Law and Economics Analysis of Ethiopian Negligence and Strict Liability Law

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> *Economic Analysis of Law fuse's is "lit by Coase and fanned by Calabresi, ignited in US law schools with the work and views of Richard Posner in the 1970's".*[1]

Abstract

The application of microeconomics principles to analyze a range of laws dubbed as "Economic Analysis of Law" is the most innovative legal reasoning. Law and Economics notion of tort law stipulates that accident costs constitute negative externalities. Harm is an externality that reduces the utility of injured parties. As harm is a downward shift in victims' utility function liability rules should be designed to maximize total welfare through internalization of externality via incentives. The economic analysis of tort law concerns cost minimization to maximize social wealth. Optimal care and optimal activity maximize society's wealth. The purpose of this article is to examine the economic analysis of Ethiopian Negligence and Strict liability law using economic efficiency as an explanatory tool to study the incentive these liability laws offer to individuals to alter their behavior. This Article contributes suggestions for the amendment endeavor of the Extra-Contractual Liability portion of the Civil Code. Furthermore, it provides suggestions to courts to entertain economically informed decisions employing law and economics insights to practically resolve a case. It is argued that Ethiopian liability law adopts uniform reasonable man standard to avoid tertiary cost. In doing so, the author employs a doctrinal research methodology.

Key-Words
Externality, harm, transaction cost, optimal care, optimal activity, incentive, Hand formula, Cassation Bench, social utility, Ethiopia
JEL-Code- *K12, K1, K13*

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[1] Cento Veljanovski, (2006). *The Economics of Law, 2nd Edition*. Hobbs the Printers, Great Britain, p.6.

Part One-Introduction

Ethiopia has adopted extra-contractual liability in Civil Code which is also dubbed "law of delict", "law of civil wrongs" and "law of torts".[2] The Civil Code provisions starting from Articles 2027 to 2178 deal with extra-contractual liability. Article 2027 enumerates the sources of extra-contractual liability and they are classified as fault-based liability (negligence-based liability), strict liability, and vicarious liability. This piece only examines negligence-based and strict liability laws from law and economics analysis of law approach employing efficiency as a normative criterion. Negligence and strict liability laws do have different classifications and offer various incentives to individuals. However, the Civil Code lumps different species of negligence and strict liability laws under the heading negligence and strict liability laws. The various liability laws incorporated in the realm of tort law are subject to rigorous economic analysis including strict liability and negligence as well as strict and negligence rules combined with various defenses. Decoupling of lumped negligence and strict liability laws help to understand the incentive each rule offers to individuals.

Law and economics describe law as "a cathedral-a large, ancient, complex, beautiful, mysterious and sacred building and behavioral science resembles the mortar between the cathedral's stones which support the structure everywhere."[3] Most of the time judges consult their intuition, facts, and laws to solve legal challenges without consulting economics principles. However, recently there is a new field of study that examines laws by using economics principles as an explanatory tool and makes law scientific discipline surpassing intuition and common sense. Borrowing Richard Posner quote elucidates:

> *"To me, the most interesting aspect of the law and economics movement has been its aspiration to place the study of law on a scientific basis, with coherent theory, precise hypothesis deduced from the theory and empirical tests of the hypotheses.*

[2] The Civil Code of The Empire of Ethiopia, Proclamation No.165/1960, 19th Year No.2, Addis Ababa 5th May 1960..See also G Felote.(2012). A Guide to the Zimbabwean Law of Delict. Roman-Dutch Law refers to the Law of Delicts whereas in England and American law they refer to the Law of Torts. The author employs extra-contractual liability and tort law interchangeably in this Article.

[3] Robert Cooter& Thomas Ulen. (2016). *Law and Economics, 6th Edition*. Pearson Education, Boston, USA.p.3.

> *Law is a social institution of enormous antiquity and importance, and I can see no reason why it should not be amenable to scientific study. Economics is the most advanced of the social sciences, and the legal system contains many parallels to and overlaps with the systems that economists have studied successfully."*[4]

"Incentives are the essence of economics."[5] Economics offer ample opportunity to predict the effects of legal sanction as incentives are the tenet of economics on individuals' behavior.[6] "Law and economics" or "economic analysis of law" is "never again would Law and Economics be thought of as exclusively the domain of…corporate law" rather the domain is the very heart of the legal system.[7] Microeconomic models can be successfully applied to tort law. The economic analysis of tort law concerns cost minimization to maximize social wealth. The purpose of this article is to critically analyze Ethiopian negligence and strict liability laws from Law and Economics perspective using economic efficiency as an explanatory tool to examine the incentive these liability laws offer to individuals to alter their behavior. Posner's tort law opinions referred to the same legal concepts but "displace, adjust, or rationalize them, using economic concepts like cost-benefit matrices, incentive effect, and least-cost avoidance models."[8] He contributes to the law an economic tool, in a form more resembling a rule than a standard that judges can use.[9] Thus, this Article introduces an economic analysis of negligence and strict laws and how individuals are induced to take incentives in different forms of liability rules as well as whether Ethiopian negligence and strict liability law are amenable to an economic analysis of law. Evaluating law from a law and economics perspective employing efficiency is uncharted water of the legal system in Ethiopia. Thus, economic analysis of law in general and tort law, in particular, has no introduction in Ethiopia in the academic writings and courts' practice which compels the author to rely on foreign sources. To meet this objective, this article is structured as follows. Part one is allotted to the introduction and highlights the roadmap of the article. Part two is devoted to law and economics analysis of negligence and strict liability

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[4] Richard A. Posner: In Michael Faure & Roger Van den Bergh, (eds.). (1989). Essays in Law and Economics.
[5] E.P. Lazaar, Incentive Contract: in J. Eatwell, et al. (ed.) (1998). *The New Palgrave- A Dictionary of Economics, Vol.2*. Macmillan, London, pp.744-748.
[6] Cooter&Ulen (supra note 3)p.3.
[7] Sophie Harnay& Alain Marciano. (2008). Posner, Economics and the Law: From Law and Economics to an Economic Analysis of Law. *Forthcoming in the Journal of the History of Economic Thought*, p.3.
[8] Lawrence A. Cunningham.(2010). Traditional Versus Economic Analysis: Evidence From Cardozo and Posner Torts Opinions. *Florida Law Review*, **62**, pp.667-720, p.669-670.
[9] Cunningham, Id.p.679.

law and how law and economics would offer incentives to parties to the accident. It decouples lumped negligence and strict liability laws and examines which species of law offers what incentives to parties to an accident to increase the wealth of the society. Part three, taking part two as hindsight, examines Economic Analysis of Negligence-based and strict liability Law under the Civil Code. Finally, a conclusion and recommendation are provided.

Part Two-Law and Economics Analysis of Negligence and Strict Liability Law

Economists describe harm as externalities (the action of a party imposes a cost on another person without price) because it is outside of the private agreement.[10] The liability rule is centered on the internalization of external effects based on the behavior of parties. Thus, the essence of the economic notion of liability law states that accident costs constitute negative externalities that should be internalized by the wrongdoer.[11]Calabresi stipulates that "our society is not committed to preserving life at any cost".[12] Liability law considers cost-benefit analysis as Calabresi argued that "we use relatively safe equipment rather than the safest imaginable because-and it is not a bad reason-the safest costs too much".[13]

Potential wrongdoers have incentives to invest in safety at an efficient level to internalize the externality they cause.[14]As harm is a downward shift in victims' utility function liability rules should be designed to maximize total welfare.[15] The objective of any society is assumed to be wealth maximization which could be advanced by liability rules. Optimal care and optimal activity maximize society's wealth.[16] To maximize society's wealth liability rules target the goal of minimization of social costs namely minimization of primary costs to deter (comprises the sum of accident avoidance measures and harm due to the accident), secondary costs (optimal risk spreading and risk-bearing of risk-averse parties) and tertiary accident costs (administrative costs comprises expenses in time and money of litigants and the state).[17]

[10]Cooter&Ulen(supra note 3)p.189.
[11] Michael Faure (ed.) (2009). *Tort Law and Economics, Encyclopedia of Law and Economics, Volume 1*, 2nd edition, Edward Elgar, Cheltenham, UK, p.xxiv.
[12]Guido Calabresi, (1970). *The Cost of Accidents: A Legal and Economic Analysis*. New Haven, Yale University Press,p.17.
[13]Calabresi, Id.p.18.
[14]Cooter & Ulen (supra note 3)p.189.
[15]Cooter &Ulen, Id.p.190.
[16] Richard A. Posner. (1972). A Theory of Negligence. *J. Legal Stud*.**1**, pp.29-96, p.40-91.
[17] Guido Calabresi, (1977). The Cost of Accidents: A Legal and Economic Analysis, 5th edition. New Haven, Yale University Press. See also Louis T. Visscher, Tort Damages: in Michael Faure (ed.) (supra note 11).

Tort is mostly committed between or among strangers that yield external costs. Coase expounded that irrespective of the liability rules regarding accidents (external costs) the law does not affect the efficient solution in the world of zero transaction costs that enables using the marketplace.[18] However; transaction cost is prohibitively high (positive transaction cost) because there is no market for an accident.[19] This leads to a lack of internalization of externalities via contractual agreement. Transaction costs such as bargaining costs, emotions, cognitive imperfections, private information, and strategy are obstacles to an efficient solution.[20] The presence of high transaction costs calls for the allocation of the legal entitlement to achieve efficiency.[21] Thus, "the economic essence of tort law is its use of liability rule to internalize negative externalities created by high transaction cost."[22]

Parties ought to take efficient precaution measures and they differ regarding the cost of care. This demands that the allocation of liability burden relies on the behavior of parties engaged in the accident. Tort law addresses relationships affected by high transaction costs and the allocation of legal entitlements based on efficiency. Therefore, the economic model of tort is based on the efficiency of liability rules concerning the care and activity levels of potential wrongdoer and victim.[23]

Law and economics uses "the principle of economic efficiency as an explanatory tool by which existing legal rules and decisions may be rationalized or comprehended."[24] Posner articulates the essence of economic analysis of law at length:

> *"One of the major contributions of economic analysis to the law has been simplification, enabling enhanced understanding. Economics is complex and difficult but it is less complicated than legal doctrine and it can serve to unify different areas of law. We shall demonstrate how economics brings out the deep commonality, as well as significant differences, among the various fields of…law…Economics can*

[18]Veljanovski (supra note 1) p.4.
[19]Veljanovski, id.p.5.
[20]Cooter&Ulen(supra note 3) p.189.
[21] Tim Friehe.(2008). *Precaution Incentives in Accident Settings*. Dissertation Universitat Tubingen, ISBN 978-3-8349-1292-3, p.7.
[22]Cooter&Ulen(supra note 3) p.190.
[23] Harold Winter.(2002). An Economic Analysis of a Hybrid Liability Rule. *Economic Inquiry*, **40**(4), pp.704-710, p.704.
[24]J.L.Coleman, (1980). Efficiency, Exchange and Auction: Philosophical Aspects of the Economic Approach to Law. *California Law Review*, **68**, pp.221-249, p.221.

reduce mind-boggling complex statutes, amendments, and judicial decisions to coherence. By cutting away the dense underbrush of legal technicalities, economic analysis can also bring into sharp definition issues of policy that technicalities may conceal."[25]

The goal of economic analysis of tort law is concerned with how forward-looking incentive analysis of economics can be married with legal reasoning. This only happens when tort law generates incentives for individuals that help alter their behavior. Economic approach considers "tort law as a set of loss (cost) allocation rules that shift (internalize) accident losses selectively with the implied objective of efficiently deterring wrongs."[26] Before examining Law and Economics Analysis of Ethiopian Negligence and Strict Liability Law, the Article tries to examine incentives for precaution under liability rules.

2.1 Efficiency of Incentives for Precaution

Incentives for taking efficient precautions rely on who can take precautions against accidents and how the law assigns the cost of harm. To have efficient incentives, tort law should align the private benefits and costs of the parties with the social benefits and costs.[27] Liabilities are designed to send signals to potential victims and injurers to behave efficiently. Thus, different liability rules offer various incentives by allocating the cost of harm, and one liability rule may be preferred to the other.

The risk of accident could be influenced by a single party (unilaterally) or both parties (bilaterally or jointly) assuming that only the injurer and victim engaged in the accident. *Unilateral precaution* describes the situations whereby one party to an accident can take precaution as it influences the risk of an accident whereas *bilateral precaution* requires both the injurer and the victim should take efficient precaution as both parties influence the risk of an accident.[28] In a bilateral accident setting both the injurer and a victim could influence to produce the accident. If efficiency justifies unilateral precaution taking then "strict liability" is as efficient as negligence rule whereas if efficiency demands bilateral precaution taking negligence rule

[25]W.Landes& R.A. Posner, (2003). The Economic Structure of Intellectual Property Law. MA, Harvard University Press Publisher, p.10.
[26]Veljanovski (supra note 1) p.181.
[27]Cooter & Ulen (supra note) p.201-202.
[28]Cooter & Ulen, Id.p.205.

offers more efficient incentives for precaution than strict liability.[29] Negligence and strict liability laws are the dominant rules but they do have species under each of them. Below, incentives under each liability rule are examined from the law and economics approach.

2.1.1 Incentives for Precaution under Simple Negligence Liability Law

In this article, unless otherwise expressed, it is assumed the models of an accident whereby two parties namely injurer and victim (both of them are risk-neutral) take care and engaged in a certain level of activities. Negligence liability law offers efficient incentives both to the victim and the injurer. All negligence laws lead to socially optimal result under restrictive assumptions provided that due care standard is set optimally. Negligence law imposes a legal standard of care to comply to exonerate oneself from liability. Here it is assumed that courts apply a legal standard of care that is equal to efficient precaution.[30]Assuming each legal standard of precaution and perfect compensation are equal to the efficient level of care every species of negligence liability law offers both injurer and victim incentives for optimal precaution.[31]The rational injurer will continue unabatedly taking more precautions until he reaches the optimal care where liability falls to zero.

As discussed, negligence law takes the assumption that the legal standard of precaution equals the efficient level of precaution. The first person to describe a legal standard of care (reasonable care) is Judge Learned Hand (1947). The Learned Hand formula shows how the court determines negligence. Hand formula translates legal principles into economic terms. However, it is argued that the Hand formula is more persuasive in evaluating reflective decisions about precautions in advance of accidents than evaluating more spontaneous decisions (lacked practical flavor when applied to a momentary lapse when the injury was imminent).[32] He coined the symbolic (algebraic) representation of an efficient level of care when setting the legal standard to hold someone liable or exonerate from negligence liability.[33] It is debatable whether Hand's formula variables refer to marginal values or total values.[34]The following representation seems applicable in a unilateral case whereby the injurer's precaution taking behavior affects the expected accident losses. According to the "Hand Test",

[29]Cooter & Ulen, Id.p.212.
[30]Cooter & Ulen, Id.p.204&206.
[31]Cooter & Ulen, Id.p.209.
[32]Cunningham (supra note 8)p.679.
[33]Cooter & Ulen (supra note 3) p.213.
[34]Cooter & Ulen, Id.p.214.

"The defendant's liability is determined by the 'BPL formula' which balances 'the burden of adequate precautions' (B) against 'the likelihood of an accident' (P) multiplied by the 'gravity of the harm should the accident occur' (L). The defendant is at fault only if accident avoidance is the cheapest solution. More specifically, a defendant is liable if B is less than PL, and not liable (at fault) if B is greater than or equal to PL."[35]

The expected total accident costs are C= B(x) +P(x) L

Where *C* is the total expected social cost, *x* is the optimal care, *B(x)* is the total cost of care (precaution cost), *P(x)* is the probability of risk and assumed to fall when more care is exercised and L is the magnitude of the loss. This illustrates the economic model of tort law is made up of the cost of harm and the cost of avoiding harm. Judge Hand mathematically defined a *reasonable person standard* to determine negligence liability on the cost-benefit analysis method.[36] Thus, one is negligently liable when the injurer fails to take action for which the expected benefit (P multiplied by the size L of the injury) from preventing an accident is greater than the cost (B).[37]

The Hand Test illustrates the basic ingredients of negligence, not factors relevant to setting the standard of care.[38] Courts' case-by-case analysis could help to set legal standard care or regulators could specify legal standard precaution through safety regulations equaling the efficient level of precaution.[39] It is argued that courts might be armed with better information to set efficient precautions rather than regulators because regulators may set low standards to exempt or avoid liability to powerful businesses or set a high standard to stifle competition.[40] In this case, the standard of care set by courts may efficiently function; however, once the regulator fixes standards courts must follow these standards. Posner argues that regulators too; not only courts, utilize the Hand formula to set a statutory duty of care.[41]The other method is the law is reliant on a community of people who established the social norm and best practice in the

[35]Veljanovski (supra note 1) p.187.
[36]Jeonghyun Kim.(2013). Revisiting the Learned Hand Formula and Economic Analysis of Negligence. *Journal of Institutional and Theoretical Economics*, **169**, pp.407-432, p.408.
[37] Kim, Ibid.
[38]Veljanovski (supra note 1) p.188.
[39]Cooter & Ulen (supra note 3) p.215.
[40]Cooter & Ulen, Id.p.236.
[41] Posner (supra note 16) p.39.

industry to set efficient precaution.[42] However, when the legislators adopt these community standards they evaluate cost and benefit.[43]The due care standard is set by "balancing the total costs of care against the total expected accident losses, with the implication that there has been complete avoidance of accident cost."[44]

Care is a continuum that reduces the likelihood of an accident.[45] Economists claim that precaution is a continuous variable which denotes that a larger variable corresponds to higher levels of precaution.[46] The Hand Test consists of three principal ingredients namely risk, precautions, and gravity of loss. When the costs of precaution (cost of accident avoidance) are low the liability is sure to follow.[47] Precaution is hence any behavior reducing the probability or magnitude of an accident.[48]

Economic analysis of tort law assumes that rational individuals respond to an increase in expected costs by substituting lower (net) cost alternatives.[49] For example, when the costs of accidents increases due to compensations go up, the potential tortfeasor is assumed to raise his level of care that leads to a cost-saving taking assumption that care is inversely related to the probability and severity of accidents which means more careless accident loses, however; probability and severity of accidents are directly related with the frequency of activity parties engage in.[50]

Adding the cost of precaution a little more (marginal cost) reduces the expected cost of harm (marginal benefit) which is called the *marginal* Hand Test.[51] The economic version of the *marginal* Hand Test stipulates that the injurer is liable if and only if at the level of care taken, the

[42]Cooter & Ulen (supra note 3) p.216.
[43]Cooter & Ulen, Ibid.
[44]Veljanovski (supra note 1) p.191.
[45]Veljanovski, Ibid.
[46]Cooter & Ulen (supra note 3) p.190.
[47]Veljanovski (supra note 1) p.189.
[48]Cooter & Ulen (supra note 3) p.201.
[49]Veljanovski (supra note 1) p.190.
[50]Veljanovski, Ibid.
[51]Cooter & Ulen (supra note 3) p.201.

marginal cost of care is less than marginal expected damages.[52] For instance, the cost of care should be increased so long as one birr spent on greater safety avoids expected accident losses of more than one birr. When incremental cost of care would have cost ten birr and reduced the risk of ten thousand birr loss to the victim by one in 500, therefore, the injurer would be liable because the additional cost of ten birr saves twenty birr in expected losses that is a probability of accident (P) is equal to 1/500 and the loss (L) is equal to ten thousand, therefore, PxL=1/500x10, 000= 20 birr.[53] Thus, *change in* B<*change in* PL[54] yields liability by taking the additional care cost balanced against the incremental reduction in risk. The *change in total accident cost = change in B(x)+change in P(x)L*.

Negligence liability law has categories comprising of simple negligence, negligence with the defense of contributory negligence, and comparative negligence which achieves optimal efficiency in different circumstances. These standards of liability rules efficiently function when due care is set at an efficient level and are detailed below.[55]

Liability rules	**Injurer Care**	**Victim Care**	**Liability Allocation**
Simple negligence	At Fault	Not Decisive	Full injurer liability
Simple negligence	Faultless	Not Decisive	Injurer is not liable
Negligence with the defense of contributory Negligence	At Fault	Faultless	Full injurer liability
Negligence with the defense of contributory Negligence	Faultless	At Fault	Injurer is not liable
Negligence with the defense of contributory Negligence	Faultless	Faultless	Injurer is not liable
Negligence with the defense of contributory Negligence	At Fault	At Fault	Injurer is not liable
Comparative Negligence	At Fault	Faultless	Full injurer liability
Comparative Negligence	Faultless	At Fault	Injurer is not liable
Comparative Negligence	Faultless	Faultless	Injurer is not liable
Comparative Negligence	At Fault	At Fault	In a proportion of Negligence

[52] J. Brown, (1973). Toward an Economic Theory of Liability.*Journal of Legal Studies*, **2**, pp.323-349, p.340: cited in Veljanovski (supra note 1) p.191.
[53]Veljanovski (supra note 1) p.191.
[54] Change means symbolically denoted by delta and denotes the marginal gains/losses
[55]Friehe (supra note 21) p.13.

As discussed, negligence rule efficiently works when the court or the law sets the level of due care equal to a socially optimal level of precaution. In addition to this assumption, when the compensation equals the harm actually caused (perfect compensation) and the level of activity was assumed constant negligence law produces the following result.[56] In this situation, the rational individuals would choose the optimal level of care to minimize private costs because excessive due care above optimal would be costly without reducing the costs of compensation as due care is enough to exonerate from liability. Similarly, taking a low level of due care entails the risk of bearing the entire amount of expected compensation.

However, different results emerge when these assumptions are violated. For example, when courts set due care level below (above) socially optimal care, induces exercising low due to caretaking and exercising greater care by individuals respectively.[57] In a similar vein, when perfect compensation is relaxed that is when overcompensation occurs; over-deterrence happens when the standard of due care is "muddy" however; if the level of due care is optimal the injurer escapes paying compensation liability.[58] Furthermore, injurers do not hold activity level constant when the total social net utility of risky activity would be positive.[59] If the injurer increases the level of activity, it will yield a proportional increment in expected accident damages in a given level of care.[60]

The activity level of the injurer influences his utility. In this case, the social objective formula comprises the total amount of utility subtracting(minus) the total costs of care assuming to be equal to the level of the activity denoted by *a*, multiplied by the level of care, x and the total amount of damages, represented by *d;* mathematically as: *max u(a)-ax-ad(x)*
Thus, the injurer raises his activity as long as the marginal increase in utility he derives from raising activity exceeds the increment to total costs.[61] The following example elaborates on a mathematical representation. Assume that the injurer derives 100 utility from risky activity; the cost of efficient precaution is 80 and the total compensation is 30. As long as injurer exercises

[56] Hans-Bernd Schäfer& Frank Müller-Langer. Strict liability versus negligence: in Michael Faure (supra note 11)p.7.
[57]Schäfer& Müller-Langer, Ibid.
[58]Schäfer& Müller-Langer, Id.p.8.
[59]Schäfer& Müller-Langer, Id.p.9.
[60]Schäfer& Müller-Langer, Ibid.
[61]Schäfer& Müller-Langer,Id.p.9.

due care (80), he escapes liability and benefits 20 from engaging in activity, however, the net utility of the activity is negative (minus 10) that requires injurer not to engage in this activity.[62] Therefore, from this, it is understood that the negligence rule creates incentives to take an optimal level of care but fails to guarantee that the social utility of activity is positive.

So far it has been shown how negligence liability rule creates incentive under unilateral situation setting whereby the injurer alone influences the risk of an accident. Now let us examine under bilateral accident settings whereby both injurer and victim influence the risk of accident through the cost of caretaking and activity level. The social objective function is designed to minimize the cost of accident and is min $c(x) + c(y) + d(x, y)$

Where c(x) denotes the *level of care taken by the injurer*, c(y) represents *the level of care exercised by the victim,* and $d(x, y)$ denotes the t*otal amount of expected damages dependent on the level of care exercised by both parties*.[63] Therefore, the marginal cost to each party increasing his level of care should be equal to the marginal benefit of an expected reduction in accident cost given that he chooses a socially optimal level of care. Calabresi argued that in a bilateral accident setting the person with the least cost of taking care (cheapest cost avoider) should be held liable.[64] However, the problem with this argument is that due to prohibitive transaction cost it is difficult to know *ex ante* who is the least cost avoider unless the courts are duty-bound to identify who were the cheapest cost avoiders after accident *ex post*. When the court sets a legal standard of due care and meeting this standard injurer escapes from liability and the victim bears the accident cost plus precaution cost in simple negligence rule. There is no need to establish a legal standard of care for a victim.[65] The following negligence liability rules emerge under bilateral accident settings.

2.1.2 Incentives for Precaution under Negligence with the defense of Contributory Negligence Rule

[62]Schäfer& Müller-Langer, p.9.
[63]Schäfer & Müller-Langer, p.15.
[64]Schäfer & Müller-Langer,p.16.
[65]Schäfer & Müller-Langer,p.18.

Under this liability rule, the injurer will be held liable if and only if he doesn't exercise optimal care while the victim does. The injurer should not be liable when he takes optimal care or if the victim doesn't take optimal care as observed in the table above. The victim is barred from obtaining compensation because he failed to take optimal due care. The assumption of contributory negligence is an all-or-nothing liability rule that induces victims to take precautions against harm to themselves.[66]The contributory negligence rule operates efficiently when it is assumed that there exists the least cost avoider in an accident setting.[67] This helps to avoid excessive (wasted) investment in care by both parties in an alternative caretaking system, not in a joint care model where both parties simultaneously influence the accident risk.[68] Contributory negligence functions well when there is perfect information possessed by parties and courts because it induces the least cost avoider to adopt care. However, different justification convinced both judicial and statutory intervention to substitute contributory negligence by comparative negligence rule.[69]

2.1.3. Incentives for Precaution under Comparative Negligence Rule

This negligence rule dictates that when both the injurer and victim are negligent, accident costs are shared between them in proportion to the extent of their negligence. Comparative negligence makes a comparison, by observing deviation from optimal precaution, the fault of a victim with that of injurer and for division or sharing of compensation.[70] The sharing of compensation between two negligent parties is the puzzle that is not settled by scholarship.[71] On top of that jury determination of comparative fault of the victim lacks precision.[72]

The following example elaborates on how to apportion costs between the parties in the case of comparative negligence.[73]Assume that accident can be prevented by X(injurer) and Y(victim)

[66]Mireia Artigoti Golobardes & Fernando Gómez Pomar. Contributory and comparative negligence in the law and economics literature: in Michael Faure (supra note 11) p.49.
[67]Golobardes & Pomar, Id.p.46.
[68]Golobardes & Pomar, Id.p.54.
[69] Oren Bar-Gill &Omri Ben-Shahar. (2003). The Uneasy Case for Comparative Negligence. *American Law and Economics Review*, **5** (2), pp.433-469, p.434.
[70]Golobardes & Pomar (supra note 66) p.52.
[71]Giuseppe Dari-Mattiacci& Eva S. Hendriks. (2013). Relative Fault and Efficient Negligence: Comparative Negligence Explained. *RLE***9**(1), pp.1-40, p.2.
[72]Mattiacci & Hendriks, Ibid.
[73]Mattiacci & Hendriks, Id.p.2-3.

spend 60 birr each on care and care taken by only one party does not affect when an accident occurs damages amount 100 birr. Under comparative negligence, the loss is shared say 50% and if one party believes that the other may not take care that costs 60 birr hence, not to take care is the best choice. In such a case comparative negligence leads to equilibrium when both parties are efficiently negligent. Let's extend the example further.[74] An accident can be prevented if both the injurer and victim take care and care taken by one party doesn't' have any effect. Injurer bears 30 birr cost while victim bears 90 birr cost of accident avoidance when an accident occurs compensation amounts to 100 birr. *Dobson vs. Louisiana Power and Light Company* concluded that the injurer should bear a greater share of a liability than the victim.[75] The court lacked precise calculation of shares but any sharing rule that assigns more than 50% of the damages to injurer would induce both parties to take care which compels injurer to prefer to take care of 30 birr rather than paying compensation share of 50 birr or more. Furthermore, the victim would choose to spend 90 birr on care to prevent an accident rather than bearing accident loss of 100 birr.

The sharing rule that apportions compensation to the relative fault of each parties' departure from due care implies to implementation of optimal sharing.[76] In this case, the court has tasks of assessing relative fault and setting the due-care standards. Having discussed negligence law the next part is devoted to the rule of strict liability.

2.2.1 Incentives for Precaution under Simple Strict Liability

We begin the discussion assuming that the activity is held constant and courts set compensation equals to harm. The courts are not compelled to set a level of due care because the injurer is liable regardless of his precaution. In strict liability, the injurer has the advantage of automatically setting the optimal activity level. A strict liability rule is significant when the injurer's activity level is important to be controlled. He is obliged to minimize private cost which equals social cost and the algebraic representation is: $c(x) + d(x)$ where $c(x)$ is accident prevention cost and $d(x)$ is the total amount of expected damages.[77]Therefore, under a unilateral accident setting, the injurer takes optimal care to minimize total accident costs. Injurer is at his

[74]Mattiacci & Hendriks, Id.p.3.
[75]Mattiacci & Hendriks, Id.p.4.
[76]Mattiacci&Hendriks, Ibid.
[77]Schäfer&Müller-Langer (supra note 56) p.10.

liberty to decide for optimal precaution and activity level. When compensation fails to equal the actual harm, the injurer is not induced to take the incentive, unlike the simple negligence rule where the injurer escapes liability as long as he exercises optimal due care.

When we relax constant activity level under strict liability results different from simple negligence rule occur. Injurer bears both the total precaution cost and the total accident damages without considering the level of precaution exercised and activity level taken. Hence, the injurer engages inactivity when the net utility of that activity produces a positive result. In simple strict liability rule, the victim's incentive to take care is zero levels of care and not a socially optimal rule.[78]

2.2.2 **Incentives for Precaution under Strict Liability with the defense of Contributory Negligence**-

This rule is a socially optimal rule that induces both parties to take precautions if and only the courts set due care for the victim equals a socially optimal level of care.[79] When the victim's level of precaution is lower than the level of care of the injurer; the injurer is not liable. This liability rule will encourage activity level shift of the injurer by providing incentive, however, the negligence rule encourages the activity level of the victim.

2.2.3 **Strict Liability with the Defense of Comparative Negligence**

It demands sharing of the cost of an accident in proportional to parties' departure from optimal precaution. Both strict liability and negligence rule results in an optimal case where the victim's care doesn't influence the probability of an accident. In joint care, different outcomes are observed in different liability rules.

Part Three-Economic Analysis of Negligence-based and strict liability Law under Civil Code

Economic analysis of tort law is a device to deter activity based on economic efficiency ground. In this Article, Ethiopian Extra-contractual liability law will be examined to test the hypothesis developed in the law and economic analysis of extra-contractual liability. To meet this objective, this Article will use the previous economic analysis of tort law discussion as hindsight.

[78]Schäfer&Müller-Langer (supra note 56) p.19.
[79]Schäfer & Müller-Langer, p.20.

Economic Analysis of Negligence-Based Law

3.1 Simple Negligence Rule

Under Ethiopian law, the general liability rule relates to negligence liability laid in Articles 2028 to 2037. There are two categories of negligence-based liabilities which are the infringement of law which is expressly stated under Article 2035 and the breach of a general duty of care which is embodied in other provisions. It is argued economic analysis demands measuring the exact costs of compliance with statutes.[80]

Article 2030 is indifferent whether "usual standards of good conduct" is violated either by acting or forbearing because the fault is committed in both ways.[81] The injurer shouldn't absolve by depicting his conduct conformed the usage unless the conduct is usual standards of good conduct which is inseparable from reasonable man.[82]

Most of the fault-liability cases fall under the infringement of law. Individual infringes general as incorporated under Article 2030 or professional standard of conduct according to Article 2031. Conduct that violates the general duty of care must be examined by reference to the standard of the so-called *behavior of reasonable man* under Article 2030(2). *Reasonable man* conduct normally refers a careful and prudent person who performs things with care and diligence. Article 2030(1) states that a person commits fault (considered negligent) when he commits or refrains from doing something in a manner or in conditions that offend morality or public order. A person is considered to be negligent when he fails to meet the general usual standard of good conduct (usage).[83] Judge Hand approach requires individuals to take the level of care that a reasonable person would take considering three parameters namely the probability of an accident, the cost of the accident, and the cost of adopting the necessary care to avoid an accident.

The following statement from Lord A.P. Herbert captures the essence of "The Reasonable Man"

> *"The Common Law of England has been laboriously built about a mythical figure- the figure of 'The Reasonable Man.' He is an ideal, a standard, the embodiment of*

[80]Cunningham (supra note 8) p.692.

[81] George Krzeczunowicz. (1965). *Extra-Contractual Liability Commentary*. Faculty of Law Haile Sellassie, Addis Ababa University, p.15.

[82]Krzeczunowicz, Id.p.20.

[83]NigatuTesfaye.(1999). *Extra-Contractual Liability and Unlawful Enrichment, 2nd Edition*,p.14. (Amharic book on Ethiopian Extra-Contractual Liability and Unlawful Enrichment, translation mine)

all those qualities which we demand of a good citizen….It is impossible to travel anywhere or to travel for long in what confusing forest of learned judgments which constitutes the Common Law of England without encountering the Reasonable Man… The Reasonable Man is always thinking of others; prudence is his guide, and 'Safety First' is his rule of life. He is the one who invariably looks where he is going and is careful to examine the immediate foreground before he executes a leap or bound; who neither stargazes nor is lost in meditation….[He] stands like a monument in our Courts of Justice, vainly appealing to his fellow-citizens to order their lives after his example."[84]

Posner details the standard of negligence. He argues that negligence is an objective standard, not a moral standard (condemnation or moral disapproval) as insane persons are liable despite they are not capable of behaving carefully.[85] This means the liability rule doesn't make care standards type-specific rather reasonable person (Article 2030/2) standard is applied to all non-identical individuals (it only depends on the action taken) regardless of age, mental status, and so on.[86] The reasonable man's standard of care is objective and uniform and behaving as a reasonable man helps escape from liability.[87] The Restatement (Second) of Torts states that "the negligence standard must be an objective and external one, rather than that of the individual judgment, good or bad, of the particular individual. It must be the same for all persons since the law can have no favorites…"[88] It is an optimal standard of care minimizing total social cost which is the sum of costs of accidents (accident costs) and the costs of precaution (precaution costs). Judge Learned Hand formulation offered economic meaning of the reasonable man concept coining mathematically symbolizing as discussed elsewhere. Posner articulated that the Hand formula implicitly embodied negligence standard for the victim and if accident avoidance cost is lower in comparison with injurer's, a victim should take care.[89]

George Krzeczunowicz stated that fault liability is *general* and measured by the *objective* standard as per Article 2030.[90] Hence, Article 2030(3) fits well to Posner's description of an *objective*

[84] Lord A. P. Herbert, The Reasonable Man cited: in Cooter & Ulen(supra note 3) p.198.
[85]Posner (supra note 16) p.31.
[86]Friehe (supra note 21) p.20.
[87] Charles R. Korsmo.(2013). Lost in Translation: Law, Economics, and Subjective standards of Care in Negligence. Penn State Law Review, **118**(2), p.287.
[88]Korsmo, Id.p.298 at footnote 43.
[89]Posner (supra note 16) p.33.
[90]Krzeczunowicz (supra note 81) p.14.

standard of negligence, not a moral standard because the fault is assessed regardless of age, physical disability, and mental status of the injurer (madman) but only compensation is reduced under Article 2099. The insane, senile, minor, patient or mentally ill persons are liable by shifting the loss even though it does not create incentive; it protects a victim's compensation interest. These groups of persons are liable even though they couldn't meet the due care standard of the average normal citizen set by court or law.

Even though objective reasonable man standard generates inefficiency, it is justified on Calabresi's costs of accidents namely "costs of administering the tort system" because the negligence standard of reasonable man exempts courts from assessing each individual's capabilities to tailor the due care standard.[91] Prohibitive information and administrative costs associated with more tailor standards necessitate swamping any allocative efficiency gains by having objectively reasonable man standard.[92]The appreciation of precaution taken by a reasonable man is done in the abstract (fictitiously). For instance, professional liability demands an average careful standard of professional conduct not the average standard of a citizen under Article 2031(2).[93] The injurer is not liable when his action is defensible in the eyes of a reasonable person under Article 2039(e). The compensation must equal harm as a rule according to Article 2091 which incorporates perfect compensation. The principle of equivalence between damage and compensation dictates that weighing together harm against compensation.[94] Thus when courts stick to "compensation-equal-to-damage" the problem of under deterrence and over deterrence problem could be solved.

3.2 Comparative Negligence Rule- Apportionment Principle

Comparative negligence rule is proportionally dividing (sharing) the loss between the injurer and the victim when both committed the fault according to each individual's negligence. Comparative negligence allows a negligent victim to get compensation from a negligent injurer. This demands both the injurer and victim to take efficient care incentive to avoid loss. Each party's deviation from the standard of care is the point of reference to allocate compensation.

[91]Korsmo (supra note 87) p.302.
[92]Korsmo (supra note 87) p.302.
[93]Tesfaye (supra note 83)p.33.
[94] Jerzy (George) Krzeczunowicz. (1977). *The Ethiopian Law of Compensation for Damage*. Faculty of Law Addis Ababa University, p.41.

Article 2098(1) states that when the victim commits fault his right to be compensated will be reduced to the extent of his contribution to the accident. Article 2098(1) applies *ex ante* precaution taken by the victim. This is identical to the comparative negligence rule discussed in the first part of this Article. The fault of the victim happens in a concurrent cause of harm inflicted on the victim himself.[95] This fault affects the compensability and the extent of compensation of the harm already done to the victim. The injurer can raise the victim's fault as a defense. Article 2097(2) also extends denial of compensation when the victim fails to take *ex post* precaution after the accident occurred. These provisions offer an incentive to the victim to take optimal precautions to avoid the accident or minimize the effect of an accident.

Due to the harsh consequence of contributory negligence on the victim, it is concisely explained by the Roman Law Maxim "whosoever suffers harm through his own fault, is deemed to suffer no harm", this maxim later changed to "the less guilty party could fully recover from the party guilty of a more serious faulty" is adopted and Ethiopia also incorporates.[96] Article 2098 dictates compulsory partial mitigation of perfect compensation (harm equals to compensation) to offer an incentive to the victim to take due care.[97] Article 2098(2) wordings "respective faults" and "gravity of each fault" depict that both the injurer and victim are at fault.[98] As the phrase "partly by the fault of the victim" is different from when the victim is the sole cause of the harm and illustrates the injurer is also at fault. The phrase "gravity of each fault" under subjective "morality test" weighs intentional injury is graver than negligence injuries.[99] Under the objective "good usage test" individuals who deviate from reasonable man's "usual standards of good conduct" is the graver of the respective fault.[100]As depicted in the table, comparative negligence liability is applied when both the injurer and victim are both at fault.

Here there is a question one may ask to what extent the contribution of the fault of the victim is compensated, say for example is 60% of fault contribution by a victim is worth compensating or is it 50% or below 50% contribution of the fault should be compensated?

[95]Krzeczunowicz, Id.p.115.
[96]Krzeczunowicz, Id.p.155.
[97]Krzeczunowicz,Id.p.159.
[98]Krzeczunowicz, Ibid.
[99]Krzeczunowicz, Id.p.169.
[100]Krzeczunowicz, Ibid.

Pure comparative negligence rule allows the victim to recover compensation from the negligent injurer despite the fact that the victim's negligence is greater than the injurer's negligence.[101] On the other hand, the modified comparative negligence (blend of pure comparative negligence and contributory negligence[102]) rule bars the negligent victim's entitlement to compensation when his fault is greater than the injurer's fault. The following quote elaborates on the species under the modified rule.

> *"The '50 percent rule' allows a negligent plaintiff to recover only if her fault is less than or equal to the defendant's. The '49 percent rule' allows a negligent plaintiff to recover only if her fault is less than the defendant's fault. Finally, the 'slight gross rule' allows a negligent plaintiff to recover only if her fault is considered 'slight' in comparison to the defendant's. In all of these cases, if the plaintiff's fault is below the cut-off, then she will be able to recover damages that are reduced in proportion to the fault attributable to her.*"[103]

Looking at the contribution of the fault of the victim and if his fault is above the cutoff point, modified comparative negligence shares the attributes of contributory negligence placing a greater burden on the victim than the injurer.

George argued that Articles 2086 and 2098 provide no clue whatever as to whether objective standard (reasonable man) generally laid down in Article 2030 to assess victim's fault or another standard differing from normal reasonable man.[104] He suggested that individuals should be granted to rely on the reasonable behavior of the potential victim.[105] Article 2098 dictates consequences of the fault should be shared between victim and injurer according to sub Article 2 stipulating reduction of compensation. However; while reducing compensation, the court should perfectly assess the amount to provide an incentive to each party. However, if the injurer committed a causal fault, however small, the injurer is only liable partly (partly relieved) based on Article 2098(2).[106]

[101]Golobardes&Pomar (supra note 66) in Michael Faure (ed.) (supra note 11) p.52.
[102]Golobardes&Pomar, Id.p.53.
[103]Golobardes&Pomar, Ibid.
[104]Krzeczunowicz (supra note 81) p.28.
[105]Krzeczunowicz (supra note 81) p.28.
[106]Krzeczunowicz (supra note 94) p.125.

The word in Article 2098 (2) "partly" offers no hint to this question to what extent the contribution of the fault of the victim is compensated. Examining the Supreme Court Cassation Bench decision offers a partial solution to this question of how comparative negligence liability is entertained in Cassation Bench which has precedential value. The Supreme Court Cassation Bench in Volume 18, file number 106450 between applicant Ethiopian Electricity Power Utility Meki District and respondents W/ro Besa Nanama, Ato Banke Measo and W/ro Ayulie Megersa has dispensed the case as follow.

The relevant fact of the case is translated as follows. Ethiopian Electricity Power Utility planted power transmission transformers 2.85 meters away from the deceased's house even though the law obliges 4 meters away to prevent accidents. There was a tree which might contact with the power that yields accident. This made the person extremely worried about the safety of his family and repeatedly applied to the applicant to cut the tree in order to prevent the accident risk. Having his repeated applications turned down by the applicant, the deceased tried to cut the tree, in which incident, he was injured by electric power and eventually died.

The Supreme Court Cassation Bench said that both parties were at fault because the applicant transgressed the law while planting electric lines and the victim also committed fault because he tried to cut a tree by himself to prevent an accident. The Cassation Bench reasoned that according to Article 2098(1) both parties contributed to the occurrence of the accident. While affirming the calculation of material compensation based on equity and set the amount 76800 birr (as already calculated by lower courts) and apportions this amount for the injurer and the victim. What the courts do is first calculate legally entitled compensation for the claimants based on equity then sharing this material damage compensation into two equal parts. Hence, the victim was entitled to half of 76800 birr which is 38400 birr. The Supreme Court Cassation Bench, however, extricates itself to calculate the extent to which each party's fault contributed to the accident. Cassation Bench leaves murky and incomplete legal interpretation as the victim's fault contribution and injurer's fault contribution effect on entitlement to compensation.

Regardless of the victim's fault contribution, the victim is entitled to half of the compensation. However, Posner argued that to assess comparative fault "the required comparison is between the respective costs to the [two sides]…of avoiding the injury. If

each could have avoided it at the same cost, they are each 50 percent responsible for it."[107] Posner illustrated the calculation as follows.[108] The victim could have prevented the accident at the cost of 1 birr and the injurer could have avoided the accident at the cost of 2 birr and the cost of injury accident occurred amounted 10 birr. The victim's comparative fault ration is 2:1 and his compensation is reduced by two-thirds which means he would bear 6.66 birr in loss and recover 3.33 in compensation. The court has departed from the economically informed analysis. As it is analyzed in the judgment the court only considers the respective fault of the victim and injurer. However, the economic analysis of tort law dictates that tort law is all about cost minimization that is a minimization of social costs namely minimization of primary costs to deter that comprises the sum of accident avoidance measures and harm due to the accident), secondary costs that is optimal risk spreading and risk-bearing of risk-averse parties and tertiary accident costs that comprise of administrative costs comprises expenses in time and money of litigants and the state. The court doesn't analyze the case based on who is the least cost avoider of primary costs rather it simply identified who was at fault the analysis of which doesn't provide an incentive to future parties in a tortuous transaction. Judicial decisions should be designed to increase the wealth of society by providing incentives. However, the court swerves out of this path and fails to offer incentives to the parties.

3.3 Contributory Negligence

Contributory negligence is a defense asserted by the injurer to bar the victim from getting compensation for harm caused by the victim's negligence regardless of the injurer also caused the harm negligently. Victim's role in causing harm, no matter how small this role is in comparison to the injurer's negligence, contributory negligence defense entirely exonerates the injurer from liability. The contributory negligence rule offers an incentive to the negligent victim to take precautions.

As discussed in the previous section, the injurer is exempted from liability when the victim's level of precaution is lower than the level of care of the injurer. Contributory negligence is hence called an all-or-nothing approach. The contributory negligence rule will incentivize the injurer to shift activity level, however; the simple negligence rule

[107] Cunningham (supra note 8)p.669-678.
[108]Cunningham, Ibid.

encourages the activity level of the victim. As observed in the table, the liability allocation of contributory negligence is designed as follows. When the injurer is at fault and at times when the victim is faultless, the injurer is fully liable; however, when the injurer is at fault and at the same time the victim is at fault, the injurer is not liable. The difference between contributory negligence from comparative negligence is that the injurer escapes from liability though he is at fault and when the victim is at fault. This type of liability is not explicitly incorporated in Civil Code. Article 2098 governs the situation when both the injurer and the victim are at fault, and compels partial compensation (apportionment of the damages) award to the victim rather than exonerating the injurer from liability. It explicitly states that liability is allocated in proportion to their fault not barring of compensation. From this, it is obvious that contributory negligence isn't a defense for injurer under Ethiopian Civil Code when both parties are at fault.

3.4 Simple Strict Liability

Strict liability shifts both prevention and damage costs to the injurer. Strict liability is limited to dangerous *activities* (Articles 2066, 2067, 2069) or *things* (Articles 2071, 2077, 2081, 2085) listed by law. The legislative framework takes "activity" as a central criterion to impose strict liability. Strict liability compels actors who create dangerous activities and benefit from such activities should take adequate protection. High expected accident costs, the impossibility that more care by the injurer would reduce the accident probability; the difficulty of constraining victim's activity in favor of the injurer's and finally the need to reduce the risk by activity level change of injurer are factors for the introduction of strict liability.[109]

Simple strict liability is unilateral in nature by which the actions of the injurer but not of the victim are assumed to affect the probability or severity of losses. Under simple strict liability, the injurer is compelled to pay for losses whenever he caused an accident; he is induced to consider the effect on accident losses of both his care and activity level. Because the injurer will be liable for losses sustained by the victim, the injurer will decide

[109] Michael Faure & Roger Van den Bergh. (1987). Negligence, Strict Liability and Regulation of Safety under Belgian Law: An Introductory Economic Analysis. *The Geneva Article on Risk and Insurance*, **12**, pp.95-114, p.98.

not only to exercise due care but also to engage in activity only when the utility gained from it outweighs expected liability payments to the victim. Thus, the amount of care taken and the level of the activity are two dimensions to economic behavior that affect the number of accidents.

Activities that increase accident risk are governed by regulation. For example, road transport traffic control regulation details the following activities are prohibited.[110] Drivers may not receive and send text, watching TV, fail to fasten the belt, chewing chat while driving. Article 78 states that any driver shall decrease speed and provide an audible warning sound for a vehicle approaching from the front. Article 16 also states that a driver may not turn to the left of a road when visibility is limited or obstructed. In addition, Article 14 obliges that every driver who drives behind another car shall keep sufficient distances.

In bilateral cases, it is assumed that potential victim and injurer influence the probability of accidents by their choice of both levels of care and level of activity and discussed below.

3.4.1 Strict Liability with the Defense of Comparative Negligence

When the victim is at fault claims for compensation instituted against the faultless defendant under the strict liability is not legally tenable as per Articles 2066(2), 2067(2), and 2086(2).[111] From these provisions, it is understood that a faultless defendant's total exemption depends on whether the victim is the "sole" cause of his harm.[112] Article 2086(2) articulates that the defendant is *wholly* exempted (no compensation is awarded) if and only if the harm is caused *solely* by a fault of the victim.[113] George argued and hinted that the fault of the victim should be assessed in strict liability as per Articles2086.[114] As discussed, the due care level of the injurer isn't assessed rather the due care level of the victim is assessed by the court to assess compensation. Economic analysis of tort law demands the judge put himself in the ex ante position and examines whether the cost of additional care by the victim could have led to a favorable reduction of accident risk. If the

[110]*Road Transport Traffic Control Council of Ministers Regulation No. 208/2011*, 17th Year No.89, Addis Ababa, 26th August 2011.
[111]Krzeczunowicz (supra note 94) p.123.
[112]Krzeczunowicz, Id.p.123.
[113]Krzeczunowicz, Ibid.p.123.
[114]Krzeczunowicz (supra note 81) p.28.

victim is exposed to the costs of his activities (which is reduction of compensation), this would provide appropriate incentives for taking optimal care to prevent accidents.

When concurrent faults of drivers happened half-half rules of compensation is employed under Article 2084. George stressed that "each of the causal faults is 'wholly' (but not solely) a cause of the accident which would not have occurred without it."[115]

Conclusion

Traditional legal analysis is indispensable and contemporary economic analysis can reinforce rather than supplant traditional legal principles. Economic explanations of law such as efficiency, incentive, least-cost avoidance models, and cost-benefit analysis can support legal judgments. The economic analysis clarifies legal principles and avoids obfuscation making law scientific. In sum, it offers a formula exuding clarity and predictability.

Under unilateral accident, negligence rule injurer only looks at the utility as long as due care is taken which may make the net social welfare negative. The negligence rule creates incentives to take an optimal level of care but fails to guarantee the social utility of activity is positive**.** Only strict liability leads to optimal activity level.

Under a bilateral accident setting, an increase in the activity level of either player leads to a proportionate increase in expected accident losses. In strict liability with defense, the injurer chooses the correct activity level and the victim engages when utility exceeds care costs so often. Under the negligence rule, the injurer will take due care, so the victim will bear the losses, thus, the victim chooses the correct activity level, injurer engages when utility exceeds care costs so often. In sum, under strict liability with defense, the victim will engage too often, under negligence injurer will engage too often. Therefore, the choice depends on whose activity level is more important to control. In Ethiopia, simple negligence, comparative negligence, simple strict liability, and comparative strict liability are recognized but no explicit recognition of contributory negligence.

Ethiopian liability law adopts uniform reasonable man standard to avoid tertiary cost. That means, objectively reasonable man standard generates inefficiency, however; it is justified on

[115]Krzeczunowicz (supra note 94) p.160-161 at footnote 85.

Calabresi's costs of accidents namely "costs of administering the tort system" because the negligence standard of reasonable man exempts courts from assessing each individual's capabilities to tailor the due care standard. This article provides suggestions to courts to entertain economically informed decisions by employing law and economics insights. The court doesn't analyze the case based on who is the least cost avoider of primary costs rather it simply identified who was at fault the analysis of which doesn't provide an incentive to future parties in a tortuous transaction. Judicial decisions should be designed to increase the wealth of society by providing incentives. However, the court swerves out of this path and fails to offer incentives to the parties. If each could have avoided the accident at the same cost, they are each 50 percent responsible for losses. This cost base method is preferred to fault contribution percentage to offer incentives to parties to accident setting. This Article examined the (in)efficiency of each liability rules by decoupling the lumped ones and which law provides care and activity level incentives which could be taken as an input to revise tort law currently underway.