Assessing social inflation’s disruption to data, metrics, and forecasts: 10 mitigation strategies

By Richard C. Frese

20 September 2021

The economy and insurance industry have been transformed over the past few years by significant disruptors such as COVID-19, increased natural catastrophes like flooding and wildfires brought on by climate change, and the return of social inflation. The combination of these factors has contributed to a hardening property and casualty (P&C) marketplace, resulting in higher premiums, policy restrictions and/or exclusions, and even some carriers pulling out of certain markets or having insureds take on more risk through higher retentions. While COVID-19 and climate change impacts may be more easily isolated, the influence of social inflation is harder to measure and may be just as or more volatile.

Social inflation causes disruption to data, metrics, and forecasts. Many individuals in the insurance industry, such as risk managers, underwriters, brokers, actuaries, captive managers, or attorneys, have their daily decisions and tasks impacted by social inflation. Even C-Suite and company management become heavily engaged when social inflation distorts budgets and renewals of insurance exposures. Social inflation is a significant driver of higher losses with more uncertainty, which is shrinking profit margins for insurers and increasing premiums for insureds. Let’s examine social inflation’s causes and drivers, the impact to data, metrics, and forecasts, and strategies to best deal with and mitigate it in a COVID-19 environment and in the future.

What is social inflation and its causes and drivers?

Social inflation has been a buzzword in the industry connected with other terms such as nuclear verdicts, runaway verdicts, and even “superimposed inflation”; however, the phenomenon is not new to the insurance industry. Beginning in the 1970s, 1980s, and even 2000s, the insurance industry started to see claims settle for large amounts but only recently has the name social inflation gained more traction. Social inflation is sometimes loosely defined, but in simple terms it refers to all the ways in which insurers’ claim costs rise over and above general economic inflation and expected claim development. Some in the industry also include legislative and litigation developments, which impact insurers’ legal liabilities and claim costs due to societal trends and views toward increased litigation, broader contract interpretations, plaintiff-friendly legal decisions, and larger jury awards in the definition of social inflation.

Social inflation, while originating in the United States, is beginning to expand globally. Many insurance lines can be impacted by social inflation but the lines most affected are:

- Personal automobile and commercial automobile liability
- Commercial general liability inclusive of product liability, premises operations, and contracting claims
- Professional liability inclusive of employment practices, directors and officers, errors and omissions, and medical malpractice
- Excess and umbrella liability

Even other lines such as workers’ compensation, via employer’s liability, can experience more generous and liberal awards.

The composition of jury pools is shifting to Millennial and Generation Z age groups from older groups. Each generation has its own general viewpoints and perspectives, which may influence how cases are viewed and verdicts are awarded. This shift could possibly contribute to social inflation. Other potential drivers include:

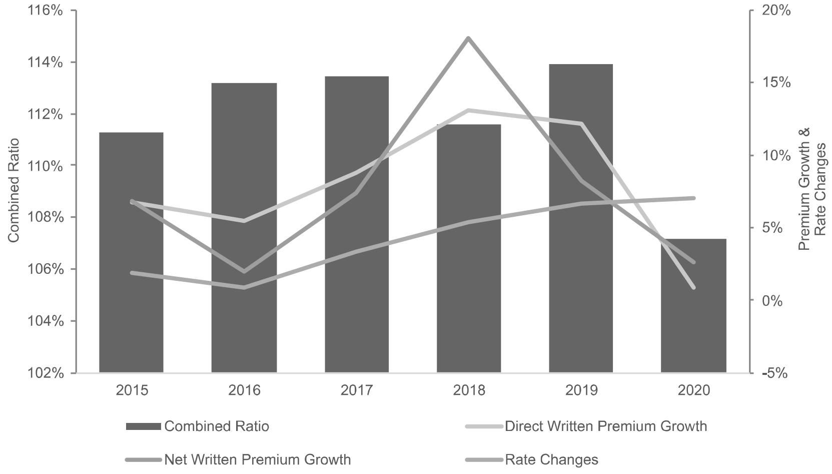
- More liberal treatment and interpretation of claims
- Erosion of tort reforms
- Third-party litigation funding by investors
- Distrust in corporations and lawyers
- Evolving views of social responsibility and the righting of wrongs
- Diminished value of money
- Society's desensitization to large jury verdicts and settlements
- Increased use of social media, news publications, and advertising by plaintiff’s bar
- Increased sophistication and organization of plaintiff’s bar
- Use of new psychological tactics by plaintiff's bar such as employing emotions versus facts
- Increase of medical expenses year over year

Many of these drivers share a common theme of insurance settlements being viewed as and becoming a “business.” Strategies that historically were used to control claim costs are no longer as successful or applicable. Societal views have shifted and continue to shift over time, making it difficult for the insurance industry to keep up with and proactively be prepared for new trends in insurance settlements.

How does social inflation impact data, metrics, and forecasts?

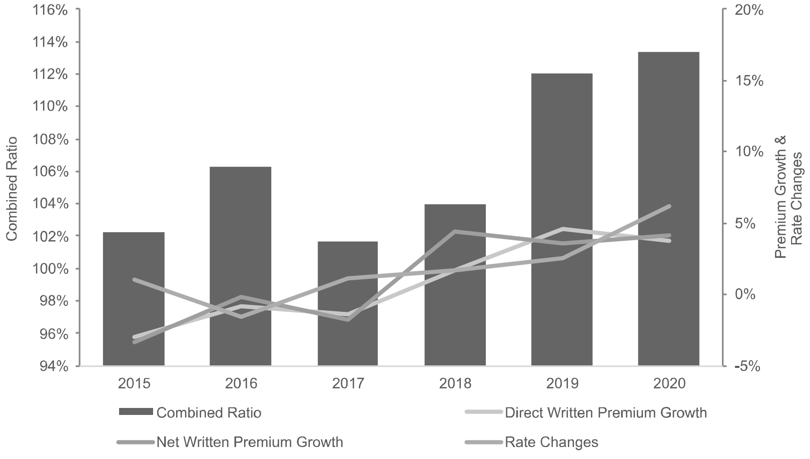
One of the first telltale signs that social inflation is having an impact in the industry is the rise of combined ratios across various lines of business. As shown in Figure 1 and Figure 2, the combined loss ratios for both commercial auto liability and medical professional liability have been over 100% and generally increasing. In addition, insurance companies have been combatting rising combined ratios by increasing written premium and rate changes. However, combined ratios continue to climb even after these rate increases. This indicates that losses are growing faster than insurance rates, which is likely driven by social inflation. The increase in losses can be caused by higher frequency and severity trends directly from socially inflated claim values.

Figure 1: Commercial Auto Liability Calendar Year Written Premium, Combined Ratio and Rate Changes



Data sources: National Association of Insurance Commissioners (NAIC) data sourced through S&P Global Market Intelligence, MarketScout Market Barometer.

Figure 2: Medical Professional Liability Calendar Year Written Premium Growth, Combined Ratio and Rate Changes



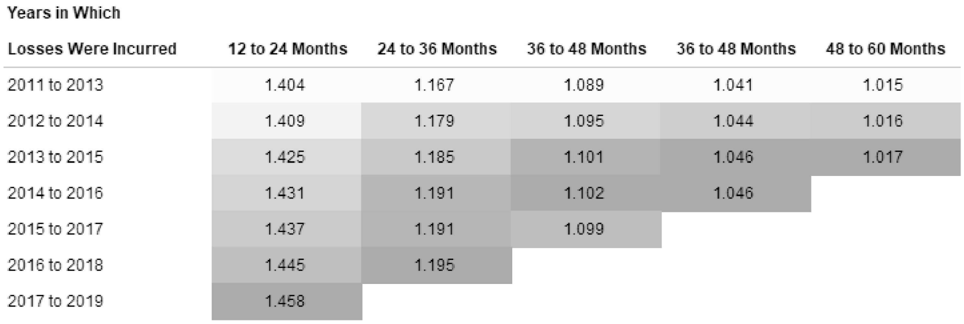
Data sources: NAIC data sourced through S&P Global Market Intelligence. MarketScout Market Barometer.

The insurance industry relies on the theory of consistency when producing actuarial estimates and loss projections. This means that past loss experience is an indicative and reliable predictor of future losses. This would include losses being reported, reserved, and paid consistently over time. In addition, severity and frequency trends can be estimated and applied to historical losses in forecasting future losses. Social inflation presents a challenge to this theory by creating data that is not consistent with the past and may not behave similarly. In particular, claim patterns, claim severities, and large loss frequencies have deteriorated. This variability adds uncertainty to loss forecasts. While actuaries could overcompensate for the trends that are shown in historical data, this could also impose the dilemma that actuarial forecasts might be redundant or too high.

Actuaries sort data and monitor loss development through loss triangles in order to project the future. As part of this process, actuaries examine age-to-age factors that show how claims develop between 12 months and 24 months of reported losses for the same year, for example. Hence, it normalizes frequency, severity, and exposure trends because each year's development is measured against the respective starting base for that year, being 12 months of reported losses. A three-year moving average of the factors smooths the variations within each individual year and might add more credibility in projecting future development.

In both commercial auto liability and medical professional liability, as shown in Figure 3 and Figure 4 respectively, the three-year average is increasing down the 12-to-24-month age-to-age column. This indicates that development is changing and becoming higher with each new year. Therefore, if more recent losses are developing at higher rates than in the past, then forecasts based on the past and the theory of consistency could be too low. This would also explain why there is a trend in the combined ratio despite taking rate increases. The pace at which losses are growing is quicker than what is being forecasted based on the past history.

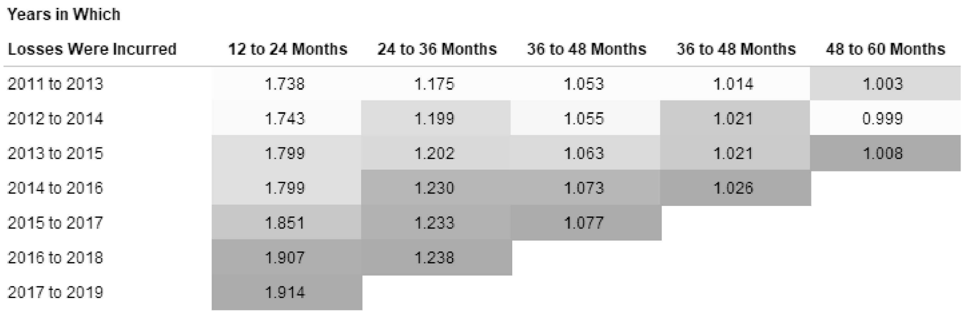
Figure 3: Commercial Auto Liability Reported Losses 3-Year Moving Average of Age-to-Age Factors



Years in Which Losses Were Incurred	12 to 24 Months	24 to 36 Months	36 to 48 Months	36 to 48 Months	48 to 60 Months
2011 to 2013	1.404	1.167	1.089	1.041	1.015
2012 to 2014	1.409	1.179	1.095	1.044	1.016
2013 to 2015	1.425	1.185	1.101	1.046	1.017
2014 to 2016	1.431	1.191	1.102	1.046	
2015 to 2017	1.437	1.191	1.099		
2016 to 2018	1.445	1.195			
2017 to 2019	1.458				

Data sources: NAIC data sourced through S&P Global Market Intelligence.

Figure 4: Medical Professional Liability (Claims-Made) Reported Losses 3-Year Moving Average of Age-to-Age Factors



Years in Which Losses Were Incurred	12 to 24 Months	24 to 36 Months	36 to 48 Months	36 to 48 Months	48 to 60 Months
2011 to 2013	1.738	1.175	1.053	1.014	1.003
2012 to 2014	1.743	1.199	1.055	1.021	0.999
2013 to 2015	1.799	1.202	1.063	1.021	1.008
2014 to 2016	1.799	1.230	1.073	1.026	
2015 to 2017	1.851	1.233	1.077		
2016 to 2018	1.907	1.238			
2017 to 2019	1.914				

Data sources: NAIC data sourced through S&P Global Market Intelligence

While it is true that unexpected loss development can also be related to factors other than social inflation, insurance professionals usually can better isolate those causes, leaving the unexplained piece likely due to the variability caused by social inflation. For example, the increase in accidents from distracted drivers and the increase in the cost of components and repairs to automobiles can be determined based on other subsets of data and industry statistics.

The impact of social inflation also brings to light the question of data reliability and quality. As long as the weaknesses and strengths of the data are understood by the user, then reasonable forecasts can still be completed. However, there may be added uncertainty. There is no doubt that social inflation has disrupted data, which adds to the complexities of using data for benchmarking, underwriting, forecasting, budgeting, and premium renewals. Some insurance companies or self-insureds may elect to account for this disruption by incorporating more conservatism and maybe even including additional contingencies.

What are strategies to best deal with and mitigate social inflation?

With the disruption caused by social inflation, insurance professionals are advised to develop key strategies that will keep their companies sound into the future. Many of these strategies begin with recognizing there is increased uncertainty in today's insurance environment, and this may continue going forward due to social inflation. The following are 10 considerations when developing these strategies:

1. **Ensure risk management is optimal:** Risk management should develop techniques to better control losses and reduce the variability of losses. This may consist of safety programs in which loss activity is closely monitored. Early intervention is always beneficial. Risk managers may want to reassess their exposures periodically and try to avoid hidden surprises. Risk management needs to be prioritized.
2. **Review insurance contracts to certify appropriate coverage:** Risk managers and C-Suite management should review all insurance contracts in place to understand the risk that their companies retain and the risk covered by the insurance company. Brokers and legal teams can assist in understanding any complex policy language. As risks also evolve, it is critical to make sure that insurance policies cover them, limits are adequate, and there are no gaps in coverage.
3. **Differentiate your program during renewals:** During a hard market in particular, it is useful for insureds to prepare documents to demonstrate their exposures, risk management, and propensity to losses during renewal periods. By successfully sharing this with underwriters, the insured may be able to differentiate their risk and achieve a lower premium. Insurance carriers will have more comfort in pricing renewal premiums if they know the proper actions are being undertaken to avoid large verdicts.
4. **Evaluate different risk financing options:** As some capacity in the insurance market shrinks, insureds may be forced to take on more risk via higher deductibles, higher retentions, or reduced insurance policy limits. It may be feasible for insureds to explore all types of risk financing options varying from guaranteed cost programs, large deductible programs, self-insured retentions, and even captive programs. Self-insured programs may desire a retention study to determine the retention size that makes the most sense for them by considering premiums and variability of forecasted retained losses.
5. **Participate in conversations with partners and peers to gather data and compare strategies:** Insureds would be wise to connect with various insurance partners such as brokers, lawyers, actuaries, third-party administrators (TPAs), captive managers, and others to gather various perspectives on industry trends regarding social inflation. Each party will offer different advice. In addition, company risk management may want to discuss the trends in its own data and strategies

that other companies have in place to combat social inflation. There will not be a one-size-fits-all strategy but many strategies will share common themes and goals.

6. **Isolate impacts on budgets and data:** Forecasts may be improved by removing the impact of social inflation claims, if possible. By stratifying data at a finer level, it may be possible to remove the uncertainty and variability of socially inflated losses to arrive at the more routine and predictable losses. Socially inflated losses could then be analyzed separately and even include an additional contingency margin such as a percentile. The combination of routine, expected losses, and a separate provision for socially inflated losses at a selected percentile, might increase the confidence management has in the adequacy of the reserves and forecasts.
7. **Model scenarios with frequent updates:** Social inflation adds uncertainty to loss forecasts and budgets. In modeling future losses, an actuary can create various projections under different assumptions and scenarios. It may be fruitful to look at the variability of loss forecasts under different assumptions and scenarios. For example, the actuary can utilize higher loss trends, or incorporate multiple large losses in the model. In addition, it may be helpful for management to receive more frequent updates of loss forecasts, which can be based on current data and be more reflective of current trends and information.
8. **Make use of technology for both controlling losses and forecasting losses:** Technology is changing at a rapid rate and being utilized more within the insurance industry. Risk management may be able to better control losses by employing today's top safety technology. In addition, technology can be used to monitor and better predict losses. Risk management tools such as dashboards may help in identifying large losses and controlling expenses. Predictive modeling is a technology used in the insurance industry to help identify losses that may be more expensive in the future based on early attributes of a claim. This type of modeling may identify candidates of socially inflated claims in order to get a jumpstart on preventing the costs from becoming nuclear.
9. **Have defendants be prepared:** Testifying can be an exhausting and overwhelming process for any defendant. There are plenty of stories of physicians who are extremely smart and can perform well under pressure during surgery but do not hold strong in the courtroom. The plaintiff's bar is very sophisticated and uses strong techniques such as anchoring theory, reptile theory, and Trojan horse theory, to name a few. This portrayal of distrust may unnerve any defendant while testifying. Defendants should be prepared and practice with their legal team. This preparation will allow the true facts of the case to be shown to the jury.
10. **Learn from the past:** There is valuable information to be gleaned from examining the past of your own company's large losses or those within the industry. Gather as much detail as is available and take the time to understand what happened. What was done well and what could have been done better? Perhaps new protocols, stronger claim advocacy, and better documentation need to be put in place going forward. There might also be comfort in knowing that, in some cases, all can be done right but a claim still might escalate. This is why adequate insurance protection is critical.

What is the COVID-19 impact and expectation going forward?

Social inflation was highly prevalent in 2019 with numerous high verdicts but was dampened in 2020 when the COVID-19 pandemic started. During the pandemic, many court cases were delayed. Those that did move forward became virtual, which may have impacted how the cases were resolved. Virtual courtrooms did not always allow for a jury trial, which plaintiff's bar dislikes because jury trials tend to result in higher awards. In addition, because the trial process was extended, some plaintiffs attempted to settle earlier, which may have led to lower-than-expected claim amounts.

In addition to a slower litigation process, government-mandated lockdowns reduced insurance exposure. For example, auto exposures plummeted because there were fewer drivers on the road. Jury attitudes also might have shifted during the pandemic. Healthcare workers were viewed as heroes and, as a result, very few medical malpractice claims were filed. There were also temporary immunities offered to healthcare workers. On the flipside, public distrust might have increased during the COVID-19 pandemic. There were more reports of public outrage and increased pushes for social justice reforms occurring simultaneously. This increased awareness of the public good could help reignite the high jury awards. Also, will people need to brush up on their skills such as driving or performing surgeries as daily activities resume? This could lead to new claims and higher risks.

Social inflation is similar to any emerging risk, and it will take time to determine the full impact. Many in the insurance community believe that social inflation will return to pre-pandemic levels. The fear is the unknown, but an even bigger fear is the long-term risks that social inflation could have on the insurance industry such as insurance companies going out of business, lack of coverage, and out-of-reach renewals. It is clear though that everyone in the industry should pay particular attention to trends in liability court awards, factor them into business decisions, and be prepared with a strategy to best mitigate social inflation. Leverage relationships with business partners and be willing to quickly adapt business plans.

About the Author(s)

Richard C. Frese

Chicago | Tel: 1 312 7260677

ABOUT MILLIMAN

For more than seven decades, we have combined technical expertise with business acumen to create elegant solutions for our clients.

Today, we are helping organizations take on some of the world's most critical and complex issues, including retirement funding and healthcare financing, risk management and regulatory compliance, data analytics and business transformation.

Copyright © 2021 Milliman, Inc. All Rights Reserved