REDEFINING LEGAL RESPONSIBILITY FOR PURE ECONOMIC LOSS IN THE INNOVATION ECONOMY

Moshood Abdussalam*

> In the varied web of affairs, the law must abstract some consequences as relevant, not perhaps on grounds of pure logic but simply for practical reasons.[1]

Abstract

This paper proposes a new standard for determining legal responsibility in the law of negligence, but particularly pure economic loss cases across Commonwealth jurisdictions. The paper argues that the prevailing standards for determining pure economic loss do not measure up to the novel legal challenges and promises thrown up by the innovation economy. This paper argues that courts should always commence their determination of legal responsibility with consideration given to the public cost–benefit implications of the defendant's actions. It is on this basis that courts should initiate their decision on whether to impose responsibility or exclude it. Where, however, disputes do not raise public interest concerns, then courts should determine each case based on its peculiar justice needs.

I. Introduction: Pure Economic Loss and the Innovation Economy

In tort law, there exist exclusionary rules that disallow compensation for pure economic loss (that is, losses resulting from events that have no bearing on damage to persons or property). However, it is observable that these rules in their prevailing form remain largely unamenable to the peculiarities and dynamics of the innovation economy. For this reason, these rules should be reconsidered to measure up to the challenges and promises of the innovation economy. Attaining

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1 Per Lord Wright, in Liesbosch Dredger v Edison SS [1933] AC 449, 460 (HL).

this is possible with a revision of the prevailing fetters to compensation by allowing innovative entrepreneurs to secure compensation for pure economic loss. By so doing, we will be deploying tort law as a socio-economic policy to support innovative entrepreneurs in our increasingly disembodied economic era.

Commentators often use the term "innovation economy" in differentiation with the previously governing market order significantly characterised by the production and distribution of goods and services, in which incremental advancements in knowledge played a critical, albeit independent, role in bringing about outcomes.[2] However, the innovation economy is a networked and disembodied economic milieu in which patterns of value creation, distribution and consumption are immensely dependent on the spillover effects of knowledge and information resources.[3] In other words, knowledge and information are the pivotal driving forces of patterns of socio-economic relations in the innovation economy.[4] Advancements in science and technology (particularly information science and technology) have brought about a paradigm shift in the social order for creating, distributing and assessing economic value.[5] Hence, legal rules, like those currently governing compensation for pure economic loss, founded on a distinction between physical and non-physical damage, are unsustainable in the innovation economy, which is essentially shaped by intangibility.

The most problematic aspect of the said exclusionary rules is that which prohibits compensation for relational economic loss (that is, losses suffered by a party associated, for example, by contract with a property owner whose property is damaged by negligence). Concerning relational economic loss, the general attitude across Commonwealth jurisdictions is essentially the same—that compensation is not to be allowed except it where can be shown that both the victim of the loss and

2 See, Jonathan Haskel and Stian Westlake *Capitalism Without Capital: The Rise of the Intangible Economy* (Princeton University Press, Princeton, 2017); and see also, Zhouying Jin *Global* Technological *Change: From Hard Technology to Soft Technology* (2nd ed, Intellect Books, Bristol, 2011).

3 See, Mark Lemley and Brett Frishmann "Spillovers" (2006) 100 Colum L Rev 101; and see also, Anupama Phene and Stephen Tallman "Knowledge Spillovers and Alliance Formation" (2014) Journal of Management Studies 1058.

4 See, David Teece "Capturing Value from Knowledge Assets: The New Economy, Markets for Know-How, and Intangible Assets" (1998) 40 California Management Review 55; and see also, Jeremy Rifkin *Zero Marginal Cost Society* (St Martin's Griffin, New York, 2014).

5 Klaus Schwab Shaping the Future of the Fourth Industrial Revolution: A Guide to Building a Better World (Portfolio Penguin, London, 2018); and see also, Jeremy Rifkin, The Third Industrial Revolution: How Lateral Power is Transforming Energy, the Economy, and the World (St. Martin's Griffin, New York, 2013).

the owner of a damaged property share a special economic relationship.[6] Therefore, relational economic loss claims generally fail, as they are not the upshot of damage to physical property owned by the claimant.

Barker criticises this "physical/non-physical" basis for discrimination saying:[7]

> Whereas in the past, much of our wealth has been tied up in tangible form, this is less so in today's world than ever before. Moreover, whilst property clearly has some personal "added value" over abstract wealth in many instances, it does not always.

The conditions of the innovation economy validate Barker's observations, as the bulk of wealth in modern times is attributable to intangible resources. Thus, the pace of socio-economic change wrought by the innovation economy should prompt us to rethink which classes of interests we consider deserving of protection from negligent actions of third parties and, by extension, the standard for attributing legal responsibility regarding such concerns.

By rethinking the prevailing standard of responsibility for pure economic loss in the innovation economy, tort law would be in harmony with prevailing social expectations and needs.[8] In the disembodied economy, entities rely on contractual networks of innovators, technologists or entrepreneurs to secure access to constantly changing data resources or ideas, and other forms of infrastructures that serve as inputs integral to economic activities. As one commentator succinctly described it, widespread innovation has induced an economic revolution, causing us to move from a *pipe-based* value creation model to one that is *platform-based*.[9] By pipes, Choudary means "a linear movement of value from a producer to one or many consumers".[10] However, by platforms, he means plug-and-play infrastructures, which enable a "multi-directional flow of value between different participants".[11]

6 See, Candlewood Navigation Corporation Ltd v Mitsui OSK Lines Ltd [1986] AC 1 (UK); Martel Building Ltd v Canada [2000] 2 SCR 860; D'Amato v Badger [1996] 2 SCR 1071; Riddell v Porteous [1999] 1 NZLR 1; Minister of Education v Econicorp Holdings Ltd [2012] 1 NZLR 36; Caltex Oil (Australia) *Pty Ltd v The Dredge 'Willemstad'* (1976) 136 CLR 529; see also, *Fortuna Seafoods Pty Ltd v Ship 'Eternal Wind'* [2008] 1 Qd R 429; and *Barclay v Penberthy* [2012] HCA 40, (2012) 246 CLR 258.

7 Kit Barker "Economic Loss and the Duty of Care: A Study in the Exercise in the of Legal Justification" in Charles Rickett (ed) *Justifying Private Law Remedies* (Hart Publishing, Oxford, 2008) 175.

8 At 178.

9 Sangeet Paul Choudary *Platform Scale* (Platform Thinking Labs, 2015).

10 At 20.

11 At 19.

In our age of platforms, three factors are predominant: decentralisation, interconnectedness and automation.[12]

Business networks characterise the age of platforms.[13] Networks may take *spider* forms (they have a governance structure, or an overarching contract directing the workings of the network) or they may be *spiderless,* (they are self-governing and lacking any identifiable governance structure).[14] Although both spider and spiderless networks are important for innovation, the law should pay special attention to spider networks. The reason being that they have certainty in form and are identifiable by delineable scope. Good examples of spider networks are card payment networks. Such networks enable payment rails that facilitate the transfer of funds across parties within the network.

In the United States, scholars have discussed the increasing exposure of participants within spider networks to risks of pure economic loss owing to the negligence of other parties, whether within the network or associated with the network.[15] Such risks may arise, for example, where unscrupulous persons gain access to and exploit confidential information of a bank's clients, with the bank having to compensate its clients after which the bank seeks to be indemnified by the negligent party for its losses. One finds a good example of this in the United States' case of *Community Bank of Trenton v Schnuck Markets,*[16] where the United States Court of Appeals denied compensation to a bank which had been a victim of such an unfortunate situation. We shall return to this case later in Section IV.

The English Court of Appeal decision in *Conarken Group Ltd v Network Rail Infrastructure Ltd*[17] brings to the fore another example of a spider network, but one relating to railway transportation, in which the issue of pure economic loss arose. In this case, Network Rail (NR) owned rail track infrastructure which it allowed Train Operating Companies (TOCs) to ply in conveying their commuters. The agreement between NR and the TOCs had varying obligations but included the

12 At 19.

13 See also, Laure Reillier and Benoit Reillier *Platform Strategy: How to Unlock the Power of Communities and Networks to Grow Your Business* (Routledge, Abingdon-on-Thames, 2017); and see also, Nick Srincek *Platform Capitalism* (Polity, Cambridge, 2016).

14 Ariel Porat and Robert Scott "Can Restitution Save Fragile Spiderless Networks?" (2018) 52 HBLR 1.

15 See, David Obderbeck "Cybersecurity, Data Breaches, and the Economic Loss Doctrine" (2016) 75 Md L Rev 935; see also, Mark Geistfield "Protecting Confidential Information Entrusted to Others in Business Transactions: Data Breaches, Identity Theft, and Tort Liability" (2017) 66 DePaul Law Review 385; see also, Catherine Sharkey "Can Data Breach Claims Survive the Economic Loss Rule?" (2017) 66 De Paul Law Review 339; see also, Alan Butler "Products Liability and the Internet of (Insecure) Things: Should Manufacturers Be Liable for Damage Caused by Hacked Devices?" (2017) 50 University of Michigan Journal of Law Reform 913; and, see also, Vincent Johnson "Cybersecurity, Identity Theft, and the Limits of Tort Liability" (2005) 57 SCL Rev 255.

16 *Community Bank of Trenton v Schnuck Markets* 887 F3d 803 (2018).

17 *Conarken Group Ltd v Network Rail Infrastructure Ltd* [2011] EWCA Civ 644.

understanding that if the rail track is unavailable because of factors not owing to the fault of the TOCs, NR would have to compensate the TOCs for their losses arising from such unavailability compensating the TOCs for their losses resulting from the inaccessibility of the rail track would amount to allowing compensation for pure economic loss through the "back door", as the TOC had no proprietary interest in NR's rail tracks, except that they were only contractually associated with it. The Court refused this argument and allowed NR's claim. The justification for this was that NR's exposure to loss, arising from its compensatory obligation to the TOCs, is connected with interference with its property resulting from the defendant's negligence.

Had contracts not required NR to compensate the TOCs, NR would most likely not have sued and the TOCs would have had to sue on their initiative; with the latter's likelihood of success being bleak owing to the exclusionary rule prohibiting compensation for pure economic loss. The question then arises: Why should a party who relies on a contractual network which is integral to its business undertaking not be able to sue for pure economic loss resulting from negligent interference with the functioning of the network?

However, just as it is important that we must expand the class of persons compensable for pure economic loss in our disembodied economy, it is equally important that we do not incautiously ease the exposure of innovators and innovative entrepreneurs to legal liability for negligent outcomes. The innovation economy relies on the chartering of new patterns of doing things in ways that save costs, improve effects and increase productivity, thus increasing social welfare. To properly cater to the interests of innovators, there must be a redefinition of legal responsibility for pure economic loss; otherwise, there is the risk of foisting chilling effects on innovation.[18] As rightly observed, we often fail to realise that tort law could serve as a subsidy route to innovators by excluding them from liability in situations where the cost of avoiding harm could be significantly high, and where the activities of such innovative persons create opportunities for enhancing social welfare.[19]

In postulating a redefinition of responsibility for pure economic loss, this paper advances two main arguments:

1) that the class of persons entitled to compensation must be expanded to accommodate innovative entrepreneurs whose exposure to economic loss is owing to their embeddedness within a network of economic relations; and

18 See, Alberto Galasso and Hong Luo "Tort Reform and Innovation" (2017) 60 Journal of Law and Economics 385 see also, James Henderson "Torts vs. Technology: Accommodating Disruptive Innovation" (2015) 47 Ariz St LJ 1146.

19 See, Gideon Parchomovsky and Alex Stein "Torts and Innovation" (2008) Mich L Rev 10.

2) conversely, calibrating legal responsibility for negligence with a regard to the social benefits that accompany the activities of defendants who are innovative entrepreneurs.

Furthermore, this paper makes the case that tort law is a species of socio-economic policy, which seeks to govern the relations of members of society as it relates to externalities. In this vein, this paper submits that social benefits and costs considerations, along with pragmatism, should inform the judicial determination of claims for pure economic loss. To this end, this paper advances an integrated model for ascertaining legal responsibility based on postulations differently advanced by Alex Stein and Jane Stapleton [20].

The structure of this paper is in the following order. Section II advances the argument that tort law is a species of economic policy, and by so doing agrees with theorists of law and economics that tort law serves as an instrumental branch of law whose purpose is to fill the gaps in the missing markets for social interactions. For this reason, this section argues, that notwithstanding inadequacies, law and economics provides a superior perspective for analysing pure economic loss than rights-based and corrective theorists. Section III lays out the foundation of the integrated model proposed in this paper as inspired by the theses of Alex Stein and Jane Stapleton. It goes on to show how their theses may be integrated to guide the imposition of responsibility for pure economic loss. Section IV discusses how the proposed integration model is apt to rationalise prevailing judicial positions across Commonwealth jurisdictions as it concerns pure economic loss. In Section V, a new standard for defining legal responsibility for pure economic loss is identified based on the integrated model derived in Section III, and this new standard is further buttressed, particularly as it relates to the needs of the innovation economy. Section VI concludes the paper.

II. Tort Law as Socio-Economic Policy

As can be observed concerning strictures on compensation for pure economic loss, it is an aspect of negligence law that defies universal theorisation despite the efforts towards that end by theorists from different jurisprudential persuasions.[21] The academic quest to provide a universal theory for pure economic loss features

20 Alex Stein "The Domain of Torts" (2017) 117 Colum L Rev 536; and Jane Stapleton "Comparative Economic Loss: Lessons from Case-Law-Focused Middle Theory" (2002) 50 UCLA Law Review 531.

21 See, Anthony Sebok "The Failed Promise of a General Theory of Pure Economic Loss: An Accident of History" (2012) 61 DePaul L Rev 615; and see also, Anita Berstein "Keep it Simple: An Explanation of the Rule of No Recovery for Pure Economic Loss" (2006) 48 Ariz L Rev 773.

scholars mostly from three schools of thought: law and economics, corrective justice and rights-based theory.[22] While the inadequacies of all these schools to provide self-contained guidance concerning pure economic loss is attributable in part to high levels of theoretical analysis, the inherent weaknesses of the rights-based and corrective justice schools are most palpable in this regard. Both corrective justice and rights jurisprudence share similar positions and, therefore, the same degrees of flaws in this respect.[23] Proponents of both rights jurisprudence and corrective justice hold the view that pure economic loss is generally undeserving of compensation because an injury to profit realisation opportunities, not occasioned by damage to or interference with a recognised legal entitlement, does not legitimately actuate a legal remedy.[24] In sum, their position is that there is no remedy without a wrong done to a recognised right.[25]

It is vital to recognise that proponents of both schools of thought hold that the nature of an entitlement, whether *in rem* or *in personam*, need not matter.[26] Their position is that the nature of an entitlement is negligible in the scheme of things, so long as lost profits, diminution in the value of interests and sunk expenses are remedied in consequence of an interference with a recognised interest which the wrongdoer is bound to respect *apropos* the victim of his wrong. The pre-condition that there must be a recognised infringed right (that is, one which creates a correlative duty of care on the negligent party) for economic loss to be legally remedied is logical in appearance but is simplistic and flatly inadequate.

That latter position (of inadequacy) is asserted based on two reasons. The first is that it is impractical that the possession of some pre-determinable or ironclad basis should be the standard for entitlement to compensation. Such a standard would be under-inclusive in that it excludes compensation from cases otherwise deserving it. The second is the disagreement shared by proponents of both schools towards the deployment of policy objectives in the fashioning of the rules of the law of negligence.

22 James Goudkamp and John Murphy "The Failure of Universal Theories of Tort Law" (2015) 21 LEG 47.

23 At 63.

24 See, for example, Peter Benson "The Problem with Pure Economic Loss" (2009) 60 SCL Rev 823; see also, John Simillie "Negligence and Economic Loss" (1982) 32 UTLJ 231; see also, Stephen Perry "Protected Interests and Undertakings in the Law of Negligence" (1992) 42 UTLJ 247.

25 See, for example, Allan Beever "A Rights-Based Approach to the Recovery of Economic Loss in Negligence" (2004) 4 OUCLJ 25.

26 At 30: "Recovery is denied, then, not for the reason that the loss fell into a class—economic rather than physical—that is excluded, but because the claimants had no right to that which they lost."

A. The Impracticality of the Pre-Determinable Rights Requirement

Activities and outcomes under the purview of the law of negligence are generally not inherently objectionable, but relate to the unwanted imposition or externalisation of injuries to others, often as a result of accidents or inadequate application of care.[27] In most cases, the negligent party may not be able to foresee harm to others, or the class of persons likely to be impacted by their actions, or the extent of the injury they are likely to impose on others. If these were determinable, it is most likely that such persons may have contracted with their potential victims concerning the risk of injury, would have invested in risk elimination, or obtained insurance to compensate for that risk.

The same can be said concerning potential victims, as they too could have taken countervailing measures to prepare against or ahead of injury from negligent persons. But uncertainties often make foreknowledge of the eventuation and scope of injuries and the potential victims difficult to ascertain. Therefore, it is unsound to speak of pre-determinable compensable rights or injuries, and, in effect, pre-determinable duties of care. It is after unfortunate events resulting from negligence have occurred that the law of negligence serves to redress "involuntary transactions" which are the by-products of negligence. It is for this reason that Bishop described the law of negligence as creating a surrogate market in externalities.[28]

Similarly, Hylton described the law of negligence as a missing market, explaining that:[29]

> ... tort doctrine should be viewed as a response to the incompleteness of markets, or more generally the problem of missing markets. Because of market incompleteness, some of the benefits as well as costs associated with activities will be shifted or "externalised" to third parties.

Since the law of negligence is a regime for the management or governance of externalities, it is after events have happened that we can best identify who to compensate and the size of compensation. In other words, it is the specific needs of events that would determine judicial outcomes. It is this reality which explains why in New Zealand, for example, the courts do not have a "rigid" body of judicial

27 See, Robert Cooter and Thomas Ulen "An Economic Case for Comparative Negligence" (1986) NYUL Rev 1067; and, see also, Hans-Bernd Schäfer and Frank Müller-Langer "Strict Liability versus Negligence" in Michael Faure *Tort Law and Economics* (Edward Elgar Publishing, Cheltenham, 2009) 3.

28 William Bishop "Economic Loss in Tort" 1982 (2) OJLS 1, at 4.

29 Keith Hylton "A Missing Markets Theory of Tort Law" (1996) 90 NWULR 977, at 978.

precedent concerning pure economic loss.[30] The courts in New Zealand address each case based on its peculiarities. An almost similar pattern applies in Australia and Canada towards pure economic loss.[31] However, at this stage, to buttress the impracticality of the pre-determined rights requirement, it is important to refer to the statement of McHugh J in *Perre v Apand*,[32] where he said:[33]

> If negligence law is to serve its principal purpose as an instrument of corrective justice, the principles and rules which govern claims in negligence must be as clear and as easy of application as is possible. Ideally, arguments about duty should take little time with need to refer to one or two cases only instead of the elaborate arguments now often heard, where many cases are cited and the argument takes days. The needs of the litigant or potential litigant, the legal practitioner and the trial judge should guide the formulation of the applicable principles. *That does not mean, however, that the common law must adopt arbitrary "bright-line" rules for the sake of certainty at the expense of what most people including judges would regard as a desirable result.*

His Honour was stating that although rights should be identifiable *ex-ante* for the law of negligence to serve corrective justice purposes, given the reality of things, this desideratum is impractical as the provision of justice should not be tied to the rigours of precedent. Therefore, he went on further to say that:[34]

> While *stare decisis* is a sound policy because it promotes predictability of judicial decision and facilitates the giving of advice, it should not always trump the need for desirable change in the law.

The need for practical justice equally explains why the English courts have made certain incremental departures from its strict rule of excluding liability for pure

30 See, Karen Hogg "Negligence and Economic Loss in England, Australia, Canada and New Zealand" (1994) 43 The International and Comparative Law Journal 11; and see, Helen Macfarlane and Hesketh Henry "Leaky Buildings: 'Te Mata' Revisited" (2010) New Zealand Journal 86.

31 See also, Paula Giliker "Revisiting Pure Economic Loss: Lessons to be learnt from the Supreme Court of Canada?" (2005) 25 LS 49.

32 *Perre v Apand* (1999) 73 ALJR 1190.

33 At [91] (emphasis added).

34 At 92.

economic loss. One of such cases is *White v Jones*,[35] where a defendant solicitor's negligence in handling testamentary formalities had caused the intended legatees to lose out in their shares of the defendant's client's estate. In *White,* the Court reasoned that if the solicitor were not held liable for the legatee's loss resulting from the solicitor's negligence, then it would result in manifest injustice to the legatee.

The second case is *Shell v Total*.[36] In this case, the English Court of Appeal departed from an aspect of the exclusionary rule reinforced by *Leigh and Sillivan Ltd v The Aliakmon Shipping Co Ltd*.[37] That case had ruled that a person who had not acquired a possessory or proprietary interest in a piece of property negatively affected by the actions of another negligent person is to be excluded from entitlement to sue for harm resulting to the said property.[38] This is so even if that person were the intended beneficiary of the proprietary owner. The Court of Appeal, departing from *Aliakmon*, reasoned that although Shell was not the legal owner of the property negatively affected by the defendant's negligence, the legal owner held a beneficial share in the property in trust for Shell. For that reason, the Court ruled that Shell could recover its economic loss. The Court rationalised its decision as being informed by "the impulse to do practical justice".[39]

We shall return to these cases later in this paper. At this stage, however, it becomes necessary to shift focus to the second reason why corrective justice and rights-based theories provide inadequate guidance in addressing concerns relating to pure economic loss.

B. The Primacy of Policy in the Attribution of Responsibility in Negligence Law

Commonplace descriptions of tort law often reflect degrees of generality, which despite their apparent legalistic correctness, do not often capture the true nature of tort law.[40] The true nature of tort law is essentially political;[41] and consequently, the

35 *White v Jones* [1995] UKHL 5.
36 *Shell v Total* [2010] EWCA Civ 180.
37 *Leigh and Sillivan Ltd v The Aliakmon Shipping Co Ltd* [1986] AC 785.
38 See GL Peiris "Liability in Tort for 'Pure' Economic Loss in the Light of *Aliakmon* and *Candlewood*: A Comparative Study" (1988) 21 CILSA 383.
39 *Shell v Total,* above n 37, at [143].
40 See, for example, the United Kingdom Supreme Court's description of tort law in *Morris-Garner v One Step (Support) Ltd* [2018] UKSC 20 [31], as follows: "The law of tort is concerned with civil wrongs, that is to say with breaches of duties imposed by the law, sometimes generally and sometimes on those who are party to particular relationships or have assumed particular responsibilities, which protect the interests of others in respect of such matters as their bodily integrity, their liberty, their property, their privacy and their reputation."
41 See, John Garner "The Negligence Standard: Political Not Metaphysical" (2017) 80 MLR 1; and see also Barbara Fried "The Limits of a Nonconsequentialist Approach to Torts" (2012) 18 LEG 231.

rules of pure economic loss are policy-driven.[42] That is what the law and economics school gets right about the matter. Tort law imposes duties of care on members of society to govern their social interactions based on multifactorial social values such as justice, morality, fairness, economic efficiency and so on. Ultimately, however, the objective of tort law is to balance competing social interests towards social welfare enhancement. It is this that Richard Posner meant in asserting that tort law serves wealth maximisation objectives. Unfortunately, several scholars appear to have misunderstood him to mean that tort law serves wealth-maximisation roles without regard to vital social values such as liberty and autonomy. Posner explains the wealth maximisation functions of tort law saying:[43]

> By "wealth maximization" I mean the policy of trying to maximize the aggregate value of all goods and services, whether they are traded in formal markets (the usual 'economic' goods and services) or (in the case of 'non-economic' goods or services, such as life, leisure, family, and freedom from pain and suffering) not traded in such markets. "Value" is determined by what the owner of the good or service would demand to part with it or what a non-owner would be willing to pay to obtain it—whichever is greater. "Wealth" is the total value of all "economic" and "non-economic" goods and services and is maximized when all goods and services are, so far as is feasible, allocated to their most valuable uses.

The political nature of tort law is most noticeable in how the law of negligence operates, especially how it allocates legal responsibility to members of society. Using economic reasoning, Hylton explains why and how the law attributes legal duties to members of society through the instrumentality of tort law. He identifies the three main standards of liability (or otherwise) in tort law to be:

a) strict liability;
b) negligence; and
c) no-duty.[44]

42 *Spartan Steel & Alloys Ltd v Martin & Co (Contractors) Ltd* [1972] 3 WLR 502, at 507 per Lord Denning, in: "At bottom I think the question of recovering economic loss is one of policy. Whenever the courts draw a line to mark out the bounds of *duty,* they do it as matter of policy so as to limit the responsibility of the defendant" (emphasis added).

43 Richard Posner "Wealth Maximization and Tort Law" in David Owen (ed) *The Philosophical Foundations of Tort Law* (Clarendon Press, Oxford,1996) 99.

44 Keith Hylton "Duty in Tort Law: An Economic Approach" (2006) 75 Fordham L Rev 1501, at1505–1510.

He posits that the law applies *strict liability* whenever it considers interference with a given entitlement imposes more social cost or very high-cost externalisation effects than benefits — (that is, *marginal social cost/MSC is greater than its marginal social benefit/MSB*). As an optimal scale or level of such activity's pursuit is zero, then the State will prohibit it outright.[45]

Examples of this are per se interference with property (for example, trespass), intellectual property, personal property, reckless interferences with bodily integrity and reckless production of defective goods, and so on, amongst other situations to which strict liability applies. It aptly explains the law's remedial response to events like trespass to property and breaches of intellectual property with property rules' remedies like equitable damages or the "user principle", even where there is no harm to the owner (for example, loss of profits), beyond mere interference.[46] It also explains why, in situations of recklessness or deliberate interference with bodily integrity and economic interests, and reckless production or provision of defective goods and services, the analysis of causation and the award of damages is generally favourable to the victim.

As regards negligence, Hylton carries further the view that it is an aspect of tort law which caters to a surrogate or missing market in externalities. He explains that the law applies the negligence standard whenever it considers that there is a rough balance between harms and benefits likely to result from activities. In this sense, that they are not per se objectionable or that benefits to society may accompany them (for example, driving cars or providing medical care).[47] The law moderates the level of care taken in pursuing such activities to ensure that the benefits of pursuing such activities do not exceed the cost of engaging in them. It explains why a "duty of care" criterion applies to negligence law. It also explains why the duty of care is operated based on a bilateral care model.[48] In other words, just as a negligent party must take care to avoid harming others, his victim must equally take steps to avoid creating exposure to harm and must respond to the injury sensibly, for example, by taking reasonable steps to mitigate injury. The consideration that there is a need not to deter the negligent party's activity itself but only to encourage him or her to take due care is mirrored in the equilibration of the duty of care with causation in order to determine legal responsibility. Thus, in *South Australian Asset Management*

45 At 1505–1510.

46 See, generally, James Edelman *Gain-Based Damages: Contract, Tort, Equity and Intellectual Property* (Hart Publishing, Oxford, 2002).

47 Hylton, above n 45, at 1505.

48 See, Alan Calnan "The Fault(s) in Negligence Law" (2007) 25 Quinnipiac L Rev 695, at 741 ("Because responsibility is a bilateral concept, every duty of care is connected to someone else's duty of self-protection. Once linked, these duties fluctuate according to an inverse proportion. The greater the actor's duty of care, the lesser the potential victim's duty of self-protection will be.")

Corporation v York Montague Ltd,[49] Lord Hoffmann re-echoed the statement of Lord Bridge, as expressed in *Caparo Industries Plc v Dickman*,[50] that:[51]

> It is never sufficient to ask simply whether A owes B a duty of care. It is always necessary to determine the scope of the duty by reference to the kind of damage from which A must take care to save B harmless.

It also goes to confirm why it is often difficult to distinguish duty of care and remoteness. For example, Lord Denning had difficulties in deciding whether the ratio in both *Spartan Steel & Alloys Ltd v Martin & Co*[52] and *SCM (United Kingdom) Ltd v WJ Whittall & Son Ltd* were based on duty of care or remoteness.[53] One must not, however, conflate both elements of responsibility (that is, duty of care and remoteness). They often serve different purposes in the determination of responsibility, especially as the latter element plays a role in the computation of damages process by determining the extent to which a defendant is legally liable for a wrongful outcome.

Hylton goes on further to explain the *no-duty* standard, which conveniently justifies the exclusion of liability in cases of pure economic loss.[54] The basis he provides for the no-duty standard is that it applies where the law considers it best to subsidise the defendant's activity for any of the following considerations:

1) Where, although there is a wrong done and there is an injury suffered, the loss is only a private loss and does not amount to a social loss (especially because the private loss to A translates in gains to B or C and D and others).

2) Where, even though there is a semblance of social cost, the administrative expense of computing damages exceeds the benefits of pursuing a remedial exercise. Thus, it is best to let the injury lie where it falls.[55]

3) Where the gains to members of society from the activity of the defendant far outweigh the negative externality or injury to one or a few others.

49 *South Australian Asset Management Corporation v York Montague Ltd* [1996] UKHL 10.
50 *Caparo Industries Plc v Dickman* [1990] 2 AC 605.
51 At [14]; and, see also, *Caparo*, above n 51, at 627.
52 *Spartan Steel & Alloys Ltd v Martin & Co* [1973] QB 27, at 36–37.
53 *SCM (United Kingdom) Ltd v WJ Whittall & Son Ltd* [1971] 1 QB 337, at 345–346.
54 Hylton, above n 45, at 1509.
55 See, for example, Guido Calabresi and Douglas Melamed, 'Property Rules, Liability Rules, and Inalienability: One View of the Cathedral' (1972) 85 *Harvard Law Review* 1089, at 1093 ("Perhaps the simplest reason for a particular entitlement is to minimize the administrative costs of enforcement. This was the reason Holmes gave for letting the costs lie where they fall in accidents unless some clear societal benefit is achieved by shifting them").

The second basis Hylton advances is the need "to simply permit markets to optimally regulate activity levels".[56] It is that the law should not, for example, impose a duty of care in situations with negligent outcomes where the victim could have insured against the risk of injury, whether by obtaining insurance or by securing contractual terms to address such concerns. In Commonwealth jurisdictions, with regard to pure economic loss, courts appear to take the second reason advanced by Hylton seriously. Although they do so in varying ways, some being more conservative (for example, England), and some being more liberal (for example, Australia, Canada and New Zealand). However, regarding the first basis advanced by Hylton for the no-duty standard, it is only the second of the three considerations that appears to gain currency with Commonwealth court—that is, the need to curb "liability in an indeterminate amount for an indeterminate time to an indeterminate class".[57] We shall elaborate more on this in Section III.

Based on the preceding analysis, it is clear to see that the economic analysis of tort law provides a better insight into *why* and *how* the law attributes legal responsibility for wrongs, especially in cases of negligence and pure economic loss. One may criticise law and economics theorists for being likely to equate a negligent person's increase in gain from externalising injury to others as satisfying the cost-benefit analysis standard. This is as long as the gain to the negligent party exceeds the injury to the victim. The simple response one can give to such criticism, going by Hylton's postulations, is that "wrongs" are only tolerable where social benefits accompany them, and not merely private benefits to the wrongdoer. We will return to addressing this in the next part of this section.

Finally, it is important to take cognisance of Goudkamp and Murphy's criticism concerning pure economic loss. This is that the postulations of the economics school cannot explain cases such as *White v Jones* (discussed above), where the court awarded damages for pure economic loss in situations where the claimants' losses were only private losses, unaccompanied by any social implication.[58] This criticism is sound, and some other scholars have equally identified it as marking a significant weakness in the economics school's analysis concerning pure economic loss.[59] The lacuna that must be filled, concerning strictures on compensation for pure economic loss, can be stated as follows:

56 Hylton, above n 45, at 509.
57 *Ultramares Corp v Touche* 174 NE 441 (NY 1931)
58 Goudkamp and Murphy, above n 23, at 64.
59 See, for example, Ronen Perry "Relational Economic Loss: An Integrated Economic Justification for the Exclusionary Rule" (2004) 56 Rutgers L Rev 711, at 716 ("I do not think that maximization of social welfare is the principal (not to say exclusive) purpose of tort law. Nevertheless, it is a legitimate concern of any branch of law, and cannot be ignored in the theoretical evaluation of legal norms").

(a) the economics school, which provides the most robust insight into legal responsibility, focuses too much on social welfare while losing sight of situations in which there are no social welfare implications;

(b) courts operate on the assumption of balancing private interests, without much advertence to social welfare considerations. Stated differently, courts sometimes inappropriately equate balancing private interests with advancing social ones.

III. The Need for a Redefined Standard

The submission of this article is that correcting the lacuna identified above is attainable with a proper combination of the theses derivable from two separately published works of Alex Stein and Jane Stapleton. In his article titled *The Domain of Torts*,[60] Stein provides very interesting insights into how the law of negligence should be structured, and how the law does operate without being consciously appreciated by judges and lawyers. Stein's thesis is very much like Hylton's, except that he focuses entirely on negligence while also providing some novel analysis.

Stein posits that the law of negligence is bi-modal or two-layered.[61] The first layer relates to the public sphere of things and is concerned with social welfare considerations. It includes whether the actions of the negligent party, despite creating harm to identifiable persons, nonetheless creates public good such that, when both the benefit and harms resulting from the negligence are juxtaposed, the social benefits significantly overweigh the harm, rendering the latter negligible. It also includes the consideration as to whether the negligence of the wrongdoer creates a significant risk of social disutility such that it should be discouraged. The second layer, however, relates to balancing competing and conflicting interests within private ecosystems, which have no social welfare implications.

On the other hand, Stapleton, in her article titled "Comparative Economic Loss: Lessons from Case-Law-Focused Middle Theory",[62] provides what one may describe as a highly plausible, positive legal analysis on pure economic loss. The judicial acceptance,[63] and widespread academic citations of her work across the common law world, including the United States, attest to it. Stapleton submits, rightfully, that the quest for an "internally coherent and normatively convincing" rule (or a

60 Stein, above n 21.
61 At 546.
62 Stapleton, above n 21.
63 See *Rolls-Royce New Zealand Ltd v Carter Holt Harvey Ltd* [2005] 1 NZLR 324; see also, *Woolcock Street Investments Pty Ltd v CDG Pty Ltd* [2004] HCA 16.

set thereof) concerning pure economic loss is unattainable.[64] For this reason, she opines that each case should be determined based on the peculiarities of its factual matrix with certain considerations (for example, the victim's vulnerability) guiding judicial determination.[65]

This paper suggests an integration of the theses of both Stein and Stapleton in the following manner. Stein's two-layer structure should generally guide courts in determining responsibility for negligence. The said structure should specifically guide cases of pure economic loss. Courts should start with the public layer to ascertain whether public welfare concerns are affected positively or negatively. If, however, public welfare interests are not implicated, then that means the matter falls squarely within the private layer. It is in this private layer that Stapleton's postulations apply.

A. Analysing the Layers of Negligence Law

The public layer

As can be gleaned from Stein's postulations, the social welfare implications of externalities resulting from a party's negligence can take the form of a gradation. For example, it could be that the marginal social benefit (that is, MSB) of a supposed negligent action may be greater than the marginal social cost (that is, MSC) such that the MSC is negligible in the scheme of things. In such a situation, Stein's submission is that there should be an exemption of the negligent party from legal liability. The rationale for this is that the victim would receive compensation by enjoying the public goods effect resulting from the defendant's activity. Corroborating Stein's view, a law scholar observed, "the need for reciprocal tolerance of technological externalities foreshadows future courts' use of cost-benefit analysis for determining negligence".[66] Stein, however, warns that we should not equate erroneously the fact that a party's action, which significantly enriches that party (or saves them costs), while injuring another, with a case of increasing social welfare. Such situations, Stein explains, only reflect an increase in the marginal private benefit (that is, MPB) of that party at the expense of marginal private cost (MPC) to his victim. He explains that such a false equation is a major flaw often committed by theorists of law and economics.[67] We now come to the second situation that features in Stein's gradation.

64 Stapleton, above n 63, at 533.
65 At 583.
66 Barbara White "Risk-Utility Analysis and the Learned Hand Formula: A Hand That Helps or a Hand That Hides?" (1990) 32 Ariz L Rev 77, at 97.
67 Stein, above n 21, at 556–557.

It is where, although the MSB of the negligent party is greater than the MSC, the quantum of the MSC is so significant that it ought to be discouraged.

An example is where the MSB may fall within a value range of, say, 60 per cent or 65 per cent while the MSC is within 40 per cent or 35 per cent, respectively. In such a situation, the law should hold the negligent party responsible to the extent necessary to cause them to internalise the social welfare cost or to encourage them to invest in the avoidance of injury. Such a situation may arise from circumstances where the negligent party could have engaged in thorough experimentation before commercialising their ideas or bringing their products to the market. This position finds confluence with that of Ariel Porat and Eric Posner, who assert as follows:[68]

> When a single act causes a harm of 100 to the victim but a separate benefit of 80 to the victim or a separate benefit of 80 to someone else, without causing any other harm or benefit to anyone else, then the social cost of the act is only 20. As a general rule, the legal system should ensure that the wrongdoer pays only 20 …

They rationalise this position based on the reasoning that where the victim, along with other members of society, gains from a defendant's activity which the law has awarded reparations against, then the defendant should equally be entitled to receive restitution from their "unintended beneficiaries".[69] However, as facilitating such restitution would generally be unworkable or difficult to achieve, it is best to exempt the defendant from liability to the extent necessary to discourage the wrongdoing. (The reader should be mindful that the numerical representation of the valuation of cost and benefits are only heuristics, and that the assessment of cost and benefits is essentially a qualitative exercise, not a quantitative one).

The third situation falling within Stein's public layer gradation is where the MSC of negligence is greater than the MSB. Here, the law should discourage the action by imposing legal responsibility due to the negligent party's action lacking social desirability. In such a situation, the court is not only likely to find the defendant to be having a duty of care but is also likely to ease the test of causation required of the claimant and be generous in the award of damages. One rationale provided by Stein for this is that the victim is "the most efficient law enforcer: She has a clear informational advantage over the government, which cannot control every risk-

68 Ariel Porat and Eric Posner "Offsetting Benefits" (2014) 100 Va L Rev 1165, at 1167.
69 At 1179.

creating activity".[70] The second is the need to deter socially undesirable levels of caution by incentivising victims to sue.[71]

Finally, according to Stein, the need to reduce the cost of adjudication is another issue which falls within the public layer, although not falling within the gradation of externalities imposed upon society. Towards this objective, the law may do either of two things:

1) adopt standardised rules or heuristics for attributing liability to save the courts time and resources; or

2) where the costs of administering justice exceed the social benefit of doing so, let injuries lie where they fall.

It is this second step that is relevant to this discussion. As will be shown in the next section, the need to save adjudication costs explains the need to limit the entitlement to compensation for pure economic loss to a limited class of persons.

The private layer

As Stein explains, this layer is only likely to involve matters bearing on negligible social welfare implications (whether negative or positive), if any at all. The reason for addressing matters of pure private implications within this layer is because of the reality that the considerations that shape this layer (for example, vulnerability) are agnostic to the social welfare benefits that may accompany the actions of the defendant. Within this layer, only the marginal private benefits/MPB to the defendant conflict with the private marginal costs/MPC to the claimants. Events and outcomes within this layer relate to concern what Stein describes as "an equilibrium of equality and reciprocity between actors and their prospective victims."[72] Stein's private layer formulation is akin to what the UK House of Lords described in *Williams v Natural Life Health Foods Ltd* as "exchanges ... which cross the line between the defendant and the plaintiff".[73] The defendant's action is only to be treated as wrongful if it upsets the balance of social relationship or engagement reasonably expected between the parties.

Thus, for example, suppose a defendant negligently produced a good which eventually reached the claimant through the marketplace. While not posing any risk or hazard to the health or safety of the public, the product causes the buyer to incur additional expenses in rectifying the production error. In such a situation, that the

70 Stein, above n 21, at 550.
71 At 550 ("The public mechanism imposes this duty to motivate all actors to prevent accidents when doing so costs less than the expected harm to the victim.")
72 At 539.
73 *Williams v Natural Life Health Foods Ltd* [1998] 1 WLR 830, at 835.

manufacturer's negligence caused the buyer to suffer out of pocket expenses should only be treated as a wrong if it imposes a disproportionate measure of economic injury that is non-reciprocal, in that the buyer could not have protected himself against its occurrence. The buyer may have avoided the injury by inspecting the product thoroughly before buying it or by securing a warranty from its seller. Thus, as contract law sufficiently addresses the buyer's concerns, then there is no need to seek protection in tort law.

It is within this private layer that Jane Stapleton's postulations concerning pure economic loss are germane. Stapleton posits that the search for unitary first principles in addressing pure economic loss issues is futile; rather, that judicial recourse to a variety of values can assist the courts. A summary of the salient factors that Stapleton recognises as necessitating the imposition of legal responsibility for pure economic loss is as follows:

1) the claimant falls within a vulnerable class of persons deserving legal protection in the given circumstance (for example, because the claimant could not have sought favourable contract terms to insure against the eventuation of risk); and

2) that the said vulnerable class is identifiable, and that the selection of the plaintiff for compensation in the given context is normatively justifiable.

These factors identified by Stapleton shed light on what Stein regards as maintaining a private equilibrium between parties on the private stratum, particularly as it concerns pure economic loss.

IV. Rationalising Major Judicial Positions Concerning Pure Economic Loss across Commonwealth Jurisdictions using the Integrated Thesis

The purpose of this section is to show that a significant portion of judicial outcomes concerning pure economic loss across Commonwealth jurisdictions may be readily rationalised using the integrated thesis derived from the works of Stein and Stapleton. These outcomes can be rationalised using this thesis, despite the conspicuous divergence between English law and other Commonwealth jurisdictions that adopt more progressive approaches.

A. Concerning the Public Layer

The public layer aspect of the integrated thesis can explain why certain events resulting from negligence justify judicial departure from the exclusionary rule in cases where there are concerns about injury to public safety and property.[74] However, the thesis is unable to account for why courts, in pure economic loss cases, do not generally have regard to whether a significant quantum of public goods effects accompanies the defendant's activity. As the integrated thesis states, such situations warrant excluding the defendant from liability.

It is important to say that such cases deserving exclusion from liability do not include, for example, those akin to *Hedley Byrne v Heller,*[75] where courts have excluded negligent parties from liability based on the need to avoid discouraging entities from providing information. Such cases abut on the private layer, as will be shown later in this section. This part will first address the need for the courts to assess whether the public benefits resulting from the defendant's actions trump the social cost resulting from them. Thereupon, it shifts to discuss those cases where courts sidestep the exclusionary rule to discourage defendants from offending public interests.

In pure economic loss cases, courts across Commonwealth jurisdictions do not appear to take the public goods effects of negligent activities in account. Such judicial practice is at odds with the conditions of the innovation economy. It may be that the reason why this is so is that defendants do not appear to raise arguments based on "public goods effects" before courts. It is equally arguable that if courts demonstrate an attitude of acceptance towards such an argument, it might have become an established consideration for ascertaining legal responsibility. Interestingly, there is a scant body of case law in the law of negligence recognising an exemption from legal responsibility for defendants whose actions were accompanied by such high social utility effects. One of such cases is *Tomlinson v Congleton Borough Council*,[76] where Lord Hoffmann said, among other things, that:[77]

> ... the majority of the Court of Appeal appear to have proceeded on the basis that if there was a foreseeable risk of serious injury, the council was under a duty to do what was necessary to prevent it ... Even in the case of the duty owed to

74 That is, where MSC is greater than MSB, or where MSB is greater than MSC but the risk of harm to public welfare is significant and there is the need to incentivise the defendant to invest in taking proper precautions.

75 *Hedley Byrne & Co Ltd v Heller & Partners Ltd* [1964] AC 465.

76 *Tomlinson v Congleton Borough Council* [2003] 3 WLR 705.

77 At 717, [34].

> a lawful visitor … and even if the risk had been attributable to the state of the premises … question of what amounts to "such care as in all the circumstances of the case is reasonable" depends upon assessing … not only the likelihood that someone may be injured and the seriousness of the injury which may occur, but also the social value of the activity which gives rise to the risk and the cost of preventative measures. These factors have to be balanced against each other.

Judicial adoptions of reasonings like this are outliers across Commonwealth jurisdictions. One good example of such is Lord Denning's reasoning in *Miller v Jackson,*[78] which was rejected by the majority in that case. Even in modern times, only a handful of cases have had such consideration to mind in determining legal responsibility.[79] It is the submission of this paper that courts should give the consideration its pride of place in the ascertainment of legal responsibility in negligence law and cases of pure economic loss, in particular. It would serve to encourage innovators and beneficial "disruptors" to pursue their ends without undue fear of exposure to legal liability.

We now turn to cases where the risk of harm to social welfare is significant. Concerning this, there is a robust body of case law as it relates to responsibility for pure economic loss. However, the extent of attributing liability on this basis differs in given situations across Commonwealth jurisdictions. It is important to start by addressing cases in which there is an exposure of a buyer of real property to the risk of economic loss owing to the negligence of a defendant. In English law, the prevailing position is unduly restrictive with regards to legal responsibility for pure economic loss resulting from defective buildings. The purchaser of such a building could sue the negligent builder (and associated persons) only if the said economic loss results from an actual manifestation of the risk of harm. Such harm must befall persons or other property owned by the buyer, but it must not be harmful to the building alone.[80] The only reason why such an owner may sue in tort is that the said defective building created a risk of public harm (in the *Donoghue v Stevenson* sense);[81] otherwise, such a claimant would have been limited to sue in contract law.[82] Where, however, the victim is a subsequent buyer of such a defective building, then it is

78 *Miller v Jackson* [1977] QB 966.

79 See, *The Scout Association v Mark Adam Barnes* [2010] EWCA Civ 1476; see also, *Blair-Ford v CRS Adventures Ltd* [2012] EWHC 2360 (QB); see also, *Wilkin-Shaw v Fuller* [2013] *EWCA* Civ 410; and see also, *Coventry and others v Lawrence* (No 2) [2014] UKSC 46.

80 *James Andrew Robinson v PE Jones (Contractors) Ltd* [2011] EWCA Civ 9; and see also, *D and F Estates Ltd v Church Commissioners* [1989] AC 177.

81 *Donoghue v Stevenson* [1932] AC 562.

82 *Murphy v Brentwood County Council* (1990) 22 H.L.R. 502, at 521.

taken that such a buyer's losses fall within the exclusionary rule, as it is one which could have been prevented by vigilant contracting.[83]

In New Zealand, the approach taken is quite peculiar. A subsequent buyer, regardless of his place in the chain of purchase, may sue for economic loss resulting from having to rectify the risk of personal injury or the cost deserting the building.[84] There is, however, a condition for this entitlement to be available. Such defective buildings create habitation risks that arouse health and safety concerns. Thus, the court, in *Te Mata Properties Ltd v Hastings District Council*,[85] said:[86]

> ... it is not difficult to identify the interests of habitation and health ... as values of such a high order as to warrant special protection. The interest in public health is axiomatic and at the forefront of the policy of the Building Acts.

Previously, in New Zealand, the position had been that such protection against risks of harm to health and safety while in occupation did not extend to owners of commercial property.[87] However, in *North Shore City Council v Body Corporate 188529*,[88] the Supreme Court reasoned that there would be a derailment of the policy of protecting occupants against health and safety risks arising from defective constructions if owners of commercial property used for residential purposes could not claim damages.[89] The policy of deterring the construction of defective buildings has been carried even further beyond residential interests. Thus, in the case of *Minister of Education v Econicorp Holdings Ltd*,[90] the New Zealand Court of Appeal imposed responsibility for economic loss in connection with a defectively built school hall, which one cannot describe as either residential or commercial.

A similar approach to New Zealand is adopted in Australia as demonstrated by cases such as *Brookfield Multiplex Ltd v Owners Corp Strata Plan,*[91] and *Woolcock Street Investments Pty Ltd v CDG Pty Ltd.*[92] In these cases, the decisions were that a duty of care to avoid pure economic loss resulting to a subsequent buyer as a result of defective construction is owed only to one who is economically vulnerable, but not

83 At 521.
84 See, *Bowen v Paramount (Hamilton) Ltd* [1977] 1 NZLR 394; and see also, *Jull v Wilson and Horton* [1968] NZLR 88.
85 *Te Mata Properties Ltd v Hastings District Council* [2008] NZCA 446.
86 At 473.
87 See, *Queenstown Lakes District Council v Charterhall Trustees Ltd* [2009] NZCA 374.
88 *North Shore City Council v Body Corporate 188529* [2010] NZSC 158.
89 At [53].
90 See, *Minister of Education v Econicorp Holdings Ltd* [2012] 1 NZLR 36; see also, *Carter Holt Harvey Ltd v Minister of Education* [2015] NZCA 321.
91 *Brookfield Multiplex Ltd v Owners Corp Strata Plan* (2014) 254 CLR 185.
92 *Woolcock Street Investments Pty Ltd v CDG Pty Ltd* (2004) 216 CLR 515.

to a commercial entity. The position that the negligent builder owes no duty of care to the subsequent buyer is especially strong where the initial owner, from whom the subsequent buyer obtained title, had played a vital role in the construction process.[93] In Canada, however, a more expansive position exists.[94] A subsequent buyer may sue for pure economic loss resulting from a defective building where the defectiveness in construction creates a risk of substantial harm to the safety of its inhabitants. In this regard, there does not appear to be a distinction between commercial and residential buyers.

It would be obvious to an observer that, to the extent that there are varying degrees to which there may be an imputation of responsibility for pure economic loss to a negligent builder of defective buildings, Commonwealth jurisdictions rank safety highly. One may, however, rationalise the different degrees of protection accorded to subsequent buyers of property across Commonwealth jurisdictions as informed by divergent social views on the need to avoid indeterminacy in the class of potential claimants and the time a defendant remains exposed to liability.[95] However, when focus shifts to the pure economic loss resulting from interference with property or possessory interests, the variations in the jurisdictional attitudes disappear. Uniformity exists across these jurisdictions in cases of interference with cases of real property,[96] machinery and goods,[97] animals,[98] and so on.

Allied to protecting interests in property, is how the law responds to particular situations that are legal exceptions to the exclusionary rule. In situations of this kind, third parties who have suffered pure economic loss may yet be successful in recovering for such losses, notwithstanding that they do not have property or possessory interests in entitlements which happen to be objects of interference. Examples include where the claimant is in a joint venture with the property owner;[99]

93 See, *Brookfield Multiplex*, above n 92, at [25]: "On the agreed and pleaded facts in *Woolcock*, the prior owner had exercised control over geotechnical investigations carried out by the engineering company.64 There was no allegation of any assumption of responsibility by the engineering company or of known reliance by the prior owner."

94 Winnipeg *Condominium Corporation No 36 v Bird Construction Co* [1995] 1 SCR 85.

95 See, *Hedley Byrne & Co Ltd*, above n 76, at 536–537: "How wide the sphere of the duty of care in negligence is to be laid depends ultimately upon the courts' assessment of the demands of society for protection from the carelessness of others. Economic protection has lagged behind protection in physical matters where there is injury to person and property. It may be that the size and the width of the range of possible claims has acted as a deterrent to extension of economic protection."

96 See *Ehmler v Hall* [1993] 1 EGLR 137.

97 *The "Naxos"* (1972) 1 Lloyds L Rep 149; *Spartan Steel & Alloys Ltd*, above n ; and see also, *SCM (United Kingdom) Ltd*, above n 54.

98 See, *D Pride & Partners (a firm) v Institute for Animal Health* [2009] EWHC 685 (QB); *Muirhead v Industrial Tank Specialities Ltd* [1986] 1 QB 507; and *Weller & Co v Foot and Mouth Disease Research Institute* [1966] 1 QB 569.

99 See *Canadian National Railway Co v Norsk Pacific Steamship Co,* [1992] 1 SCR 1021; and *Caltex Oil (Australia) Pty Ltd*, above n 7.

general average contribution cases;[100] where an employer suffers the loss of a valuable employee owing to negligence;[101] and the cases of fishers whose businesses were disrupted by negligent interference with marine habitats. Rationalising cases of these kinds have been difficult for both judges and academics. Some judges have described them as cases "analogous to physical damage".[102]

Rhee, however, provides the most plausible rationalisation for these cases. He rationalises them using what he calls "a production theory".[103] The pith of Rhee's thesis is that these cases reflect the law's desire to protect against the implications likely to result from interference with factors of production, especially where the subject-matter interfered with is integral to a nonowner's trade.[104] The loss of a factor of production is a loss to society, especially as reflected in a diminution in productivity. Rhee's thesis finds congruence with the reasoning of the Scottish Court of Session's statement in *Land Catch LTD v International Oil Pollution Compensation Fund*,[105] a case concerning interference with marine habitats. Despite acknowledging that fishers have no ownership interest over water bodies, the court went to describe the place of fishers in this regard as special, saying:[106]

> For the fisherman I am considering, the pollution of the waters in which he regularly fishes does no physical harm to his person or his property; the oil does not touch him or anything belonging to him; there is no contamination of him or of his vessel or equipment. Nevertheless, it appears to me that the loss of his livelihood is properly described as damage that is caused directly and immediately by contamination resulting from the discharge or escape of oil from the ship.

The law does not, however, consider other persons whose livelihood is dependent on selling the catch of fishers, such as retailers and processors of marine products as candidates for compensation.[107] The reason is that these other persons are not victims of the loss of a factor of production. As such, their case

100 See Morrison Steamship Co Ltd v Greystoke Castle (Cargo Owners) [1947] AC 265.
101 Barclay v Penberthy [2012] HCA 40.
102 See *SCM (United Kingdom) Ltd*, above n 54, at 346.
103 Robert Rhee "A Production Theory of Pure Economic Loss" (2010) 104 NWULR 49; see also, Brendan Selby "In re: Oil Spill by the Oil Rig Deepwater Horizon on the Gulf of Mexico, on April 20 2010, Order, Aug 26 2011" (2012) 36 Harvard Envl L Rev 5336.
104 At 72–78.
105 *Landcatch Ltd v International Oil Pollution Compensation* 1999 SLT 1208.
106 At 1221.
107 *Alegrete Shipping Co Inc v International Oil Pollution Compensation Fund 1971 (The Sea Empress)* [2003] 1 Lloyd's Rep 327.

does not raise concerns about social loss, particularly because the resources of this other class of persons are deployable to alternative uses.

Finally, within the public layer also fall entities such as health care providers, regulators, licensed advisers, professionals and public office holders who are responsible for socially vital services. To deter such persons from performing below par, and to protect persons whose interests would be negatively affected by their poor discharge of duties, the law recognises an entitlement to recover damages for pure economic loss. It explains the successful recovery for pure economic loss by legatees in cases such as *Ross v Caunters*,[108] and *White v Jones.*[109] As explained regarding this concern, Cooke J said, among other things, in *Gartside v Sheffield, Young and Ellis*,[110] that:

> To deny an effective remedy in a plain case would seem to imply a refusal to acknowledge the solicitor's professional role in the community. In practice the public relies on solicitors … to prepare effective wills. It would be a failure of the legal system not to insist on some practical responsibility.

It also explains why in New Zealand cases such as *Invercargill City Council v Hamlin*[111] and *North Shore City Council v Body Corporate 188529 (Sunset Terraces)*,[112] the courts held that defendant public agencies were liable for pure economic loss suffered by homeowners who had relied on their inspection of residential building constructions.

One should not take this to mean those holding such crucial offices would necessarily be liable for pure economic loss resulting from a subpar discharge of their roles. For compensation to arise, the economic loss must result from the officer's failure to measure up to the essence of its public duty. In the New Zealand case of *Attorney General v Carter*,[113] the Court of Appeal refused to impose legal responsibility to the Ministry of Transportation which had negligently issued a certificate of safety and seaworthiness concerning a vessel that the claimant bought. The court held that the purpose of the certificate related to the safety and seaworthiness of the ship, not to its usefulness for economic purposes.

108 *Ross v Caunters* [1980] Ch 297.
109 *White v Jones*, above n 36.
110 *Gartside v Sheffield, Young and Ellis* [1983] NZLR 37.
111 *Invercargill City Council v Hamlin* [1996] 1 NZLR 513.
112 *North Shore City Council v Body Corporate 188529 (Sunset Terraces)* [2011] 2 NZLR 289.
113 *Attorney General v Carter* [2003] 2 NZLR 160.

B. Concerning the Private Layer

As already explained above, the private layer of the law of negligence is concerned with maintaining the different equilibria between private entities within social ecosystems. In other words, it tries to ensure that there is no transgression of the lines of fair social interactions. A feature common to both Stein and Stapleton is what one may describe as contextual vulnerability. Expressed differently, this is whether a victim of pure economic loss suffered exposure to non-reciprocal harm, against which he could have made preparations. As will be shown here, where judicial ascertainment of responsibility for negligence is structured using the integrated thesis advanced in this paper, the private layer inherently winnows away concerns relating to indeterminate liability.

A touchstone for determining if a victim suffers exposure to non-reciprocal risk is generally known as "the cheapest cost avoider" criterion.[114] It is whether the victim could have insured against the risk of loss by contracting for protective terms or the risk is something that the victim should have known to be a prevalent feature of operating within the given environment the victim chose to operate in, and as such insured against it.[115] In the Canadian case of *Bow Valley Huskey v Saint John Shipping*,[116] the claimant suffered an economic loss due to contractual relations with the direct victim of negligent interference with property (that is, a drilling rig). The court denied an attribution of legal responsibility to the defendant on the consideration that the claimants did not suffer from inequality in bargaining power with the direct victim, who was their contracting partner. They could have contracted with the owner of the rig for terms which protected them against loss arising from interference with the rig. Similar consideration has influenced denying the attribution of liability in England,[117] New Zealand law,[118] and in Australian

114 Catherine Sharkey "Can Data Breach Claims Survive the Economic Loss Rule?" (2017) 66 DePaul Law Review 339; see also, Catherine M Sharkey "In Search of the Cheapest Cost Avoider: Another View of the Economic Loss Rule" (2018) 85 U Cin L Rev 1017.

115 See, Mark P Gergen "The Ambit of Negligence Liability for Pure Economic Loss" (2006) 48 Ariz L Rev 749.

116 *Bow Valley Huskey v Saint John Shipping* [1997] 3 SCR 1210.

117 See *Simaan General Contracting Co v Pilkington Glass Ltd* (No 2) [1988] QB 758.

118 *Rolls-Royce New Zealand Ltd*, above n 64.

law.[119] There is, however, the recognition of the fact that, although a party may be sophisticated in outlook, that party may yet be vulnerable in the relevant context.[120]

We now come to the second aspect of the criterion, which is whether the victim could have insured against risks known to be prevalent in a given environment. Some scholars and, in some cases, judges have reasoned that where a party could have invested against known risks, then that party is the least cost avoider and should not be treated as vulnerable.[121] However, some others hold that this reasoning is wrong. In the Australian case of *Perre v Apand*,[122] McHugh J reasoned that "[w]hether the plaintiff has purchased or is able to purchase, insurance is, however, generally *not* relevant to the issue of vulnerability".[123] He went on to say that:[124]

> ... courts often wrongly assume that insurance is readily obtainable and that the increased cost of an extension of liability can be spread among customers by adding the cost of premiums to the costs of services or goods.

The truth is that it is the context of each case that should determine whether failure to take insurance matters for assessing vulnerability. For example, in the United States case of *Community Bank of Trenton v Schnuck Markets* discussed in the introduction to this paper, the United States Court of Appeal reasoned that "[d]ata breaches are a foreseeable (and foreseen) risk of participating in the card networks, not an unexpected physical hazard".[125] The court reasoned further that if the claimants wanted protection against such risks, they could have contracted for better reimbursement terms from the network against such risk eventuating from the negligence of another person.[126] One may add that, allied to this, is whether there

119 See, *Esanda Finance Corporation Ltd v Peat Marwick Hungerfords* (1997) 188 CLR 241; *Brookfield Multiplex Ltd*, above n 92; and see also, *Woolcock Street Investments Pty Ltd*, above n 64.

120 *Carter Holt Harvey Ltd v Minister of Education* [2016] NZSC 95 ("The refusal of this Court to draw a distinction between vulnerable and non-vulnerable or commercial and non-commercial property owners in *Spencer on Byron* was on the basis that the question of vulnerability must be looked at not in relation to the plaintiff in the case at hand but in relation to likely plaintiffs as a class. In this case we do not think it is realistic to expect all those entering into building contracts to protect themselves by the contractual measures suggested by Mr Goddard. Indeed, we think it is probably unrealistic to expect sophisticated property owners like the Ministry to do so.")

121 See, for example, Richard Posner "Common-Law Economic Torts: An Economic and Legal Analysis" (2006) 48 Ariz L Rev 735.

122 *Perre v Apand* [1999] HCA 36.

123 At [130]; see also, *Ehmler v Hall* 1 EGLR 137, per Nolan LJ: "The fact that the cost of repairs to the building was covered by insurance is neither here nor there."

124 *Ehmler v Hall*, above n 125.

125 *Community Bank of Trenton v Schnuck Markets* 887 F3d 803 (2018), at 817.

126 At 815.

is an alternative legal regime able to provide the claimant with adequate remedies or protection instead of tort law.[127]

The other indicator for determining that the lines of proper social interaction have been crossed is where it can be objectively gleaned that the defendant has assumed responsibility for the victim's exposure to loss. This explains the *Hedley Byrne* types of cases, such as negligent misstatements and poor discharge of professional duties (not relating to socially crucial interests) resulting in economic loss to a third-party victim.[128] Cases of this kind account for the bulk of matters within the private layer as it relates to pure economic loss. The formulaic approach often used by courts is pursued by asking whether there is there was proximity between the claimant and defendant, whether the victim's loss was foreseeable and whether it is fair, just and reasonable to impose legal responsibility to the defendant.

Courts have consistently dismissed this formula (and its elements) as unhelpful. For this reason, the English Court of Appeal, in *CGL Group Ltd v The Royal Bank of Scotland plc*,[129] recently came to the position that no single test is helpful. The court came to the reasoning that: "It is now clear that in determining whether, in a particular case, responsibility has been assumed by a defendant, an objective test is applied."[130] In other words, whether responsibility for pure economic loss arises (in purely private cases) is a question to be determined based on the facts of each case.

V. Towards a New Standard of Responsibility in the Innovation Economy

An observation one can make from the previous section is that the social benefits accompanying negligent outcomes are not concerns which courts appear to have regard to in the attribution of legal liability. However, the social cost of negligent actions is a concern which New Zealand and Canada take into consideration. However, in Australia and England, the courts appear to take the view that legal responsibility for pure economic loss is essentially a matter of private relations. This

127 *Perre v Apand*, above n 124, at [120]: "Where another body of law can effectively deal with economic loss, a court should be slow to use negligence law to impose a duty of care on a defendant. This is particularly important where to do so would interfere with a coherent body of law in another field."

128 See, for example, the statement by Maurice Kay LJ in *Robinson*, above n 81, that: "The provider of a service, such as an accountant or solicitor, owes a duty of care in tort to his client because his negligence may cause loss of the client's assets. I do not think that a client has a cause of action in tort against his negligent accountant or solicitor simply because the accountant's or solicitor's advice is incorrect (and therefore worth less than the fee paid by the client). The client does have a cause of action in tort if the advice is relied upon by the client with the result that his assets are diminished."

129 *CGL Group Ltd v The Royal Bank of Scotland plc* [2017] EWCA Civ 1073.

130 At [65].

is also the case in Australia, although it takes a more liberal approach than England on the matter.

It is the submission of this paper that courts must always give room for a balancing of the benefits and costs of activities first before considering their purely private implications. The need for this approach is particularly necessary for our disembodied innovation economy, where new ways of doing things are the currency of the time. Tort law must be reformed to encourage innovation but, at the same time, it must also discourage incautious commercialisation or practices of innovation that may create social harm, as well as inherently socially harmful innovation.

By now, the reader would have understood the proposed standard under the integrated model to be as follows:

a) Courts should start an assessment of responsibility, firstly, by considering the comparative social benefits and costs of negligent actions occasioning economic loss. Where the activity creates significant social benefit, albeit accompanied by a negligible size of harm, the defendant deserves exemption from liability. This should be the case, especially where detection of the likelihood of harm to others, beforehand, is difficult, or additional investment towards the avoidance of harm (perceived to be negligible) would dampen innovation incentives or waste resources.

b) Where, however, the perceived social cost of the activity is smaller in comparison to the size of social benefits accruable, although the said cost is high, the activity should be deterred to the extent necessary (only) to discourage the recurrence of such harm. On the obverse, where the perceived social cost of the activity may outweigh whatever social benefit may accompany it, then liability must be imposed to discourage and makeup for resulting harm.

c) Where neither social benefits nor cost concerns arise, then the matter is purely private and the context-specific needs of justice between the parties in the issue should govern the attribution of liability.

Having stated the proposed standard for redefinition, we come to discuss what the contents of the standard should be. It is fair to assume that the contents of elements (a) and (c) of the standard are sufficiently clear, and do not need any further analysis. However, element (b) requires some more discussion, particularly in connection with the peculiarities of the innovation economy.

Element (b) is largely concerned with high social costs, both in situations where such costs exceed benefits or are less than benefits, as can be gleaned from

the preceding discussions. Thus, negligent interference with socially valuable interests such as property rights and traditionally recognised factors of production fall within this class. However, interests such as profits and the avoidance of loss are not currently treated by the law with such protective regard. Some scholars have argued that such discrimination between interests reflects a legal bias in favour of a capitalist class.[131] While this is true, we must not forget that property and traditionally recognised factors of production are essential to the productivity of societies. We must also bear in mind that with rigorous rules for determining causation, merely possessing any of these favoured interests would not entitle one to compensation for loss. That said, however, in the innovation economy, we must recognise a new class of entities entitled to compensation for economic loss. This class relates to those whose losses mirror a loss to society. That class, as proposed in this paper, is innovative entrepreneurs.

In the innovation economy, platforms and networks, especially spider forms, are crucial factors of production. Interference with such intangible infrastructures can have reverberating effects within the economy. Whenever such unfortunate situations arise, we cannot compensate every victim exposed to loss because of their reliance on such infrastructure. However, losses resulting from negligence that are suffered by innovative entrepreneurs who rely on such infrastructure approximate society's loss. Unlike other entrepreneurs who seek to create a niche for themselves in the market, innovative entrepreneurs, as Spulber describes, "establish firms that embody commercial, scientific, and technological inventions and introduce these discoveries to the economy".[132] They "implement new strategies by founding firms that offer new products, production processes, and transaction techniques".[133]

Most importantly, what explains their crucial importance is that "innovative entrepreneurs make important economic contributions because they overcome the inertia of incumbent firms". By not discriminating against innovative entrepreneurs in protection from economic loss, the law would be signalling its valuation of their place in society and as such, incentivising them. While claims of lost profits by innovative entrepreneurs may be speculative, the law should compensate them for the value of forgone opportunities (that is, incremental opportunity costs) and out of pocket expenses suffered because of an event resulting from negligence. Where a defendant's activity bears higher marginal benefits albeit with high social costs, then claimants who qualify as innovative entrepreneurs should only be able to

131 See Ronen Perry "The Economic Bias in Tort Law" (2008) The U Ill L Rev 1573; see also, Eileen Silverstein "On Recovery in Tort for Pure Economic Loss" (1999) 32 *U Mich JL Reform* 403.

132 Daniel Spulber *The Innovative Entrepreneur* (Cambridge University Press, Cambridge, 2014) at 38.

133 At 38.

cover a portion of their incremental costs, which is considered necessary to deter a recurrence of the wrong.

VI. Conclusion

Based on the preceding analysis, this paper argues that there is a need for the redefinition of legal responsibility for pure economic loss across Commonwealth jurisdictions in the light of the novel challenges and promises of the innovation economy. This paper makes a firm case for discarding the distinction between tangible and intangible assets, and the indiscriminate bias against contractual relationships in determining entitlement to compensation for pure economic loss. Most importantly, however, the paper argues that in the assessment of legal responsibility for negligence generally, and for pure economic loss in particular, courts should always start with a comparative assessment of the public cost-benefit implications of the defendant's actions. It is on this basis that courts should initiate their decision on whether to impose responsibility or exclude it. Where, however, disputes do not raise public interest concerns, then courts should determine each case based on its peculiar justice needs.