

Workers' Compensation: Recent Developments in Moral Hazard and Benefit Payments

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Abstract:

Studies using pre-1990 data generally found benefit and frequency elasticities for workers' compensation cash benefits that exceeded, respectively, 1.0 and 0: an increase in expected benefits apparently induced (a) an even greater increase in actual benefit payments and (b) an increase in claim frequency. Researchers previously hypothesized that incentive effects for workers dominated those for employers. The authors of this study reevaluate benefit and frequency elasticities for 1975-89, using data with some advantages over those used by previous studies, and also investigate whether the elasticities changed during the years 1990-1999, when insurance policies with large deductibles increased employers' incentives to limit benefits and many states restricted benefit eligibility. For both periods, they find benefit elasticities significantly under 1.0 and frequency elasticities of about 0. They also find that much of the substantial decline in actual benefits in the 1990s was due to changes in state compensability rules and administrative stringency.

A Further Explanation of the Article

The article (at pages 341-342) describes several possible consequences that may occur when workers' compensation benefits prescribed by statute (expected benefits) are increased:

The simplest theory suggests that the benefit elasticity for cash benefits should be 1.0: if expected benefits increase by 10%, one would expect actual benefit payments to increase by 10%. Expected benefits are the cash benefits prescribed by workers' compensation statutes. Equally simple theories suggest that the frequency elasticity and the duration elasticity for cash benefits should both be 0: if expected benefits increase by 10%, there should be no increase in the frequency or duration of workers' compensation cases. However, more sophisticated economic theories suggest that changes in expected

benefits affect workers' and employers' behaviors and thus also affect the benefit, frequency, and duration elasticities.

On the workers' side, three kinds of moral hazard (or incentive effects) can follow an increase in expected benefits. Workers may be less concerned about job safety and more willing to accept risk, which results in an increase in injury frequency and injury severity (the true injury effect). In addition, the increase in expected benefits may induce workers to submit claims for losses they otherwise would not have bothered to report (the reporting effect). An increase in expected benefits may also cause workers to extend the periods for which they claim benefits (the duration effect). These incentive effects for employees should tend to make the benefit elasticity greater than 1.0 and the frequency and duration elasticities greater than 0.

On the employers' side, there are also three kinds of moral hazard (or incentive effects) that can result from an increase in expected benefits if the employer is at least partially liable for the benefits paid to injured workers. Such liability will occur if, for example, the employer is self-insured or purchases an experience-rated insurance policy. When insurance is purchased, similar incentives exist for the carrier. The employer may be encouraged to keep the workplace safer when the benefits for injured workers are increased in order to reduce the costs of the program (the safety effect). The carrier may provide additional loss prevention services when benefits increase. An increase in expected benefits may also encourage employers and carriers to deny claims (the under-reporting or monitoring effect). In addition, to reduce new benefits costs resulting from statutory changes, employers and insurance carriers may strengthen their claim management practices by reducing the duration of benefit payments (the rehabilitation or return-to-work effect). These incentive effects for employers and carriers should tend to make the benefit elasticity less than 1.0 and the frequency and duration elasticities less than 0.

In response to an inquiry about whether our results were inconsistent with previous findings that increases in statutory benefits lead to increases in injury duration, I provided this response:

I would restate the findings of the paper by Steve and me this way.

Our dependent variable was the total amount of incurred benefits per 100,000 workers in constant dollars. The amount of incurred benefits is the product of frequency of claims times average benefits per claim. (We summed up the products of frequency time average benefits per claim for TTD, PPD, PTD, and fatal.)

We found a negative relationship between expected benefits (as an independent variable) and the dependent variable. That negative relationship could occur because higher expected benefits resulted in lower frequency of claims and/or lower average benefits per claim (which is determined in part by duration of claims).

As a result, the negative relationship between expected benefits and incurred benefits could have occurred even if the average duration of benefits increased because the frequency of benefits may have declined and more than offset the higher average benefits resulting from longer duration.

Our findings are thus consistent with some prior studies finding that higher benefits lead to longer durations of claims.

To elaborate a bit, as discussed in the paper, there are a number of possible consequences resulting from higher expected benefits. Three factors that could increase benefit payments are the true injury effect, the reporting effect, and the duration effect. Three factors that could decrease benefit payments are the safety effect, the rehabilitation effect, and the monitoring effect. The relative importance of these effects will depend *inter alia* on the amount of time after benefits are increased.

An increase in the maximum weekly benefit may or may not lead to a decrease in injury duration. We cannot tell from our results what happened to duration. And even if duration increased, benefits per 100,000 workers may decline because of the other consequences of higher benefits.

Finally, I want to note that our measure of expected benefits is based on the NCCI actuarial procedure used to evaluate the consequences of statutory changes on benefit payments. One important difference is that our procedure does not include an allowance for the "utilization effect," which I understand has been used by the NCCI in recent years. If we had included an allowance for the utilization effect in our measure of expected benefits, we would have biased the coefficient on expected benefits.

The article can be downloaded from:
<http://digitalcommons.ilr.cornell.edu/ilrreview/vol63/iss2/9>