



ECONOMICS OF LIABILITY: AN ISLAMIC VIEW

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ABSTRACT

This paper navigates through the civil liability legal theory in studying its economic effects. It aims at giving an insight of the Islamic system of liability. To do so, it begins with a brief introduction of what a liability system is through a glance at the experience of the United States in this regard. The American system of liability gives the courts a wide range of authority to assess the injury, which includes material, emotional, and loss of future income opportunity, and compensation that aims at not only granting the injured a recuperating sum, but also at deterring the injurer from such a behavior. The most serious economic outcome of the *A* system are: the grandiose uncertainty and unpredictability, and the huge amount of grants that represents high cost, and sometimes prohibitive, of liability. This led to long and cumbersome litigation, consumer profiteering, forsake of innovative ideas, and shortage of certain products and services. The Islamic system of liability centers on the materiality of the injury, both in its causality and in its outcome, and it provides a list of compensations. Accordingly, recognizable emotional harm is only the one that can actually be materially checked, and recognizable loss of income covers only that actually forgone income during the off work period caused by the injury. As life and parts of the human body are sacred and priceless, the *I* system leaves it only to revelation to define the amount of compensation for loss of life and bodily parts. The main economic outcome of the *I* system is its predictability and conservative amounts of compensation. The system also assigns a role for the society both in payment of the grant and in benefiting from the compensation.

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1. INTRODUCTION

Risk exists everywhere and in all societies. Life itself has many risks whether it be in a primitive desert or forest, or in an industrial city. Contemporary living has more risk of a certain special kind than living in the past, i.e., the risk that arises from materials, “friendly” as they may be, we always deal with material things and substances and they exist all around us.

A legal system of liability aims at compensating the injured as well as deterring potential injurer. The efficiency of such a legal system is measured by its effectiveness in achieving these two objectives subject to the cost incurred to concerned individuals and to the society as a whole. Additionally, liability by definition is an internalization of certain externalities of one’s activities. This process of internalization results in the distribution of the cost of injury among the users of goods and services through the price mechanism.

This paper is an attempt to discover the tenets of the Islamic liability system and to examine its economic implications. In order to appreciate the importance of the subject, we shall introduce it through a brief overview of the development of the liability issues in the United States. Hence, Section 2 shows that the sources of liability problems, which culminated in the liability crisis of the eighties, reside in the essentials of the American legal system of liability, which is basically derived from the Roman Heritage. It summarizes the economic implications of the American legal system of liability, i.e., the “A system.” In Section 3, we will outline the essentials of the Islamic legal system of liability, i.e., the “I system”, and in Section 4, we will examine the economics of liability under I system. We will find ourselves with different approaches of achieving the objectives of deterrence and compensation, and with a different set of results on the economic sphere.

2. THE ECONOMIC IMPLICATIONS OF THE AMERICAN SYSTEM OF LIABILITY

A liability system in a society affects the behavior of producers as well as consumers from several aspects, especially in areas of production decisions which are influenced by the producer’s ability to predict or anticipate his costs and returns, and the attitude of consumers towards exposure to risk-bearing goods and services. Three economic phenomena intrinsic to the American legal system of liability will be studied in this section, i.e., the difficulty to predict producer’s liability, the high cost of liability, and the ambiguous effect of liability on consumer behavior.

a. *The difficulty to predict producer’s liability:*

The A liability system, in general, allows courts and juries vast authorities in determining the incidence of liability and the amount of award to an extent that

the juries are *de facto* Lords in this regard (Shapiro, 1991, 4). The dominance of the court and jury in the *A* system led to the reflection of prevailing ideas in the society in their judgements. Ideas such as helping the poorer and weaker party, that corporations are more able to spread the risk than individuals, confidence in the efficiency of the price system in distributing risks, etc., were reflected in the judgement of liabilities and in the amount of awards throughout the '60s and '70s (Viscousi, 1989, 73). This resulted in a high level of uncertainty on the part of commodity producers for whom the estimation of this future cost element of present production has become very difficult.

Uncertainty about liability has several sources: (i) uncertainty about the legal standard which the jury and the judge would adopt with regard to commodity defect and/or negligence on the part of the service provider, (ii) uncertainty about the determination by the judge and the jury of the extent of defect or negligence, (iii) uncertainty about the causality relationship between the defect and the injury, (Priest, 1991, 38), (iv) uncertainty about the cost of litigation and related administrative costs, (v) uncertainty about the possibility of administrative fines, and most important (vi) uncertainty about the amount of award which will be granted to the plaintiff (Calfee and Craswell, 1984, 967-8), especially with the drastic increase in the amount of awards over the last 30 years (Priest, 1991, 43-4).

By itself, uncertainty is cumbersome for economic behavior, although it is at the same time a natural characteristic when dealing with the future. But exaggeration in uncertainty renders economic decisions more confusing, and deviates the behavior of even risk neutral persons from optimal behavior (Calfee and Craswell, 1984, 975-9), as expectations is always an integral part of economic decisions.

Moreover, exaggerated uncertainty distorts behavior by unnecessarily increasing the cost of precaution, which is manifested, for instance, in buying more car accident insurance than optimal from the point of view of social welfare. Producers' uncertainty about their future liability is even increased by the inclusion of remote risk in the juries' determination of liability. Remote risk is unpredictable at the time of sale of the commodity whose price is determined in complete isolation of the cost of remote risk liability (Viscousi, 1991, 73). The difficulty in prediction on the part of producers of goods and services is a landmark of the failure of the *A* system in achieving the objective of internalizing liability risks, as it ends up eliminating certain goods and services from the market, preventing new goods from entering it, and reducing spending on research and development related to new goods (Viscousi, 1991, 73; and Priest, 1991, 46-7).

b. *The high cost of liability*

The rising cost of liability has been a fact of life in the United States through the past several decades (Priest, 1991, 35). This reached a crisis level in the '80s because of: (i) the expansion in the application of the rule of strict liability, (ii)

the evolution of the negligence rule in the practical application of courts toward securing compensation to the injured by charging the stronger party which has always been considered to be the producer of commodities and/or services, (iii) the inclination of courts to give less attention to the motives of the injurer, and (iv) the increasing adoption of the contribution of the commodity defect to the injury rather than being its sole cause (Priest, 1991, 32-9). This has resulted in a drastic increase in the share of liability in the total cost of commodities (Viscousi, 1991, 71), and in sky rising compensations. For instance, the average compensation in the case of death of an adult male has increased from US\$233,259 in 1975 to \$946,140 in 1985, although the average hourly wage has increased by less than 100% (Broder, 1990, 51), and average awards in medical liability cases has increased more than twice as much as the rate of inflation during the period 1975 to 1985 (Danzon, 1990, 51).¹

This increase in awards to plaintiff does not tell the whole story of the rising cost of liability as there are two other cost ingredients: (i) administrative and overhead costs borne by the producer in managing his or her liability which reached, in certain cases, to about 20% of the awarded amount (Danzon, 1991, 52), and (ii) the social cost borne by the tax payer in administering the liability system. The rise in this cost is indicated by the tremendous increase in the number of law cases in State and Federal Courts. For instance, liability cases related to industrial commodities increased in federal courts more than six times in the period 1975 to 1987 (Viscousi, 1991, 73-4). Medical liability cases also increased at similar rates, and tremendous increases of liability cases are also observed in Canada and United Kingdom (Danzon, 1991, 57-9).²

The rise in the cost of liability forced a decline in the production of certain commodities (Priest 1991, 44). It obscures the efficiency of the liability system and raises questions about the ability of the *A* system to realize the desired objectives of deterrence and compensation, whether these objectives can be achieved by a less costly liability system, and whether the cost of the *A* system has a negative effect on the efficiency of the economic system itself.

The high cost of liability is apparently efficient if one looks at it from the point of view of internalizing commodity risks. This is obvious especially in those cases where commodities were forced out of the market because of the high liability cost element in their prices. On the other hand, this itself is an indication that consumers or their groups do not have the same evaluation or same information of the risk as the producers since the supply price tag of the commodity does not allow it to find a matching demand. The system is not, however, efficient in the case of remote risk because it fails in spreading its cost among users since the cost in this case is either born by producers (bankruptcy cases) or by future consumers.

Moreover, the increasingly high cost of medical liability was not completely absorbed within the price of medical services – a result that may be explained by the structure of the medical services market (Danzon, 1991, 61-3).

c. *The ambiguous effect of liability on consumer behavior*

It may not be difficult to estimate the compensation of pecuniary harm as one may theoretically estimate the effect of the injury on the marginal utility of money of the consumer. However, non-pecuniary injuries are difficult to determine since the cost to the consumer depends on many factors that can only be determined by knowing the actual alternatives available to the consumer and his or her lifestyle (Schwartz, 1988, 363-70). To the misfortune of the *A* system, compensation for non-pecuniary harm represents half or more of total awards granted by courts (Viscousi, 1991, 80).

In one respect, there is an element of uncertainty in the behavior of the consumer with regard to submitting claims of liability to courts. This element of uncertainty is, however, reduced in the United States by the fact that a high percentage of liability suits are taken by attorneys on contingency basis. This had led Canada and the United Kingdom to ban contingent fees for liability suits (Danzon, 1991, 58).

In another respect, the increased application of strict liability instead of the negligence rule may reduce the consumer's care to avoid injury (Schwartz, 1988, 370; and Priest, 1991, 42-3). Moreover, an exaggeration in the amount of awards may create a state of negligence on the part of consumers. In general, any deviation of the expected awards from the real cost of the injury injects in the system negative effects on the incentives of either the consumer or producer depending on what direction the deviation takes (Cooter, 1991, 13). Consequently, it is difficult to argue that a third party insurance is more efficient than first party insurance since the latter gives consumers the right to select what risks they would like to insure and to evaluate expected cost of injury against the cost of insurance.

2.1 NEW TRENDS IN THE LIABILITY SYSTEM

The liability crisis, which culminated in the 1980's, has been simmering for a long time. One of the early and most important changes in the *A* system came in the early '30s with the introduction of Workman Compensation System (Viscousi, 1991, 77-82). This system exchanges forsaking the right of suing the employer for a simplified administratively determined system of indemnity, although the workman compensation system is based on a strict liability notion as employers bear the whole cost of its financing. The workman compensation system, however, does not prevent employees from suing the producers of defective machinery and materials. The system's most visible success is in reducing litigation costs and improving the predictability of employers' liability to a great extent (Butler and Worrall, 1983, 581-3).

The no fault system was also introduced in the car insurance business and there are demands for expanding it to the medical practice and other areas of

liability (Danzon, 1991, 64-6). The main feature of the no fault system is its putting of a cap on the awards through a schedule of indemnity in exchange for simplifying the procedure and reducing litigation costs. The no fault system was also successful in improving the predictability of liability costs and in checking the rise of awards, specifically by excluding any award for pain and suffering (Cummins and Tennyson, 1992, 97). The resort to mutual insurance in the medical profession was another attempt to reform the *A* system of liability. The mutual medical insurance was more capable than the commercial insurance in obtaining information that allows successful application of experience rating and in reducing moral hazards (Danzon, 1991, 59-60). Other ideas suggested to reform the *A* liability system include a contributory negligence defense and a distinction between the award to plaintiff and payment of injurer. The contributory negligence defense implies that if the consumer fails to take sufficient care in avoiding the injury, the producer's liability goes to zero if he or she forwarded sufficient design care, instructions and information about the risks of the commodity (Schwartz, 1988). The distinction between awards to the injured and charges on the injurer is based on the separation between compensation objective and deterrence objective by means of a tax as done in the case of workman compensation. (Danzon, 1984, 524-33).

Lastly, the most drastic reform in the *A* liability system came from within, i.e., through attitude changes on the part of courts and juries. This change in attitudes is called by Henderson and Eisenberg, "the counter-revolution." It actually started in the mid-'70s as a result of the huge increase in awards that caused the beginning of a rolling back of earlier positions that led to the liability crisis (Danzon, 1984, 517). Changes in attitudes of judges and juries were manifest in a "retreat from prior pro-plaintiff stances," "refusal to extend doctrine" of strict liability, and other pro-plaintiff rules. Changes were carried out by both judicial decisions and legal professional studies (Henderson and Eisenberg, 1988, 489-516). *Inter alia*, they include "the state of art defense", "state of limitations", "collateral source rules" and "damage rules" (Viscousi, 1991, 75-6).

3. ESSENTIALS OF THE ISLAMIC LEGAL SYSTEM OF LIABILITY

Liability is discussed by Muslim jurists under the title "*èamÈn*". It is defined as the responsibility to pay a financial compensation as a result of an injury inflicted on others (ZarqÈ, 1988, Vol. 1, para 648; and ZuhaylÈ, 1982, 15). *èamÈn* covers liability in civil as well as criminal cases. Compensated injuries in *èamÈn* include injuries inflicted on the human being as well as property injuries (ZuhaylÈ, 1982, 15-7; and FayÈullÈh, 1983, 41). In this section we will restrict our discussions to that part of the *èamÈn* that falls under the conventional meaning of liability (i.e., criminal *èamÈn* is excluded).

The *I* system of liability (*èamÈn*) is applied today in several countries including Saudi Arabia, Jordan, Sudan, and Iran. However, there are minor differences among the various legal systems in these countries. Therefore, this

study will refer to the Proposed Arab Unified Financial Transactions Law (PAUFT LAW), and the classical jurisprudence works. Articles 264 to 290 of the PAUFT LAW³ deal with liability.

The main characteristics of the *I* system of liability which distinguish it from the *A* system can be summarized in the following five points:

a. *The amount of compensation for bodily injuries*

In all human injuries, the *I* system provides for a compensation that consists of three components: (i) blood money or wergild, (ii) treatment expenses, and (iii) lost income allowance. Human injuries are divided into three categories: (i) loss of life, (ii) major injuries in the head and/or the body, and (iii) minor injuries. For the first two categories, the amount of wergild is determined by the Prophet Muḥammad. This is unanimously agreed upon in the various schools of jurisprudence and is referred to in Article 277 of the PAUFT LAW. In case of death, the amount of wergild is 100 female camels or its equivalent.⁴ Compensation for major injuries is fixed as percentages of the wergild for the loss of life. These include loss of an organ such as an eye or a hand, a sense such as hearing or tasting, or major wounds in the head and/or body.⁵ Minor wounds are left to be determined by the court on the discretion of expert juries as percentages of a unit of full compensation for loss of life (Fayḍullāh, 1983, 146-55).

All human injuries, regardless of the injured's economic and social status, ethnicity, color, religion, age, etc., are treated equally, i.e., the amount of wergild is the same regardless of present, past and future wealth and income of the injured or any change in the injured's marginal utility of money. This is an essential tenant of the *I* liability system, which derives its rationale from the fact that all human beings are equal and all differentiations either artificial, judgmental, or speculative.

However, contemporary Muslim jurists did not define a contemporary equivalent of 100 female camels. Whether this equivalent should be calculated on the basis of prices of camels in our days and if so, in what country? Should it be in the same area where the Prophet had lived, i.e., Makkah and Madīnah, or is some other area? Or should an equation be derived on the basis of, say, the cost-of-living equivalent of 100 female camels at the time of the Prophet, or the labor-wage equivalent of the same quantity of camels at that era? Settlement of these questions is still awaited for. However, determination of the 100 camels' equivalent is not left to the court to decide on a case-by-case basis. It must be decided on a grandiose basis for the whole society by means of legislative action, based on the givings of the Sunnah (the Prophet's tradition) and involvement of the Ummah.⁶

The expenses of medical treatment are the second part of the compensation mentioned in article 277 of the PAUFT LAW. It is defined as the expenses required to reach the state of full cure (Zarqī, 1988, 137-40). This compensation element is based on actual payment or accrual, and subject to court verification

and discretion.

The third component of injuries' compensation is lost income. It is mentioned in articles 270 and 277 of the PAUFT LAW. Lost income that is subject to compensation is that which was known and secured at the time of injury, it does not include probable future income (Zarqū, 1988, 118). Keeping in mind that property damages are easily estimated, the area left to judiciary discretion is very limited in the *I* system as compared with the *A* system.

b. *Factual rather than intentional basis*

The *I* system of liability is based, to a large extent, on the material incidence of harm rather than looking into the motives and aptitude of the injurer. Therefore, liability in the *I* system is related to a factual incidence that a harm is done to someone (PAUFT LAW: 264). For instance, the drowning of a child who is entrusted to a professional swimming instructor to teach him how to swim is a fact sufficient for determining the instructor's liability. Also, a car driver is responsible for the injury inflicted by the car even if it went completely out of the driver's control (Zarqū, 1988, 73-88). The defense of *force majeure* is acceptable only if the injurer is completely deprived of his or her own will that he or she becomes like a plain tool that moves without any will (PAUFT LAW: 266). This implies the adoption of a form of strict liability with regard to the injurer by direct action (see the following point). It is rationalized on the ground that an injury requires compensation and whoever inflicted the injury should be liable for it.

c. *Direct versus indirect injurers*

The *I* system distinguishes between two kinds of liabilities. The liability of the direct injurer whereby the action affects the injury directly, such as a car driver hitting a pedestrian; and liability of indirect injurer whereby the action of the injurer causes but not directly affecting the injury, such as a defect in the breaks system of a car. Whenever there is a cause and a direct action together, the injurer by direct action is the one who is liable for the injury (PAUFT LAW: 265). Exceptions to this rule are five cases, determined in the law as follows: (i) when the direct action is founded on the cause, (ii) when the indirect injurer misleads or forces the direct injurer, (iii) when there is an ill intention on the part of the indirect injurer, but not on the part of the direct injurer, (iv) when the indirect action is the most effective in creating the injury, and (v) when it is impossible to make the direct injurer liable for the injury (PAUFT LAW: 265).

The distinction between injury by causation and injury by direct action has its impact on commodity liability, since in most cases of commodity injuries the direct injurer is the consumer while the indirect injurer is the producer/seller, and unless one of the above mentioned five circumstances is proven the liability of the direct injurer is maintained. This distinction is reflected in a negligence rather than strict basis for commodity liability. This requires the producer to

take the necessary safety measures in accordance with the prevailing state of art. Therefore, remote risk is completely disregarded unless it is known to the producer (Zarq , 1988, 75-6).

d. *Creating a social insurance system for payment of compensation*

Recognizing that the injurer did not intend to make the harm and that the amount of compensation may be beyond the injurer's means and ability to pay, the Islamic liability system has created a certain form of insurance that assures the payment of the compensation to the injured. This insurance system is called *al-ʿaqilah*. It is mentioned in Article 273 of the Jordanian Civil Law. It aims at guaranteeing payment of compensation to the injured (Zarq , 1988, 133), and it requires that whenever a wergild for loss of life or major human injuries is charged, the responsibility for its payment will be distributed over the members of family and/or tribe of the injurer. This system is based on an ancient tradition of the Arabian tribal solidarity. However, the *I* law maintained the financial aspect of *al-ʿaqilah* system. It redefines this kind of social solidarity and restricts it to financial support only in the case of payment of wergild in liability cases, i.e., it excludes financial liability resulting from a criminal act, as well as non-financial liability such as taking human ransoms. Many jurists also include in *al-ʿaqilah*, neighbors and professional associates and colleagues of the injurer. *al-ʿAqilah* is the only exception of the known rule in Islam that "no one is responsible for others' deed or creed," which is stated in verse (6:164) of the *Qur' n*, "no bearer of burden shall bear the burden of another," (Zarq , 1988, 133).

The contemporary application of the system of *al-ʿaqilah* is not yet agreed upon by Muslim scholars. Some of them suggest that professional associations and trade unions should take this responsibility while others suggest that the injurer alone should be charged with it, and if he or she were to fail because of insufficient resources, the Government treasury should step in and ensure that complete payment of compensation is made to the injured. Apparently, *al-ʿaqilah* approach is a form of insurance based on a certain social bondage between the injurer and his/her family, tribe, neighbors or fellow professionals. It seems that the most appropriate modern form of this approach would be a cooperative insurance based on a bondage of exposure to liability. Potential injurers who are exposed to similar liability would be members in this cooperative insurance body.

e. *Obligatory philanthropic contribution in case of loss of life*

If the injury results in a loss of life, the *I* system of liability requires a kind of social compensation because "loss of life is exceptionally significant" (Fay ull h, 1984, 141). This compensation is called *kaff rah*. It is mentioned in verse (4:92) of the *Qur' n* that requires the injurer to liberate a slave in the case of loss of life. Muslim jurists stipulate that if there were no

slaves, then a charitable donation of an amount equivalent to the value of one slave should be given to the poor and needy (Fayèullèh, 1983, 37-8 and 142-3). If this amount is also beyond the means of the injurer, the *Qur'Énic* verse referred to above provides for a substitute of two consecutive months of fasting on the part of the injurer as a spiritual rehabilitation for the purpose of making him or her more cautious and careful in the future (Fayèullèh, 1983, 143).

4. ECONOMICS OF LIABILITY UNDER THE ISLAMIC SYSTEM

In this section we will study the effect of the *I* liability system on: (a) producer's predictability, (b) the objective of compensation, (c) the objective of deterrence, (d) the role of the Government with regard to liability, (e) the economic and social effects of *kaffÉrah*, and (f) producer and consumer equilibria under the *I* system of liability.

a. *Producer's predictability*

It goes without saying that predictability of liability is the key to its internalization, as producer's equilibrium cannot be revised to include the burden of liability without the ability to anticipate the dollar amount of this burden. Under the assumption of profit maximization, predictability of liability is essential in determining the amount of investment the producer would make to avoid the injury while maintaining producer's equilibrium.

Several factors influence the predictability of producer's liability. These include producer's expectations of the behavior of consumers with regard to the safety of the commodity, degree of risk aversion of the producer, producer's expectations about behavior of the judicial system and the amount of award granted, etc. The effect of the *I* system of liability on predictability will be looked at from three angles: the court's authorities, the determination of the amount of award and the compensation of lost income.

i. *The authority of the judiciary*

Three principles in the *I* liability system reduces the area of court authority. First, the *I* system of liability opted to put a fixed list of wergild (a price list) for human injuries. This is itself a major limitation on the authority of the courts, since property damage does not usually represent high proportion of the total award in most liability cases. Besides, property damage is more predictable than human injury. Second, the *I* system of liability does not provide for compensation of certain non-pecuniary harms such as libel cases in which no financial disadvantage is inflicted on the injured (Khafif, 1971, Vol. 1, 55-7 and Zarqè, 1988, 85). This is based on the stipulation that such damages are beyond compensation and any financial compensation does not render the injured to

pre-injury state. Third, the two principles of priority of injurer by direct action over injurer by causation and of material ground of injury further reduce litigation procedure and limit the area left to the court's discretion.

The limitation of court's authority and the detailed legal treatment of liability increase producer's predictability and allow him/her better anticipation of monetary value of risks involved. Moreover, the strict conditions required for proving liability of injurer by causation further improve the predictability of producer's liability under the *I* system.

ii. *Fixed wergild*

The price list of body injuries allows commodity producers to determine the amount of awards in advance once the expected risk is determined. This works in a manner similar to an indemnity system as it reduces uncertainty about the future. Additionally, the distribution of liability burden through *al-ʿaqilah* system not only reduces the amount of the burden of an injury but also allows the producer to form better expectations of his or her share of the compensation.

iii. *Compensation for lost income*

On the other hand, PAUFT LAW: 270, and Jordan Civil Law: 266, introduced a compensation for lost income. This undoubtedly adds an uncertainty element into producer's liability, as the amount of lost income is not easy to predict. However, Islamic jurisprudence emphasizes that whenever lost income is recognized in liability cases, it is only that income which has already been secured or contracted that is subject to compensation. Anticipated future income or any loss of income that involves a probability element is not covered (Zarqā, 1988, 118; and Khafif, 1971, Vol. 2, 60-6 and 112-3).

b. *The objective of compensation*

It would be interesting to consider whether the amount of awards in the *I* liability system achieves the objective of compensation or not. In this regard it will be useful to restrict our discussion to human injuries since compensation of property damage is usually small relative to human injuries.

Islamic scholars distinguish three kinds of injuries inflicted on human beings: (i) injuries on the body, (ii) injuries of sentiments, feelings social status and financial reputation,⁷ and (iii) abstract injuries which are defined as injuries without financial implications (Khafif, 1971, Vol. 1, 54-6).

Injuries of social status, moral injuries and abstract injuries are considered beyond compensation in material or financial terms. They are a kind of social and moral crimes, i.e., they are punishable through the Islamic penal code, but no financial compensation can be given to the injured. The status of the injured can be rendered to pre-injury state by declaring the falsehood of the injurer and punishing him or her. The punishment of the injurer in those kinds of injuries

renders reconsideration to the injured. Removal of these categories of harms from the list of injuries that can be compensated is reduces the amount of compensation.

Let us now look at the price list of injuries and see whether prices quoted fulfill the objective of compensation. This requires a quick glance at the economic conditions of the society of Madīnah during the lifetime of the Prophet Muḥammad when the price list was ordained. There are several historical indications that labor compensation was in the neighborhood of one *dirham* a day.⁸ There are also indications that one *dirham* would be sufficient to buy food items for a family of four to five persons including meat, bread and date (Kahf, 1991, 32-8). This implies that the amount of wergild for the loss of life equaled more than the total earnings of one person for eleven years. Moreover, camels for the Arabs of the Prophet's era where almost the sole capital item – they were a standard measure of wealth, source of food and clothing, source of residence for the nomads, and the only means of transportation in the Arabian desert (Kahf, 1991, 24-7). One hundred female camels made a huge fortune that only tribal chieftain and most wealthy traders can afford to keep.⁹ The amount of wergild equaled twenty times the amount of standard richness with regard to the payment of *Zakāh* (the Islamic alms) that is the financial duty on the rich to help the poor.¹⁰ A family who owns one or two female camels would have sufficient capital to provide for the family's living in terms of milk, meat, clothes, transportation and source of monetary income.¹¹

This may imply that giving one hundred female camels in that society was tantamount to making the injured (or his or her family) very rich and to provide them with sufficient capital to place them at the top of the scale in terms of economic status in the society. This also implies that the amount of compensation is determined as a means of providing not only compensation but also reconciliation and condolences that aim at pleasing the injured and making him/her forget all about the injury. This may, perhaps, be the only explanation of what the jurists talk about when saying that compensation does not only cover the benefit deprived from the lost organ but it also has a beauty of its own (Ibn Qudḥmah, circa 1223, Vol. 5, 383-5), and that wergild is set very high to the extent that it makes it difficult or even impossible for the injurer to pay it. This emphasizes the fact that the objective of compensation and condolences is the most important aim of the award. This indication is strengthened by the following two points:

- i. *al-ʿAqilah* system aims at attenuating the financial burden of the injurer. Hence, the amount of the award is not essentially utilized as a means to force revision in the injurer's behavior. This is consistent with the stipulation that liability is a result of an error rather than intention on the part of the injurer. It is also consistent with the separation between the objective of compensation and condolences, and the objective of deterrence. Moreover, jurists often mention that *al-ʿaqilah* system is invoked in order to guarantee that a compensation is

paid because the injurer alone may not be able to handle its payment (Zarq , 1988, 131). Hence, *al-‘aqilah* implicitly recognizes that the amount of compensation is usually beyond the capacity of the injurer, i.e., it is aimed for compensation and reconciliation of the injured.¹²

ii. The *I* system invokes means other than the award for deterring potential injurers as will be seen in the next subsection.

c. *The objective of deterrence*

The *I* system utilizes tools of deterrence that preserve the separation between the objective of compensation and the objective of deterrence. The first and most effective tool for deterring potential injurers is a supervisory authority that controls the markets and supervises the observation of legal, ethical, health and safety principles and procedures. This is a form of market ombudsman (*mu‘atasib* or *‘uisbah*) which was established as an independent state agency as early as 637 during the reign of ‘Umar, the Second Successor of the Prophet.¹³ This *‘uisbah* agency developed safety regulations for all crafts and trades that were observed throughout Muslim cities in the Middle Ages.¹⁴ Other tools consist of fines imposed by the authority and/or judiciary in the form of tax on injurers (Zuhayli, 1982, 311-3) and regulatory instructions by the control authority of industries and commodities that may involve risks to users and consumers. Violation of these regulatory instructions may be punishable by imprisonment and/or fines. Additionally, the members of *al-‘aqilah* would have a self-interest in imposing social and moral means of deterrence on the injurer. Finally, the responsibility of the injurer to pay the part of the compensation that could not be collected from *al-‘aqilah* and the injurer’s responsibility for philanthropic contribution, *kaff‘Erah*, are also deterrence tools since they represent direct financial costs to the injurer.

Two means are used in the *I* system for the objective of inducing the consumer to avoid injury and reducing moral hazards: (i) the exclusion of certain injuries from compensation, (ii) the distinction between liabilities of direct injurer and indirect injurer along with the difficulty of proving negligence in the case of indirect injurer. This is in addition to the contributory negligence defense that requires that the consumer bear partial responsibility for the injury in proportion to the effect of negligence on his/her part (PAUFT LAW: 269, Khafif, 1971, 90-101; and Zarq , 1988, 116-7).

The PAUFT LAW did not provide a definition of the safety measures required by producers, apparently leaving it to the control authority as these measures differ according to industry and circumstances. However, looking into the rich heritage of Islamic jurisprudence, we can derive the kind of safety measures required from the actual examples given by jurists. Muslim jurists gave many examples, some of which are the following:

- i. If a judge were to sentence a man to death on adultery charges, but it was later discovered that the man's organ has been cut off (i.e., he was sexually impotent), the judge would be liable because the man's condition should have been known to the judge (Ibn Rajab, 1972, 308).
- ii. If a judge were to sentence a person to death on the basis of witnesses' testimony, but later discovered that the witnesses were reputed liars, the judge would also be liable because such a reputation should have been known to the judge (Ibn Rajab, 1972, 309).
- iii. If a lady had a miscarriage because she was frightened by a call from the Governor, the Governor would be liable because he should have checked whether she was pregnant or not (Ibn al-Najjār, circa 1654, in Zarqā, 1988, 76).
- iv. A person who dug a hole in a public lot without proper permission from the authority would be liable if a person were to fall into it, but he would not be liable if the other person was pushed into the hole by a third party. However, if the digger had permission and took sufficient measures for safety and warning, he would not be liable for the person who falls into the hole (Ibn Rajab, 1972, 307).
- v. A person who passes in a market while holding a dangerous material, such as a sword or an arrow, is required to keep its edge within the person's fist so that it does not endanger others. In all places of common use such as streets and markets, there is always an implicit condition of "common-sense safety without negligence" for users of these places (Khafif, 1971, Vol. 1, 39; and Zarqā, 1988, 172). Safety measures and precautions are emphasized more when dangerous materials are handled. In handling dangerous materials, excess of one's limit is presumed if an injury happens, i.e., in handling dangerous materials such as a weapon or an untamed animal, such as an ox, the mere injury is considered as an indication of negligence (Fayḥ, 1983, 186-7).
- vi. A person who performs circumcision on infant boys is liable if he cuts more than he should (Zarqā, 1988, 45), citing an action of charging such a person for his medical errors by ʿUmar, the Second Successor after the Prophet.
- vii. A person who practices medicine without being known of having studied medicine or without proper licensing is liable for any injury regardless of negligence, whereas a licensed physician is only liable for negligence, error

and lack of necessary care (Zarqf, 1988, 29-30).

- viii. A swimming instructor is liable for the drowning of a child while he or she is teaching the child how to swim, as the mere fact that the child drowned is an evidence of negligence (Zarqf, 1988, 82).
- ix. Mistakes by witnesses in courts even without intention or negligence make them liable because a witness is supposed to place maximum care and precaution in telling the plain truth only (Zarqf, 1988, 40).
- x. Remote or exceptional harm of a material or a service results in the liability of the injurer if he or she knew about the possibility of the injury (Zarqf, 1988, 75-6).
- xi. One's action within one's own property, or exercise of one's own legitimate right relieves one from any liability except in the case of abuse of one's own right such as doing the action only for hurting other people (Khafif, 1971, Vol. I, 96-101; and Zarqf, 1988, 71-2).

From these examples one may derive five rules related to precautions and safety measures as follows:

- i. More safety measures are required for actions outside one's own property and rights than for actions within one's own property and rights.
- ii. The nature of the commodity and service affects the level of precautions and safety measures required. Dangerous materials and services call for larger investments in safety measures and precautions than normal goods and services.
- iii. The degree of safety measures also differs in accordance with the qualifications of potential injurers. Unqualified or unlicensed practitioners are required to invest more in safety than qualified practitioners.
- iv. The state of art and professional opinions are major determinants of negligence.
- v. The number of people exposed to potential injuries is also important in determining the required level of safety measures, i.e., extra safety measures are required for in the case of walking while holding dangerous materials in a crowded market¹⁵ than in empty areas.

d. *The role of the Government with regard to liability*

This subsection will study the role of the government in compensating the injured, deterring potential injurers and protecting the environment. A digression is added on compensating the injured in crimes because of its relevance.

i. *The role of the Government in compensating the injured*

The *I* system of liability considers the Government a last resort for payment of compensation of the injured if *al-ʿaqilah* could not afford payment (Ibn ʿazm, circa 1064, Vol. 9, 402). This payment is financed by the taxpayers' money unless some other arrangement is made.

Some jurists suggest that in a contemporary society, where family and tribal bondage are either loose or non-existing at all, professional associations and trade unions should play the role of *al-ʿaqilah* (Fayūllāh, 1983, 136; and Zarqā, 1988, 132-6). However, this proposal may not be consistent with the conventional role of these organizations, and it may reduce their membership and over burden them with responsibilities they may not be prepared to take.

One may argue that since *al-ʿaqilah* is a system of mutual insurance, why not have the Government impose membership in a mutual or cooperative insurance body as one of the conditions for indulging in the production of goods and services that involve liability. In other words, establishing a new *al-ʿaqilah* on the basis of a common bondage which is the exposure to certain kinds of liability such as medical practice liability, passenger transportation liability, commodity production liability, etc.

ii. *The role of the Government in deterring potential injurers*

According to the *I* system, the Government is in charge of providing a regulatory system for safety measures related to the production and distribution of goods and services. This is one of the objectives of *ʿūsbah*. *ʿīsbah* in Islam means supervision over the market with regard to abiding by commodity safety rules, fair play of the market forces, and general compliance of ethical values and legal regulations on the part of the actors in the market. A system of licensing for medical practice was introduced as early as the 9th century CE in Baghdad, Cairo, Damascus, Isfahan, Cordova and other major Islamic cities. The *ʿūsbah* authority used to depend on professional experts in each profession in determining standards of safety rules. Regulatory fines may also be imposed in case of violation of safety standards provided that these fines are not paid to the injured. However, fines' proceeds may be used to support the mutual insurance organization and/or research in safety measures. Physical punishment and imprisonment may also be used as a deterrence tool in certain cases.

iii. *The role of the Government in environment protection*

The *I* system also places the Government in charge of the responsibility of protecting future generations. In addition to the general Islamic guidance which is derived from the basic role of the Government in Islam as defined in the Islamic political system,¹⁶ the practice of ‘Umar, the Second Successor of the Prophet, may be quoted when he specifically considered the Islamic Government responsible for the well-being of the future generations.

The welfare of future generations will remain a public good subject basically to collective decision, and a value judgement matter that is determined through the social objectives of a nation (Howarth and Norgaard, 1992, 473-7). This implies that internalization of environment protection can only be achieved through Government regulations. In this regard, one should recall that the *I* system calls for more precautions when potential injury could affect a larger number of people and property. Additionally, the Islamic price list of human injuries help in reducing uncertainty about evaluating future injuries.

iv. *Digression: compensating the injured in crimes*

The state responsibility as a final resort for compensating the injured in liability is very close to its responsibility in compensating the injured in criminal actions. Although this issue is not usually included under liability studies, it has vivid similarity and its brief investigation sheds light on the issue at hand. The *I* system maintains the following points:

- The main instruments to prevent crime are education, safety protection and a strong penal code with minimum loopholes.
- The criminal is responsible for property damage and personal injuries inflicted on those affected by crimes.
- No blood is wasted. This is an important rule in Islamic law. It means that blood may not be shed except as a result of a court judgement according to the law. Any blood shed otherwise must be compensated either in terms of punishment of the blood shedder or in terms of a financial *wergild*.
- The Government is responsible to compensate those affected by crimes in which criminals are not captured.

The Government responsibility for compensation of persons injured in crime gives additional strength to the argument for its responsibility for the injured in liability cases, especially since the *I* system of liability is more geared towards the objective of compensation.

e. *The economic and social effects of kaffErah*

As an obligation on the injurer in the case of loss of life, the *kaffErah* represents a social support to the philanthropic activities in the society. It aims at compensating the society for the loss of one of its members. The *I* system does not attach any condition to the *kaffErah* payment except that it should go to the poor and needy as charity.

f. *Producer and consumer equilibria under the I system*

i. *Producers' equilibrium*

The introduction of liability in the cost of production has two implications, i.e., the introduction of a new cost element to pay for the externalities (liability), and an increase in the degree of uncertainty because the cost of future liability has more uncertainty than other items of cost. The *I* system provides better predictability of liability cost than the *A* system as we have seen earlier. This means that the distribution of probability attached to the expected amount of awards as well as to the realization of incidence of liability by court, has less variance in the *I* system than in the *A* system. Additionally, the cost of philanthropic contribution (*kaffErah*) is also known in advance, and the distribution of the cost of bodily injuries among the members of *al-^caqilah* does not only reduce the cost of individual injuries but also reduces its uncertainty because it spreads risks.

al-^cAqilah system incorporates an altruistic element in the producer's behavior as it makes each producer's cost dependent on commodity risks of other fellow producers. This requires a keen attention on the part of each producer to reduce liability exposure of other producers, thus affecting a social effort to reduce the commodity risk in the society as a whole. However, if *al-^caqilah* takes a form of cooperative insurance in which premiums are based on experience rating of individual producers, this altruistic element would be reduced, and with perfection of the experience rating charge system, it converges to having each producer carrying only the cost of his or her liability alone as in the *A* system.

ii. *Consumers' equilibrium*

The consumer under the *I* system also has better predictability of the awards in case of injuries. However, the price list of bodily injuries negates any differentiation on the basis of marginal utility of the money of the consumer. Therefore, it will be difficult to show the effect of incorporating the compensation element in consumer equilibrium without knowing more about the pre-injury marginal utility of consumer's money. Hence, under the *I* system, compensation payment may create consumer surplus or deficit depending on the pre-injury marginal utility of money of the injured.

On the other hand, the causality rules of the *I* system discourage the consumer from suing producers for liability. This implies an increased personal incentive to avoid the risk involved in using the product. In other words, the consumer would like to invest in protecting other utilities from loss as a result of the injury which may not be compensated under the *I* system. This effect is emphasized by excluding certain injuries from the compensation.

4. CONCLUSION

This paper did not intend to claim any superiority for the Islamic system of liability, although the writer believes in this superiority. Civil liability centers on loss of life and body injuries. Life is priceless and the human body is sacred. Allah says, “We have truly honored the children of Adam,” (*al-Qurʿān*, 17:70). No human being can claim an ability to put a price on life or human body parts, and any such attempt is not only arbitrary but also immoral. Does the *Sharʿah* provide a price list of life and parts of the body? Allah says, “If anyone slew a person—unless it be for murder or for spreading mischief in the land—it would be as if he slew the whole human race,” (*al-Qurʿān*, 5:35). Yet since day one on this earth, there have always been cases where a person has been killed by mistake, without any ill or evil intention by the killer, there have also been bodily injuries inflicted the same way. This is more so in the age of machines rolling down the streets and in factories, and of almost every thing we eat has gone through a manufacturing process that may cause harm in one way or another. There is always a need for a system that compensates the harmed and deters the injurer by forcing him or her to be more careful, and more considerate to those who will use the goods or services.

Would we be better off if we were to leave the basic functions of compensation and deterrence of such a system to courts and judges? Or if life has to go on anyway, would we be better off if we were to have a system that allows both non-cheating consumers and non-negligent producers to predict the outcome of possible injuries and life loss?

This paper studied the tenets of the Islamic civil liability system and analyzed its economics. Essentially the Islamic system depends on direct causality of a harmful action, regardless of the actor. It also finds in the damage an objective harm that must not go inside the injured person, keeping in mind that all children of Adam are equal. A compensation must not fluctuate from a court to another, from a judge to another, from a city to another, or according to wealth, color, education, age, religion, sex, race or any other circumstances of the harmed or the injurer. Where can we find such an objective list of compensation except in the Divine revelation?

Predictability is one of the main characteristics of the Islamic system of civil liability. This provides the producer with better chance of planning and pricing, and while it compensates the injured it deters consumers from exaggerating their demand for compensation. By involving the community (or society) on the side

of the injurer, through the *‘aqilah* principle, as well as on the side of the injured, through the *kaffErah* principle, the Islamic system recognizes the role of the society in the injury and its right to be compensated too.

ENDNOTES

1. Since the period of 1975 to 1985 was a high rate of inflation period, a reference to the increase in expenditures or medical services may be more appropriate. However, the comparison with inflation may be justified by the compensatory nature of the liability awards.

2. Liability also has several indirect cost elements which include the effect of the incidents and the court judgments on the reputation of the producers of goods and services which is reflected on future demand for the product, the effect of the incidence on the future cost of insurance, its effect on the prices of the corporation's shares in the stock market and on the producer's future ability to borrow, the effect of the incidence of future cost of new regulations imposed by the control authority on the whole industry as well as on the injurer, and the tax payer's cost of supervising such expanded regulations, future administrative fines, etc.

3. The Proposed Arab Unified Financial Transactions Law (PAUFT LAW) is derived from the Islamic jurisprudence (the *SharEah*). It was approved by the General Committee to Unify Legislation in the Arab League's Countries, Tunis, 1984.

4. The money equivalent of 100 female camels stated by jurists of all Islamic schools of jurisprudence is 1000 golden *dinErs* which equals 4250 grams of gold (FayEullEh, 983, 129-30 and 139-40). At the gold price of March 31, 2000 (US\$ 295 an ounce), this amount equals US\$ 43,474.

5. Major injuries whose wergild is fixed in Islamic law are the following:

<u>Injury</u>	<u>Amount of wergild</u>
a. Loss of life	100% (100 female camels)
b. Loss of a sense (such as seeing, hearing, mind, taste, etc.)	100% (100 female camels)
c. Loss of a single organ (such as tongue, nose, hair, etc.)	100% (100 female camels)
d. Loss of an organ of whom there are two In the body (such as an eye or a hand)	50% (50 female camels)
e. Loss of an organ of whom there are four in the body (such as an eyelid)	25% (25 female camels)
f. Loss of a finger in hand or foot	10% (10 female camels)
g. Loss of a tooth	5% (5 female camels)
h. Hand wounds:	
- if it reaches the bone	5% (5 female camels)
- if it breaks the bone	10% (10 female camels)
- if it displaces the bone	15% (15 female camels)

- if it reached the membrane of the brain 1/3 (33 and 1/3rd female camels)
 - if it reaches the brain 1/3 (33 and 1/3rd female camels)
 - i. Bodily wounds:
 - if it reaches the inside of the abdomen 1/3 (33 and 1/3rd female camels)
 - j. Other injuries' compensation is to be determined by the court on the basis of experts' opinion within the guidance above.
 - k. Compensations of bodily injuries are accumulative, i.e., if more than one organ is injured, you add together the compensation of each and all injuries. For instance, loss of the nose plus one ear and two eyelids gives 200% of the wergild.
- (See: Zuhayrī, 1982, 344-8)

6. In Saudi Arabia, the Supreme Judicial Council sets the equivalent of a hundred camels in Saudi Arabian Currency, Riyal, at SR 100,000 (US\$ 27,000)

7. This kind of injury is considered subject to compensation only to the extent that it entails an actual financial loss or a material harm that is inflicted on the injured, keeping in mind that pain and suffering are considered a form of material harm (Zarqūf, 1988, 121-7).

8. *Dirham* was the unit of silver currency at that time. One *dirham* equals one tenth of the golden *dīnār* that is the golden unit of currency. The amount of compensation for loss of life that is one hundred female camels equaled ten thousand *dirham* at the time of the Prophet Muḥammad in Madīnah.

9. See for instance, the bibliography of the Prophet by Ibn Hishām (Vol. IV, 139-40).

10. In *zakāh*, a person who owns five camels is considered as rich and is required to pay *zakāh* annually. On the other hand, a person who owns 1 female camel is considered to be satisfied enough so that he or she should not be given charity from *zakāh*.

11. See for instance, the bibliography of the Prophet by Ibn Hishām (circa 833, Vol. I, 173) and the bibliography of 'Umar Ibn al-Khaṭṭāb, by Ṣanāwī and Ṣanāwī (1983, 110).

12. This is unlike criminal liability where the financial compensation is charged to the injurer. Hence the award is used as a deterrence in criminal liability (Zarqūf, 1988, 132; and Khafif, 1971, Vol. II, 176-81).

13. There are several reports that the Prophet himself used to inspect the markets.

14. See for instance, Maṭṭuq (1982); and al-Shirazi (1981).

15. This has, in a sense, analogy to the *Qur'ān* (24:19) that distinguishes between an act of misdeed and the spread among many people of an act of misdeed.

16. Ibn Khaldūn, circa 1406 defines the role of the Islamic government as managing the affairs of people in accordance with implications of Islamic rationale in procuring their hereafter's interests and worldly interests related to the former. See Kahf (1985).

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