Comparing the Premium Cost of Workers’ Compensation

By: David W. Langham

There are a variety of ways in which the nations’ workers’ compensation programs are similar, and yet they contain many distinctions. The states have variations in their laws and regulations, but also in their mixtures of industries and risks.

Some jurisdictions have traditionally been tilted in favor of the injured worker. Others have been changing in recent years to create the “level playing field.” Some jurisdictions have a compensation process founded on the concept of impairment, while others favor a system tied to disability. Some even employ a combination of both concepts.

There are similar variations in the delivery of medical care. Some jurisdictions leave the choice of physician in the hands of the injured worker. Others are “employer choice.” Still others try to strike a balance somewhere between the two poles with plans allowing employers to define panels or provide networks, within which the injured worker is allowed some choice.

States limit maximum compensation payments. The states also have various maximum durations of benefits, statutory and regulatory control of medical and hospital charges, and varying levels of attorney involvement in the processing and resolution of workers’ compensation claims. From a statutory and regulatory perspective, there is significant variety among the jurisdictions.

There are also likelihoods of distinctions in the industrial mix. Kentucky has its mining industries, Florida its tourism challenges. Heavy industry, shipping, agriculture, each may have its own challenges. To some extent, the various jurisdictions’ programs have evolved through adaptation to these regional industrial mixtures, and have just as likely been variously influenced by the politics of their respective industries and environments.

There is nonetheless much that jurisdictions have in common. The underlying logic of workers’ compensation is consistent in a macro sense. However, the application of the theory has evolved to illustrate a great many distinctions in the micro sense.

There is every reason to better understand this statutory process. Workers’ compensation is a huge industry. It might be rationally measured by various metrics. Among these alternatives could be the number of workers whose livelihoods are covered by workers’ compensation, the dollar volume of benefits delivered annually, or the insurance premium dollars that are collected annually.

Workers’ compensation covers the majority of working Americans. According to the U.S. Census Bureau, there are about 116 million working Americans.¹ About six million are in enterprises with “0 to 4” employees.² This distinction has relevance because under some state laws, employees in smaller businesses are exempt from mandatory participation in workers’ compensation. Even in this population of smaller employers, there have been significant efforts to include even one-employee firms in certain industries such as construction. This has been driven by perceptions of misclassification of employees as “independent contractors.” That classification issue is relevant not only in workers’ compensation, but also in a far broader context of American labor issues including compliance with compulsory health insurance, wage and hour requirements, and laws like the Americans with Disabilities Act.
The Census figures support that about 110 million Americans are likely to be covered by workers’ compensation. It is very likely there are a great many more employees of smaller businesses that are also covered, but it is as likely that some otherwise covered employees have been exempted in a particular situation. That 110 million is almost 95% of the 116 million. Workers’ compensation touches the lives of the vast majority of working Americans.

It is worth noting that the Census Bureau reports there are 5.7 million business firms in the U.S. A significant majority of these, 62%, employ between 0 and 4 employees. Thus, while most employees are likely to be covered by workers’ compensation, it is likely that most businesses are of a size that renders participation in workers’ compensation voluntary.

A great deal is paid each year in workers’ compensation benefits. In 2011 workers’ compensation indemnity and medical payments totalled $60.21 billion. That is approximately $547.00 per working American likely to be covered by workers’ compensation. For illustration, a stack of one billion dollar bills would be about 67.9 miles tall. A round trip to the earth’s moon costs about $750 million; for $60 billion you could make that trip eighty times. Sixty billion dollars is a significant amount of money in most contexts.

A significant amount is charged by insurance companies to insure the risk of workplace injuries each year. The 2011 net premium written for workers’ compensation was $37.5 billion. This net written premium was about $10 billion greater than the combined revenue of the National Football League (NFL), Major league baseball (MLB), the National Basketball Association (NBA), NASCAR, and the National Hockey League (NHL).

From the standpoint of the workers’ covered, the benefits paid, or the premiums collected, workers’ compensation is huge. How huge is it? Judge Mills of the Florida First District Court of Appeal described it:

Workers' compensation is a very important field of the law, if not the most important. It touches more lives than any other field of the law. It involves the payments of huge sums of money. The welfare of human beings, the success of businesses, and the pocketbooks of consumers are affected daily by it.

Generally, employers are responsible under the various state statutes to provide benefits. Some do so by purchasing insurance. Some cover their own risk and are thus referred to as “self-insured.” Some businesses band together with other employers in “self-insured funds.” In yet another illustration of distinctions among jurisdictions, the extent to which employers may self-insure varies across the country, as do procedures. In the insurance markets, the vast majority of jurisdictions allow workers’ compensation coverage to be sold by private carriers. A few jurisdictions have “monopolistic” systems in which the jurisdiction itself provides the coverage.

Despite the size of the workers’ compensation insurance market, the insurance element is dominated by a relatively compact group of providers. The 25 largest workers’ compensation insurers account for about 70% of the net written premium in the country. The top ten carriers alone account for 50%.

The ongoing relevance of workers’ compensation is debated however. America has seen a marked decrease in the manufacturing segment in recent years. It seems axiomatic that the risks of some work-place injuries are more prevalent in that segment of the economy than in the service industry. However, there is evidence to support that work-place injuries are not uncommon in the service sector. In some part likely due to greater focus on the subject, there have been improvements in workplace safety. The frequency of work accidents overall continues to improve. However, claims costs are increasing, and are predicted to continue to
rise. Thus, while focus has brought workplace safety improvements, the relevance of workers’ compensation is nonetheless arguably strong.

Across the country, there are insurance premiums rising and premiums falling in any given year. There are predictions of continued cost increases for providing benefits to injured workers. Despite the current predictions of increases in claims costs, the trend in premiums over the last two decades has been to decrease. There are a variety of explanations offered by the experts. Often the actuaries point to decreasing frequency, that is less accidents, as a significant factor in decreasing premium. Some also point to more effective medical care, and a resulting overall improvement in residual disability following injuries.

So, there is inconsistency in the marketplace of workers’ compensation across the continent. Though the tendency is to decrease, there are examples of increasing costs in both micro and macro senses. Some celebrate this diversity, espousing the benefits of individual states’ ability to adjust their programs, tailoring to predominant industries. Few leaders in the world of workers’ compensation will concede overall flaws in their own program, though most look with some envy at something some jurisdiction is doing elsewhere, at least perceptively better.

There are also those in the marketplace who find fault or failure in the federalist model that has evolved over the last 100 years since American workers’ compensation was born. In *Workers’ Compensation Where have We Come From? Where are we Going*, the Workers’ Compensation Research Institute (WCRI) describes a perceived flaw in the current American workers’ compensation marketplace: “the state by state approach to workers’ compensation in the U.S. has often led to a ‘rush to the bottom’ on the part of jurisdictions.”17 The economic goal is perceived to be striving to “protect jobs and induce employer location or relocation, some state policymakers have traded off the quality of programs at the expense of the injured workers and their families.”18

That refrain has been echoed more recently in a series of articles co-produced by ProPublica and National Public Radio. They conclude that “over the past decade, states have slashed workers’ compensation benefits, denying injured workers help when they need it most and shifting the costs of workplace accidents to taxpayers.”19 That analysis cites evidence of 33 jurisdictions that “have passed workers’ comp laws that reduce benefits or make it more difficult for those with certain injuries and diseases to qualify for them” since 2003.20

States and policymakers may be driven by multiple factors in the legislative and regulatory process. It is rare that a “pure” bill comes to vote, without opposition, dissent, curiosity or concern. There are a multitude of interests involved in workers’ compensation, including the worker and family, the medical providers who seek compensation for services, the payers who seek to minimize expenditures, and the regulators who seek to balance all in some program that is generally loved by none, maligned by many, but which hopefully remains true to those for whom it was designed, the employees and the employers for whom they work.

In this environment, some degree of envy is perhaps inevitable; the proverbial grass is always greener on the other side of the fence. State programs are questioned regarding the delivery of benefits and the costs associated with them. The competition among states for industry and investment, businesses and the resulting jobs, seems to be increasing.21 In such an environment, it is natural that the market would look for measures to afford comparisons that are empirical and consistent. For the workers’ compensation marketplace, in this regard, there are but a handful of useful tools. One example is the Workers’ Compensation Research Institute (WCRI) CompScope™ series.22 If any criticism of that product is valid, it is likely the limited scope. CompScope compares a sampling of states, but does not include all of the states. In any
endeavor based on statistical sampling, there may be those who take issue with the width and breadth of the sample.

Oregon’s Department of Consumer and Business Services (DCBS) produces a biannual Workers’ Compensation Premium Rate Ranking Summary. This allows an objective comparison of states. While CompScope™ compares a sample of states on multiple matrices, the DCBS summary compares all of the states on a single matrix, premium cost.

The 2014 DCBS Ranking Summary reflects that premium rates for 2014 ranged between categories from “under $1.50” through “$3.00 - $3.49” per $100.00 of payroll. The lowest rate was $.88 in North Dakota and the highest was $3.48 in California. California was the only state in the “$3.00 - $3.49” category for 2014. The report includes a color-coded map which provides a stark illustration of the various rates.

<table>
<thead>
<tr>
<th>Premium</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $1.50</td>
<td>10</td>
</tr>
<tr>
<td>$1.50 - $1.99</td>
<td>24</td>
</tr>
<tr>
<td>$2.00 - $2.49</td>
<td>11</td>
</tr>
<tr>
<td>$2.50 - $2.99</td>
<td>5</td>
</tr>
<tr>
<td>$3.00 - $3.49</td>
<td>1</td>
</tr>
</tbody>
</table>

According to the Oregon DCBS, the study is produced by surveying regulators and rating bureaus in the fifty states and District of Columbia. The DCBS concedes at the outset that “every state’s economy is different, which leads to a different mix of industries, occupations, and occupational hazards.” In an attempt to homogenize the data presented, the DCBS uses a “consistent mix of 50 major risk classifications, across all states.” It contends that the data which have the “largest weight in the study” is similar in Oregon and countrywide. The study considers each state’s premium mix, without employer-specific considerations that may affect individual premium, such as experience modifications, dividends, or discounts.

The study does not address self-insured costs or expenses. There are those who fault the study in this regard. One might find that argument facially illogical, concluding that with no insurance there would be no premium to study. There is some validity to that. Some states, Florida among them, collect assessments from the workers’ compensation industry in order to fund operations of the workers’ compensation system. For the purpose of assessment calculation for the self-insured, state agencies make determinations of what a self-insured entity’s insurance premium would have been. Therefore, there is potentially a significant data pool worthy of study, which is not included in the DCBS analysis.

Anecdotally, self-insured employers are perceived by some as taking a stronger, hands-on, approach to both claim prevention (safety) and management. There are those who therefore believe that the experience of self-insureds is better than insured employers. Thus, states with large self-insured populations may have skewed premiums as the employers in the state’s risk pool have been segregated, with a volume of the perceptively best risks removed to the self-insured market segment. As some states do not allow self-insurance, and as state regulation may vary, some may question the effects of these variables on a premium comparison such as the DCBS report.

There are many critics of the Oregon report. According to Workcompcentral, immediately following the release of the 2014 report, the California Division of Workers’ Compensation issued a statement questioning the findings. Essentially, California notes that “in 2012, the 50
classes represented only 60% of Oregon’s losses,” but “in California those 50 classes likely represented a smaller percentage of California losses because they may not reflect our state’s business mix.”\(^{29}\) California was also critical of the study not accounting for “deductible plans and policyholder dividends” which are regulatory issues, but which affect individual employers similarly to the self-insurance affect.

The California Division statement also notes that the DCBS study “looks only at the cost side of the workers’ compensation equation.” This argument is that the depth and breadth of the service delivered by any particular workers’ compensation system is of at least co-equal importance. This argument may be in harmony with the ProPublica perspective recently expressed.\(^{30}\) In the California Division view, the DCBS study is akin to a publication of the price of automobiles from various manufacturers, without commensurate consideration of whether those particular vehicles represented in the study are Mercedes or Tata Nanos.\(^{31}\) That is, is it basic transportation, or is it more substantial or even well-appointed; are there notably consistent amenities to the product that is being priced? Any debate of workers’ compensation might rationally include discussion of the volume of benefits delivered.

The California Division goes on to caution that a “state could drastically reduce its scope and level of benefits in order to reduce costs and do ‘better’ in the Oregon comparison,” but “such reduction can lead to the current situation in Florida where a Dade County circuit court judge has declared their workers’ comp system unconstitutional because reforms there ‘decimated’ compensation benefits . . .”.\(^{32}\) The scope of the mentioned challenge, which is referred to in Florida as Florida Workers Advocates v. Florida (or “Padgett” is often used to shorthand reference this case), is the subject of significant debate. While the Padgett trial decision works through the Florida appellate process, the Florida Supreme Court recently rendered Morales v. Zenith Ins.\(^{33}\) Morales is seen by some to support that the Florida workers’ compensation exclusive remedy, seemingly stricken by a trial court in Padgett, remains of some significance.

When the Oregon study was last published in 2012, David DePao, owner of workcompcentral and a nationally recognized expert on workers’ compensation characterized it as a declaration of the “winners and losers in the race to be cheapest.”\(^{34}\) From the tone of this statement, Mr. Depaolo seems to agree with the contention that the marketplace is engaged in a contest with the lowest rates as the ultimate, and perhaps singular, goal.\(^{35}\)

Over time, there have been various criticisms of the DCBS study. In 2006, Montana took issue with its performance. WorkCompCentral reported that state officials there had embarked on “a comparative study to find out why the Big Sky State consistently ranks as one of the highest cost systems.”\(^{36}\) In 2013, the New York Compensation Insurance Rating Board (NYCIRB) disputed the “Oregon study that ranked New York workers’ compensation costs the fifth highest in the nation.”\(^{37}\) The criticisms are not new.

Mr. Depaolo noted in 2012 that there are those who “take the survey as gospel.”\(^{38}\) He summarized several criticisms of the survey. He noted the “states’ economies and mix of hazards are very different,”\(^{39}\) which he acknowledges the DCBS claims to have considered. This is essentially the criticism of the NYCIRB in 2013. Perhaps most persuasive, Mr. Depaolo notes that “the rankings are weighted against class codes that officials in Oregon have determined to be most important to that state.”\(^{40}\) Thus, in some part, his criticism in 2012 is also consistent with those cited by the California Division in 2014.\(^{41}\) However, he also notes that the “relative cost of living among states,” and therefore effects on payroll, has a “huge impact on rates, which translates to premiums.”\(^{42}\) In other words, because the indemnity benefits in workers’
compensation are generally percentages of earned wages, the higher those per capita wages, the higher premiums might be logically expected.

Mr. DePaolo concludes that the DCBS is “the only study that I know of that at least attempts to rank states on their relative workers’ compensation costs,” and he concedes that despite criticisms for the study it is not “meaningless.” He cautions the data presentation could be good or bad “depending upon what argument you want to make.” It is notable that although the Oregon study has detractors, no other state has invested in production of such a study with answers to these criticisms. As the most populous state in the country, such an analysis would seemingly be within California’s means?

Whatever the criticisms of the DCBS study, it does bring some perspective to the comparison between states. It seems that whatever statistical failures may be assigned or inferred to the survey, those should be anticipated to be uniform and consistent failures. Even if all alleged failures of the Oregon study were taken as fact, the uniformity of application to all states nonetheless leaves it as the sole tool that boasts application to all 51 jurisdictions. Thus, there is perhaps at least value in any state’s measurement of its biennial performance against its own past performance using this survey. In that context, the criticisms seem the least persuasive. Though the wage rates and other factors within a state may change over time, the comparison of a state to its historical self should still provide relevant reflection.

Furthermore, the average trend in rates for the country as a whole can be calculated from the data presented in the DCBS report. Through analysis of the national average from all jurisdictions in the biennial report, the market can perceive a downward trend that is national in scope. As the market debates the cause of that trend, consideration can be given to individual state performance against the overall trend. States which have passed workers’ compensation legislation can be viewed in comparison with states which have not. Certainly, these figures are not conclusive of any point, but in this context they bring an interesting set of comparisons to the discussion.

There is also some tendency to utilize the study for comparing one state to another. As illustrated by Mr. DePaolo’s comments in 2012, that may be fraught with flaws. Recently, the Illinois News Network (INN) questioned What can Illinois Learn from its Neighbor? (Indiana). In an extensive article, it examines the success of Indiana’s last decade, in which it has “consistently outperformed the Land of Lincoln.” There are several causes argued, one of which is workers’ compensation. INN cites the Oregon DCBS study for the conclusion that the “national median” index rate in the report is $1.88, that Indiana’s is $1.16 and Illinois’ is more than twice that at $2.83. INN concluded that Illinois has the “seventh-highest workers’ compensation rates in the nation. And North Dakota is the only state with lower workers’ compensation rates than Indiana.” The fact is that whether the Oregon DCBS biennial study is the best tool for comparison among states, nonetheless it is used for such purpose.

The DCBS has been publishing this survey for a significant period, the last 20 years. There has been a great deal of legislative activity in some jurisdictions during the last two decades, often referred to as “reform.” In preparation of this analysis, extensive research failed to identify any authoritative source completely documenting the breadth or scope of those “reforms.” The best resource located was the Annual Stat Bulletin 2014 Edition produced by the National Council on Compensation Insurance (NCCI). This report and a variety of Internet searches substantiate that there has been a significant volume of reform in the last twenty years.

The occurrence of “reform” in itself likely supports some perception of a need to correct some workers’ compensation program failure, real or perceived. These may have been to
increase or decrease direct benefits (indemnity or death compensation), adjust reimbursement for medical providers, facilities, or hospitals, or to change presumptions, burdens of proof, or procedural processes. There are a great many interrelated processes and procedures in any workers’ compensation system. Analysis of each of those processes, and the motivations for statutory amendments within and among them in the various jurisdictions is beyond the scope of this analysis. Without such analysis, it is impossible to validly quantify the scope of such legislative activity, or whether the label “reform” is an accurate characterization in any specific instance.

The WCRI concurs that reform has occurred in various forms. It notes that in the 1980s various economic and regulatory pressures combined to “put enormous pressure on the workers’ compensation (systems) for reform – reform to constrain, not liberalize, the state laws.”

Though a generalization, it is consistent with the overall trend to lower premium rates across the continent. It is likewise generally consistent with the research detailed herein, documenting passage of workers’ compensation regulatory and statutory change.

With this understanding of what the Oregon study does and does not explain with each release, there is nonetheless a value in this data. Each biannual snapshot of the fifty-one American jurisdictions provides a basis for comparison between and among jurisdictions. A state may also compare its rank from one study to the next. The DCBC study does not readily provide an easy and meaningful history for each state, illustrating how its current situation in the workers’ compensation marketplace compares to its own situation over the last twenty years.

Regardless of criticisms of the Oregon study regarding state v. state comparison validity, the data would seem highly relevant in comparing a particular state today versus that same state at any particular point in its past. Likewise, that intra-state trend may be validly compared to the overall average trends in the same period. In this context, the comparison is not state versus state, but state versus self and national averages.

Analyses of the trends which emerge from comparisons are interesting. Overall, the national trend has been to lower workers’ compensation premiums. In 1994, the mean, or average, premium rate in the DCBS survey was $4.36. The highest rate that year was Louisiana at $6.98 (160% of the 1994 average), and the lowest was Indiana at $2.26 (52% of the 1994 average). In 1994, thirty-two of 51 jurisdictions (63%) fell within one standard deviation (SD) of the mean in 1994.

The rates nationally have decreased markedly in the last 20 years. In the 2014 results, the average rate was $1.87 (43% of the 1994 average). The highest rate in 2014 was California at $3.48 (186% of the 2014 average), and the lowest was North Dakota at $.88 (47% of the 2014 average). Thirty-seven of 51 jurisdictions (73%) fell within one standard deviation (SD) of the average in 2014. This demonstrates that overall the Oregon DCBS 2014 results for the states are tending to be more consistent with each other, and thus more likely to be statistically close to the average.

The average decreased 57% over the twenty year span 1994 through 2014 ($4.35 - $1.87). Overall, the decreases in workers’ compensation premiums, as measured by the DCBS report, decreased markedly in the last two decades.

Five states’ premium rate measurements over 20 years were remarkably consistent with the average. Missouri, most notably, followed the average performance of the nation in the DCBS study. However, Georgia, Idaho, Michigan and Tennessee were likewise significantly similar to the average.
Seventeen jurisdictions had rates below the 1994 average and remained below average for all, or significantly all, of the twenty year period. They maintained their respective trends, and followed the general overall trend of decreasing rate. Some followed the slight rebound increase trend in the national average between 2000 and 2008, while others in this group were much more consistent with a steadily decreasing rate demonstrated by the national average of the DCBS analysis. These are represented in the following chart.
In this group, Indiana is again noteworthy. The lowest in DCBS’ 1994 survey results, Indiana briefly lost that distinction to Virginia in 2000. North Dakota experienced a marked decrease in 2002, as the Virginia rate rebounded; North Dakota thereafter maintained its position as the lowest rate in the DCBS survey through 2014. Indiana, however, experienced no notable fluctuations over the two decade survey summary, following the general trend to decrease, but maintaining a remarkably smooth progression.

Eight jurisdictions began the twenty year study period with rates above the 1994 average, and concluded still above average in 2014. Of these, only Illinois was markedly high in 1994 (more than one SD over the average). Four of the 7 had a DCBS survey rate within one SD of the 2014 average. Connecticut, New York and Oklahoma each had a 2014 DCBS rate which exceeded one SD above the 2014 average. Examined differently, Connecticut’s 1994 rate was 122% of the average and its 2014 was 153%. New York’s 1994 rate was 123% of the average and its 2014 was 147%. Oklahoma’s 1994 rate was 111% of the average and its 2014 was 136%.

Each of the 7 demonstrated a reasonably consistent overall decrease in rate over the span of the twenty years studied. However, Connecticut and New York demonstrated increases in rate since 2010 that were inconsistent with the overall downward trend; Illinois also demonstrated an increase between 2008 and 2010, followed by a return to a general downward trend.

These seven both began and concluded the study period above the average and notably each maintained its above average position in each of the 11 DCBS studies with only one exception; Pennsylvania’s survey result rate dipped slightly below the average momentarily in 1998. Following the California Division logic, does this mean that these seven states provide the best measure of benefit?

Five jurisdictions began the study period in 1994 with rates above the DCBS rate average, yet demonstrated significantly consistent downward trends in over the last twenty years and concluded the study period with below-average rates. Texas is notable in this group, starting the
study period in 1994 with a rate more than one SD over the average, yet concluding the period with a rate below the overall DCBS average. The 1994 DCBS rate for Texas was $5.91, which equaled 236% of the 1994 average. From that vantage point high in the 1994 rankings, Texas descended to a DCBS rate of $1.61 in 2014, which was only 86% of the average.

Three jurisdictions began the study period in 1994 with DCBS rates markedly (more than one SD) above the average: Maine, New Mexico, and Rhode Island. Maine’s 1994 rate $5.87 was 135% of the average, New Mexico and Rhode Island’s respective $5.75 was 132% of the average. The highest DCBS rate in 1994 was Louisiana at $6.98 (160% of the 1994 average). These three jurisdictions concluded the study period still above the DCBS average, but less markedly so; Maine’s 2014 rate $2.15 was 115% of the average and New Mexico and Rhode Island’s respective $1.99 was 106% of the 2014 average.
Similarly, the two highest states in the 1994 DCBS survey ended the study period with 2014 rates much closer to the 2014 average. Louisiana had a 1994 rate of $6.98 (160% of average) and Montana was a very close second at $6.91 (158% of average). Louisiana concluded the study period in 2014 with a DCBS rate of $2.23 (119% of average) and Montana ended the period with a rate of $2.21 (118% of average). Thus, while remaining above average, these jurisdictions nonetheless experienced a significant improvement compared to their own past.

Three jurisdictions began the 20 year study period with DCBS rates below the 1994 average, and concluded the period with rates above the average in 2014, New Jersey and South Carolina. South Carolina began the study period with a rate more than one SD below the 1994 average and concluding the study period in 2014 above the average. New Jersey began the study period less significantly below the 1994 average, but below nonetheless, and concluded with a 2014 rate ($2.82) more than one SD above the average. The overall progression of the states in this group show more fluctuation than is apparent in some of the other groups discussed above.
Eight jurisdictions demonstrated less consistency with the overall national averages of the DCBS data. Alaska, California, Delaware, Florida, Hawaii, Kentucky, Ohio and Vermont had results with notable variation over the 20 year study period.

One state in this group began the study period well over the DCBS average and concluded the period in 2014 exceeding the average more. California’s 1994 rate was $5.04 (116% of average); by 2014 that rate had changed to $3.48 (186%, and the highest in the 2014 survey).

Four states in this group started in 1994 with rates in excess of the study average, three of them markedly so, and concluded with rates below the 2014 average. Florida began the period in 1994 at $5.72 (131% of average) and concluded in 2014 at $1.82 (97%). Hawaii started the study period with a rate of $6.06 (139% above the 1994 DCBS average) and ended the period at $1.85 (99%). Kentucky started the period at $5.46 (125%) and ended in 2014 at $1.51 (81% of average). Ohio’s rate in 1994 was $4.42 (101% of average) and by 2014 the rate was $1.74 (93%).

Three states in this group began the twenty year period studied with rates below average, two of them markedly so, and concluded the studied period with rates significantly above the DCBS survey average. Alaska started the period at $3.92 in 1994 (90% of average) and ended at $2.68 (143%). Delaware in 1994 was $3.18 (73% of average) and ended in 2014 at $2.31 (124%). Vermont started in 1994 at $4.21 (97% of average) and ended at $2.33 (125%).
There are criticisms of the DCBS survey. There are arguments that militate against using the survey as a "gold-standard" for the analysis of any particular state’s rate or overall performance. However, the data is intriguing. The process is consistently applied; whether the classifications selected by Oregon are the most representative or not, they are consistent. Each survey provides a snapshot of each jurisdiction’s current position in the marketplace from one perspective. Put another way, the quality of the camera, the film, or the developing may not be what everyone could unanimously agree is ideal, but each biannual survey is taken with the same film and with the same camera.

There have been some noteworthy publications on the internet in recent years, where someone has photographed their child or pet in the same spot on a periodic basis and then used the conglomeration of those photos to tell a visual story. In the same manner, the consistent calculation of rate using the DCBS paradigm affords jurisdictions the chance to observe the changes in respective premium rates over time. The changes might be particularly notable if viewed through the prism of local knowledge regarding regulatory or statutory changes that might be argued to have precipitated or influenced fluctuations. The absence of a definitive listing of all “reforms” and changes makes that analysis difficult in this macro scale. However, in the individual state charts that accompany this analysis, those that could be located are annotated.

Five jurisdictions are remarkably consistent with the averages over the last 20 years (Georgia, Idaho, Michigan, Missouri, and Tennessee). Seventeen jurisdictions have consistently demonstrated survey results with rates below the annual average of the DCBS process (Arizona, Arkansas, Indiana, Iowa, Kansas, Maryland, Mississippi, Nebraska, North Carolina, North Dakota, Oregon, South Dakota, Utah, Virginia, West Virginia, Wisconsin, and Wyoming). Eight jurisdictions have demonstrated the same consistency against the DCBS averages, but are consistently higher (Alabama, Connecticut, Illinois, Minnesota, New Hampshire, New York, Oklahoma, and Pennsylvania). Thus, the results for 30 of the 51 jurisdictions, 59%, show notable consistency with national trends illustrated over a significant period, 20 years, of study under a consistent set of criteria.

Another five jurisdictions (Colorado, District of Columbia, Massachusetts, Nevada, and Texas) demonstrated similar shifts over the study period, moving from above average states to below average. Notably, only one of these, Massachusetts, has been below the average for an extended period, since 2000. Nevada and the District of Columbia crossed below the average demarcation in 2008, and Texas and Nevada more recently still, in 2012.

Five more Jurisdictions that began the study period markedly above the DCBS average have brought their rates to, or very close to, the average in the 2014 study. These include three with markedly high comparative 1994 rates (Maine, New Mexico, and Rhode Island), and the two jurisdictions with the highest 1994 rates (Louisiana and Montana).

Three jurisdictions (South Carolina, New Jersey and Washington) have demonstrated the opposite shift from below average to above average; South Carolina and New Jersey in 2006 and Washington in 2010.

The remaining 8 jurisdictions (Alaska, California, Delaware, Florida, Hawaii, Kentucky, Ohio, and Vermont) demonstrated notable fluctuations in the DCBS rate calculation over the 20 year study period. Of these, only Florida, Hawaii, Kentucky and Ohio finished the twenty year period with a rate below the DCBS average.

There are a multitude of potential explanations. Legislative and regulatory change, court interpretations, and changes in employment concentrations or other economic influences are among them. In the charts that follow, each state’s 20 year history is illustrated along with the national average; when known, regulatory or legislative actions are annotated.
Alabama\textsuperscript{53, 54}

The NCCI memorialized Alabama premium rate changes based on the following. Alabama made changes to its medical fee schedule each year 2000-13; endnote 54.

Alaska\textsuperscript{55, 56}

The NCCI memorialized Alaska premium rate changes based on the following: Statutory changes were made in 1995 (HB 237), 2000 (HB 419), 2007 (HB 228), 2009 (HB 104) and 2010 (SB 159; HB 13). Medical fee schedule changes were made in 2007, 2009, and 2010; endnote 55.
Arizona\textsuperscript{57, 58}

Arizona passed reforms in 2004; endnote 57.

The NCCI memorialized Arizona premium rate changes based on the following: Statutory changes in 1999 (SB 1410), 2008 (HB 2195) and 2009 (HB 2195, Phase 2). Medical fee schedule changes were made each year 1995 through 2013; endnote 58.

Arkansas\textsuperscript{59, 60}

Arkansas passed reforms in 1993; endnote 59.

The NCCI memorialized Arizona premium rate changes based on the following: Statutory changes in 1999 (SB 1410), 2008 (HB 2195) and 2009 (HB 2195, Phase 2). Medical fee schedule changes were made each year 1995 through 2013; endnote 60.
California\textsuperscript{61, 62} 

California passed reforms in 2003, 2004, 2012 and 2013; endnote 60. The NCCI memorialized California premium rate changes based on the following: Statutory changes in 2013 which were implemented in 2013 and 2014 (SB 863). Medical fee schedule changes were made in 1994, 1999, 2001 and 2007; endnote 62.

Colorado\textsuperscript{63, 64} 

Colorado passed reforms in 2004; endnote 63. The NCCI memorialized Colorado premium rate changes based on the following: Statutory changes in in 2003 (SB 106), 2006 (HB 1113), 2007 (SB 1297), 2008 (SB 241), 2009 (SB 243), and 2010 (SB 187). Medical fee schedule changes were made in 2002, 2004, and 2007-13; endnote 64.
Connecticut\textsuperscript{65, 66}


The NCCI memorialized Connecticut premium rate changes based on the following: Statutory changes in 1995 (eliminating the second injury fund), 1997 (SB 976), and 2006 (Pub. Act 06-24; PSB 25). A medical fee schedule was implemented in 1994 and changed in 1998; the practitioner fee schedule was changed each year 2008-13; endnote 66.

Delaware\textsuperscript{67, 68}

Delaware passed reforms in 2013; endnote 67.

The NCCI memorialized Delaware premium rate changes based on the following: Statutory changes in 2008 (SB 1); endnote 68.
District of Columbia\textsuperscript{69}

The NCCI memorialized District of Columbia premium rate changes based on the following: Statutory changes in 1999 (HB 12-192); endnote 69.

Florida\textsuperscript{70, 71}

The NCCI memorialized Florida premium rate changes based on the following: Statutory changes in 1994 (SB 12C), 1998 (eliminated the Special Disability Trust Fund), 2003 (SB 50A), 2009 (HB 903), and 2013 (SB 662). Medical fee schedule changes were made each year 2001-06; the hospital fee schedule was changed 2007; the physician fee schedule was changed 2007 and 2008; endnote 71.

Georgia\textsuperscript{72, 73}

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>8.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>7.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>6.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Georgia passed reforms in 2004 and 2013; endnote 72.


Hawaii\textsuperscript{74, 75}

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>8.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>7.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>6.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hawaii passed reforms in 2005; endnote 74.

The NCCI memorialized Hawaii premium rate changes based on the following: medical fee schedule changes in 1998, 1999 and 2002-13; endnote 75.
The NCCI memorialized Idaho premium rate changes based on the following: Statutory changes in 1998 (HB 714). A medical fee schedule was implemented in 2006 and changes were made 2007-13; endnote 76.

Illinois passed reforms in 2004, 2005 and 2011; endnote 77.

The NCCI memorialized Illinois premium rate changes based on the following: Statutory changes in 2011 (HB 1698). A hospital fee schedule was implemented in 2009. Medical fee schedule changes were made 2007-13. Dental and pharmacy fee schedules were implemented in 2012; endnote 78.
Indiana\textsuperscript{79, 80}

Indiana passed reforms in 2013, endnote 79.


Iowa\textsuperscript{81, 82}

Iowa passed reforms in 2004; endnote 81.

The NCCI memorialized Indiana premium rate changes based on the following: statutory reforms in 2004 (HF 2581); endnote 82.
Kansas

The NCCI memorialized Kansas premium rate changes based on the following: Statutory changes in 2000 (SB 219) and 2011 (HB 2134). Medical fee schedule changes were made in 1996, 1999, 2001, 2005, 2007, 2010-12, and 2014. Hospital and physician fee schedule changes were made 1997; physician fee schedule changes were made 2003; endnote 83.

Kentucky

The NCCI memorialized Kentucky premium rate changes based on the following: Statutory changes in 1994 (HB 928), 1996 (HB 1), and 2000 (HB 992). Medical fee schedule changes were made 1999, 2002, 2006, and 2008; endnote 85.
Louisiana

Louisiana passed reforms in 2004; endnote 86.

The NCCI memorialized Louisiana premium rate changes based on the following:
Statutory changes in 1995 (SB 144), 1996 (HB 32), 2001 (HB 419 and HB 435), and 2003 (HB 301). Medical fee schedule changes were made 1994; endnote 87.

Maine


The NCCI memorialized Maine premium rate changes based on the following: Statutory changes in 2000 (LD 762). Medical fee schedule changes were made 1994, 2012-14; endnote 89.
Maryland\textsuperscript{90}

The NCCI memorialized Maryland premium rate changes based on the following: Statutory changes in 2009 (HB 700, Step 1), 2010 (HB 700, Step 2), and 2011 (HB 700, Step 3 and SB 212). Hospital fee schedule changes were made 2004-13. Medical fee schedule changes were made 2004. Physician and ambulatory surgical care fee schedule changes were made 2013; endnote 90.

Massachusetts\textsuperscript{91, 92}

The NCCI memorialized Massachusetts premium rate changes based on the following: medical fee schedule changes were made 1995-96, 2000, 2002, 2004, and 2008; endnote 92.
Michigan\textsuperscript{93, 94}

Michigan passed reforms in 2011; endnote 93.

The NCCI memorialized Michigan premium rate changes based on the following: Statutory changes in 2011 (PA 266). Medical fee schedule changes were made 1996-98 and 2003; endnote 94.

Minnesota\textsuperscript{95, 96}

Minnesota passed reforms in 2013; endnote 95.

The NCCI memorialized Minnesota premium rate changes based on the following: Statutory changes in 2000 (SF 3644), 2008 (SF 3218), and 2013 (SF 1234); endnote 96.
Mississippi\textsuperscript{97, 98}

<table>
<thead>
<tr>
<th>Year</th>
<th>Mississippi</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>$8.00</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>$7.00</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>$6.00</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>$5.00</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>$4.00</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>$3.00</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>$2.00</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>$1.00</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>$0.00</td>
<td></td>
</tr>
</tbody>
</table>

Mississippi passed reforms in 2004; endnote 97.

The NCCI memorialized Mississippi premium rate changes based on the following: changes in medical fee schedule changes were made 1997 and 2013; endnote 98.

Missouri\textsuperscript{99, 100}

<table>
<thead>
<tr>
<th>Year</th>
<th>Missouri</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>$8.00</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>$7.00</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>$6.00</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>$5.00</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>$4.00</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>$3.00</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>$2.00</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>$1.00</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>$0.00</td>
<td></td>
</tr>
</tbody>
</table>

Missouri passed reforms in 2005 and 2013; endnote 99.

The NCCI memorialized Missouri premium rate changes based on the following: statutory reforms in 2005 (SB 1) and 2014 (SB 1); endnote 100.
The NCCI memorialized Montana premium rate changes based on the following: Statutory reforms in 2003 (HB 164 and SB 282 and SB 450) and 2013 (HB 334). Medical fee schedule changes were made 2011. Physician fee schedule changes were made 2003-09. Facility fee schedule changes were made 2008; endnote 102.

Montana passed reforms in 2011; endnote 101.

The NCCI memorialized Nebraska premium rate changes based on the following: Statutory reforms in 1994 (LB 757, Stage I.), 1995 (LB 757, Stage II.), 1996 (LB 757, Stage II.), 1997 (LB 757, Stage IV.), 1998 (LB 757, Stage V.), and 2008 (LB 588); endnote 103.
Nevada\textsuperscript{104, 105} passed reforms in 1993; endnote 104.

The NCCI memorialized Nevada premium rate changes based on the following: statutory reforms in 2000 (SB 37), 2003 (AB 168), 2004 (AB 438), and 2009 (SB 363 and SB 195). Medical fee schedule changes were made 2002 and 2004-11; endnote 105.


The NCCI memorialized New Hampshire premium rate changes based on the following: Statutory reforms in 1994 (HB 1579), 2010 (HB 240) and 2014 (SB 147); endnote 107.
New Jersey\textsuperscript{108, 109}

<table>
<thead>
<tr>
<th>Year</th>
<th>New Jersey Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>$-</td>
</tr>
<tr>
<td>1996</td>
<td>$1.00</td>
</tr>
<tr>
<td>1998</td>
<td>$2.00</td>
</tr>
<tr>
<td>2000</td>
<td>$3.00</td>
</tr>
<tr>
<td>2002</td>
<td>$4.00</td>
</tr>
<tr>
<td>2004</td>
<td>$5.00</td>
</tr>
<tr>
<td>2006</td>
<td>$6.00</td>
</tr>
<tr>
<td>2008</td>
<td>$7.00</td>
</tr>
<tr>
<td>2010</td>
<td>$8.00</td>
</tr>
<tr>
<td>2012</td>
<td>$2.00</td>
</tr>
<tr>
<td>2014</td>
<td>$1.00</td>
</tr>
</tbody>
</table>

New Jersey passed reforms in 2004; endnote 108.

New Jersey does not evidence any benefit changes in the NCCI data; endnote 109.

---

New Mexico\textsuperscript{110, 111}

<table>
<thead>
<tr>
<th>Year</th>
<th>New Mexico Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>$6.00</td>
</tr>
<tr>
<td>1996</td>
<td>$4.00</td>
</tr>
<tr>
<td>1998</td>
<td>$5.00</td>
</tr>
<tr>
<td>2000</td>
<td>$3.00</td>
</tr>
<tr>
<td>2002</td>
<td>$2.00</td>
</tr>
<tr>
<td>2004</td>
<td>$1.00</td>
</tr>
<tr>
<td>2006</td>
<td>$1.00</td>
</tr>
<tr>
<td>2008</td>
<td>$1.00</td>
</tr>
<tr>
<td>2010</td>
<td>$1.00</td>
</tr>
<tr>
<td>2012</td>
<td>$1.00</td>
</tr>
<tr>
<td>2014</td>
<td>$1.00</td>
</tr>
</tbody>
</table>

New Mexico passed reforms in 2004; endnote 110.

The NCCI memorialized New Mexico premium rate changes based on the following: statutory reforms in 1999 (repeal of Second Injury Fund), 2000 (cap on indemnity and funeral allowance changes), 2001 (SB 234) and 2003 (HB 501). Medical fee schedule changes were made 2003-05 and 2007-12; endnote 111.
New York 112, 113


The NCCI memorialized New York premium rate changes based on the following: statutory reforms in 1996 (LB 11331), 2007 (Workers’ Compensation Reform Act; NYCIRB R.C. Bulletin 2133), and 2014 (closing the Reopened Case Fund). Medical and hospital fee schedule changes were made 1995. Hospital inpatient fee schedule changes were made 2009. Evaluating and management physician fee schedule changes were made 2010; endnote 113.

North Carolina 114, 115

North Carolina passed reforms in 2005 and 2011; endnote 114.

The NCCI memorialized North Carolina premium rate changes based on the following: statutory reforms in 2011 (H 709). Hospital fee schedule changes were made 1994 and 2013. Medical fee schedule changes were made 1996. Physician fee schedule changes were made 2013; endnote 115.
Ohio passed reforms in 2004 and 2006; endnote 118. Ohio does not evidence any benefit changes in the NCCI data; endnote 119. Ohio is a monopolistic state; endnote 117.

North Dakota does not evidence any benefit changes in the NCCI data; endnote 116. North Dakota is a monopolistic state; endnote 117.
The NCCI memorialized Oklahoma premium rate changes based on the following: statutory reforms in 1999 (SB 680), 2000 (SB 1414), 2002 (HB 1003), 2005 (SB 1X), 2010 (HB 2650), 2011 (SB 878), and 2014 (SB 1062). Medical fee schedule changes were made 2000, 2008, 2010, and 2012; endnote 121.

Oregon passed reform in 1990 and 2005; endnote 122.

The NCCI memorialized Oregon premium rate changes based on the following: statutory reforms in 1998 (HB 2549), 1999 (SB 460), 2002 (SB 485), and 2005 (SB 757); endnote 123.
The NCCI memorialized Pennsylvania premium rate changes based on the following: statutory reforms in 1996 (Act 57); endnote 124.

Pennsylvania

The NCCI memorialized Rhode Island premium rate changes based on the following: statutory reforms in 1998 (SB 3178), 2004 (Change in burial allowance), 2007 (HB 7042), and 2012 (SB 2083); endnote 126.

Rhode Island

Rhode Island passed reform in 2004; endnote 125.
South Carolina\textsuperscript{127, 128}  

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{south_carolina_chart}
\caption{South Carolina premium rate changes based on statutory reforms and fee schedule changes.}
\end{figure}

\begin{itemize}
\item South Carolina passed reforms in 2007; endnote 127.
\item The NCCI memorialized South Carolina premium rate changes based on the following: statutory reforms in 1996 (HB 3838), 2003 (R 147), 2007 (SB 332), and 2008 (eliminated second injury fund). Hospital fee schedule changes were made 2006. Physician fee schedule changes were made 2010. Pharmacy fee schedule changes were made 2011. Hospital and physician fee schedule changes were made 2011; endnote 128.
\end{itemize}

South Dakota\textsuperscript{129}  

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{south_dakota_chart}
\caption{South Dakota premium rate changes based on statutory reforms and fee schedule changes.}
\end{figure}

\begin{itemize}
\item The NCCI memorialized South Dakota premium rate changes based on the following: statutory reforms in 1996 (HB 1299), 2001 (eliminate subsequent injury fund), 2009 (HB 1057), and 2010 (HB 1118). Physician fee schedule changes were made 1996. Hospital fee schedule changes were made 1996. Medical fee schedule changes were made 2002; endnote 129.
\end{itemize}
Tennessee


The NCCI memorialized Tennessee premium rate changes based on the following: statutory reforms in 2000 (SB 2381), 202 (SB 277), 2004 (HB 3531, Step I.), 2005 (HB 3531, Step II.), and 2014 (SB 200). Medical fee schedule changes were made 2007-13; endnote 131.

Texas

Texas passed reforms in 2005, endnote 132.

The NCCI memorialized Texas premium rate changes based on the following: statutory reforms in 2002 (HB 2600), 2003 (HB 2600), and 2005 (HB 7). Medical fee schedule changes were made 2004-13. Hospital fee schedule changes and ambulatory service center fee schedule changes were made 2008; endnote 133.

Vermont passed reform in 2004; endnote 136.

The NCCI memorialized Vermont premium rate changes based on the following: statutory reforms in 1994 (SB 377) and 2004 (H 632). Medical fee schedule changes were made 1994. Physician fee schedule changes were made 2007-08. Hospital and durable goods fee schedule changes were made 2006; endnote 137.
Virginia\textsuperscript{138, 139}

Virginia passed reform in 2004; endnote 138.

The NCCI memorialized Virginia premium rate changes based on the following: statutory reforms in 1998 (change in burial allowance); endnote 139.

Washington\textsuperscript{140, 141}

Washington passed reforms in 2011; endnote 140.

Washington does not evidence any benefit changes in the NCCI data; endnote 141. Washington is a monopolistic state; endnote 117.
West Virginia\textsuperscript{142, 143}

Reform passed 2005; endnote 142.

The NCCI memorialized West Virginia premium rate changes based on the following: statutory reforms in 2009 (SB 537). Physician fee schedule changes were made 2008; endnote 143.

Wisconsin\textsuperscript{144, 145}

Wisconsin passed reform in 2004; endnote 144.

The NCCI memorialized Wisconsin premium rate changes based on the following: statutory reforms in 1994 (AB 844), 1995 (AB 844, Step II.), 2002 (AB 505), and 2006 (SB 474); endnote 145.

The total for employment in firms with 0-4 employees is 5,906,506; Id.\

Of the 116 million American workers reported by the Census Bureau, about six million are in enterprises with “0 to 4” employees. Some jurisdictions do not require participation in workers’ compensation if there are a small number of employees. Recently that statutory accommodation has been eroded as states have attempted to address the issues associated with misclassification of employees as independent contractors. The $60.21 billion divided by the 110 million who are employed in entities with more than four employees is $547.36.


David Langham, \textit{Where did it Come From, Where is it Going, and How “Huge” is it Anyway?}, 57 Lex and Verum 1, June 2014, at 7.


According to the International Risk Management Institute, Inc., the only jurisdictions which are currently monopolistic are: “North Dakota, Ohio, Washington, Wyoming, Puerto Rico, and the U.S. Virgin Islands.”
Grabell, supra.


WCRI’s mission is “to be a catalyst for significant improvements in workers' compensation systems, providing the public with objective, credible, high-quality research on important public policy issues. Our Mission, Workers Compensation Research Institute, http://www.wcrinet.org/about.html. (Last visited March 2015). The WCRI CompScope™ Benchmarks “measures the performance of 16 different state workers’ compensation systems, how they compare with each other, and how they have changed over time.” CompScope™ Benchmarks, 14th Edition, Workers Compensation Research Institute, http://www.wcrinet.org/studies/public/abstracts/BMcscope_multi14_all-ab.html. (Last visited March 2015).

There could be argument over relevance or the weight that such a report should be afforded. That does not change the objectivity of the report. For example, a school teacher might award class grades based upon student height. The relevance of that metric could be argued, but height is nonetheless objective.


California Surges to the Top in Comp Cost Benchmark Study, WorkCompCentral, (October 9, 2014), https://www.workcompcentral.com/news/story?id=5d3c3252b5f1eca10eafa13978e4486746ebf7a21gs/words=california%20oregon%20study.state_=start=10.type=_sort=time,past=_records_per_page=10,stype=AND,p

Grabell, supra.

Email from Peter Melton, Director Communications Office, California Department of Industrial Relations, Division of Workers’ Compensation, *Statement Copy*, (November 3, 2014 12:45 PM CST), providing Industrial Relations Director Christine Baker’s statement of October 2014 (copy on file with Judge Langham).

*Morales v. Zenith Ins.*, 152 So.3d 557 (Fla. 2014).


Grabell, *supra*.


DePaolo, *supra*.

Id.

Id.

Id.

Melton, *supra*.

DePaolo, *supra*.

Id.

Id.

Id.


Id.

Id.

This is a proprietary and copyrighted report. Permission was conveyed by NCCI to cite and reference the report. Email from Lori Lovgren, Division Executive State Relations, National Council on Compensation Insurance, *Received your voicemail*, (January 9, 2015 2:10 PM CST)(copy on file with Judge Langham).


Statistically, there is significance to an average. The presence of exceptionally variant data sets can lead to a distortion of the average in some instances. The statistical analysis solution is to also consider the median, which is the value in the overall data set which is situated in the distribution such that an equal number of individual values fall both above and below that value. In 1994, the mean was $4.36, and the median was $4.35. Over the course of the 11 surveys studied, the deviation between median and mean was not significant in most years: 1994 median = $4.35, mean = $4.36, difference = $.01; 1996 median = $3.54, mean = $3.52, difference = $.02; 1998 median = $2.69, mean = $2.79, difference = $.10; 2000 median = $2.26, mean = $2.28, difference = $.02; 2002 median = $2.42, mean = $2.50, difference = $.08; 2004 median = $2.58, mean = $2.65, difference = $.07; 2006 median = $2.48, mean = $2.56, difference = $.08; 2008 median = $2.26, mean = $2.32, difference = $.06; 2010 median = $2.04, mean = $2.05, difference = $.01; 2012 median = $1.88, mean = $1.91, difference = $.03; 2014 median = $1.85, mean = $1.87, difference = $.02.

Mathematicians and statisticians use the “standard deviation” to measure the extent to which the individual figures in a data set are distributed. The deviation for 1994 was $1.14, thus the range encompassed by +/- one standard deviation was from $3.22 to $5.50.

West Virginia exceeded the annual average notably in 2000, returned very close to the average in 2002, and then returned to the below average group. Wisconsin exceeded the average slightly in 2010, returning to the average in 2014. North Carolina exceeded the average slightly in 2008, returning to the average in 2012.


The NCCI memorialized Alaska premium rate changes based on the following. Statutory changes were made in 1999 (SB 1410), 2008 (HB 2195) and 2009 (HB 2195, Phase 2). Medical fee schedule changes were made each year 1995 through 2002 through 2013.


The NCCI memorialized California premium rate changes based on the following: Statutory changes were made in 1999 (SB 1410), 2008 (HB 2195) and 2009 (HB 2195, Phase 2). Medical fee schedule changes were made each year 1995 through 2002 through 2013.


The NCCI memorialized Connecticut premium rate changes based on the following: Statutory changes were made in 1995 (eliminating the second injury fund), 1997 (SB 976), and 2006 (Pub. Act 06-24; PSB 25). A medical fee schedule was implemented in 1994 and changed in 1998; the practitioner fee schedule was changed each year 2008-13. *NCCI Annual Statistical Bulletin - 2014 Edition*, supra.


The NCCI memorialized Delaware premium rate changes based on the following: Statutory changes were made in 2008 (SB 1). *NCCI Annual Statistical Bulletin - 2014 Edition*, supra.

The NCCI memorialized District of Columbia premium rate changes based on the following: Statutory changes were made in 1999 (HB 12-192). *NCCI Annual Statistical Bulletin - 2014 Edition*, supra.


The NCCI memorialized Florida premium rate changes based on the following: Statutory changes were made in 1994 (SB 12C), 1998 (eliminated the Special Disability Trust Fund), 2003 (SB 50A), 2009 (HB 903), and 2013 (SB 662). Medical fee schedule changes were made each year 2001-06; the hospital fee schedule was changed 2007; the physician fee schedule was changed 2007 and 2008. *NCCI Annual Statistical Bulletin - 2014 Edition*, supra.


The NCCI memorialized Idaho premium rate changes based on the following: Statutory changes were made in 1998 (HB 714). A medical fee schedule was implemented in 2006 and changes were made 2007-13. *NCCI Annual Statistical Bulletin - 2014 Edition*, supra.


The NCCI memorialized Illinois premium rate changes based on the following: Statutory changes were made in 2011 (HB 1698). A hospital fee schedule was implemented in 2009. Medical fee schedule changes were made 2007-13. Dental and pharmacy fee schedules were implemented in 2012. *NCCI Annual Statistical Bulletin - 2014 Edition*, supra.


The NCCI memorialized Kansas premium rate changes based on the following: Statutory changes were made in 2000 (SB 219) and 2011 (HB 2134). Medical fee schedule changes were made in 1996, 1999, 2001, 2005, 2007, 2010-12, and 2014. Hospital and physician fee schedule changes were made 1997; physician fee schedule changes were made 2003. *NCCI Annual Statistical Bulletin - 2014 Edition*, supra.


The NCCI memorialized Louisiana premium rate changes based on the following: Statutory changes were made in 1995 (SB 144), 1996 (HB 32), 2001 (HB 419 and HB 435), and 2003 (HB 301). Medical fee schedule changes were made 1994. NCCI Annual Statistical Bulletin - 2014 Edition, supra.


The NCCI memorialized Maine premium rate changes based on the following: Statutory changes were made in 2000 (LD 762). Medical fee schedule changes were made 1994, 2012-14. NCCI Annual Statistical Bulletin - 2014 Edition, supra.

The NCCI memorialized Maryland premium rate changes based on the following: Statutory changes were made in 2009 (HB 700, Step 1), 2010 (HB 700, Step 2), and 2011 (HB 700, Step 3 and SB 212). Hospital fee schedule changes were made 2004-13. Medical fee schedule changes were made in 2004. Physician and ambulatory surgical care fee schedule changes were made 2013. NCCI Annual Statistical Bulletin - 2014 Edition, supra.


Michigan passed reforms in 2011, 2011: Michigan Employers Continue to Benefit from Decrease in Workers’ Compensation Rates; State’s Pure Premium Rate has Dropped by more than 21 Percent in just Three Years, Michigan Department of Licensing and Regulatory Affairs, (October 29, 2013), http://www.michigan.gov/lara/0,4601,7-154-10573_11472-315479--,00.html.

The NCCI memorialized Michigan premium rate changes based on the following: Statutory changes were made in 2011 (PA 266). Medical fee schedule changes were made 1996-98 and 2003. NCCI Annual Statistical Bulletin - 2014 Edition, supra.


The NCCI memorialized Minnesota premium rate changes based on the following: Statutory changes were made in 2000 (SF 3644), 2008 (SF 3218), and 2013 (SF 1234). NCCI Annual Statistical Bulletin - 2014 Edition, supra.


The NCCI memorialized Mississippi premium rate changes based on the following: changes in medical fee schedule changes were made 1997 and 2013. NCCI Annual Statistical Bulletin - 2014 Edition, supra.


The NCCI memorialized Missouri premium rate changes based on the following: statutory reforms in 2005 (SB 1) and 2014 (SB 1). NCCI Annual Statistical Bulletin - 2014 Edition, supra.

The NCCI memorialized Montana premium rate changes based on the following: statutory reforms in 2003 (HB 164 and SB 282 and SB 450) and 2013 (HB 334). Medical fee schedule changes were made 2011. Physician fee schedule changes were made 2003-09. Facility fee schedule changes were made 2008. NCCI Annual Statistical Bulletin - 2014 Edition, supra.


The NCCI memorialized North Carolina premium rate changes based on the following: statutory reforms in 2011 (H 709). Hospital fee schedule changes were made 1994 and 2013. Medical fee schedule changes were made 1996. Physician fee schedule changes were made 2013. *NCCI Annual Statistical Bulletin - 2014 Edition*, supra.


Monopolistic states provide workers’ compensation insurance through state funds or regulated self-insurance. As such, these states are not part of the National Council on Compensation Insurance (NCCI) and the absence of NCCI data on these states is not indicative of any particular conclusions. See, *Monopolistic State Funds*, International Risk Management Institute, http://www.irmi.com/online/insurance-glossary/terms/m/monopolistic-state-funds.aspx. (Last visited February 2015).


The NCCI memorialized Rhode Island premium rate changes based on the following: statutory reforms in 1998 (SB 3178), 2004 (Change in burial allowance), 2007 (HB 7042), and 2012 (SB 2083). *NCCI Annual Statistical Bulletin - 2014 Edition, supra.*


The NCCI memorialized South Carolina premium rate changes based on the following: statutory reforms in 1996 (HB 3838), 2003 (R 147), 2007 (SB 332), and 2008 (eliminated second injury fund). Hospital fee schedule changes were made 2006. Physician fee schedule changes were made 2010. Pharmacy fee schedule changes were made 2011. Hospital and physician fee schedule changes were made 2011. *NCCI Annual Statistical Bulletin - 2014 Edition, supra.*

The NCCI memorialized South Dakota premium rate changes based on the following: statutory reforms in 1996 (HB 1299), 2001 (eliminate subsequent injury fund), 2009 (HB 1057), and 2010 (HB 1118). Physician fee schedule changes were made 1996. Hospital fee schedule changes were made 1996. Medical fee schedule changes were made 2002. *NCCI Annual Statistical Bulletin - 2014 Edition, supra.*


The NCCI memorialized Texas premium rate changes based on the following: statutory reforms in 2002 (HB 2600), 2003 (HB 2600), and 2005 (HB 7). Medical fee schedule changes were made 2004-13. Hospital fee schedule changes and ambulatory service center fee schedule changes were made 2008. *NCCI Annual Statistical Bulletin - 2014 Edition, supra.*


The NCCI memorialized Vermont premium rate changes based on the following: statutory reforms in 1994 (SB 377) and 2004 (H 632). Medical fee schedule changes were made 1994. Physician fee schedule changes were made 2007-08. Hospital and durable goods fee schedule changes were made 2006. *NCCI Annual Statistical Bulletin - 2014 Edition, supra.*


The NCCI memorialized West Virginia premium rate changes based on the following: statutory reforms in 2009 (SB 537), Physician fee schedule changes were made 2008. *NCCI Annual Statistical Bulletin - 2014 Edition, supra.*


