

Accounting for Accrued Workers' Compensation Costs: Recognizing Incurred but Not Reported Accounting Liabilities



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Workers' compensation costs represent a major portion of many manufacturing companies' production costs, which like other incurred but not reported (IBNR) liabilities are difficult to measure. While companies can self-insure or pay insurance companies to satisfy such liabilities, measuring such costs remains problematic, because the periods when the employee's output (during one's working life) often do not match easily with the ultimate workers' compensation payments. Moreover, such factors as changing state statute of limitation laws and companies idling plants due to mergers, acquisitions and other business interruptions add complexity to measuring such liabilities. This article summarizes this matter and provides examples and references of how companies and their auditors can better grasp workers' compensation concepts.

Workers' compensation insurance reimburses medical costs and lost income for workers becoming ill or injured on the job. The Bureau of Labor Statistics¹ finds the manufacturing (service) sector spending 2.1 percent (1.3 percent) of total employee costs on workers' compensation – representing 23 percent (15 percent) of legally required benefit costs. Such costs affect many industries when office workers claim they experience chronic and debilitating illnesses such as carpal tunnel syndrome and chronic fatigue, or when truck drivers and construction workers claim spinal injuries. Claims often increase with announcements of expected

workforce reductions, complicating the estimation of future workers' compensation costs.² Per the National Academy of Social Insurance, in 2012, U.S. employers paid \$83.2 billion in workers' compensation costs.³

In measuring workers' compensation costs, employers must estimate potential claim liabilities that exceed insurance coverage. Per the Financial Accounting Standards Board (FASB) in Accounting Standards Codification (ASC) 450-20-25-2 and 720-20-25-14, entities must accrue "probable and estimable losses" as liabilities for IBNR⁴ claims and incidents, and record a corresponding expense. While guidance related to insurance costs exists,⁵ little guidance exists for calculating workers' compensation IBNR. Calculations become uncertain, and potential costs and accrued liabilities may change substantially, due to such factors as:

- claims often lag the injury causing the claim,
- current claims often grow over time (e.g., sprains worsen with repetitive motion),
- external events can trigger unexpected claims (e.g., plant closings, mergers, restructurings),
- changed calculation inputs (e.g., experience rating, reportable and non-reportable conditions, severity and frequency of prior and expected claims, legislation changes), and
- laws against denying coverage based upon pre-existing medical conditions.

Auditors should diligently examine client inputs to assess the calculations' accuracy, also considering the factors discussed in this study.

In this article, we analyze workers' compensation expenses and accruals to help CPAs present and auditors attest to financial information accurately and reasonably. This includes calculation of workers' compensation insurance premiums, examples of workers' compensation calculation changes in known entities and a discussion of Texas workers' compensation.

Determining Workers' Compensation Insurance Premiums⁶

Insurance premiums fundamentally equal rate times payroll. Rate reflects expected losses and the insurance company's markup. To estimate expected losses, the National Council on Compensation Insurance (NCCI) collects insurance company data for claims filed and amounts paid for each claim under each employer's policy. It then groups employers by industry or occupational classification and state to calculate average cost or expected loss rate (ELR) by dividing total losses by total payroll for each industry/state combination. ELR is typically higher for hazardous industries, such as roofing or logging, than for low-risk industries, such as clerical or restaurant; rates increase for states with "plaintiff-friendly" legislation (e.g., legislation that grants long periods of statute of limitations to file claims).⁷ Such rate determinations are also called "manual rating," which vary significantly among states.

To tailor premiums to individual employer risk characteristics, NCCI uses an Experience Rating Plan.⁸ The plan uses the most recent employer three-year history of actual loss and payroll data. Based on the frequency (number of claims filed) and severity (dollar amount of lost wages or medical costs) of claims over this time relative to average or expected losses, the NCCI determines an employer's experience rating modification (Mod). Employers receive Mod calculations for each employee occupational classification and for each state where the employer operates.

The NCCI derives loss development factors (LDF) to help smooth employers workers' compensation premiums (e.g., cases where workers claim that the injury has worsened or new health

problems arise). The NCCI LDF factors consider the employers' claim histories, job classifications, and states where they do business. Small changes in LDF can cause wide disparities in IBNR estimates, because companies must multiply the LDF by the entire payroll. Thus, management accountants and external auditors must carefully review this potentially high-risk account.

Examples of Workers' Compensation Calculation Changes in Known Entities

Workers' compensation often represents a large liability. Target's \$467 million 2013 long-term workers' compensation liability equaled 29 percent of its total other non-current liabilities.⁹ The U.S. Postal Service (USPS) had a \$16.2 billion long-term 2012 workers' compensation liability.¹⁰

Example: IBNR Liabilities for Workers' Compensation

We now present Company X's IBNR liabilities example, using an actual engagement – but with some simplified assumptions and disguised rounded balances. Table 1 contains Company X's 2000-2014 loss data, including a \$500,000 catastrophic claims deductible insurance policy. Catastrophic claims exceeding incurred losses represent amounts accrued for claims originating in those years. For example, for claims filed for 2013 injuries, the company recorded \$2.2 million of actual losses. However, the accrual, as described below, will differ.

In earlier years (2000-2002) presented in Table 1, Company X's LDF is 1.000 since those years' claims were fully settled. Multiplying "incurred losses" times LDF represents estimated total losses. LDF increases for later years, indicating that much of the payout is unpaid. For example, a company has actual liabilities of \$2.2 million in 2013. The LDF indicates that total estimated loss is expected to be \$3,152,600 (\$2.2 million x 1.433). Since claims arose recently, much of the payout will occur over several future years. The next column indicates company claim payments made. The last column indicates

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Table 1: Loss Data for Use in Calculations

Year	Incurred Losses	Loss Development Factors [LDF]	Estimated Total Losses	Actually Paid Losses	Required Reserve as of December 31, 2014 (Undiscounted)
	A	B	C = AxB	D	E = C-D
2000	\$1,310,000	1	\$1,310,000	\$1,300,000	\$10,000
2001	1,350,000	1	1,350,000	1,300,000	50,000
2002	940,000	1	940,000	933,000	7,000
2003-2012	.	.	.	.	.
2013	2,200,000	1.433	3,152,600	1,400,000	1,752,600
2014	870,000	2.512	2,185,440	380,000	1,805,440
Total	\$32,120,000		\$36,507,240	\$29,499,000	\$7,008,240

Table 2: Employer's Payout Schedule

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
2000	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000
2001	20,000	30,000	0	0	0	0	0	0	0	0	50,000
2002	0	0	7,000	0	0	0	0	0	0	0	7,000
2003-2012	.	.	.	.	.	.	.	.	.	.	.
2013	100,000	110,000	120,000	130,000	140,000	150,000	160,000	87,600	755,000	0	1,752,600
2014	110,000	120,000	130,000	140,000	150,000	160,000	170,000	180,000	201,440	444,000	1,805,440
Total	\$493,000	\$833,800	\$843,000	\$632,300	\$716,300	\$708,200	\$897,000	\$484,200	\$956,440	\$444,000	\$7,008,240

the company's probable accruals, which for 2013 equals \$3,152,600 less \$1.4 million of actual paid losses – or \$1,752,600.

Next, Table 2 details the time periods that the company expects to settle the claims from Table 1. The payout pattern considers the nature of individual claims, past experience of similar injuries and NCCI data. For example, for claims arising in 2002, the company expects to pay \$7,000 in 2017. Total (undiscounted) payout for claims for current (2014) and prior years is \$7,008,240 – as also shown in the right most cells of Tables 1 and 2.

Using a 4 percent discount (among options in Table 3, Panel A), Company X should accrue a \$5,690,676 total liability. Sensitivity analysis (Table 3, Panel A) shows that expected inflation rates can significantly impact the liability. A 2 percent discount rate reduces the liability by only 10.1 percent, from its undiscounted level while a 6 percent discount rate reduces it up to 26.3 percent. Assuming Company X's opening liability per its balance sheet was \$2,837,500 and \$380,000 in paid 2014 claims, its accrued IBNR financial statement liability is \$3,119,676 (Table 3, Panel B).

Results of Changes in Actuarial Calculations

Changing actuarial calculations affect IBNR liabilities (e.g., Los Angeles International Airport's medical expense component of workers' compensation grew 59.6 percent from 2011 to 2012).¹¹ Thus, changes outside of a company's control can dramatically impact recorded liabilities. In Table 1, for example, the LDF grew substantially from 2013 to 2014 due to the company expecting to receive many more 2014 claims compared to earlier periods.

Differing Discount Rates

Long-term liabilities appear at discounted amounts. Discount rate changes can greatly affect the related expense and liability. In 2012, the USPS used a 2.1 percent discount rate and increased the 2013 rate to 3 percent, lowering its 2013 workers' compensation expense by \$2.7 billion.¹² Ace Limited's 2012 Form 10-K Report stated that a 1 percent change would cause a projected net loss and loss expense reserve change of about \$344 million; a 9.4 percent change.¹³ Companies generally face similar challenges in properly reporting workers' compensation liabilities given many factors to consider, such

as LDF discount rates, state where the claims arose, plus the number and severity of claims.

Texas Workers' Compensation

Texas is the only state not requiring workers' compensation insurance, thereby allowing employees to sue their employers in the courts with no limit for workplace injuries.¹⁴ However, building or construction employers contracting with governmental entities must provide such coverage for each employee working on the public project.¹⁵ Texas entities should use State Department of Insurance Rate Guides¹⁶ to compare workers' compensation coverage using (1) the Texas workers' compensation classification relativities established by the insurance commissioner; (2) its own independent company-specific relativities; or (3) NCCI loss costs. Companies using the loss costs must file a loss cost multiplier that considers other associated expenses; e.g., agents' commissions and company profits. Employers may be able to negotiate their experience modifier downward for improved loss ratios or implemented safety programs. Companies can also use optional rating plans, such as different deductibles or retrospective ratings, to reduce premiums.

A Focus on Process and Reasonableness

Companies performing workers' compensation calculations in-house must measure, by location, these factors: numbers of employees and workers' compensation claims, and estimated time-off, medical costs per claim and estimated duration for such claims. They must also estimate the long- and short-term components, noting that short-term claims often accumulate less often than long-term claims. Calculations become more complex for companies operating in multiple states, with different laws related to workers' compensation calculations.

Given the size of workers' compensation balances in calculating IBNR, accountants and their auditors should carefully review the underlying assumptions and resultant calculations. Importantly, in *Delta Holdings, Inc. v. National Distillers and Chemical Corp.*, 945 F.2d 1226, 1231 (2d Cir. 10/1/1991), cert. denied, 112 Second Circuit, 1671 (1992), the court held that generally accepted

Table 3: Calculation of Incurred but not Reported (IBNR) Liabilities

Panel A: Expected Future Payments of the \$7,008,240 total Liability on Discounted Basis		
Discount Rate:	Present Value*	% of Required Reserve
2.00%	\$6,299,611	89.90%
4.00%	\$5,690,676	81.20%
6.00%	\$5,164,719	73.70%

*Assumes payments for each period are made at the end of the year as shown in Table 2.

Panel B: Unreported Workers' Compensation Liability		
Accrued liability discounted at 4%, 12/31/2014:		\$5,690,676
[Given] Workers' Compensation Liability Balance @ 1/1/2014	\$2,837,500	
Add: Interest Expense 4% (assuming a discounted beginning balance)	113,500	
Subtotal:	2,951,000	
Less: [Shown in Table 1] Workers' Compensation paid during 2014	-380,000	
Workers' Compensation Liability to be Accrued		\$2,571,000
Estimated Incurred But Not Reported (IBNR) Workers' Compensation Liability		\$3,119,676

accounting principles (GAAP) require reinsurers to estimate reasonable IBNR liabilities – but need not use a “precise actuarial method.” The court stressed that all actuarial methods are somewhat inaccurate and require conjecture, especially because no one can estimate accurately the number or amounts of future claims. Thus, it focused on the calculations’ process and reasonableness – rather than on their exactness.

The above complexities should help company accountants and their auditors grasp how to measure and account for workers’ compensation expenses. This process often involves considerable study or outside expertise. ■

Footnotes

1. See Employer Costs for Employee Compensation Survey, June 2013 (Table 5), Bureau of Labor Statistics, U.S. Department of Labor.
2. Krueger, A. B., & Meyer, B. D. (2002). “Labor Supply Effects of Social Insurance.” *Handbook of Public Economics*, 4, 2327-2392.
3. The most recent year for costs relate to 2012, which was published in 2014. See National Academy of Social Insurance, *Workers' Compensation: Benefits, Coverage, and Costs*, http://www.nasi.org/sites/default/files/research/NASI_Work_Comp_Year_2014.pdf
4. IBNR is the term for calculating potential claims by covered employees.
5. See, for example, ASC 720-20 and ASC 340-30.
6. See “ABC of Experience Rating” published by The National Council on Compensation Insurance (NCCI), https://www.ncci.com/documents/abc_Exp_Rating.pdf. The NCCI collects and analyzes employer and insurance company workers’ compensation claim data to make its insurance rates recommendations.
7. The statute of limitations time periods for the respective states can be found at <http://injury.findlaw.com/accident-injury-law/time-limits-to-bring-a-case-the-statute-of-limitations.html>.
8. NCCI-calculated Experience Rating Plans, which face state approval, are mandatory plans affecting all employers that meet a state’s premium eligibility criteria. Employers paying premiums below this threshold face an effective Mod of 1. Plans do not apply to California, Delaware, Michigan, New Jersey or Pennsylvania. North Dakota, Ohio, Washington and Wyoming administer their own plans and rates.
9. <http://corporate.target.com/annual-reports/2012/10-K/10-K-part-II/Item-8-Financial-Statements-and-Supplementary-Data>.
10. <http://about.usps.com/who-we-are/financials/10k-reports/fy2013.pdf>.
11. <http://www.lawa.org/uploadedFiles/Investors/LAWA%20CAFR%20FY%202013%20Final.pdf>.
12. <http://t.usps.com/who-we-are/financials/10k-reports/fy2013.pdf>.
13. <http://insurancenewsnet.com/print.aspx?id=373734&type=newswires>.
14. See Texas Department of Insurance, Workers’ Compensation Insurance (May 2014) <http://www.tdi.texas.gov/pubs/consumer/cb030.html>.
15. <https://www.tdi.state.tx.us/pubs/factsheets/employerrr.pdf>.
16. <https://www.tdi.state.tx.us/wc/>.

The authors wish to thank Barbara Apostolou (University of West Virginia), Dave Dupree (Comerica), Jerry Hepp (Gnosis Praxis Ltd.), Melvin Houston (attorney at law), John Fleming (SmartPros, LTD), Diane Roberts (University of San Francisco), Dan Zittnan (Grant Thornton) and Andrew Miller (graduate research assistant, Wayne State University) for their excellent comments on earlier drafts of this article.

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