to reduce the likelihood of an offset.

## **Conclusions and discussion**

We use data from the Health and Retirement Study (HRS) and matched Social Security Administration (SSA) data to study workers who suffer permanently disabling injuries covered by workers' compensation (WC). We examine whether they subsequently end up on SSDI, as well as the available evidence on whether, when this occurs, SSA appears to be calculating and potentially applying required offsets to SSDI benefits when combined benefits from the two programs are sufficiently high relative to prior earnings. Our analysis' novel feature is to link HRS data on WC benefit receipt to SSA data on WC and SSDI recipients.

We find that a large share of workers who suffer permanently-disabling, WC-compensable injuries end up on SSDI. We also find that SSA appears to be missing information on a sizable share of WC-benefit recipients, and the frequency with which SSDI benefits are reduced because of the WC offset seems surprisingly low at least based on the information we have.

In future work, we will do more to try to determine whether offsets occur when required by expanding our use of the data sources. It would be useful to combine Social Security earnings records and WC and SSDI benefit formulas to try to assess where the SSDI offset rule is more likely to apply.

A larger challenge is studying the reverse offset states and whether, in these states, WC benefits are being reduced when workers receive SSDI benefits for WC-compensable injuries. This will require different data, most likely WC insurance claims matched to SSA administrative data. Moreover, the ability to merge data on SSDI benefits and WC insurance claims would provide the most definitive evidence on all of the questions we consider, given the small number of observations we can glean from

the HRS data and the matched HRS and SSA data on workers with permanently-disabling injuries who receive WC.



## References

- Barth, Peter S. 2003/2004. "Compensating Workers for Permanent Partial Disabilities." *Social Security Bulletin*, 65(4), pp. 16-23.
- Boden, Leslie I. 2005. "Running on Empty: Families, Time, and Workplace Injuries." *American Journal of Public Health*, 95(11), pp. 1894-1897.
- Buffie, Nick, and Dean Baker. 2015. "Rising Disability Payments: Are Cuts to Workers' Compensation Part of the Story?" CEPR Reports and Issue Briefs 2015-21, Center for Economic and Policy Research (CEPR).
- Clayton, Ann. 2003/2004. "Workers' Compensation: A Background for Social Security Professionals." *Social Security Bulletin*, 65(4), pp. 7-15.
- Dolinschi, Roman. 2017. *CompScope™ Benchmarks, 17<sup>th</sup> Edition: The DataBook*. Workers Compensation Research Institute, Cambridge, MA.
- McInerney, Melissa, and Kosali Simon. 2012. "The Effect of State Workers' Compensation Program Changes on the Use of Federal Social Security Disability Insurance." *Industrial Relations*, 51(1), pp. 57-88.
- McLaren, Christopher F., and Marjorie L. Baldwin. 2017. *Workers' Compensation: Benefits, Coverage, and Costs — 2015 Data*. National Academy of Social Insurance, Washington, DC.
- Murphy, Griffin, Jay Patel, Elaine Weiss, and Leslie I. Boden. 2020. *Workers' Compensation: Benefits, Costs, and Coverage (2018 Data)*. National Academy of Social Insurance, Washington, DC.
- National Council on Compensation Insurance (NCCI). n.d. ABCs of Experience Rating. [https://www.ncci.com/Articles/Documents/UW\\_ABC\\_Exp\\_Rating.pdf](https://www.ncci.com/Articles/Documents/UW_ABC_Exp_Rating.pdf)

- O’Leary, Paul, Leslie I. Boden, Seth A. Seabury, Al Ozonoff, and Ethan Scherer. 2012. “Workplace Injuries and the Take-Up of Social Security Disability Benefits.” *Social Security Bulletin*, 72(3), pp. 1-17.
- Olson, Janice A. 1999. *Social Security Bulletin* 62(2), pp. 73-85.
- Parent, Rene, Incigul Sayman, and Kevin Kulzer. 2012. “Profile of Social Security Disabled Workers and Dependents Who Have a Connection to Workers’ Compensation or Public Disability Benefits.” Social Security Administration, Research and Statistics Note No. 2012-03, <https://www.ssa.gov/policy/docs/rsnotes/rsn2012-03.html>.
- Reville, Robert T., and Robert F. Schoeni. 2003/2004. “The Fraction of Disability Caused at Work.” *Social Security Bulletin*, 65(4), pp. 31-37.
- Social Security Administration. n.d. *Disability Benefits*.
- Social Security Administration. 2020. *Annual Statistical Report on the Social Security Disability Program, 2019*. Social Security Administration, Publication No. 13-11826.
- Social Security Administration. 2019. *Annual Statistical Report on the Social Security Disability Program, 2018*. Social Security Administration, Publication No. 13-11826.
- Social Security Administration. 2006. *Annual Statistical Report on the Social Security Disability Program, 2005*. Social Security Administration, Publication No. 13-11826.
- Victor, Richard. 2019. *Scenarios for the 2030s: Threats and Opportunities for Workers’ Compensation Systems*. Sedgwick Institute.
- Victor, Richard A. 1989. *Designing Benefit Structures for Temporary Disability*. Workers Compensation Research Institute, Cambridge, MA.

**Table 1: Workers' compensation and Social Security disability insurance reporting  
in the HRS and SSA data**

	<b>HRS data</b>	<b>HRS data supplemented by SSA data</b>	<b>HRS data supplemented by SSA data, for matched HRS-SSA subset of HRS data</b>
	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
<b>Total individuals</b>	40,169	...	19,949
<b>Receive either WC or SSDI</b>	4,770	5,385	3,337
<b>Receive SSDI</b>	4,152	4,797	3,102
<b>Receive WC</b>	901	926	472
<b>Permanent disability</b>	185	...	97
<b>Temporary disability</b>	363	...	157
<b>Average rating (permanent)</b>	79.0% N = 161	...	77.3% N=83
<b>Receive both WC and SSDI at some time</b>	283	338	237
<b>Permanent disability</b>	75	79	52
<b>Temporary disability</b>	96	106	68
<b>Average rating (permanent)</b>	88.3%, N = 68	87.8% N=72	85.6% N=47

**Notes:** Data from HRS public respondents combined with restricted matched SSA data. The classification of observations indicated in the labels for the rows are determined solely from HRS responses in Column (1), and supplemented with the SSA data in Columns (2) and (3). The columns indicate the data sets used.

**Table 2: Status at entry into SSA data**

	HRS data supplemented by SSA data, for matched HRS-SSA subset of HRS data	Disabled at entry	Retired at entry	Other at entry	Unknown at entry	SSA records as receiving SSDI
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Total individuals</b>	19,949	2,784	12,306	2,247	2,612	2,149
<b>Receive either WC or SSDI</b>	3,337	2,362	400	108	467	2,149
<b>Receive SSDI</b>	3,102	2,345	268	91	398	2,149
<b>Receive WC</b>	472	212	149	20	91	172
<b>Permanent disability</b>	97	53	25	4	15	40
<b>Temporary disability</b>	157	55	48	9	45	42
<b>Average rating (permanent)</b>	77.3% N=83	N=47	N=21	N=15		N=35
<b>Receive both WC and SSDI at some time</b>	237	195	17	25		172
<b>Permanent disability</b>	52	47	5			40
<b>Temporary disability</b>	68	50	7	11		42
<b>Average rating (permanent)</b>	85.6% N=47	N=42	N=5			N=35

**Notes:** Column (1) repeats the information from column (3) of Table 1. Columns (2) to (5) report benefit type recorded at date of initial entitlement based on the SSA data. Column (6) is limited to individuals who received SSDI payments from SSA. Cells are sometimes combined to meet cell-size reporting requirements when using multiple restricted data sets matched to the HRS.

**Table 3: Information on offsets, HRS respondents (and responses) in SSA data**

	<b>Total with SSA data</b>	<b>Offset</b>	<b>Knows</b>	<b>Unknown and in reverse offset state</b>	<b>Unknown and not in reverse offset state</b>
	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>
<b>Total individuals</b>	19,949	177	124	8,749	10,899
<b>Receive either WC or SSDI</b>	3,337	143	61	1,018	2,115
<b>Receive SSDI</b>	3,102	135	54	891	2,022
<b>Receive WC</b>	472	70	32	188	182
<b>Permanent disability</b>	97	16	8	41	32
<b>Temporary disability</b>	157	16	6	71	64
<b>Average rating (permanent)</b>	77.3% N=83	84.9% N=14	86.9% N=8	75.9% N=35	72.3% N=26
<b>Receive both WC and SSDI at some time</b>	237	62	25	61	89
<b>Permanent disability</b>	52	14	6	16	16
<b>Temporary disability</b>	68	17		18	33
<b>Average rating (permanent)</b>	85.6% N=47	82.3% N=12	95.0% N=6	84.7% N=15	85.4% N=14

**Notes:** Column (1) repeats the information from Column (3) of Table 1. Column (2) contains individuals with SSA-calculated SSDI payment offsets in the restricted data. Column (3) is limited to individuals where there is evidence that SSA is aware of WC receipt. Column (4) contains individuals with no evidence of SSA knowledge of WC receipt and who were living in a reverse offset state prior to SSDI or WC receipt. Column (5) is limited to individuals with no evidence of SSA knowledge of WC receipt and who were not living in a reverse offset state prior to SSDI or WC receipt. Cells are sometimes combined to meet cell-size reporting requirements when using multiple restricted data sets matched to the HRS.

**Table 4: Information on offsets, HRS respondents in SSA data limited to SSDI recipients verified in matched SSA data**

	Total with SSA saying receive SSDI	Offset	Knows	Unknown and in reverse offset state	Unknown and not in reverse offset state
	(1)	(2)	(3)	(4)	(5)
<b>Total individuals receiving SSDI</b>	2,149	113	20	701	1,315
<b>Receive WC</b>	172	55	11	46	60
<b>Permanent disability</b>	40	13		14	13
<b>Temporary disability</b>	42	13	0	11	18
<b>Average rating (permanent)</b>	81.1% N=35	79.4% N=11		82.3% N=13	81.4% N=11
<b>Receive both WC and SSDI (starting date reported and WC before SSDI or within 3 years)</b>	118	33		36	49
<b>Permanent disability</b>	34	10		12	12
<b>Temporary disability</b>	35	10	0	10	10
<b>Average rating (permanent)</b>	77.9% N=29	71.6% N=8		80.1% N=11	79.5% N=10

**Notes:** Column (1) reports similar evidence to Column (1) of Table 3, with a few differences: (i) it restricts to those with SSDI benefits reported by SSA; (ii) it begins with the third row (individuals receiving SSDI); and (iii) the last four rows use more explicit timing information to identify WC-compensable injuries near the date of beginning SSDI. Column (2) contains individuals with SSA calculated SSDI payment offsets in the restricted data. Column (3) is limited to individuals where there is evidence that SSA is aware of WC receipt. Column (4) contains individuals with no evidence of SSA knowledge of WC receipt and who were living in a reverse offset state prior to SSDI receipt. Column (5) is limited to individuals with no evidence of SSA knowledge of WC receipt and who were not living in a reverse offset state prior to SSDI receipt. Cells are sometimes combined to meet cell-size reporting requirements when using multiple restricted data sets matched to the HRS.

**Appendix Table A1: Reverse Offset States**

Alaska
California
Colorado
Florida
Louisiana
Minnesota
Montana
New Jersey
New York
North Dakota
Ohio
Oregon
Washington
Wisconsin

**Source:** <https://secure.ssa.gov/poms.nsf/lnx/0452105001>.