Feature Article: The Winding Roads of Log Truck Insurance

Shawn Baker and Justin Tyson

Introduction

Large swaths of the general public still have no idea what modern logging entails. Even in areas with extensive forest industry activity, many people associate the chainsaw as the state of the art and it's alarming how many people still ask about livestock extracting the logs. However, one thing almost everyone associates with logging is trucks. Stacked, cut logs traveling down the highway may be the most visible and recognizable aspect of the forest industry. At some point, a truck transported from the forest every forest product in use today.

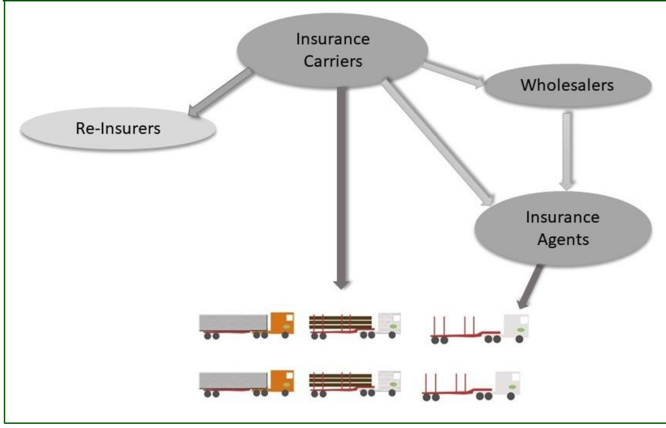
A functioning wood supply chain requires log trucks. Yet, the viability of log hauling challenges the entire chain. It is highly regulated and, in part because of its visibility, subject to frequent inspections. Hauling is a low profit margin operation encouraging some to cut corners where they can. Increasingly, it also feels pressure from insurance markets with costs reportedly rising and availability falling.

Discussions of log truck insurance have increased at industry association meetings over the past few years as loggers raised concerns about insurance costs. To clarify our understanding of the issue, Forisk reached out to people involved at all levels of trucking insurance. This article shares our findings to put the issue into context within the greater wood supply chain.

How Commercial Truck Insurance Works

Before we investigate issues driving truck insurance premiums and availability, it helps to describe how truck insurance (and insurance in general) works. Ultimately, a network of businesses backed by significant capital take on the risk of an insurance policy. The bulk of an insurance premium flows to these firms, known as insurance "carriers" (Figure 22). Carriers make possible a massive insurance industry, which covers everything from personal homes and automobiles to commercial real estate to health and well-being at work. Log trucks fall under the umbrella of commercial automobile policies, a large category including most heavy trucks on the road. A carrier must accept the risk of a given driver or firm to issue a policy; if not, the policy doesn't get written. Many insurance firms willing to underwrite loggers are far from household names. Harco, Bitco, AmTrust, Ace, and Sentry are major carriers of log truck policies (or have been in the past). Another carrier has a well-known retail arm and is more familiar as a result, Progressive.

Figure 22. Structure of Commercial Automobile Insurance Industry



While carriers provide the capital and ultimately make the final decisions, they are not the only players. Many policies are sold through retail agents who work between the insured companies and the carriers. Often, wholesalers distribute coverage to individual retail agents who manage policies directly with policy holders (i.e. log truck owners). Carriers may bypass wholesalers to deal directly with independent retail agents as well. In addition, carriers may purchase insurance themselves on the policies they've written through reinsurance. Reinsurers help spread the risk of unexpected losses. Wholesalers can be important for a smaller industry like logging that has a set of unique operating conditions. Larger carriers may rely on the expertise of wholesalers to understand industry specific risks and aid in underwriting for specialty industries, as opposed to maintaining that level of expertise in the larger parent company. In logging, wholesalers and retail agents are often the more visible face of the insurance industry.

Loggers seeking to cover their truck fleets will contact a retail insurance agent who will gather the necessary data and transmit it up the chain. Ultimately, underwriters working for the carrier or a wholesaler will assess the risks and determine whether or not the policy should be issued and at what cost. In many industries, a safety inspector or loss control officer may also evaluate a company and identify areas to address to improve the likelihood of attaining coverage or reduce the risk profile of the company. For years, commercial truck companies benefitted from vigorous competition in the insurance industry, keeping rates lower and underwriting standards fairly lax. Some of these trends have started to catch up with the industry.

None of this is new; the business has been structured and functioned this way for years. Why, then, is log truck insurance now such a concern? What has changed, if anything? Why are there reports of decreasing insurance availability and higher costs? The answers to these questions vary based on who you ask, which means the core issues combine a number of factors.

Are Premiums Higher and Policies Harder to Find?

For this article, we spoke with logging contractors from seven states spread across the U.S., representing around 350 logging trucks. They repeated the same issues. Most employed drivers who had been denied coverage by an insurance company. It is increasingly difficult to cover a driver. Typically, they need two years of experience after gaining their commercial driver's license (CDL). They must pass drug and alcohol tests to maintain their CDL. Often, they must have a safe driving record. The standard for coverage denial was anything more severe than a single, minor traffic violation. Multiple violations or any "serious" violation, such as speeding more than 15 mph above the speed limit, invalidates a driver.

Given the strict standards, it is not surprising that log truck owners might move between insurance companies. All but one logger we spoke with had changed providers over the past three years. The reason for switching companies was split, with half seeking lower rates and the other half switching because their current insurer left the state. That is a worrisome trend, though most of the loggers reported having multiple companies still willing to write them a policy. Premium increases affected all but one company (a large company with in-woods and over-the-road trucks). These increases ranged from 10% to 300% over the past three years based on the claims history of each company and their success in pursuing lower rate providers.

While we did not speak with independent contract haulers (owner operators), these issues are particularly relevant to them. The current environment of insurance availability and cost is more severe for single-truck contract haulers than for loggers with a fleet of vehicles.

Premiums are Higher…Why?

Many reasons could explain increasing premiums. Maybe accidents increased from commercial vehicles generally. Accidents could be more severe than in the past. Or perhaps logging is singled out from other classes of commercial vehicles. Insurance trade journals report on the lack of profitability in commercial automobile insurance (of which trucking is a large segment and log trucks specifically are a small portion). While most insurance sectors are profitable, commercial auto stands out for its poor performance (Figure 23). Spiraling costs of claims, due in part to increased litigation and higher medical costs, have driven the entire sector into a period of net losses. As a whole, commercial auto insurance lost money for the past 6 years, and the pace of those losses has increased. The losses coincide with a turnaround in the rate of heavy truck accidents, which reached their nadir in 2010.

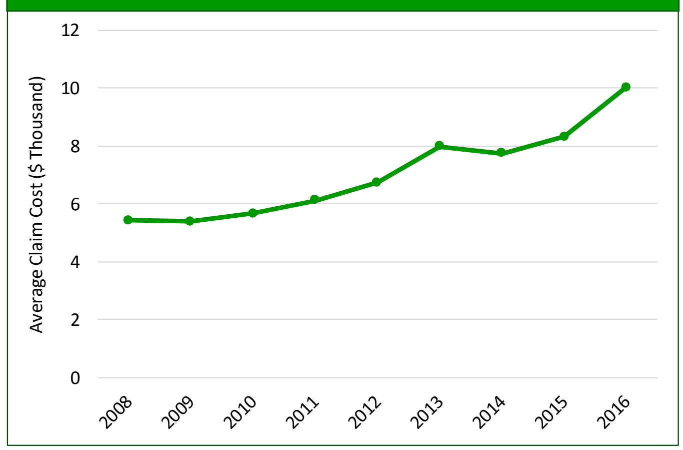
Given the increasing losses incurred by carriers, there are essentially two short-term remedies: (1) raise the cost of premiums to help pay for the cost of increased claims or (2) tighten the standards by which drivers are assessed to minimize the risk of higher claims. Data from individual firms offers a clue as to the pace of claim increases. While the rate of accidents increased since 2010, the size of those claims has as well (Figure 24). Barring new legislation to reform civil litigation and jury damage awards, the insurance companies can't do much to drive down the average cost of claims. They can, however, work to reduce the frequency of claims (and severity of accidents) by focusing on loss prevention for their insured clients. Training is a part of this, but tighter underwriting is as well. The data suggest the accident rate is lower than a decade ago, but the recent increase suggests room for improvement.

Figure 23. Commercial Automobile Insurance Profitability and Heavy Truck Accident Rate

*Commercial auto insurance profitability is typically measured by the "combined ratio," which compares the value of premiums collected against the cost of issuing premiums and claims made against them. A value of 100 is break-even. Values in the graph are combined ratios subtracted from 100 to indicate profit (positive) or loss (negative).

Data Sources: A.M. Best, Insurance Information Institute, FMCSA

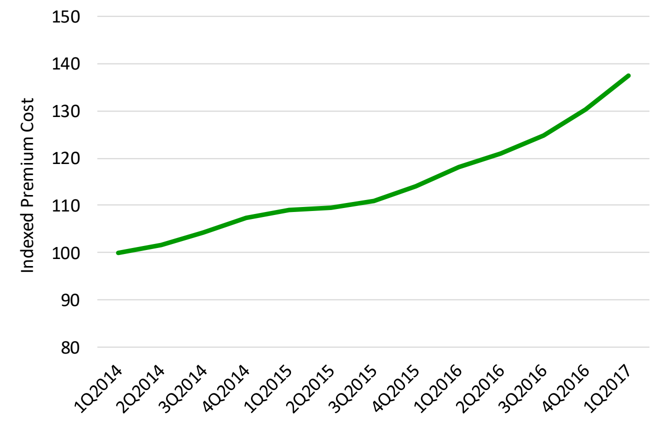
Figure 24. Average Cost of Commercial Automobile Claims



Data Source: Insurance company public filings

Premiums rise to offset the losses being incurred by carriers. A quarterly survey on average premiums charged administered by the Council of Insurance Agents and Brokers found that in 2015, commercial auto premiums increased 6% (Figure 25). In 2016, they increased nearly 14%. Through just the 1st quarter of 2017, they had increased over 5%, the largest single quarter increase over the past three years. This trend is likely to continue until balance returns to the commercial auto sector. Logging is a sliver of this sector, but there is reason to believe it could be among the riskier segments, which puts logging in line for a larger portion of premium increases.

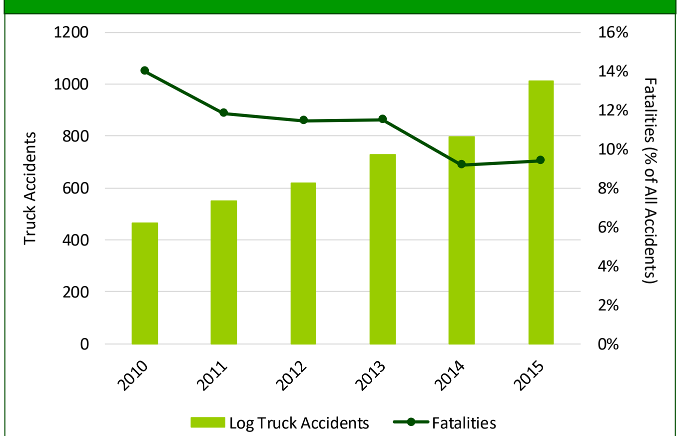
Figure 25. Indexed Average Commercial Automobile Premium Cost, Based on Quarterly Premium Changes



Data Source: Council of Insurance Agents and Brokers

Accident statistics back up this theory. Since 2010, the number of accidents involving log trucks more than doubled, from 466 to 1,012 (Figure 26). Given the recovery in the forest industry over this time, an increase in log trucks on the road is expected. Total heavy truck crashes increased by about 33% over the same period. Unfortunately, log truck accidents were more severe than other types of accidents. Injuries resulted from 79% of log truck accidents compared to 56% of all heavy truck accidents in 2015. The percentage of log truck accidents that resulted in a fatality fell nearly every year since 2010, from 14% to 9%, but that percentage is the highest of any truck type tracked by the Federal Motor Carrier Safety Administration. Fatalities are more than twice as common in a log truck accident as accidents involving other types of heavy truck. Insurance settlements are higher on fatality accidents. If frequency and severity of crashes are key concerns of insurance companies, the logging industry needs to take note.

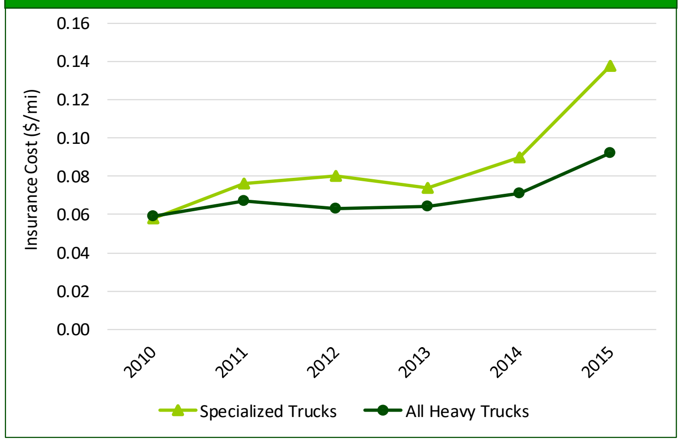
Figure 26. Annual Accidents Involving Log Trucks and the Percentage of Those Accidents That Involved a Fatality



Data Source: FMCSA

Higher premiums are painful and shared across all trucking industries. The reduced availability of insurance, though, is concerning. Higher costs can be accounted for and insurance, while expensive, is not the major cost of operating a heavy truck. Lack of insurance, however, is crippling. An exodus of insurance carriers from logging would eliminate the forest industry's ability to move wood. For many loggers, hauling is a negative margin operation, subsidized by their pay for harvesting timber. Therefore, marginal increases in insurance costs hurt. The American Transportation Research Institute estimated that insurance represented just under 8% of the operating cost of specialized trucks (such as log trucks). If hauling costs $7 per ton, insurance represents around $0.56 per ton of the delivered cost. Should rates double, they increase the cost of delivered wood or reduce the value of stumpage sold by forest owners. According to ATRI data, such a doubling occurred between 2010 and 2015, but those costs were masked by lower diesel prices (Figure 27).

Figure 27. Average Annual Cost per Mile of Heavy Truck Insurance for All Trucks and Specialized Trucks (which includes logging)



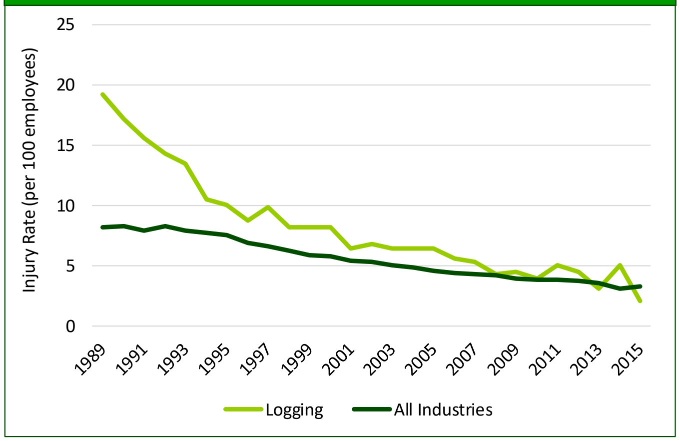
Data Source: American Transportation Research Institute

Where Does the Industry Go from Here?

Much of the Southern U.S. currently enjoys sufficient logging capacity, with few worried about the ability to move wood out of the forest. With loggers on quotas, concerns about trucking capacity take a backseat, but continued tightening by insurance carriers on the types of companies they willingly cover could further shrink the limited pool of log truck drivers. Implementing wide-scale driver training and programs to improve safety performance take a concerted effort by loggers, landowners, mills, and the insurers. A consortium of forest industry participants started Team Safe Trucking in 2015 to provide information and collaboration on improved log trucking safety. Increasing adoption of loss control training in the woods requires everyone in the supply chain to accept the impending risk of tightening insurance underwriting.

None of this is unprecedented. The logging sector faced similar threats twenty years ago with workers' compensation insurance costs. Higher costs signaled the sector was less safe than other industries. Logger training introduced with the Sustainable Forestry Initiative in the 1990's included a section on logging safety and helped focus on reducing injuries. A substantial portion of the workforce also moved from the ground and into protective cabs on machinery. The results have been outstanding; loggers now have an on-the-job injury rate on par with the national average for all industries (Figure 28). The reduction in injury rates from 19 to less than 3 injuries per 100 workers testifies to the industry's ability to address a challenging issue. Logging is still identified as one of the least safe occupations due to the continued frequency of fatal injuries relative to the small workforce. It is worth noting the occupation with the most total fatalities: truck drivers.

Figure 28. Total Injury Incident Rates per 100 Full-Time Equivalent Employees in Logging and All Industries



Data Source: Bureau of Labor Statistics

The high cost of each accident spotlights safety. For log trucks, an accident has the potential to eject logs into the roadway, increasing the injury risk and severity. As a result, insurance carriers work to eliminate anything that suggests an accident-prone driver. Previous research into the contributing factors to log truck accidents highlights training on how to avoid distracted driving (an umbrella term that covers texting or other smartphone use), keeping trucks well-maintained to avoid mechanical failures, and safe driving practices around traffic might help reduce accidents (Baker et al. 2012). The largest variables log truck owners control in the insurance equation are management of their trucks and driver selection. A well-managed fleet is likely to avoid large increases in their insurance costs, and they will have lower fuel consumption and maintenance costs. Safe, reliable drivers who want to drive log trucks are hard to come by. Compensation is a major determinant of how effective the industry is in recruiting and retaining safe drivers. We discussed logging and trucking compensation in detail in the Q1 2017 *Forisk Research Quarterly*.

Decades of research speak to the ability of the logging workforce to continually improve their in-woods production. Mostly anecdotal information suggests that hauling is a burden born by logging companies to facilitate their in-woods operations. As one of our contacts said, "loggers are great at logging but they aren't great fleet managers." Hauling is a crucial part of the business that needs the same level of attention as the in-woods operations. The threat of further cost increases paired with capacity reductions from limited labor and tightening insurance underwriting may force the entire wood supply chain to pay more attention to the most visible aspect of the business.

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