

Have United States Legislatures Fully Considered Causal Factors in Assigning Liability for Inherent Risk Accidents?

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Abstract

The public's dissatisfaction with American tort rules has led US state legislatures to enact more than 120 statutes for assigning liability for accident losses. Many of these statutes address the liability of accidents involving inherent risks of activities where neither the activity provider nor injured participant was negligent. Due to business complaints about high insurance costs, legislatures decided that participants ought to bear the costs arising from inherent risk accidents. Yet, causal factors associated with sport activities may support an alternative liability rule to maximize social welfare. Because inherent risk statutes lead to increased activity levels, they are accompanied by increased accident costs. Factors causing incorrect liability results may be compared to offer a recommendation for a liability regime for inherent risk accidents.

Keywords

Inherent risks, accidents, damages, activity levels, levels of care.

Introduction

Absent an enforceable liability system, people have no incentive to use reasonable precaution to avoid injuring others. Since the 1970s, US policy makers and economists have studied liability options to devise laws that incorporate deterrence of injury and economic efficiency (Calabresi, 1970; Landes & Posner, 1987). However, given the range and nature of human actions, projected outcomes are not always achieved. Causal factors including misconceived risk, non-rational actions, precautionary measures for which a duty of care has not been established, and transaction costs detract from efficiency and complicate the assignment of liability. Not being able to evaluate these causal factors means that they may be ignored (see Brigham, 2009). Another concern is whether the level of activity is fully considered (Hylton, 2008).

Lawsuits arise when there is disagreement about who should be liable for damages from accidents. Disputes are between plaintiff-participants and defendant-activity providers (including alleged providers). Discontent with claims for damages for unavoidable accidents where providers have employed adequate precaution has led US state legislatures to enact specialized liability statutes for selected activities (see Appendices 1 and 2). Snow skiing, horseback riding, and roller skating are the most prominent activities covered. The statutes delineate provisions saying that activity providers are

not liable for accidents that occur as part of the inherent risks of the listed activity. Rather, participants are designated as residual bearers of liability for these accidents. The statutes have become known as "inherent risk statutes" (Centner, 1995).

With the assignment of liability by inherent risk statutes, questions arise whether the provisions are grounded on

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welfare-efficiency criteria or simply respond to special interest groups that had the political muscle to garner favoritism (Feldman & Stein, 2010). In the absence of negligence, who should pay for an injury of an unavoidable accident that resulted from an inherent risk of an activity? Legislatures have choices, but in changing liability rules, why should they enact inherent risk statutes for some activities and not others? This paper looks at tort liability rules to evaluate the selection of a preferred assignment of liability for accidents occurring due to the inherent risks of an activity. The first section looks at liability options, followed by an accounting of inherent risk statutes for unavoidable accidents. With this foundation, the paper analyses the effects of causal factors on negligence liability to suggest that the assignment of liability should give further consideration to accident determinants. In this manner, the price of an activity would more accurately reflect its real costs.

Liability Options

American law employs four major liability rules to assign accident losses: (1) no liability, (2) strict liability, (3) negligence, and (4) strict liability with the defense of contributory negligence (Shavell, 2003; Dari-Mattiacci, 2005). Under these liability rules, residual liability is assigned to activity providers or participants. The no-liability and negligence rules place residual liability with participants. The strict liability and strict liability with the defense of contributory negligence rules assign residual liability to activity providers. In discussing preferences for these rules, activity providers and participants are assumed to make decisions under uncertainty to maximize their utility. Similarly, legislatures select from among the rules to maximize the value of society's utility function (Tietelbaum, 2007).

The no-liability and strict liability rules assign responsibility for damages without considering fault. For accidents where no liability has been assigned, including unavoidable accidents, the participant is liable for the damages. Under inherent risk statutes, a no-liability rule also applies to qualifying activity providers. Strict liability is the opposite of no liability, and this rule holds providers responsible for damages whenever an injury occurs. Strict liability applies for abnormally dangerous activities. Moreover, due to legislative action, an administrative strict liability regimen applies to accidents involving workers' compensation and no-fault insurance. No-liability and strict liability rules may be accompanied by moral hazard because persons do not always bear responsibility for the economic consequences of their actions. Under a no-liability rule, providers are not concerned about the losses of participants. Under strict liability, participants may not employ sufficient care to keep themselves safe.

The third and fourth liability rules modify the no-liability and strict liability rules with negligence rules. Under negligence, an activity provider incurs liability if the provider's lack of precaution constituted a breach of duty that contributed to the injury. Participants also may incur liability if they are negligent. Negligence assigns liability based on fault so offers persons incentives to use care to deter accidents. For most accidents, including medical malpractice and automobile accidents, a negligence rule applies (Shavell, 2003). Strict liability with the defense of contributory negligence holds providers liable unless the participant failed to employ due precaution to avoid injury.

American legal liability rules rely heavily on a welfare-based normative approach under which common law and statutes are structured to maximize the well-being of individuals (see Kaplow & Shavell, 2001). This involves the consideration of individuals' well-being and the exclusion of matters that are unrelated to well-being. Well-being is determined from the preferences of individuals, including goods and services to consume, social and environmental amenities, feelings, and notions of fulfillment. Economic analyses of the four liability rules identify preferred welfare recommendations (Brown, 1973; Gilles, 1992; Shavell, 2003).

The traditional economic approach to tort law recommends that a determination of who should pay for damages should consider the levels of care and activity selected by activity providers and participants. Tort liability is concerned with the level of care because as more precaution is employed to avoid an accident, the likelihood of injury is reduced. Due care embodies precautionary measures for which a duty of care has been established to avoid injury (Dari-Mattiacci, 2005). Theoretically, due care may be set at the level of care where the marginal costs of precaution are equivalent to the expected

marginal reduction in accident losses. Providers do not use less than due care because they would be exposed to the risk of liability for related injuries, although this does not occur if injured persons do not advance their claims. Activity providers and participants decline to use too much care because it costs more than the damages they would incur under negligence liability.¹ Thus, persons use sufficient care to minimize precaution and accident costs. However, difficulties in evaluating whether a party employed due care may interfere with projected results.

In addition to due care, activity levels affect the likelihood of an accident (see Shavell, 1980; Hylton, 2008). By reducing the frequency of an activity, providers can reduce the number of accidents. An optimal level of activity occurs when the full social costs of an activity are less than or equal to its social benefits. Activity levels also include other precautionary measures for which a duty of care has not been established (Dari-Mattiacci, 2005). These other precautionary measures are not considered in a determination of negligence due to the excessive costs of observing them and calculating optimal levels of care.

Generally, both activity providers and participants can alter their activity levels to reduce the number of accidents. Under a negligence liability rule, providers only pay for accident damages if they fail to use due precaution. Because providers do not pay for accident costs in situations where they used due care, negligence does not provide an incentive for potential providers to consider all accident losses in determining their activity levels (Shavell, 1980). Social costs accompanying accidents that result despite the use of due care are an externality. Providers do not take into account participant care and remaining risk so that activity levels may be too high. The imposition of a strict liability rule governing these accidents can provide an incentive to reduce activity levels with a corresponding reduction in accident losses.

Inherent Risk Statutes for Unavoidable Accidents

To curtail lawsuits against providers of risky sport activities, US state legislatures have enacted more than 120 inherent risk statutes. Diverse provisions alter common law liability for selected activities, including skiing, horseback riding, roller skating, snowmobiling, sport shooting, agritourism, whitewater rafting, and amusement rides. For activities covered by inherent risk statutes, both activity providers and participants may use care but accidents still occur. These accidents may be called “unavoidable accidents” (see Posner, 1973). This means that neither providers nor participants can adjust their care to reduce these accidents. In the absence of a breach of a duty, providers are not liable for damages from accidents resulting from the inherent risks of the activity. Providers retain liability for negligence outside the scope of the statutory protection.

Justification for the Statutes

Providers of various sport activities petitioned for inherent risk statutes to establish a no-liability rule for non-negligent accidents to reduce liability and litigation costs (see *Grieb v. Alpine Valley Ski Area*, 1986). Businesses and organizations sponsoring sport activities claimed they were experiencing difficulties in securing insurance (North American Horsemen’s Association, 1993; *Rothstein v. Snowbird Corporation*, 2007). By placing more risks on participants, providers could escape liability and continue to offer activities.² Under inherent risk statutes, activity providers are not liable for accidents caused by the inherent risks of an activity, although they have a duty not to expose participants to increased risks. Participants are responsible for unavoidable accidents.

Proponents of the inherent risk statutes advanced a number of arguments to justify the provisions. Foremost was the claim of too many unjustified lawsuits. These included lawsuits by injured participants for accidents in which sport providers had not engaged in any negligence contributing to the damages. Sometimes, participants were negligent but brought the lawsuit believing that the activity providers must have also been negligent or that strict liability should apply. In other cases, the issue of whether a party employed due care was dependent on being able to observe their actions and their

1. This is not always true as persons who wish to avoid litigation may use more than due care.

2. Yet the costs of inherent risk accidents do not evaporate or go away just because providers have insurance. Instead, the statutes lowered the price of providers’ liability insurance by placing losses on participants.

honesty. Difficulties in being able to assess the level of care used by activity participants contributed to efforts to secure a no-liability rule. Yet, the American contingency fee arrangement is structured to curtail lawsuits without merit. A lawyer accepting a lawsuit involving personal injuries is only paid if the lawsuit is successful. Therefore, lawyers do not accept cases unless they feel there exists a good chance of winning the lawsuit or securing an adequate settlement offer.

Another possible explanation for an excessive number of injury lawsuits is the existence of a subconscious belief that sport providers should be strictly liable for all accidents. Participants are under the impression that if an accident occurs, the activity provider should be liable. The adoption of strict liability for defective products expresses support for strict liability (Twerski, 2006). Products liability cases suggest the expansion of strict liability may become the norm for other categories of accident participants, including providers of sport services.

Research also suggests that some decisions to proceed with lawsuits may be based in part on hindsight and outcome bias. Hindsight bias is the exaggeration of what could have been anticipated (Rachlinski, 1998). This means that people believe other persons should have foreseen that their actions might lead to injury despite the fact that they acted reasonably given the circumstances. Hindsight bias thereby favors finding liability despite the activity provider's use of due care. Outcome bias may occur when there are serious injuries (Montgomery, 2006). When looking at the result of an accident entailing serious injuries, people tend to feel that the provider made a bad decision. Therefore, despite the absence of a clearly defined breach of care, hindsight and outcome biases may lead the jury to perceive the facts as supporting liability and issue a verdict favorable for the participant.

Addressing Risks and Selected Activities

Inherent risk statutes address the risks accompanying activities in two ways. First, the statutes prescribe duties for providers and participants. These duties involve assignments of care that reduce risks of injury. Second, the legislative provisions identify inherent risks and note the impossibility of eliminating these risks (Idaho Code, 2010). Due to the perceived ability of participants to control risks, the statutes assign liability for inherent risks to participants. Participants cannot recover damages for injuries resulting from the inherent risks of the activity. Often, the statutes also provide that activity providers have no duty to eliminate, alter, control or lessen the risks inherent in the activity (Idaho, Code 2010).

Complementing the no-duty provision is an assignment of responsibility for risks associated with the sport to participants. For skiing, this may mean that:

each skier shall have the sole individual responsibility for knowing the range of his own ability to negotiate any slope or trail, and it shall be the duty of each skier to ski within the limits of the skier's own ability, to maintain reasonable control of speed and course at all times while skiing, to heed all posted warnings, to ski only on a skiing area designated by the ski area operator and to refrain from acting in a manner which may cause or contribute to the injury of anyone. The responsibility for collisions by any skier while actually skiing, with any person, shall be solely that of the individual or individuals involved in such collision and not that of the ski area operator (Idaho Code, 2010).

The enunciation of conduct relating to the inherent risks of an activity addresses precautionary measures for which duties of care may not be assigned under negligence law. Under negligence, some precautionary measures are so complicated that they are omitted from the duty of care (Dari-Mattiacci, 2005). By assigning risks of conduct to participants, the statutes create a no-liability rule under which participants are completely liable for accidents that did not involve provider negligence. By requiring participants to assume the costs of inherent risk accidents, there are fewer precautionary measures grouped under activity levels. This means that under the statutes, inherent risk accidents become more dependent on the level of the activity. Higher levels of activity will be accompanied by more injuries.

In enacting legislation to control risks, US state legislatures have approached the placement of liability only for activity providers of selected activities. Most inherent risk statutes are limited to a particular sport activity (see Appendices 1 and 2). The first group of statutes covered snow skiing, and the idea

of placing responsibilities on participants for inherent risks spread to other activities. The adoption of separate inherent risk statutes for individual sport activities raises questions of political favoritism for selected sports. Why have legislatures adopted inherent risk statutes for whitewater rafting and not for bungee jumping or canoeing?

Two examples reveal questionable policy choices with legislative dispensation for certain providers. The Colorado General Assembly enacted a statute for baseball saying that spectators at professional baseball games assume the risks that are obvious and necessary, such as being struck by a baseball or a baseball bat (Colorado Session Laws, 1993). No similar provisions address the risks of spectators at amateur or recreational games. Why should spectators at professional games be treated differently? Did the Colorado General Assembly feel spectators at professional games need to be encouraged to employ care to reduce risks of injury but spectators at amateur games do not? Or, did the General Assembly feel that spectators at professional games are better able to pay for injuries so professional teams should not have to incur expenses related to injured spectators?

The recent agritourism inherent risk statutes pose a similar question (Centner, 2010). These state statutes posit special liability provisions for persons owning farms and ranches who have broadened their businesses to include farm tours, pumpkin harvesting and painting, orchard tours, learning about farm machinery, Halloween parties, hay rides, wine tours, petting zoos, hunting for a fee, fishing for a fee, horseback riding, farm vacations, pick-your-own operations, camping, craft shops, country stores, roadside stands, farm museums, nature trails, picnic areas, and children's day camps (Holland & Wolfe, 2000). The legislatures adopting these provisions did not explain why the special liability exceptions were needed for farms and ranches providing tourism activities but not for other tourist facilities.

Reasonable Levels of Activity

Tort law seeks to encourage reasonable levels of activity. A liability rule that over-encourages an activity accompanied by injuries may impose costs that outweigh its benefits. If activity providers are not required to internalize the full costs of accidents, the reduced costs associated with offering the activity may lead to activity levels that are too high (Kornhauser, 1989). Participants may engage in activities that are not cost-justified (Meese, 2001) and high levels of activity may cause too many participants to be injured.

For accidents that are part of the inherent risks of the activity, external costs may be placed on others whenever both activity providers and participants employ reasonable care but an accident involving damages still occurs. Neither the providers nor participants of these accidents are internalizing all of the costs placed on others because under the law they have used due care. Under negligence, providers are not liable if they used due care, so they have no incentive to reduce their level of activity although accidents are occurring that place costs on participants. The costs of the activity do not include the expenses of inherent risk injuries. This means that providers provide more activities than are socially desirable. If participants fail to fully evaluate liability for damages that accompany inherent risk accidents, they may participate in the activity too often.

Uncompensated claims, including those with small amounts of damages, are additional liability components that accompany activities governed by inherent risk statutes. Most injured participants do not recover full damages under negligence law because they choose not to litigate. In the United States, an estimated 90 percent of accident claims are not litigated (Galanter, 2000). The existence of uncompensated claims means activity providers are not held liable for all of their errors. Because they only pay part of the damage they cause, providers do not internalize all of the costs of injuries (Geistfeld, 1998). The rational response is to expend monies for providing a safe activity equivalent to the damages for which providers must pay, resulting in an underinvestment in safety by providers (Harrington & Danzon, 2000). Providers do not have an incentive to employ optimal precaution to avoid accidents because they are not accountable for all resulting losses.

Small damage claims also result in uncompensated claims that affect liability. Lawyers for plaintiffs may find that it is not cost effective to litigate claims whenever damages are less than \$50,000, which is the median personal injury verdict (Kritzer, 2001). Participants of small claims probably cannot find

a lawyer willing to represent them because the lawyer cannot earn enough to cover litigation expenses. This means that participants with small amounts of damages never collect from negligent activity providers who voluntarily decline to compensate participants for wrongful injuries. When claims are uncompensated, providers never pay for all of the damages associated with their activities. The subsidization of activities involving claims that are small, uncompensated, or occur under an inherent risk statute means that the overall level of the activities may be too high. Reducing the level of activity to reduce damage costs might be beneficial.

Turning to participants, the possibility of not being compensated for damage losses often causes participants to take action to reduce losses (Miceli, 2008). Participants who file lawsuits due to providers not coming forth with compensation for injuries have to absorb the costs of the lawsuit, which are deducted from damage awards received by successful plaintiffs. Others may buy insurance to pay for accidents. Participants who do not file a claim bear their full damages. Even under strict liability, participants may employ some care to avoid accident losses. Yet the costs incurred by participants are not considered by providers in establishing their levels of activity.

Selecting Liability Provisions

Under inherent risk statutes, duties are prescribed for activity providers and participants, and participants incur liability for their injuries whenever there is no evidence that the provider was negligent. The issue is whether a no-liability rule is a reasonable social and economic response for personal injuries involving inherent risks. Is the placement of liability on participants for accidents governed by inherent risk statutes superior to strict liability? If the no-liability rule established by these statutes does not effectively reduce accident costs associated with the activity, strict liability might be preferred (Geistfeld, 1998).

Neither strict liability for providers nor no liability for participants takes into account all of the known liability factors. A strict liability rule does not take into account the costs associated with participant care. Under a no-liability rule, activity providers employing sufficient precaution do not pay for accident damages. Because damage costs for inherent risk and other uncompensated accidents are not factored into the marginal costs of precaution and accident prevention, activity levels may be too high under a no-liability rule. Thus, the choice of a liability rule might be grounded on whether participants' level of care or providers' level of activity is more significant in responding to inherent risk accidents (Anderson, 2007).

This would involve an analysis of the injuries to determine how many are related to the level of care taken by participants. Activity participants should be assigned liability for inherent risk damages for activities where their behavior affecting expected harm cannot be scrutinized (Sykes, 2007). Activity providers should be assigned liability for inherent risks for activities where they are better able to take measures to reduce expected harm (Sykes, 2007). If activity levels are too high, a legislature might adopt a strict liability rule under which providers would be designated as the residual bearers of liability for inherent risk accidents.

Turning to the sport of skiing, what might be significant in determining the assignment of liability? Obviously, injured skiers have numerous allegations for seeking damages from providers. Under the statutes, providers have responsibilities concerning safe equipment and premises. Any violation of a rule or regulation is negligence and providers remain liable for associated injuries. This includes injuries caused by manmade features placed in the wrong location relative to a ski slope (see *Spencer v. Killington, Ltd.*, 1997). The inherent risk ski statutes only assign injuries to participants that resulted from an inherent risk. Two categories of accidents lead to a majority of the inherent risk lawsuits: conditions of the ski area and collisions with objects and other skiers.

Conditions inherent to the risks of skiing include changing weather conditions; snow conditions such as ice, cut-up snow, and machine-made snow; surface or subsurface conditions such as bare spots, trees, rocks, stumps, streambeds, or other natural objects and collisions with these objects; impact with lift towers, signs, and man-made structures; and the failure of skiers to ski within their abilities (Colorado Revised Statutes, 2010). The inherent risk statutes mean that providers do not incur liability for injuries relating to these conditions. Rather, skiers with injuries that occur when they lose control

on icy snow (see *Salderini v. Wachusett Mountain Ski Area, Inc.*, 1996) or are surprised by a bare spot (see *McHerron v. Jiminy Peak, Inc.*, 1996) are responsible for their injuries.

Collisions with objects and other skiers are a second category of inherent risk accidents. The ski statutes place duties on providers to provide warning notices to skiers. Statutory provisions may require identification of the difficulty of trails and slopes, extreme terrain, closed areas, and man-made features not readily visible (Colorado Revised Statutes, 2010). Providers who fail to comply with statutory warning requirements can incur liability for accidents related to their negligence. For collisions that occur despite the warnings, participants incur liability.

For both conditions of a ski area and collisions, the issue is whether the provider or the participant can reduce the risks of injury. Because providers are liable for any negligent conditions of the premises and are required to place warnings of dangers, there remain few opportunities to enhance safety through additional care by providers. Conversely, skiers know their skills, can observe their surroundings, and can determine whether they can safely navigate a trail or condition of the ski area. Participants also can avoid a collision with another skier or an object. Thus, participants may be in a superior position vis-a-vis providers to keep themselves safe. Assigning participants liability for damages associated with conditions and collisions related to their conduct may help reduce risks.

The level of activity is also important in determining how to assign liability for inherent risk damages. Under general liability law, activity providers do not incur liability for uncompensated claims that injured participants fail to seek redress and unpaid claims for minor accidents that are never litigated. Under inherent risk statutes, providers also do not incur liability for damage costs for inherent risk accidents. Absent liability for all of these damage costs, activities may be offered too often under the liability provisions established by inherent risk statutes. Without liability for these accident damages, providers have lower overall activity costs. In a competitive market, the lower costs result in a market readjustment where providers lower their fees for activities, leading to greater participation. Activities with high amounts of damages placed on participants may not be very beneficial. By internalizing more injury costs, providers would raise the price of their activity. Higher prices would lead to fewer participants engaging in these activities, and the lower participation would be accompanied by fewer accidents.

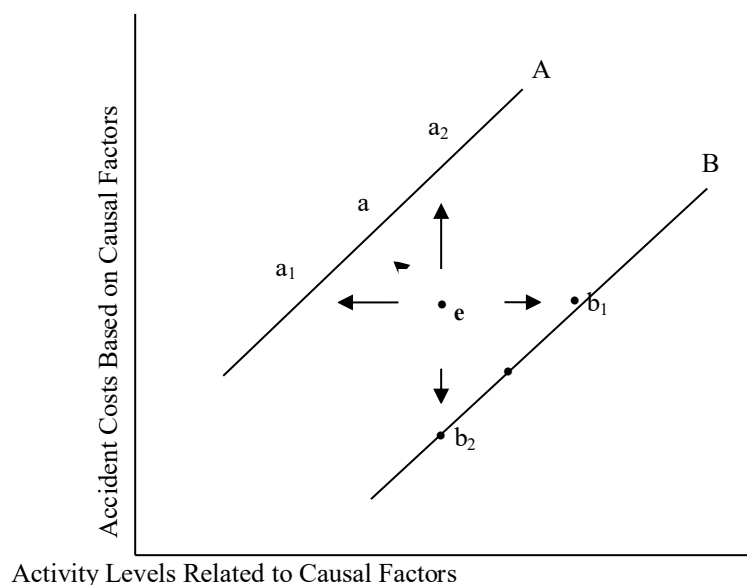


Figure 1: Shifts in Activity Providers' Accident Costs for Causal Factors under Negligence

Effects of Causal Factors on Negligence Liability

The effects of causal factors on negligence liability are shown in Figure 1 (above). Let e represent negligence equilibrium where the marginal costs of precaution are equivalent to the expected marginal reduction in accident losses. The horizontal axis denotes activity levels related to causal factors while

the vertical axis denotes accident costs related to three factors. Line A represents liability for activity providers where they are liable for accident costs despite not being negligent. Causal factors that would be represented by A include unmeritorious lawsuits, fraudulent claims, judicial mistakes finding liability, inability to show participant negligence, hindsight and outcome bias, and failure to account for activity-provider care. Line B represents liability for activity providers where they are not liable for accident costs despite being negligent. Factors that would be represented by B include small claims not litigated, difficult claims and unproven claims not paid, judicial mistakes in not finding liability, unobservable activity-provider negligence, and failure to account for participant care and remaining risk.

In Figure 1, segment ea_0 represents those causal factors that cause activity providers to pay more accident costs. Segment eb_0 represents causal factors that enable activity providers to avoid accident costs associated with wrongful conduct. For A, causal factors that cause activity providers to incur liability may be expected to lead activity providers to raise activity prices to cover the expenses. Higher prices would cause a change from equilibrium e to a lower activity level denoted by a_1 . Correspondingly, participants may use less precaution as they recognize they can recover accident damages. With less participant precaution, accident costs are projected to increase from e to a_2 . The joint effects of higher prices and less participant precaution for these factors would lead to activity level a_0 .

Turning to B, factors that cause activity providers to not be liable for accident costs may lead activity providers to lower prices. This would encourage more people to become participants, resulting in a change from equilibrium e to a higher activity level denoted by b_1 . Correspondingly, participants may use more precaution leading to fewer accidents. The result would be lower accident costs, accompanied by a lower activity level, and a change from e to b_2 . The joint effects of these factors would lead to activity level b_0 .

The significance of Figure 1 arises from comparing the accident costs from all causal factors that shift liability from equilibrium e . If one group of factors represented by A or B is more weighty, when all of the factors are considered together, equilibrium may shift from e . Although inherent risk accidents do not involve negligence by activity providers or participants, the choice of assigning liability for these accidents might be based on which group of negligence factors is most significant. Are the causal factors under which activity providers unfairly incur liability (represented by A) more significant than the factors under which activity providers escape liability for their negligence (represented by B)?

One comparison is whether the causal factors leading to lower activity levels denoted by a_1 are more significant than the factors leading to higher activity levels denoted by b_1 . Under this comparison, the assignment of liability for inherent risk accidents might be based on whether the factors unfairly assigning liability to providers (represented by A) are smaller than the factors under which providers escape liability (represented by B). If $ea_1 > eb_1$, this lends support for holding participants liable, which occurs under inherent risk statutes. However, if $ea_1 < eb_1$, this lends support for making activity providers liable for accidents.

A second comparison is whether the factors leading to increased accident costs, denoted by a_2 , are greater than the factors leading to decreased accident costs, denoted by b_2 . Under this comparison, the assignment of liability to activity providers might be based on whether the accident costs accompanying causal factors unfairly assigning liability to providers are smaller than the accident costs accompanying factors under which providers escape liability. If $ea_2 > eb_2$, this lends support to hold participants liable under an inherent risk statute. However, if $ea_2 < eb_2$, this lends support for making activity providers liable for accidents.

Finally, a comparison of the change in equilibrium e to a_0 or b_0 may offer the greatest support for selecting a liability regime. If $ea_0 > eb_0$, this supports participant liability under an inherent risk statute. The factors involved in holding activity providers wrongfully liable are greater than the factors enabling activity providers to avoid liability for their wrongful conduct. However, if $ea_0 < eb_0$, this supports activity-provider liability.

Legislatures enacting inherent risk statutes were convinced $ea_1 > eb_1$. Legislators felt that activity providers were incurring too much liability for unmeritorious lawsuits. However, more weighty

factors may offset the negative factors of activity providers. Because placing liability for inherent risk accidents on participants increases accident costs, the level of activity needs to be considered. It may be beneficial to lower the level of activity to reduce accident costs.

Conclusion

Many US state legislatures have taken action to adopt inherent risk statutes that delineate a no-liability rule for accidents occurring due to the inherent risks of the activity. Statutes that encourage participants to employ care to avoid accidents can be justified by their deterrence of losses. This may occur in activities where participants are in a superior position vis-a-vis providers to employ care to keep themselves safe. Yet for accidents occurring due to the inherent risks of the sport, participants have not been negligent. Therefore, criteria other than due care may be more appropriate for assigning liability for these accidents.

In defining inherent risks of an activity, most statutes and courts recognize that activity providers should take reasonable steps to minimize risks of injury without altering the nature of the sport (see *Knight v. Jewett*, 1992). Whenever activity-provider liability would deter vigorous participation in the activity or fundamentally alter the nature of the activity, risks are assigned to participants. Simultaneously, if activity providers are not held accountable for accidents, they have lower business costs and increase the level of activity. Increased participation leads to more accidents. Does the protection from liability granted to activity providers by inherent risk statutes lead to activity levels that are too high? If the activities are accompanied by significant injuries, reducing activity levels to reduce accident costs may be beneficial.

The evaluation of casual factors accompanying negligence liability suggests that it is not clear that activity providers should escape liability for inherent risk accidents. By encouraging greater participation, the legislatively-enacted inherent risk statutes increase accident losses that are placed on participants. Participants may use their insurers to cover the costs or, alternatively, severely injured participants may be unable to pay the costs and file for bankruptcy. One study suggests that the financial difficulties of more than 40 percent of debtors filing for bankruptcy are related to medical expenses (Jacoby, 2001). Severely injured participants filing for bankruptcy may default on mortgages and loans thereby adversely affecting other businesses.

The placement of accident costs on injured participants' insurers, families, and creditors by legislatures adopting inherent risk statutes may not be socially beneficial.³ Given that increased levels of activities lead to additional accidents, consideration might be given to placing some costs of accidents on providers so that the price of an activity more accurately reflects its real costs. Coinsurance or an industry accident-trust fund might provide a more satisfactory resolution for the placement of liability for inherent risk accidents. Alternatively, adopting a rule where activity providers internalize accident costs by bearing residual liability may be more consistent with current social beliefs. Further research is needed to evaluate levels of care and activities to discern whether alternative liability assignments could augment social welfare.

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3. Thus, the inherent risk statutes have similarities with environmental injustices. Providers of selected activities have garnered legislative dispensation for their businesses at the expense of participants. In the absence of robust remedies against activity providers, it is less likely that injured persons can collect for their injuries (see Koenig & Rustad, 2004).

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- Idaho Code. Sections 6-1101 to 6-1109 (2010).

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McHerron v. Jiminy Peak, Inc., 665 N.E.2d 26 (Mass. 1996).
Rothstein v. Snowbird Corporation, 175 P.3d 560 (Utah 2007).
Salderini v. Wachusett Mountain Ski Area, Inc., 665 N.E.2d 79 (Mass. 1996).
Spencer v. Killington, Ltd., 702 A.2d 35 (Vt. 1997).

APPENDIX 1: Specialized Liability Statutes

- Alabama Code § 6-5-342 (roller skating and skateboarding).
 Alaska Statutes §§ 05.45.010–.210 (skiing).
 Alaska Statutes § 09.65.290 (general sports).
 Arizona Revised Statutes §§ 5-701 to 5-707 (skiing).
 Arizona Revised Statutes § 12-554 (baseball).
 Arkansas Code Annotated §§ 18-60-107 (harvesting crops and trees).
 Colorado Revised Statutes Annotated § 13-21-120 (baseball).
 Colorado Revised Statutes Annotated § 13-21-121 (agricultural recreation).
 Colorado Revised Statutes Annotated §§ 33-44-101 to -114 (skiing and snowmobiling).
 Connecticut. General Statutes Annotated §§ 29-211 to -213 (skiing).
 Florida Statutes Annotated § 316.0085 (skateboarding, skating, paint ball, offroad bicycling).
 Georgia Code Annotated §§ 2-14-152 to -153 (harvesting crops).
 Georgia Code Annotated §§ 27-4-280 to -283 (fishing).
 Georgia Code Annotated § 43-43a-1 to -8 (skiing).
 Georgia Code Annotated § 51-1-43 (roller skating).
 Hawaii Revised Statutes § 663-1.54 (active sports).
 Idaho Code §§ 6-1101 to -1109 (skiing).
 Idaho Code §§ 6-1201 to -1206 (outfitters and guides).
 Illinois Compiled Statutes Annotated, chapter 745, §§ 52/1 to 52/99 (hockey facilities).
 Illinois Compiled Statutes Annotated, chapter 745, §§ 72/1 to 72/30 (roller skating).
 Indiana Code Annotated §§ 34-31-6-1 to -4 (roller skating).
 Kansas Statutes Annotated §§ 74-50,165 to -50,173 (agritourism).
 Louisiana Revised Statutes Annotated § 9:2795.4 (motorized off-road vehicles).
 Louisiana Revised Statutes Annotated § 9:2795.5 (agritourism).
 Louisiana Revised Statutes Annotated § 40:1485.1 (amusement rides).
 Maine Revised Statutes Annotated, title 8, §§ 601–608 (roller skating).
 Maine Revised Statutes Annotated, title 8, §§ 801–806 (amusement rides).
 Maine Revised Statutes Annotated, title 32, §§ 15201–15227 (skiing).
 Massachusetts General Laws Annotated, chapter 128, § 2E (harvesting crops and trees).
 Massachusetts General Laws Annotated, chapter 143, §§ 71H–71S (skiing).
 Michigan Compiled Laws Annotated § 324.73301 (harvesting crops).
 Michigan Compiled Laws Annotated § 324.82126 (snowmobiling).
 Michigan Compiled Laws Annotated §§ 408.321–.344 (skiing).
 Michigan Compiled Laws Annotated §§ 445.1721–.1726 (roller skating).
 Michigan Compiled Laws Annotated §§ 691.1541–.1544 (sport shooting).
 Missouri Annotated Statutes § 537.327 (paddlesport).
 Missouri Annotated Statutes § 537.550 (small-town festivals and fairs).
 Montana Code Annotated §§ 23-2-651 to -655 (snowmobiling).

Montana Code Annotated §§ 23-2-702 to -734 (skiing).
Montana Code Annotated §§ 27-1-741 to -745 (amusement rides).
Montana Code Annotated §§ 37-47-401 to -404 (outfitters and guides).
Nevada Revised Statutes §§ 455A.010–.190 (skiing and snowboarding).
Nevada Revised Statutes §§ 455B.010–.100 (amusement rides).
New Hampshire Revised Statutes Annotated § 215-A:5-c (off-highway recreational vehicles).
New Hampshire Revised Statutes Annotated § 215-C:55 (snowmobiles).
New Hampshire Revised Statutes Annotated §§ 225-A:1 to -A:26 (skiing).
New Jersey Statutes Annotated §§ 2A:53A-43 to -48 (professional baseball).
New Jersey Statutes Annotated §§ 5:13-1 to -11 (skiing).
New Jersey Statutes Annotated §§ 5:14-1 to -7 (roller skating).
New Mexico Statutes Annotated §§ 24-15-1 to -14 (skiing).
New York General Obligations Law §§ 18-101 to -108 (skiing).
New York Labor Law §§ 865–868 (skiing).
North Carolina General Statutes §§ 99C-1 to -5 (skiing).
North Carolina General Statutes §§ 99E-10 to -25 (skating, skateboarding, freestyle bicycling).
North Carolina General Statutes §§ 99E-30 to -32 (agritourism).
North Dakota Century Code §§ 53-09-01 to -11 (skiing).
Ohio Revised Code Annotated §§ 4169.01–.99 (skiing).
Ohio Revised Code Annotated §§ 4171.01–.10 (roller skating).
Oregon Revised Statutes §§ 30.970–.990 (skiing).
Oregon Revised Statutes §§ 401.605–401.635 (wilderness travel).
Pennsylvania Consolidated Statutes Annotated, title 40, § 2051; title 42, § 7102 (skiing).
Pennsylvania Consolidated Statutes Annotated, title 42, § 8339 (harvesting crops).
Rhode Island General Laws §§ 41-8-1 to -4 (skiing).
South Carolina Code Annotated §§ 52-21-10 to -60 (ice and roller skating).
South Dakota Codified Laws Annotated §§ 32-20A-21 to -23 (snowmobiling).
Tennessee Code Annotated §§ 68-114-101 to -107 (skiing).
Tennessee Code Annotated §§ 70-7-201 to -207 (whitewater rafting).
Texas Health & Safety Code Annotated §§ 759.001–.005 (roller skating).
Texas Health & Safety Code Annotated §§ 760.001–.006 (ice skating).
Utah Code Annotated §§ 47-3-1 to -3 (sport shooting).
Utah Code Annotated §§ 78-27-51 to -54 (skiing).
Utah Code Annotated §§ 78-27-61 (amusement park rides).
Utah Code Annotated § 78-27-62 (hockey facilities).
Utah Code Annotated § 78-27-63 (recreational claims against municipalities).
Vermont Statutes Annotated, title 12, §§ 1037–1038 (sports and skiing).
Virginia Code Annotated §§ 3.2-6400 to -6402 (agritourism).
Virginia Code Annotated §§ 55-362, 55-376.3–.4 (real estate timeshare).
Washington Revised Code Annotated §§ 79A.45.010–.060 (skiing).
West Virginia Code §§ 20-3A-1 to -9 (skiing).
West Virginia Code §§ 20-3B-1 to -5 (whitewater rafting).
West Virginia Code §§ 20-15-1 to -8 (off-highway vehicles).
Wisconsin Statutes Annotated § 895.525(4m) (contact sports).
Wisconsin Statutes Annotated § 895.527 (sport shooting).
Wyoming Statutes §§ 1-1-121 to -123 (recreational sports).
Wyoming Statutes § 6-9-301 (skiing).

APPENDIX 2: Equestrian and Animal Immunity Statutes

Alabama Code § 6-5-337.
Alaska Statutes § 09.65.290.
Arizona Revised Statutes Annotated § 12-553.
Arkansas Code Annotated §§ 16-120-201 to -202.
Colorado Revised Statutes Annotated § 13-21-119.
Connecticut General Statutes Annotated § 52-557p.
Delaware Code Annotated, title 10, § 8140.
Florida Statutes Annotated §§ 773.01–.05.
Georgia Code Annotated §§ 4-12-1 to -5.
Hawaii Revised Statutes Annotated §§ 663B-1 to -2.
Idaho Code §§ 6-1801 to -1802.
Illinois Compiled Statutes Annotated, chapter 745, §§ 47/1 to 47/999.
Indiana Code Annotated §§ 34-6-2-40 to -43, 34-6-2-69, 34-6-2-95, 34-31-5-1 to -5.
Iowa Code Annotated §§ 673.1–.3.
Kansas Statutes Annotated §§ 60-4001 to -4004.
Kentucky Revised Statutes Annotated §§ 247.401–.4029.
Louisiana Revised Statutes Annotated §§ 9:2795.1, 9:2795.3.
Maine Revised Statutes Annotated, title 7, §§ 4101, 4103-A.
Massachusetts General Laws Annotated, chapter 128, § 2D.
Michigan Compiled Laws §§ 691.1661–.1667.
Minnesota Statutes Annotated § 604A.12.
Mississippi Code Annotated §§ 95-11-1 to -7.
Missouri Annotated Statutes § 537.325.
Montana Code Annotated §§ 27-1-725 to -728.
Nebraska Revised Statutes §§ 25-21,249 to -21,253.
New Hampshire Revised Statutes Annotated § 508:19.
New Jersey Statutes Annotated §§ 5:15-1 to -12.
New Mexico Statutes Annotated §§ 42-13-1 to -5.
North Carolina General Statutes §§ 99E-1 to -3.
North Dakota Century Code §§ 53-10-01 to -02.
Ohio Revised Code Annotated § 2305.321.
Oklahoma Statutes, title 76, §§ 50.1–.4.
Oregon Revised Code §§ 30.687–.697.
Rhode Island General Laws §§ 4-21-1 to -4.
South Carolina Code Annotated §§ 47-9-710 to -730.
South Dakota Codified Laws Annotated §§ 42-11-1 to -5.
Tennessee Code Annotated §§ 44-20-101 to -105.
Texas Civil Practice & Remedies Code Annotated §§ 87.001–.005.
Utah Code Annotated §§ 78-27b-101 to -103.
Vermont Statutes Annotated, title 12, § 1039.
Virginia Code Annotated §§ 3.1-796.130–.136.
Washington Revised Code Annotated §§ 4.24.530–.540.
West Virginia Code §§ 20-4-1 to -7.
Wisconsin Statutes Annotated § 895.481.
Wyoming Statutes §§ 1-1-121 to -123.

