11. Improving the Interaction Between the SSDI and Workers' Compensation Programs

John F. Burton Jr. and Xuguang (Steve) Guo

INTRODUCTION

Social Security Disability Insurance (SSDI) is the largest source of cash benefits for disabled workers and their families with $140.1 billion paid in 2013. Workers' compensation (WC) is the second-largest source of cash benefits for these workers and their families, paying $32.0 billion in 2013 (Sengupta and Baldwin 2015). WC benefits are limited to workers whose disabilities are the result of work-related injuries and diseases,[1] while SSDI benefits are paid regardless of the source of the disability. Although there are other differences between the programs in coverage and eligibility rules, many workers actually or potentially qualify for both sources of benefits.

In the next three sections, we provide a primer on SSDI, Medicare, and WC, examine the retrenchments in WC since 1990, and review evidence suggesting there is cost shifting from WC to SSDI. We then devote four sections to proposals that could reduce the extent of cost shifting. The final section provides our conclusions and recapitulates our suggestions for the initial implementation of the proposals.

A PRIMER ON SSDI, MEDICARE, AND WORKERS' COMPENSATION

The primer provides only a brief discussion of the SSDI program, on the assumption that most readers are reasonably familiar with the program. The discussions of Medicare and the medical components of WC are also brief since the main focus of this chapter is cash benefits.

SSDI and Medicare Benefits

SSDI benefits are paid to workers who become disabled and unable to work prior to the normal retirement age. SSDI benefits are available to workers with disabilities, whether or not their disabilities result from work injuries. However, SSDI benefits are paid only to workers who meet the definition of disability in the Social Security Act: "the inability to engage in any substantial gainful activity (SGA) by reason of any medically determinable physical or mental impairment(s) which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months."

Workers must have a substantial history of contributions to the Social Security system in order to be eligible for SSDI benefits, which begin after a five-month waiting period. Workers who qualify for SSDI benefits can lose their benefits if they subsequently have enough earnings to indicate they are

[1] We use "injuries" to include "injuries and diseases" in this study.

capable of SGA. However, most workers who qualify for SSDI benefits continue to receive benefits until they die or until they are old enough to qualify for old age benefits in the Social Security program.

Medicare pays health care costs for persons who receive SSDI benefits after an additional 24-month waiting period (or 29 months after the onset of disability).

Workers' Compensation Benefits

WC benefits are paid to workers who become disabled or who require medical treatment as a result of work-related injuries. Workers are eligible for benefits from the first day of employment. WC provides medical benefits, which begin the day of the injury. In most jurisdictions, the medical benefits are provided without limits on duration or dollar amount, and there are no deductibles or co-insurance payments for the medical care.

Seventy-five percent of WC cases involve only medical benefits (Sengupta and Baldwin 2014, 7), while cases including cash benefits (almost always in addition to medical benefits) account for the other 25 percent. Most WC claims that pay cash benefits are for temporary total disability (TTD), which means the disability temporarily precludes a person from performing the pre-injury job or another job at the employer that the worker could have performed prior to the injury. In most states, TTD benefits have a waiting period of from three to seven days and continue until the worker is able to return to work, is determined to have a permanent disability, or reaches a statutory limit on the duration of TTD benefits.

While most WC cases involving cash benefits involve only TTD benefits, most payments of cash benefits go to workers who receive permanent total disability (PTD) or permanent partial disability (PPD) benefits. Those are the categories of cash benefits most likely to involve workers who also qualify for SSDI benefits because of the serious nature of the injuries. (O'Leary et al. 2012, Chart 5).

Permanent total disability benefits are paid to those with disabilities that preclude material levels of employment. PTD benefits account for only 0.3 percent of the WC cases paying cash benefits, but accounted for 7.1 percent of all cash benefit payments in 2009 (Sengupta, Baldwin, and Reno 2014, Figure 4). Burton (2012, 53) estimated there were about 13,200 PTD cases nationally in 2009. PTD benefits are paid for the duration of the period of total disability or for life in 38 states (Tanabe 2014, Table 5). In the other 13 jurisdictions, the duration or dollar amount of PTD benefits is limited.

PPD benefits involve disabilities that are permanent but that do not completely limit a person's ability to work. In almost all PPD cases, the duration of the benefits is determined after the date of maximum medical improvement.[2] Once the duration is determined (e.g., 100 weeks), the worker receives benefits for that duration, even if he or she returns to work at full preinjury wages prior to 100 weeks. Conversely, PPD benefits stop after 100 weeks, even if the worker is continuing to experience a loss of earnings due to the work-related injury. PPD benefits accounted for 37.7 percent of cases paying

[2] Burton (2005) identified three operational approaches to PPD benefits: the impairment approach (which determines the duration of the PPD benefits by rating the worker's medical condition); the loss-of-earning-capacity approach (which determines the duration of PPD benefits by rating the worker's loss of earning capacity based on the worker's medical conditions as well as factors including age, education, and prior work experience); and the actual-wage-loss approach (which determines the duration of PPD benefits by the period in which the worker experiences loss of earnings due to the work injury). The actual-wage-loss approach is used in only a few states, and those states are likely to limit the duration of PPD benefits.

cash benefits and for 62.0 percent of cash benefits payments in 2009 (Sengupta, Baldwin, and Reno 2014, Figure 4). Burton (2012, 53) estimated there were about 468,000 PPD cases nationally in 2009.

The Adequacy of WC Permanent Disability Benefits.

One approach to assessing the adequacy of WC benefits relies on wage-loss studies that compare the WC benefits received by a sample of injured workers to the actual wage losses experienced by those workers. Wage losses are calculated by comparing the workers' post-injury wages with estimates of the wages the workers would have received if they had not been injured. (Non-injured workers in jobs similar to the injured workers are used as a control group to produce estimates of potential wages.) One issue in the wage-loss studies is the value of the replacement rate (benefits divided by earnings losses) that is considered adequate. The National Commission on State Workmen's Compensation Laws (1972, 18-20) indicated that replacement of two-thirds of lost earnings was the appropriate standard for TTD, PTD and death benefits, but did not specify an adequacy standard for PPD benefits. A study panel of the National Academy of Social Insurance, while acknowledging the decision was somewhat arbitrary, endorsed "the historical standard of replacing two-thirds of gross wages as a measure of benefit adequacy" for PPD benefits (Hunt 2004, 128). In recent decades, there have been a series of wage-loss studies of PPD benefits, which are summarized by Boden, Reville and Biddle (2005, Table 3.4). The studies indicate that replacement rates for the 10 years after injury were 46 percent in New Mexico, 41 percent in Washington, 37 percent in California, 36 percent in Oregon and 30 percent in Wisconsin. The authors concluded (at 60) the "replacement rates do not approach the benchmark for adequacy."

Financing of SSDI and Workers' Compensation

The SSDI program is financed by employer and employee contributions of 0.9 percent each up to an annual taxable maximum of earnings (currently $118,500). The contribution rates do not vary depending on prior benefit payments made by the employer.

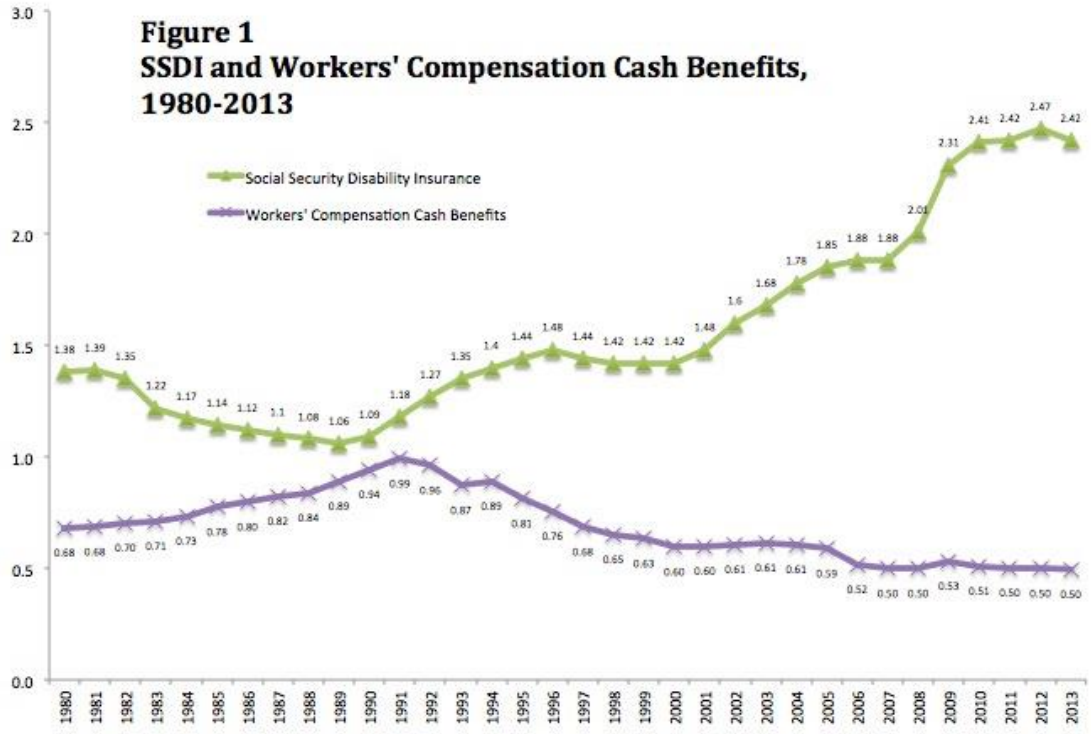
The WC program is largely financed by insurance premiums paid by employers.[3] (With the exceptions of a few states, workers do not pay WC premiums.) The premiums vary among employers based on previous benefit payments attributable to the firm or similar employers. (More information on experience rating is provided in proposal 3.)

DEVELOPMENTS IN WORKERS' COMPENSATION CASH BENEFITS SINCE 1980

Cash Benefits Increased until the early 1990s and then Decreased

Payments per $100 of covered payroll for WC cash benefits from 1980 to 2013 are shown in Figure 1. (The figure also includes information on SSDI benefits per $100 of payroll, which will be discussed in the next section.) WC cash benefits increased from $0.68 per $100 of payroll in 1980 to a peak of $0.99 per $100 of payroll in 1991. Cash benefits then declined in most subsequent years until reaching $0.50 per $100 of payroll in 2013, tying four other recent years for the lowest figure since 1980.

[3] In most states, employers can self-insure their workers' compensation obligations, which constitutes perfect experience rating (although many self-insuring employers reinsure some of their risks).



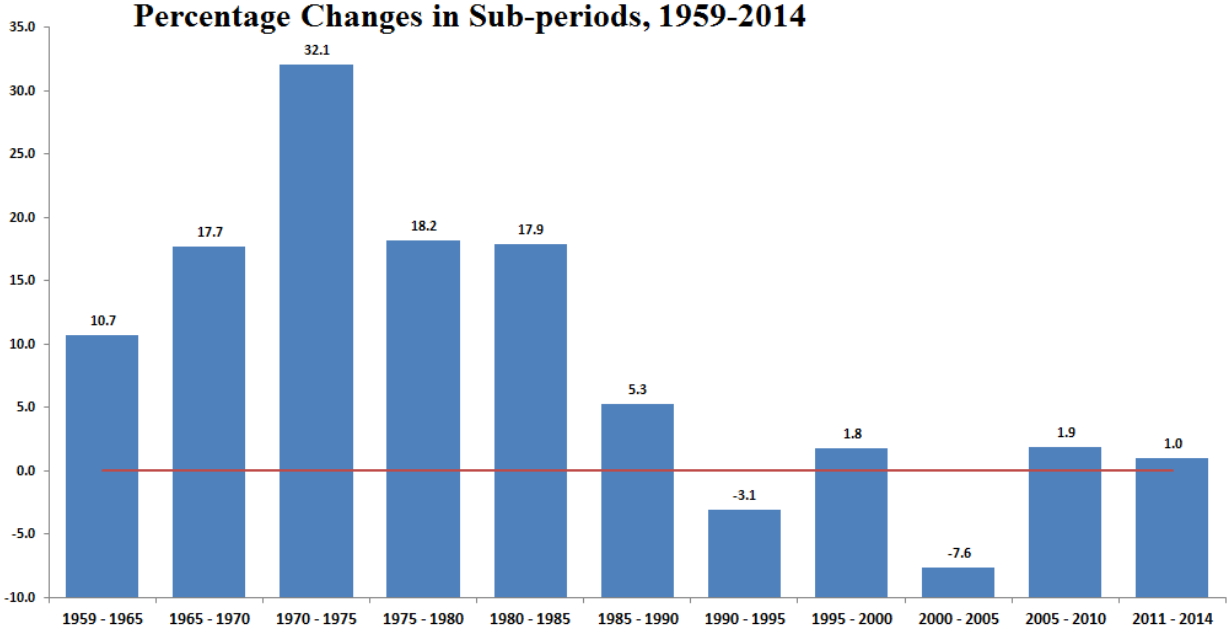
Explanation of the Increase and Subsequent Decline in Cash Benefits

The National Council on Compensation Insurance (NCCI) publishes information on countrywide changes in workers' compensation premium levels, which are divided into two primary components: (1) experience change, which is largely "based on analyses of state premium and benefit cost data," and (2) benefit changes [which we describe as changes in statutory benefits], which reflect changes in cash benefits "adopted by various state legislatures, as well as medical fee and hospital rate changes" (NCCI 2015, Exhibit 1).

Figure 2 shows the benefit changes for sub-periods (most involve five-year intervals) from 1959 to 2014. Workers' compensation statutory benefits increased significantly during the 1960s, substantially between 1970 and 1985, and modestly between 1985 and 1990. Then statutory benefits declined in the decades of the 1990s and the 2000s, before increasing by 1 percent between 2010 and 2014.[4]

[4] The NCCI reported a 0.8 percent national increase in statutory benefits in 2014, including a 24.1 percent decline in cash benefits in Oklahoma and a 16.2 percent decline in Tennessee (NCCI 2015, Exhibits 1 and 3).

Figure 2
Workers Compendsation Statutory Benefits Changes
Percentage Changes in Sub-periods, 1959-2014



Source: Calculations by John Burton based on NCCI (2015 and earlier editions)

There are only a few published studies that attempted to determine the sources of declining payment of WC cash benefits since the early 1990s. Spieler and Burton (2012) provide a qualitative analysis examining changes in state WC statutes and court decisions that reduced the durations of cash benefits and, of even more importance, changed the compensability rules in many states. Some of the changes include limits on the ability of workers to qualify for benefits when their work injuries aggravated preexisting conditions; restrictions on benefits for certain diseases, including stress-related mental disorders and carpel tunnel syndrome; requirements that disorders must be proven by "objective" medical evidence; and higher standards of proof so a claimant must prove the case by "clear and convincing evidence" rather than by the "preponderance of the evidence." Guo and Burton (2010) conducted a quantitative analysis of the determinants of cash benefits relying on annual observations for 46 jurisdictions (including the District of Columbia)[5]. They found that part of the decline in cash benefits between 1990 and 1999 was due to a drop in the work-related injury rate, but that a larger share of the decline was caused by a combination of (1) more stringent administrative practices, rules, and decisions by state courts, (2) tightening of eligibility rules in state statutes, and (3) the declining share of WC cases that qualified for permanent partial disability benefits.

Recent Developments Affecting WC Cash Benefits

A recent example of the effort to tighten compensability rules involved Illinois, where Gov. Bruce Rauner proposed in 2015 a change in the causation standard used to determine if a worker qualifies for WC benefits:

[5] Additional information on Guo and Burton (2010) is provided in proposal four.

> The causation standard should be raised from an "any cause" standard to a "major contributing cause" standard. The accident at work must be more than 50 percent responsible for the injury compared to all other causes.

The governor's discussion of this proposed standard indicates that Missouri, Kansas, Oklahoma, and Tennessee have recently passed laws requiring the workplace to be "the *primary* cause for workers' compensation to be compensable," and indicates that "Florida's major contributing cause standard is identical to the one we are proposing." The major contributing cause (MCC) requirement contrasts with the traditional approach in WC, in which a worker is eligible for benefits so long as the work-related injury is a nontrivial source of his or her disability. An example of how restricting eligibility affects workers is provided in Oregon, where Thomason and Burton (2001) estimate that a series of legislative changes, including adopting the MCC provision, resulted in benefits (and costs) about 25 percent below the amounts they would have been without the more restrictive eligibility standards.

In addition to reductions in the duration and weekly amounts of cash benefits and the constriction of compensability rules, there is a nascent movement to reduce the mandatory coverage of workers by state WC laws. The most significant recent development concerning mandatory coverage was Oklahoma's adoption of an employer opt-out provision that applies to injuries sustained after January 1, 2014. Robinson (2013, 154-55) distinguishes the Oklahoma approach from the long-standing provision in Texas that allows employers to be "non-subscribers" to the state's workers' compensation law, and thus subject themselves to tort suits. (Many Texas employers have, however, voluntarily established disability plans that provide some protection to injured workers). The Oklahoma law allows employers the choice of (1) remaining with the "traditional" workers' compensation act or (2) establishing a written benefit plan that provides "for payment of the same form of benefits" that are at least equal to or greater than those under the state's WC law. The advantage to an employer is that the benefit plan they adopt may qualify as an Employee Retirement Income Security Act plan, which could mean that a dispute involving the benefit plan would be resolved in federal courts rather than by the Oklahoma Workers' Compensation Commission or Oklahoma state courts. It is too soon to assess the extent to which the 2013 Oklahoma law will result in significantly reduced WC coverage for the state's workers, but several commentators, including Torrey (2015, 10-11), have expressed concern about the opt-out provision.

Although the decline in WC benefits shown in Figures 1 and 2 that were examined by Spieler and Burton (2012) and Guo and Burton (2010) began in the early 1990s, the rate of constriction in coverage and benefits may have accelerated in the past 10 years. Grabell and Berkes (2015) report that "Since 2003, legislators in 33 states have passed workers' compensation laws that reduce benefits or make it more difficult for those with certain injuries and diseases to qualify for them."

THE POSSIBLE SHIFTING OF COSTS OF WORKPLACE INJURIES AND DISEASES FROM WORKERS' COMPENSATION TO SSDI

Payments per $100 of covered payroll for WC cash benefits and for SSDI benefits from 1980 to 2013 are shown in Figure 1. As previously discussed, WC cash benefits per $100 of covered payroll increased from 1980 until 1991, and then declined in most subsequent years. In contrast, SSDI benefits declined during most of the 1980s, but increased significantly in subsequent years. WC cash benefits were only slightly less expensive than SSDI benefits in the early 1990s, but by 2013, SSDI benefits were almost five times WC cash benefits as a percent of covered payroll. The divergent trends in SSDI and WC since 1980 caused the National Academy of Social Insurance to "raise the question of whether

retrenchments in one program increase demands placed on the other" (Sengupta, Reno, and Burton 2011, 45).

Coordination of SSDI and WC Benefits

The Social Security Act was amended in 1965 to require that the total of SSDI and WC benefits, and certain other public disability plans (PDB) operated by most states, not exceed the "applicable limit," which for most workers is 80 percent of the worker's average current earnings (ACE) prior to qualifying for SSDI benefits (Altomare 2009). In most states, the offset provision requires SSDI benefits to be reduced if necessary to achieve the 80 percent limit if the worker is receiving benefits from both programs. For example, if the ACE is $4,000 per month, then the "applicable limit" is $3,200. If the WC monthly cash benefit is $2,800, and the SSDI benefit would have been $1,800 without the offset provision, then the application of the offset provision requires the SSDI monthly benefit to be limited to $400. However, in 15 states with reverse-offset laws, WC benefits are reduced to achieve the 80 percent limit. Using the figures in the prior example, SSDI benefits would be $1,800 and WC cash benefits would be $1,400 after application of the reverse offset provision. In short, in this example, the use of the reverse-offset provision in place of the offset provision used in most states results in a $1,400 increase in SSDI benefits. (The offset topic is examined in more depth in the next section..)

Cost Sharing by WC and SSDI

Some workers receive WC cash benefits that meet the adequacy standard for the WC program (replacement of two-thirds of lost wags resulting from a work-related injury or disease) and also receive SSDI benefits. This can happen for a variety of reasons, such as the worker experiencing a work-related injury, which is compensated by the WC program, and a non-work-related injury (such as an auto accident), which results in SSDI benefits. Or the worker may receive WC cash benefits that replace two-thirds of lost wages plus SSDI benefits that bring the total of WC and SSDI benefits up to the limit of 80 percent of ACE. We classify such cases as cost sharing rather than cost shifting, even though there are SSDI benefits paid in addition to the WC benefits, because the objective of adequate WC benefits is met.

Cost Shifting from WC to SSDI

There are at least four types of shifting of costs of work-related injuries and diseases from WC to SSDI. First, some of the costs of work-related injuries and diseases can be shifted from WC to SSDI by the offset provision if workers receiving both SSDI and WC benefits are receiving weekly WC benefits that are inadequate. While the cost shifting may not be the intent of the offset provision, that is the effect because SSDI benefits are higher than they would be if WC benefits were adequate to bring the total of SSDI and WC benefits to the 80 percent limit.[6]

[6] The example in the *Coordination of SSDI and WC benefits* subsection assumed that the ACE is $4,000 a month, the "applicable limit" is $3,200, the WC monthly benefit is $2,800, and the SSDI monthly benefit would have been $1,800 without the offset provision. But because of the offset provision, the actual SSDI monthly benefit is $400. However, if the WC benefit is not $2,800 (assumed to adequate) but instead is $1,500 (not adequate), the actual SSDI monthly benefit will be $1,700 (not $400).

Second, cost shifting from WC to SSDI can occur if WC benefits terminate while the loss of wages due to the work-related injury persists. In this case, all of the disability benefits must be provided by the SSDI program after WC benefits cease.

Third, cost shifting can occur if some workers with work-related injuries never receive WC benefits, either because WC claims are never filed or the WC claims are denied because of restrictive compensability rules. In this case, all disability benefits are provided by SSDI.

Fourth, while the offset provision in a majority of states requires SSDI benefits to be reduced if total benefits exceed the applicable limit (80 percent of ACE), in 15 states the offset provision allows the states to reduce WC benefits in cases that exceed the maximum. In those states, the offset provision shifts some of the costs of work-related injuries from WC to SSDI.

Social Security Administration Data on the Overlap of SSDI and WC

There is a substantial overlap between SSDI and WC (or PDB) beneficiaries whose benefits from the two programs are coordinated as required by the offset provision in the Social Security Act (Sengupta and Baldwin 2015, Table 19). As of 2013, Social Security Administration (SSA) data indicate that 492,000 (5.5 percent) of workers receiving SSDI benefits were currently affected by the offset provisions. However, it is impossible to distinguish between cases involving cost sharing and cases involving the first type of cost shifting. In addition, there were 549,802 workers for whom SSDI benefits were previously offset by WC benefits. However, it is not possible to distinguish between cases involving cost sharing and cases involving the second type of cost shifting. Finally, 43,817 workers (or 0.5 percent of all workers receiving SSDI benefits) were currently receiving SSDI and WC benefits in reverse-offset states, which represents the fourth type of cost shifting. While studies discussed in the next section suggest that the workers eligible for both SSDI and WC benefits are undercounted in the SSA data in this paragraph, these data are not particularly useful in identifying the extent of cost shifting from WC to SSDI. To demonstrate cost shifting, other types of evidence are available.

Evidence of Cost Shifting from WC to SSDI

One source of evidence uses data from national surveys. An example of this approach is the analysis by Reville and Schoeni (2004/2004) of the 1992 Health and Retirement Study (HRS), a nationally representative study of the U.S. population aged 51-61. Among the disabled who reported that their health condition was caused by their work, 29 percent were enrolled in the SSDI program at the time of the survey but just 12.3 percent had ever received WC benefits (Reville and Schoeni 2003/2004, Table 6). For the workers whose health condition was caused by work but who never receive WC benefits, this represents the third type of cost shifting.

A second source of evidence relies on data from secondary sources compiled by organizations concerned with the costs of occupational injuries and illnesses. An example is the study by Leigh and Marcin (2012), who relied on data from several sources including the National Council on Compensation Insurance and the Bureau of Labor Statistics to estimate that the total costs of workplace injuries and illnesses in 2007 were $249.64 billion.[7] The authors estimated that the amounts

[7] Leigh and Marcin (2012) estimated that the total cost of workplace injuries and illnesses in 2007 was $249.64 billion, with $67.09 billion attributed to medical costs and $182.54 billion to indirect costs. Indirect costs consisted of (1) lost earnings ($110.02 billion), (2) lost fringe benefits ($29.03 billion), and (3) lost home production ($43.49 billion).

and percentages of the total costs accounted for by the various payers were workers' compensation ($51.725 billion or 20.72 percent)[8], out-of-pocket costs absorbed by the families ($124.88 billion or 50.02 percent), private health insurance ($32.92 billion or 13.19 percent), the federal government ($26.76 billion or 10.72 percent), and state and local governments ($13.35 billion or 5.35 percent) (Leigh and Marcin 2012, Table 4). The costs for the federal government included $12.51 billion for medical care and $14.25 billion for indirect costs, which includes *inter alia* the costs of SSDI benefits paid for workplace injuries and diseases. The essence of this study is that the federal government payments for cash benefits and medical care for workplace injuries and diseases are roughly half the amount paid by the WC program. This evidence involves examples of the first three types of cost shifting.

A third source of evidence relies on administrative data for individual WC recipients matched with administrative data for those individuals maintained by SSA. An example of this approach is the study of recipients of WC beneficiaries in New Mexico conducted by O'Leary et al. (2012). The results indicate that some workers who received WC benefits subsequently received SSDI benefits, and some portion of those SSDI benefits were due to the lingering effects of work-related injuries (O'Leary et al. 2012, Chart 5). For example, about 30 percent of workers who received PTD benefits from the WC program received SSDI benefits within 15 years after the date of their work-related injuries, and more than 20 percent of workers who received PPD benefits from the WC program received SSDI benefits within 15 years of their injuries. (These percentages refer to the excess number of SSDI cases compared to workers who receive only WC medical benefits). Even workers who only received WC temporary disability benefits for less than eight weeks were more likely to receive SSDI benefits than similar workers who received only WC medical benefits. The results indicate that some losses of earnings resulting from workplace injuries are only partially compensated by WC benefits, which is evidence of the first and second types of cost shifting

A fourth source of evidence uses state-level data on WC programs matched with state-level data on the SSDI program compiled by SSA. A particular issue that has been examined using this approach is whether the costs of work-related disability have been shifted from WC to SSDI as a result of the changes in WC statutes in recent decades that reduced cash benefits and constricted eligibility rules. While there is clear evidence that WC coverage and benefits have declined in recent decades, only a few studies have tested whether the costs have been shifted from WC to SSDI, and the results of these studies are mixed. Using state-level data on WC and SSDI activity, McInerney and Simon (2012) examined whether PTD or PPD weekly benefits provided by WC state programs were negatively associated with SSDI applications or allowances in those states. That is, in states where WC rules were less generous were applications or awards for SSDI benefits higher? They concluded "it is unlikely that state workers' compensation changes were a meaningful factor in explaining the rise in DI during our study period of 1986 to 2001." A different conclusion was reached by Guo and Burton (2012), who examined state-level data on SSDI applications in approximately 45 jurisdictions between 1981 and 1999. We found that population aging, increasing female labor force participation, changes in the unemployment rate, and the DI replacement rate (DI benefits/lost earnings) explained most of the changes in SSDI benefits between the 1980s and the 1990s. Nonetheless, changes in WC permanent disability statutory benefits and WC eligibility rules had a small but statistically significant and positive effect on increasing SSDI applications in the 1990s (explaining about 3 to 4 percent), which is evidence of the first three types of cost shifting. Additional research is needed to determine if the extent of cost

[8] Leigh and Marcin (2012, Table 3) estimated that workers' compensation benefits in 2007 were $51.725 billion, compared to the National Academy of Social Insurance estimate of $55.4 billion.

shifting from WC to SSDI has increased in recent years. One research project we recommend be initiated as soon as feasible is a national survey with the same questions contained in the 1992 HRS to see if the results reported by Reville and Schoeni (2003/2004) have changed.

For the balance of this paper, we assume that the evidence is clear that a significant proportion of the cost of work-related injuries is paid by the SSDI program rather than by the WC program, even if evidence demonstrating that of cost shifting has recently increased is sparse.

PROPOSAL ONE: IMPROVE THE DESIGN AND IMPLEMENTATION OF THE OFFSET PROVISION

History and Reasons for the Offset Provision

Coordination of SSDI and WC benefits has an interesting history (Larson 2015, §157.03(1): "When disability benefits were first added to the Social Security Act in 1956, a rather crude offset provision was included, generally reducing [disability] benefits by the amount of compensation from other systems. In . . . 1958, the entire offset provision was quietly repealed." The Act was amended in 1965 to require that the total of SSDI and WC benefits and certain other public disability plans (PDB) not exceed 80 percent of the worker's prior earnings. In most states, SSDI benefits are reduced if necessary to achieve the 80 percent limit when the worker is receiving benefits from both programs. However, in 15 states with reverse-offset laws enacted before 1965, WC benefits are reduced to achieve the 80 percent limit.

We believe there are two reasons for an offset provision that limits the total amount of WC and SSDI benefits relative to a worker's income prior to disability. The first reason is to directly limit the total amount of SSDI and WC benefits in order to reduce the total costs of these programs to employers and workers. The second reason for the offset is to decrease the incentives for disabled workers to extend their period of disability after they qualify for SSDI and WC benefits[9]

We believe there also are reasons why the offset should result in a reduction of SSDI benefits rather than WC benefits. First, as discussed in proposal three, WC premiums are experience rated, which is designed to encourage employers to improve workplace safety. If WC benefits are reduced through the offset provision, the safety incentives in WC are reduced with no offsetting increase in safety incentives through higher SSDI benefits, since SSDI taxes are not experience rated. Second, the history of the offset provision suggests that Congress intended the offset to reduce WC benefits not SSDI benefits.[10]

Problems with the Current Offset Provision

Defective Design

The provision in the 1965 amendments to the Social Security Act that allows 15 states to operate reverse-offset laws is not a rational design decision consistent with the original formulation of SSDI

[9] Three incentives for workers that occur when WC benefits are increased are discussed in proposal one. Similar incentives occur when SSDI benefits are increased.

[10] The United States Supreme Court upheld the constitutionality of the offset in *Richardson v. Belcher*, 404 U.S. 78 (1971). Larson (2015, 157.03[2] observed "As to which program should apply the offset, the Court noted the judgment of Congress that the duplication of benefits may lead to the erosion of the workers' compensation systems."

benefits. Although the 15 states with reverse-offset rules are 30 percent of the states, they probably account for more than 30 percent of all WC benefits nationally, since the 15 states include California, New York, Florida, Illinois, New Jersey, and Washington, six of the seven states with the greatest amounts of WC benefit payments in 2013 (Sengupta and Baldwin 2015, Table 8).

Defective Implementation

These reasons for the offset provision are only fulfilled, however, if SSDI and WC effectively coordinate their benefits. This requires, for example, that SSA uses accurate information about the amount of WC benefits to calculate SSDI benefits after the application of the offset provision.

The limitations of the verification process for the amount of WC benefits were documented in a report by the Government Accounting Office (2001), which compared WC records from Virginia with SSA beneficiary records. The examination showed that SSA was unaware that about 26 percent of Virginia disability insurance beneficiaries concurrently received WC benefits for at least a month. Among these unrecognized concurrent benefit cases, about 6 percent had received WC benefits for periods of six months to seven years (Government Accounting Office 2001, 3). The Government Accounting Office report also indicated that the SSA review indicated that more than 50 percent of SSDI beneficiaries whose benefits were being offset had been paid inaccurately, often leading to lower SSDI benefits than the beneficiaries were entitled to, because reductions in WC benefits had not been reported. The Government Accounting Office (2001, 4) recommended that SSA take several actions to test the viability of a voluntary reporting process on WC benefits with WC insurers.

A subsequent study by O'Leary et al. (2012, 4) suggests that the Social Security Administration (SSA) has not developed an effective verification process to determine the number of workers receiving both WC and SSDI benefits, and the amounts of WC benefits:

> SSA maintains some information on workers' compensation claims to manage the offset provision. However, the workers' compensation benefits data maintained by SSA are self-reported, and there are no existing automated data matches with states. For reported workers' compensation benefits, SSA individually verifies the type and amount with the workers' compensation providers before adjusting DI payment, but there are no means for SSA to check for unreported workers' compensation claims.

The ongoing deficiencies of the verification process for implementation of the offset provision were verified by a 2015 report by the GAO (now the Government Accountability Office) of the concurrent receipt by federal employees of SSDI and Federal Employees' Compensation Act (FECA) benefits. The GAO study involved workers who received concurrent benefits from both programs in at least one month between July 2011 and June 2014. The GAO found that SSA successfully detected the concurrent payments to about 52 percent of the workers, but did not detect concurrent payments in about 13 percent of the cases. The GAO could not tell if SSA detected concurrent benefits for about 35 percent of the workers who received both SSDI and FECA benefits. In a small sample of 20 individuals whose concurrent receipt of SSDI and FECA benefits SSA had not recognized, the GAO found that potential overpayments to seven individuals had lasted more than a decade and resulted in potential overpayments of more than $100,000 to each person. GAO indicates that SSA reported making an estimated $371.5 million in SSDI overpayments stemming from FECA benefits from FY 2009 to FY 2013 (about $75 million per year), but that SSA was unable to determine how much of those funds SSA had recovered.

One of the recommendations by the GAO (2015, 25) is that SSA compare the costs of benefits of SSA's current approach to reducing the potential overpayment of SSDI benefits—which relies on SSDI beneficiaries to self-report any FECA benefits they receive—with the costs and benefits of alternative approaches including routinely matching FECA and SSDI program data to detect potential SSDI overpayments.

Description and Advantages of the Proposal to Revise the Design and Implementation of the Offset Provision

We propose that the offset provision used to coordinate SSDI and WC be modified in two ways in order to encourage workplace safety and reduce SSDI financial woes:

(1) The reverse-offset provisions in 15 states should be eliminated. The reverse-offset provision is inequitable (applying to only a few favored states) and shifts some of the costs of workplace injuries to the SSDI program, aggravating the financial difficulties of the Disability Insurance Trust Fund and reducing incentives for employers to improve workplace safety.

(2) All states workers' compensation programs should be required to provide SSA with electronic data for all cases that pay cash benefits. SSA should use that data to identify all cases in which workers are concurrently receiving SSDI and WC benefits and to reduce the SSDI benefits to achieve the 80 percent limit for the combined benefits.

Concerns about the Proposal and Responses to the Concerns

1) Employers, legislators, and WC administrators in the 15 states and their allies will object. A compelling response is that the depleted Disability Insurance Trust Fund is in such dire condition that special treatment of these states needs to be eliminated, even if the provision is 50 years old.

2) Implementation of the proposal to collect more data from the states and to effectively use the data will place additional burdens on SSA and state WC agency staffs. A response is that additional resources used to hire additional personnel will result in reduced payments of SSDI benefits and a more appropriate allocation of the costs of workplace injuries, which should improve workplace safety. We are encouraged that the FY 2016 budget overview prepared by the SSA Acting Commissioner proposes to "improve program integrity by requiring states, local governments and private insurers that administer WC and PDB to provide [WC benefit payments] information to SSA" (Colvin 2016, 22-23).

Implementation of the Proposal: Initial and Ultimate

(1) The initial implementation could involve a multiyear phased-in increase in benefits paid by the WC programs in the 15 states with reverse-offset provisions. However, we recommend immediate elimination of the reverse-offset provision in order to avoid confusions during a transition period and to expedite financial relief for the Disability Insurance Trust Fund.

(2) The initial implementation to collect data from the states could involve a coordinated effort of SSA and National Institute for Occupational Safety and Health (NIOSH), which sponsors a program

to collect benefit data from state workers' compensation programs.[11] The ultimate implementation should also coordinate data collection efforts with the Center for Medicare and Medical Services (CMS) in order to collect data on cash and medical benefits in WC settlements, as discussed in the next section. The ultimate implementation could involve collecting and analyzing data from a larger set of states than those involved in the NIOSH project.

PROPOSAL TWO: REQUIRE WORKERS' COMPENSATION SETTLEMENTS TO COVER FUTURE CASH BENEFITS

The Current Status of Workers' Compensation Settlements

WC Benefits and Compromise and Release Agreements

One common feature of the claims resolution process in WC cases providing PPD or PTD benefits is the closing of cases both administratively and financially by compromise-and-release (C&R) agreements. These agreements are allowed in 43 states (Torrey 2007, Tables 1 and 2, 457-461). A C&R agreement usually involves three elements (National Commission 1972, 109): (1) a compromise on the amount of benefits that falls between the employer's previous offer and the worker's demand, which is likely to be based in part on what the worker would potentially have received from an administrative law judge's award of continuing indemnity payments; (2) payment of the benefits in a single, lump-sum payment rather than on an ongoing basis; and (3) release of the employer from further liability for cash benefits (in all cases) and for medical benefits (in some, but not all, C&R agreements). An injured worker who accepts a C&R agreement waives any subsequent cash benefits for the work-related injury involved in the settlement and, if applicable, to any subsequent medical benefits for the case settled by the C&R.

Views differ over the relative merits of C&R agreements (Savych 2012, 7; Thomason and Burton 1993, S10-S11). Proponents argue that C&R agreements reduce administrative costs in the WC delivery system as well as providing fair resolution of "doubtful" cases that would otherwise result in extensive litigation. Another supporting argument, referred to as the closure effect, asserts that receipt of a settlement may encourage workers to return to work or to start a new career rather than prolonging the duration of disability in the hopes of increasing the amount of WC benefits received. The settlements also eliminate uncertainty for workers, insurers, and state WC agencies about the ultimate benefit payments in a case.

Critics of C&R agreements *inter alia* allege that the injured worker's interests may be subordinated to those of other participants in the WC program. C&R agreements are considered beneficial to: 1) carriers (who pay out less in cash benefits than they otherwise would, and who no longer accrue administrative costs associated with processing a still-open claim); 2) claimants' attorneys (who typically receive a large, up-front payment that is a percentage of the lump-sum award, rather than receiving legal fees in smaller increments over time if the worker is paid benefits on a continuing basis); and 3) state WC agencies (which permanently clear their dockets of the claims closed by C&R agreements).

[11] The NIOSH Center for Workers' Compensation Studies (NIOSH 2014, 3) has a current project to "Analyze existing state-level workers' compensation data and use results to identify research and intervention priorities" in order to improve workplace health. "A number of states have been collecting a series of occupational health indicators, including certain WC data" and NISOH intends to commit up to $5.4 million in new money to add additional states.

There have been only a few studies of the consequences for workers who accept C&R agreements. A common finding is that C&Rs typically pay out less than the injured worker would have received had he or she continued to receive ongoing cash benefits. Thomason and Burton (1993, S10-12) reviewed several previous studies, including those involving workers from Michigan, California, and Texas. Their conclusion (1993, S12) was that:

> Past research indicates that injured workers who settle with a compromise and release agreement receive an amount that is less than the benefits they would have received had the case been adjudicated.

Thomason and Burton (1993) examined lump-sum settlements of PPD claims in New York and found evidence that (1) insurer adjustment activities, such as appealing initial awards for workers, increased the probability that cases were settled with lump-sum settlements; (2) a 24-25 percent discount rate was required to equate the lump sum settlements with the present value of the benefits stream paid in adjudicated awards, even though there were no disputes over liability in these New York cases involving lump-sum settlements; (3) use of attorneys increased the probability of lump-sum settlements; (4) use of attorneys reduced the amount of benefits in the lump sum settlements that were voluntarily agreed to by the parties; and (5) use of attorneys had no statistically significant effect on the size of litigated awards.

Potential Cost Shifting from WC to SSDI and Medicare

The widespread use of C&R agreements that terminate further cash and often additional medical benefits has resulted in inadequate cash benefits and possibly insufficient medical benefits in many state WC programs. One likely consequence is that some of the costs of work-related disabilities are shifted to SSDI and Medicare.

The Medicare as a Secondary Payer Act

The concern that state WC programs may be inappropriately shifting portions of the costs of work-related disabilities to SSDI and Medicare cannot be described as nascent. The *Medicare as a Secondary Payer Act* enacted in 1984 established the principle that if medical expenses could be covered under either WC or Medicare, then WC not Medicare should pay for the care. WC's primary responsibility for medical expenses resulting from work-related disability was strengthened by the *Medicare, Medicaid, and SCHIP Extension Act of 2007*. These laws are administered within the Department of Health and Human Services by the CMS.[12] Prior to completing a WC settlement in excess of a specified amount, the parties to the settlement must obtain confirmation from the CMS that sufficient funds have been set aside to cover all outstanding and prospective medical expenses resulting from the workplace injury or disease.

Description and Analysis of the Proposal to Require Workers' Compensation Settlements to Cover Future Cash Benefits

We propose that SSA establish a procedure to ensure that WC C&R agreements include enough resources to cover future cash benefits, which would be similar to the current procedure used by the

[12] The 120 pages of instructions for approving proposed Workers' Compensation Medicare Set-Aside Arrangements (WCMSA) amounts are contained in the CMS Reference Guide (CMS 2015).

CMS to ensure that WC settlements include enough resources to cover future medical benefits. The settlement review procedure would consist of several elements:

(1) In a WC case in which the work-related tests have been clearly established, the cash benefit component of a C&R agreement would have to be no less than the present value of PPD and PTD benefits unpaid at the time of the settlement, taking account of the weekly benefits and the duration of PPD or PTD benefits included in the applicable state's WC statute.[13]

(2) The SSA settlement review procedure for WC cash benefits should be combined with the CMS settlement review procedure for WC medical benefits and jointly administered by SSA and CMS. The participation of SSA will ensure that the allocation of the settlement between cash and medical benefits is appropriate and that the present value of the cash benefits has been calculated appropriately.

The offset provision for SSDI and WC cash benefits discussed earlier and the *Medicare as a Secondary Payer Act* both tend to increase the proportion of WC settlements that are devoted to medical benefits as opposed to cash benefits.[14] The proposal to require WC settlements to cover future cash benefits should increase the proportion of WC settlements devoted to cash benefits, thereby reducing the shifting of the costs of work-related disability from WC to SSDI. The proposal may also result in an increase in the size of WC settlements, which may also reduce the shifting of the costs from WC to both SSDI and Medicare.

Concerns about the Proposal and Responses to the Concerns

The current policy requiring CMS approval of the amount of future medical benefits provided in WC settlements is controversial and opposed by many practitioners, including employers, insurance carriers, applicants' attorneys, and state administrators.[15] Adding a review of future cash benefits is likely to induce elevated ire among these participants in the WC delivery system. A partial response is that the combination of the current policy on future medical care and the proposed policy for future cash benefits is likely to reduce the use of C&R agreements, which is a desirable outcome.

[13] The present value of future benefits can be calculated by using an interest rate no greater than the rate on 10-year US Treasury bonds as of the date of the settlement plus 2 percent.

[14] The incentives to increase the share of a WC settlement devoted to medical benefits instead of cash benefits can be illustrated by a three-step example. In step one, the worker (typically with the assistance of his attorney) and the employer (typically with the assistance of the insurer and a lawyer) negotiate a C&R agreement for $100,000 to cover medical and cash benefits. The parties agree that $80,000 of the settlement is for cash benefits and $20,000 is for medical benefits. In step two, assume the offset provision discussed in proposal one is introduced. The parties may now agree to allocate $60,000 of the settlement to cash benefits and $40,000 to medical benefits. The employer is indifferent to the reallocation since the total amount of the settlement has not changed. The worker prefers the reallocation because the amount of SSDI benefits received by the worker after application of the offset provision will be higher if the WC cash benefits are $60,000 than if the WC cash benefits were $80,000. In step three, assume that the Medicare as a Secondary Payer Act is enacted and the CMS decides that $50,000 needs to be set aside for future medical care, thus reducing the amount of the $100,000 settlement devoted to WC cash benefits to $50,000, which means that the SSDI benefits may have be further increased to bring the total of WC and SSDI benefits up to the 80 percent limit of prior earnings included in the offset provision.

[15] A coalition of organizations concerned with the Medicare secondary payer rules have drafted the *Medicare Secondary Payer and Workers' Compensation Settlement Agreements Act of 2015*. The organizations include UWC Strategic Services on Unemployment and Workers' Compensation and the Workers' Injury Law & Advocacy Group.

Implementation of the Proposal: Initial and Ultimate

Initial implementation should involve a task force—including representatives of CMS, SSA, NIOSH, the important interest groups in WC, and researchers—to develop a plan to require prior approval of both the cash and medical benefits components of WC settlements. The task force would be asked *inter alia* to prepare a plan for full implementation of the proposal.

PROPOSAL THREE: EXPERIENCE RATE THE SSDI PROGRAM

Financing Social Insurance Programs

The SSDI program is financed by employer and employee contributions. Each contributes 0.9 percent of taxable earnings up to an annual maximum of earnings (currently $118,500). The contribution rates do not vary depending on benefit payments made to former employees of the employer.

Most other U.S. social insurance programs rely on experience rating, in which the employer is the sole or primary source of funding for the program and the employer's contribution rate depends at least in part on benefit payments to current or former employees. Both unemployment insurance (UI) and workers' compensation (WC) rely on experience rating, although there are important differences between the experience rating formulas in those programs.

Experience Rating in the UI Program[16]

The annual taxable wage base in UI is at least $7,000 (as required by federal law since 1983). Most states have adopted a higher wage base, although most states have annual maximums of $20,000 or less, such as New York, where the wage base is $8,500. All states use experience rating to determine the employer's contribution rate.[17] Federal law allows states to experience-rate any employer after one year of experience in the UI program. States use varying formulas to determine an employer's prior record of benefit payments.[18] Schedules are then used to convert the results of the state's formula into a tax rate. In most states, a low balance in the state's UI fund triggers a schedule with higher tax rates, and a high balance in the UI fund results in lower rates. In New York, for example, when the UI fund balance is less than 0 percent of payroll, the rates in the schedule range from 0.9 percent to 8.9 percent of payroll, and when the UI fund balance is more than 5 percent of payroll, the rates range from 0.0 percent to 5.9 percent of payroll.[19]

Experience Rating in the WC Program

All state WC programs rely on two levels of experience rating. Industry-level (or for a few classes, occupation-level) experience rating relies on insurance rates for each of the 500 or more insurance classes used in most states. A pure premium rate is calculated for each class based largely on prior

[16] The description of experience rating in Unemployment Insurance is largely based on U.S. Department of Labor (2014).
[17] Only Alaska, New Jersey, and Pennsylvania require employee contributions for UI.
[18] Most states rely on the reserve-ratio formula, which is (contributions minus benefits charged to the employer) /payroll. In most of these states, the contributions and benefits include all past years, and the payroll is the average of the three most recent years. Other states rely on the benefit-ratio formula, which is benefits charged to the employer's covered payroll. In most of these states, the benefits are those charged in the last three years and the payroll is the average of the three most recent years A few states rely on other formulas, such as the Benefit-Wage-Ratio formula.
[19] Federal law requires that the maximum tax rate be at least 5.4 percent.

benefit payments to workers in that class. In most states, carriers add a loading factor to the pure premium in order to determine an insurance rate per $100 of payroll. These insurance rates vary significantly among classes within each state. For example, the rate for bakeries may be $2 per $100 of payroll while the rate for loggers may be $50 per $100 of payroll. The insurance rate is multiplied by the employer's payroll in that class to determine most of the workers' compensation premium for that employer.[20]

Most employers are only eligible for industry-level experience rating. An employer with a sufficient premium obligation (which varies among states) may also qualify for firm-level experience rating in addition to industry-level experience rating.[21] In Florida, an employer must be experience rated at the firm level if it had at least $10,000 in premiums during the most recent 24 months, or had at least an average annual premium of $5,000 in the experience period, which is normally three years. The firm-level experience rating formula places more weight on the frequency of claims than on the severity of claims, on the theory that severity is more likely due to chance. The greater the size of the firm (as measured by premium), the more weight is given to the firm's experience relative to the experience of other firms in the industry. A large bakery with a particularly adverse record of benefit payments may pay $4 per $100 of payroll rather than the classification rate of $2 per $100 of payroll. Conversely, a very safe bakery may pay $0.50 per $100 of payroll.

A very large firm may qualify for a retrospectively-rated insurance policy, in which the premium is based primarily on the firm's own record of benefit payments. In addition, about 25 percent of all workers' compensation benefits are paid by self-insuring employers, which means their WC costs are almost perfectly experience rated.

Comparisons of Experience Rating in UI and WC

This comparison of UI and WC makes clear that the two programs' use of experience rating of employer contributions differs considerably in the following ways: (1) WC relies on industry-level experience rating for most employers, while UI does not. (2) UI requires firm-level experience rating for all employers, regardless of size. Most employers are too small to qualify for firm-level experience rating in WC. (3) UI relies on a relatively unsophisticated experience-rating formula that ignores factors affecting credibility, such as the size of the firm and the occurrence of random events such as catastrophes. The experience-rating formula used in WC considers these factors. (4) UI relies on a combination of constricted definitions of covered payroll with contribution schedules with minimum and maximum rates to produce actual contributions that exceed the expected losses of some employers who pay the minimum rates, and that also result in contributions that are less than the expected losses for some employers who pay the maximum rates. One result is that low-risk employers subsidize high-risk employers in the UI program. There is no such systematic subsidy of high-risk employers in the WC program.

[20] Workers' compensation premiums include other charges, such as expense constants Burton (2011, Appendix 22.1).
[21] The discussion of firm-level experience rating in WC is largely based on NCCI (2014)

Experience Rating in Workers' Compensation: Theory and Evidence[22]

The two levels of experience rating in WC are designed to promote safety (Burton 2009, 249-250). Industry-level experience rating establishes a premium for each industry that is largely based on prior WC benefit payments by the industry. The resulting differences in labor costs and prices across industries should in theory shift the composition of national consumption towards safer products. We are unaware of any studies that test this theory.

Firm-level experience rating determines the WC premium for each firm above a minimum size by comparing its prior benefits payments to those of other firms in the industry. Firm-level experience rating has been used in WC since the program's origin in the early twentieth century. John R. Commons, a leading economist of that era who helped design the Wisconsin WC program, asserted that experience rating provides economic incentives to employers to get the "safety spirit" that would otherwise be lacking (Burton 2015b, 865). The rudimentary theory is that firms have an incentive to improve safety in order to reduce premiums and remain competitive. Guo and Burton (2010) developed a more comprehensive theory to identify the incentives for experience-rated employers when WC benefits (and as a result premiums) increase:

a) The safety effect – the employer is encouraged to improve workplace safety

b) The underreporting or monitoring effect – the employer is encouraged to resist the reporting and acceptance of claims, which *inter alia* should reduce the prevalence of fraudulent claims

c) The rehabilitation or return-to-work effect – the employer is encouraged to strengthen claims management practices in order to reduce the duration of benefit payments

There are also incentives for workers when workers' compensation benefits are increased:

d) The true injury effect – the worker is less concerned about job safety, which results in a greater frequency and severity of injuries

e) The reporting effect – the increase in benefits may induce workers to submit claims they otherwise would not have bothered to submit

f) The duration effect – the increase in benefits may case workers to extend the periods for which they claim benefits

A number of studies of experience rating provide evidence that should help assess the overall effect of experience rating and the relative influence of the six effects of higher benefits (Burton 2015b). Almost without exception, the studies find that experience rating reduces the number of workers' compensation claims. What is unclear, however, is whether the reduction in claims is a result of the safety effect—with fewer actual injuries—or is due to the monitoring effect—with employers denying

[22] We confine our discussion of the effect of experience rating to studies of the WC program. There is also an extensive literature on the effects of experience rating in the UI program. Ehrenberg and Smith (2015, 529) summarize one aspect of this research:

> Empirical analysis of the effects of imperfect experience rating on employer behavior suggests that it is substantial. These studies have estimated that unemployment would fall by 10 percent to 33 percent if UI taxes in the United States were perfectly experience rated (so that employers laying off workers would have to pay the full cost of the added UI benefits).

more claims. The survey of experience-rating studies by Boden (1995) concluded that "research on the safety impacts has not provided a clear answer to whether WC improves workplace safety." In contrast, Thomason (2005) asserted that most (11 of 14) studies he surveyed found that experience rating improves safety and health and concluded: "Taken as a whole, the evidence is quite compelling: experience rating works." A markedly different conclusion was reached by Mansfield, MacEachen, Tompa et al. (2012),[23] who concluded that:

> Although experience rating is intended to stimulate safer workplaces, a growing body of literature reveals that it has not achieved that effect. . . . The absence of a safety effect may arise because employers focus on managing reported claims rather than prevention.

We believe this conclusion overstates the evidence about the failure of experience rating to promote safety. Instead, we agree with the assessment by Butler, Gardner, and Kleinman (2013, 453) based on their review of the literature: "Evidence tends to support the hypotheses that experience rating strengthens firms' economic incentives for safety, but not all research is conclusive." In any case, the issue is not a choice between the safety effect *or* the monitoring effect. As Butler, Gardner, and Kleinman indicated (2013, 454) in reviewing a study by Thomason and Pozzebon (2002), "experience rating causes employers both to improve workplace safety and health and to engage in more aggressive claims management." While we recognize the danger that "aggressive claims management" can morph into employers resisting legitimate claims, we nonetheless conclude that experience rating in WC provides a convincing rationale for the introduction of experience rating into the SSDI program.[24]

Description and Analysis of the Proposal to Experience Rate the SSDI Program

The suggestion to experience-rate SSDI contributions by employers is not new. Burkhauser and Daly (2011, 111) credit Berkowitz and Burton (1970) and Burton and Berkowitz (1971) with "the first systematic set of efficiency arguments for experience rating in the context of WC." Berkowitz and Burton asserted these arguments were applicable to the SSDI program. However, Burkhauser and Daly (2011, 110-111) had enough reservations about evidence on experience rating in WC that they

[23] Mansfield, MacEachen, Tompa et al. (2012) is one of a collection of articles that provide largely negative assessments of experience rating. For example, Tompa, Hogg-Johnson, Amick et al. (2012) conclude that their study of Ontario "suggests that experience rating provides an incentive for secondary prevention, but less so for primary prevention [safety]." The only "good news" for experience rating in this set of articles was provided by Seabury et al.(2012), who found that workers injured at self-insuring employers (who are perfectly experience rated) have significantly improved return-to-work experience for up to five years after the date of injury (the rehabilitation effect).

[24] A study by Guo and Burton (2010) did not explicitly examine the effect of experience rating in workers' compensation but did provide relevant information about the importance of the economic incentives for employers and workers in the workers' compensation program, where experience rating of premiums is an important feature. We relied on yearly observations for each of 46 jurisdictions (including the District of Columbia). A key independent variable was the expected cash benefits prescribed by each state's worker' compensation statute. In some regressions, the dependent variable was the BLS injury rate for the state. We found that the frequency elasticity for cash benefits was not significantly greater than 0 in Period I (1975-1989) or in Period II (1990-1999). This contrasts with some previous studies that found a positive frequency elasticity. One interpretation of these results is that the true injury effect is offset by the safety effect. In other regressions, the dependent variable was incurred cash benefits per 100,000 workers, which are the insurance carriers' estimates of the cash benefits that will actually be paid for injuries that occurred in a particular policy period. We found that the benefit elasticity (the association between expected and actual benefits) was significantly less than 1.0 in both study periods. One interpretation of these results is that the monitoring and rehabilitation effects for employers are stronger than the reporting and duration effects for workers. The results differ from most previous studies' findings of benefit elasticities greater than 1.0.

did not recommend immediate implementation of such a major change in SSDI policy. Instead, they recommended that SSA shift its demonstration funding to test the efficacy of experience rating and other policies that could slow the movement of disabled workers onto the SSDI rolls. Liebman and Smalligan (2013, 3) also recommended several demonstration projects, including one that would provide financial rewards to employers who had fewer employees become eligible for SSDI benefits than predicted based on historical data and information on the current profile of employees. The only empirical study we have seen examining the possible use of experience rating of SSDI is Stapleton, Mann, and Song (2014), which we discuss in the next subsection.

We propose that experience rating for SSDI should consist of seven elements:

(1) SSA would produce industry-level contribution rates calculated as (a) the SSDI benefits paid to workers in the industry during the most recent 10 years with data / (b) covered wages for workers in the industry during the most recent 10 years with data. The industry levels correspond to six-digit North American Industry Classification System codes.

(2) Unless a firm qualifies for firm-level experience rating (as described below), in each industry the employer and employee contributions would each be one-half of the contribution rates calculated in element (1) up to an annual maximum of earnings.[25]

(3) A firm would be subject to mandatory firm-level experience rating if the total of the firm's projected employer and employee contributions under element (2) are at least 50 times the average of the total of projected employer and employee contributions in the firm's industry. (The multiplier of 50 will be adjusted based on experience.)

(4) The mandatory firm-level experience rating would only apply to the employer's contribution.

(5) A firm that qualifies for experience rating under element (3) would have increasing credibility given to its own experience as the size of the firm's total contributions increase. A firm with contributions sufficiently large compared to the average contributions of other employers in the industry would have its contribution rate based entirely on the firm's own experience.

(6) A firm that qualifies for experience rating would have its contribution rate for a given year calculated as the SSDI benefits paid to current or former employees of the firm in the most recent 10 years of data / the covered wages for the firm during the most recent 10 years with data, subject to the credibility rules in element (5).

(7) New hires receiving workers' compensation cash benefits or veteran's benefits within the five years prior to the dates on which they were hired would see their SSDI benefits and wages excluded from the SSDI experience rating formula. The employer would be charged the industry-wide contribution rates for those workers.

The proposal to experience rate SSDI contributions at the industry level for both employees and employers would provide economic incentives to shift production to safety industries. The proposal to experience rate SSDI employer contributions at the firm level provides economic incentives to firms to improve the health and safety of their workers, to provide disabled workers effective medical

[25] Arguably only the employer and not the employee should be required to pay a higher premium in a hazardous industry. This option should be considered during the initial implementation phase of our proposal.

care and rehabilitation services, and to return the workers to employment. Many employers already have established networks of medical care and rehabilitation providers and return-to-work programs that focus on employees with work-related injuries, and the introduction of experience rating into the SSDI programs will encourage these employers to extend these services to workers disabled by other causes.

Concerns about the Proposal and Responses to Concerns

(1) Concern has been expressed about whether firm-level experience rating for the SSDI program is viable for smaller firms. Stapleton, Mann, and Song (2014) found extremely high variation in relative SSDI claims experience (the proportion of benefits attributed to the employer divided by the taxable wages by the employer) for firms with fewer than 50 employees. However, over half of successful SSDI applicants were from firms that on average were much larger than other firms and that employed nearly three-quarters of all workers. Our experience rating proposal for SSDI is unlike UI—where experience rating is applied to virtually all employers, regardless of size —but instead is like WC, where firm-level experience rating is *no*t used for small firms. In essence, our proposal for experience rating of SSDI benefits will rely on the WC approach to credibility and therefore will not experience rate small employers.

(2) Concern has been expressed about lack of a work-related test in the SSDI program, which means that "if a worker is diagnosed with MS, or cancer, unrelated entirely to the job, the employer [under the proposal] will still be penalized." This objection was anticipated by Berkowitz and Burton (1970, note 20).[26] To restate the response in a somewhat expanded version, our proposal to experience rate employers for SSDI benefits provided to their workers with disabilities applies to three types of the disabilities:

(i) Type one disabilities, which are the results of work-related injuries or diseases for which the employer (a) can help prevent the injuries and diseases and/or (b) can reduce the consequences of the injuries through rehabilitation and return-to-work (RTW) programs

(ii) Type two disabilities, which are the result of injuries or diseases that are not work-related but for which the employer (a) can help prevent the injuries or diseases through wellness programs and employer-supported health care and/or (b) can reduce the consequences of the injuries through rehabilitation and RTW programs

(iii) Type three disabilities, for which the employer (a) cannot help prevent the injuries or diseases and (b) cannot reduce the consequences of the injuries through rehabilitation and RTW programs.

If it is assumed that type three disabilities are distributed randomly among workers, then our proposal in essence reduces to a flat-rate tax on all firms for those SSDI benefits for which a particular employer

[26] Berkowitz and Burton (1970, Note 20) opined: "It is possible that the work-related test could be eliminated completely without ignoring any of the objectives of the workmen's disability income system. An employer could be charged for the benefits paid to his disabled workers, whether or not the disabling injuries were work related. This would eliminate any disputes about the cause of the disability. However, if it could be assumed that nonwork-related injuries are distributed randomly among the working population, the system in effect reduces to a flat-rate tax on all businesses to finance benefits for off-the-job injuries and an experience-rated tax on each business to finance work-related injuries. Obviously, questions such as the credibility to be given to each firm's experience would have to be resolved, but this plan would appear to fulfill the accident prevention and cost allocation objectives of the workmen's disability income system."

is not responsible (type three disabilities) plus an experience-rated tax for each firm to finance SSDI benefits for which the employer is at least partially responsible (types one and two disabilities).

There are two major advantages of this proposal. First, employers would have financial incentives to reduce the incidence and consequences of type two disabilities, which are incentives that do not exist in the current WC and SSDI programs. And the significant costs of distinguishing between work-related and nonwork-related injuries and diseases would be eliminated.

(3) Concern has also been expressed about whether firm-level experience rating results in increased discrimination against individuals at higher risk of disability, such as job applicants with prior injuries. There are several responses to this concern.

First, the Americans with Disabilities Act "prohibits pre-employment medical examinations and, indeed, all pre-employment inquiries about disabilities. §102(d). Medical examinations are permissible after a conditional offer of employment is made, but only if certain conditions are met. §102(d)(3)" (Willborn et al. 2012). This provision could be strengthened by increasing the contribution rate for SSDI for employers who violate §102(d).

Second, element (7) of our proposal for experience rating of SSDI could be modified to provide even stronger financial incentives for employers to hire workers with prior disabilities that resulted in WC or veterans disability benefits. For example, the wages but not the SSDI benefits of these workers subsequent to their being hired for the new jobs could be used in the experience-rating formula.[27]

Third, WC programs in most states have second-injury funds, which are designed to eliminate discrimination against previously impaired workers by limiting the charges to employers for benefits provided to a worker with a previous injury who experiences a new injury (Larson and Burton 1985). The second-injury funds pay for some or all of the benefits that would not have been incurred but for the preexisting impairments. This WC approach could be adapted for SSDI by excluding from the experience-rating procedure any SSDI benefit payments made to a worker after he or she was hired when the health examination administered by the employer after a conditional job offer revealed a preexisting medical condition that was serious enough to jeopardize the worker's ability to perform the job.[28] One advantage of this approach compared to the approach described in the previous subsection is that it would not be confined to workers who received workers' compensation or veterans' disability benefits.

Implementation of the Proposal: Initial and Ultimate

Initial implementation should require SSA to conduct demonstration projects applicable to (a) firms with large numbers of employees, (b) firms in industries with relatively stable workforces over time as opposed to industries in which workers typically have multiple employers (such as construction), and (c) firms that volunteer to be experience rated (although adverse selection needs to be considered).

[27] Element (7) could be expanded to include workers who previously received SSDI benefits. For example if a worker who received SSDI benefits based on employment with employer A is subsequently hired by employer B, the wages paid to the worker by employer B, but not any additional SSDI benefits paid to the worker by employer B, would be used in the experience-rating formula to determine the contribution rate for employer B.

[28] Second Injury Fund requirements for the worker's prior injury necessary for coverage are discussed by Larson and Burton (1985, 124).

The initial implementation could bypass the first two elements of the proposal, which involve industry-level experience rating, and proceed directly to the firm-level experience rating in element (3). The ultimate implementation should contain all seven of the elements in our proposal and extend experience rating to all firms that meet the credibility requirement in element (3).

The Dual Advantages of the Experience-Rating Proposal

One effect of experience rating SSDI contributions is that employers would have several financial incentives to directly reduce expenditures on SSDI benefits, namely a) the safety and health effect, b) the underreporting or monitoring effect, and c) the rehabilitation or return-to work effect. These are similar to the effects of experience rating in WC.

An important additional effect of experience rating the SSDI program is that the current incentives for employers to shift costs from WC to SSDI would be reduced. Under the current financing arrangements, an employer benefits financially if benefits are paid by SSDI instead of WC because only WC benefits increase the employer's contributions to these programs. However, if the employer was experience rated for benefits in both the SSDI and WC programs, there would be less incentive for the employer to shift the source of the disability benefit payments to SSDI. In turn, this should reduce efforts by employers to reduce the adequacy and coverage of state WC programs, thus reducing the amount of cost shifting from WC to SSDI discussed earlier.

PROPOSAL FOUR: FEDERAL STANDARDS FOR STATE WORKERS' COMPENSATION PROGRAMS

The Source of Inadequate WC Benefits: Interstate Competition

The National Commission on State Workmen's Compensation Laws (National Commission) was created by the Occupational Safety and Health Act of 1970 and directed to determine if state WC laws "provide an adequate, prompt, and equitable system of compensation for injury or death arising out of or in the course of employment." The commission, most of whose members were appointed by the Nixon administration, issued a unanimous report (1972, 25) concluding that "State workmen's compensation laws are in general neither adequate nor equitable." Of greater relevance to an understanding of current WC programs is the commission's analysis of a major source of the deficiencies of state programs (1972, 124-25):

> **Competition among States.** The economic system of the United States encourages the forces of efficiency and mobility. These forces tend to drive employers to locate where the environment offers the best prospects for profit. At the same time, many of the programs which governments use to regulate industrialization are designed and applied by states rather the federal government. Any state which seeks to regulate the byproducts of industrialization, such as work accidents, invariably must tax or charge employers to cover the expenses of such regulations. This combination of mobility and regulation poses a dilemma for policymakers in state governments. Each state is forced to consider carefully how it regulate its domestic enterprises because relative restrictive or costly regulation may precipitate the departure of the employers to be regulated or deter the entry of new enterprises.

> Can a state have a modern workers' compensation program without driving employers away? Our analysis of the cost of workmen's compensation has convinced us that no state should hesitate to adopt a modern workmen's compensation program. . . .
>
> While the facts dictate that no state should hesitate to improve its workmen's compensation program for fear of losing employers, unfortunately this appears to be an area where emotions too often triumphs over facts. . . . whenever a state legislature contemplates an improvement in workers' compensation which will increase insurance costs, the legislators likely will hear claims from some employers that the increase in costs will force a business exodus. It will be virtually impossible for the legislators to know how genuine are these claims. To add to the confusion, certain states have abetted the illusion of the runaway employer by advertising the low costs of workmen's compensation in their jurisdictions.
>
> When the sum of these inhibiting factors is considered, it seems likely that many states have been dissuaded from reform of their workmen's compensation programs because of the specter of the vanishing employer, even if that apparition is a product of fancy not fact. A few states have achieved genuine reform, but most suffer with inadequate laws because of the drag of laws of competing states.

The Solution to Inadequate WC Benefits: Federal Standards

The National Commission made 84 recommendations for improving state WC programs. Of particular relevance to developing a strategy to deal with the deleterious effect of competition among states were the designation of 19 of these recommendations as essential and a recommendation (National Commission 1972, 127) that "compliance of the states should be evaluated on July 1, 1975, and, if necessary, Congress with no further delay in the effective date should guarantee compliance." There were no dissents from this recommendation for federal standards among members of the commission.

Federal standards for WC have not been enacted. The threat of federal intervention probably explains the surge in improvements in WC statutes in the 1970s shown in Figure 2. With the change in the national political environment since 1980, the threat of federal standards diminished in the 1980s and disappeared in subsequent decades. Federal standards for state programs arguably would improve the level of cash benefits and broaden the compensability rules so that less of the costs of work-related injuries and disease would be shifted from WC to SSDI. A starting point for federal standards could be the 19 essential recommendations of the 1972 National Commission.

Concerns about the Proposal and Responses to the Concerns

Burton (2015a) identified several problems with the proposal to enact federal standards for state WC programs in the twenty-first century, which make this an unrealistic approach to help solve the current financial difficulties of SSDI. One of the problems is that the 19 essential recommendations of the 1972 National Commission largely deal with aspects of the program that are relatively easy to quantify, such as the maximum weekly benefit for permanent total disability benefits, which could readily be turned into federal standards. However, the post-1990 developments in WC laws that arguably have resulted in cost shifting to SSDI largely involve changes in compensability rules that are harder to quantify, such as requirements that the major contributing cause (MCC) of a worker's disability must

be work related. Writing a federal standard to nullify the MCC provision would be challenging. Another and even more serious obstacle to enactment of federal standards is that he current political environment makes federal standards for state WC laws impossible. As a result of these problems, further discussion of federal standards as a partial solution to the cost shifting from WC to SSDI is unwarranted, despite the considerable virtue of this approach.[29]

CONCLUSIONS

Recapitulation

WC pays for a substantial portion of the costs of work-related disability. However, SSDI also pays for a substantial portion of the costs as a result of cost shifting from WC, which adds to the financial difficulties of the Disability Trust Fund. Some of the cost shifting is a byproduct of the offset provision used to coordinate WC and SSDI benefits. Some of the cost shifting is a result of inadequate WC cash benefits, a problem that appears to have become more serious in recent decades.

Two of our proposals would modify current programs that coordinate WC with federal programs for disabled workers. Proposal One would eliminate the reverse-offset provision for WC and SSDI and strengthen the verification procedure for the collection of WC data needed to implement the offset provision. Proposal Two would require that WC settlements not only include sufficient resources for future medical benefits (a current requirement) but also require that WC settlements include sufficient resources for future cash benefits.

Our other two proposals involve more significant changes. Proposal Three requires the SSDI program to be experience rated, which should directly reduce expenditures on SSDI benefits and should indirectly reduce cost shifting from WC to SSDI. Proposal Four would establish federal standards for state WC programs, which would increase the adequacy of WC benefits and thus reduce the amount of work-related disability costs shifted to SSDI. However, we do not recommend implementation of Proposal Four because the approach is currently infeasible.

Initial Implementation

The initial implementation of our proposals would include several components:

- Conducting a national survey with the same questions contained in the 1992 Health and Retirement Survey (HRS) to provide evidence about whether shifting of the costs of work-related injuries and diseases from WC to SSDI has increased over time.
- Eliminating the reverse-offset provisions that currently allow 15 states to reduce WC benefits in order to limit the combined total of SSDI and WC benefits.
- Establishing a coordinated effort of the Social Security Administration (SSA), the National Institute for Occupational Safety and Health (NIOSH), and the Center for Medicaid and Medicare Services (CMS) to collect data on WC settlements in order to increase the effectiveness of the current offset provision for WC and SSDI benefits.

[29] Commenting on an earlier draft of this paper, Marjorie Baldwin asked: "Would it be feasible to experience rate SSDI by state?" SSA should explore this intriguing possibility as it implements Proposal Three. This variant of experience rating could be an important incentive for states to stop reducing WC coverage and benefits in order to attract employers.

- Establishing a task force with representatives from SSA, CMS, and other constituencies to develop a unitary plan to require prior approval of both the cash and medical benefits components of WC settlements.
- Establishing mandatory experience rating of employer contributions to SSDI. The implementation could begin with pilot projects.

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