THE REGULATORY ROLE OF TORT LAW: A FURTHER ECONOMIC ANALYSIS OF CIVIL LIABILITY AND THE MOLECULARIZATION OF JURISDICTIONAL PROTECTION IN BRAZILIAN CONSUMER LAW

ABSTRACT

Although harm compensation is one of the possible functions of tort Law, this is not the main role of the civil liability: an indemnity has, as its primary purpose, the purpose to generate incentives or disincentives for potential harmdoers, in order to, due the legal system, estabilish the minimization of the social cost and encourage a greater level of investment in precaution and, with that, a lower probability of occurrence of losses and harms and, therefore, a lower expected damage. To do so, however, indemnities must be understood as the legal garment of economic rationality for generating incentives: the regulatory role of tort Law. Thus, the purpose of this paper is to bring Law and Economics closer to civil liability, thinking about how the Economic Analysis of Law' tools (and, more specifically, the Hand Formula) can help Brazilian Courts to improve the way in which indemnities are calculated, which will be concatenated based on the jurisprudence of consumer Law and the perspective of collective actions arising from consumer relations, or, in other words, from the molecularization of the consumer's judicial protection.

KEYWORDS: Economic Analysis of Law, Hand Formula, Tort Law, Consumer Law, Collective Process.

INTRODUCTION

What purpose does the legal institute of civil liability serve? A first possible answer would say that the duty to indemnify and indemnities serve to repair damage caused to others, that is, to restore *the status quo ante* of someone or some situation. A second possible answer, on the other hand, more in line with the Economic Analysis of Law (Law and Economics), "*as a simpler and more objective approach to the subject*"[1], would suggest that the duty to indemnify and the indemnities focus on stimulating or discouraging conduct, that is, , "*create incentives for the parties to adopt an efficient level of precaution*"[2], functioning as a mechanism of incentives or disincentives of behavior, reason why, in my view, it is possible to recognize a true regulatory function in civil liability. It is precisely on this regulatory function of civil liability that the present article will focus on.

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[1] PORTO, Antonio José Maristrello. GAROUPA, Nuno. Curso de Análise Econômica do Direito. São Paulo: Atlas, 2020, p. 236.

[2] BATTESINI, Eugênio. Direito e Economia: Novos horizontes no estudo da responsabilidade civil no Brasil. São Paulo: LTr, 2011, p. 285.

The legal and economic functions of civil liability coexist and should indeed coexist, but how are indemnities calculated in Brazil? Has the Brazilian Judiciary managed to also concatenate the economic variables of civil liability? The questions are relevant because, although there is a relative consensus that 1) conduct, 2) damage and 3) causal nexus make up the minimum assumptions of any and all civil liability situations, whether objective or subjective, to give rise to a duty of indemnify, in Brazil, there is no consensus on the methodology for calculating these indemnities, especially in relation to moral damage[3].

Recently the Superior Court of Justice (STJ) began to apply, with greater emphasis[4], the so-called biphasic method of calculating the value of indemnities, from which the STJ anchors (anchoring) an initial amount of indemnity based on the average of jurisprudence of similar cases, and then assesses the specific circumstances of the specific case, increasing or decreasing the value found in the first phase. The technique is not necessarily new, since some time ago, at least since 2006[5], there were Judgments

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[3] *"Because pecuniary losses are equal either to actual losses in wealth or to the cost of replacing goods, such losses are often easy for courts to determine. By contrast, because non pecuniary losses cannot be observed directly, they are difficult for courts to estimate. [...] In any case, if non pecuniary losses are likely to be large, it is important for courts to attempt to estimate them, and especially when pecuniary losses are small. Otherwise, incentives to reduce risk may be seriously compromised"*. SHAVELL, Steven. Foundations of Economic Analysis of Law. The Belknap Press of Harvard University Press. London, England, 2004, p. 242-243.

[4] Special Appeal No. 1,473,393/SP, reported by Justice Luis Felipe Salomão, judged in 2016. *"[...] 8. The biphasic method, as a parameter for measuring compensation for moral damages, meets the requirements of an equitable arbitration , because, in addition to minimizing any arbitrariness, avoiding the adoption of solely subjective criteria by the judge, it removes the pricing of the damage, bringing a balance point through which it is possible to reach a reasonable correspondence between the amount of the indemnity and the harmed legal interest, as well as establish an amount that best corresponds to the peculiarities of the case. 9. In the first phase, the basic or initial value of the indemnity is determined taking into account the injured legal interest, in accordance with the jurisprudential precedents on the matter (group of cases). 10. In the second phase, the value is adjusted to the peculiarities of the case based on its circumstances (severity of the fact itself, culpability of the agent, concurrent fault of the victim, economic condition of the parties), proceeding to the definitive fixing of the indemnity , through fair arbitration by the judge"*.

[5] Special Appeal No. 710.879/MG, reported by Minister Nancy Andrighi. *"Civil law and civil procedure. Action for compensation for moral and material damages. Road accident suffered by a public transport passenger. Death result. Deficient reasoning. pre-questioning. Materials damage. Re-examination of evidence. Moral damages. Value has been fixed. Review by the STJ. Possibility. The special appeal is not known in the part in which it is deficient in its reasoning, nor when the legal matter dealt with in the legal provision considered to be violated has not been considered by the State Court. The dismissal of the request referring to compensation for material damages in the 1st and 2nd degrees of jurisdiction was generated from the analysis of the facts and evidence presented in the process, which cannot be modified in the special route. The STJ is entitled to review the arbitration of compensation for moral damages when the fixed amount differs from those stipulated in other recent judgments of this Court, observing the peculiarities of each litigation. The sentence established as moral damages the equivalent of five hundred minimum wages for each applicant; the judgment reduced the amount to twenty thousand reais for the mother, twenty thousand reais for the father and ten thousand reais for the sister. Based on the*

in which the STJ divided the calculation of compensation for moral damages into two phases, one for anchoring, the other for framing. In 2011, revisiting one of these past judgments, the STJ reverberated the two-phase method, previously outlined, as "*the most appropriate method for a reasonable arbitration of compensation for off-balance sheet damage*"[6]. Even so, the jurisprudence of the biphasic method is still timid in the Courts.[7]

In addition, there are records of a three-phase method of calculating the value of indemnities, sometimes applied in the Federal Regional Court of the 2nd Region (TRF2)[8], which is inspired by the stages of penalty calculation in art. 68 of the Brazilian Penal Code.

There are also, in addition to these two methods mentioned, a countless number of judicial decisions that do not use any method, basing fair arbitration only on the free conviction of the judges who, although motivated, given the uncertainty of their foundations, ends up compromising the security and the reliance on the legal system.

I recognize the merits of the initiatives described above and how difficult it is to define the fair (and efficient) value of an indemnity, but I understand that the issue of civil liability involves a new look, a new perspective, a new methodology, this time guided by Economic Analysis of Law.

Consequently, my objective with this article is to shed light on the also symbolic function of civil liability, hoping, as a result, to be able to suggest a modest

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precedents found referring to similar hypotheses and considering the peculiarities of the process, the amount of compensation for moral damages is set at sixty thousand reais for each of the appellants. Special appeal partially known and, in that part, provided". STJ, 3ª T., REsp 710.879/MG, rel.: Minister Nancy Andrighi, j. 06/1/2006, DJ 06/19/2006.

[6] Special Appeal No. 959.780/ES, reported by Minister Paulo de Tarso Sanseverino, judged in 2011.

[7] In October 2022, when searching for the terms "method", "biphasic", "damage" and "moral" in the STJ, it appears that there are only 84 judgments that expressly mention the subject.

[8] "*[...] 12. With regard to the amount of compensation and, guided by the criteria suggested by doctrine and jurisprudence, which provide that the setting of the indemnity amount for moral damage must take into account the circumstances of the case, as well as the socio-economic condition of the victim and the offender, so that the amount to be paid does not constitute unjust enrichment of the victim, and also serves to prevent negligent and harmful attitudes from happening again. in a doctrinal work on the subject: "for the purpose of parameters for the arbitration of the amount of pecuniary compensation for moral damages, the Brazilian legal system allows the demarcation of the minimum and maximum limits of the corresponding amount in number of minimum wages, in compliance with reasonableness and proportionality , in the scale of the values of the juridical-constitutional goods, avoiding, in this way, that there is a complete absence of parameters in the establishment of the quantum debatur, without any consideration eration regarding the aspect of diminishing or damage to the victim's property.*" GAMA, Guilherme Calmon Nogueira da. Critérios para a fixação da reparação do dano moral abordagem sob a perspectiva civil-constitucional. In: LEITE, Eduardo de Oliveira. Grandes Temas da Atualidade: Dano Moral. Rio de Janeiro: Forense, 2002.

proposal for a method of calculating indemnities that, guided by the Economic Analysis of Law, manages to provide a answer that, unlike the previous ones, is more efficient (and fair) and, above all, capable of solving the problem of lottery jurisprudence, that is, the randomness of indemnity values.

Therefore, in order to prepare an Economic Analysis of Law roadmap for the calculation of indemnities, we chose to cut the debate and focus the study of civil liability in consumer relations in Brazil. The choice for the topic is justified due to the expressive amount of lawsuits that involve discussions on consumer rights in Brazilian Courts.

According to data from the National Council of Justice (CNJ), updated until March 2022, there are 61,512,508 cases pending judgment in the State Courts, of which 4,656,776 were triggered in 2022. The disproportionate litigation is a reality in Brazil and, historically, as indicated by the conclusions of the 2021 Justice in Numbers (Justiça em Números) report, from the same CNJ, "*the high number of cases [...] in the second degree of State Justice [...] of Consumer Law*"[9] and "*the high number of Consumer Law cases in the State Court appeal groups*"[10]. The stir becomes even more delicate when we see that, according to the CNJ's 2021 report, in 2020 R$100,067,753,052.00 was spent on the Judiciary[11], with the expenditure on State Justice, "*a segment that covers 77 % of pending cases*"[12] and which is the likely destination of consumer law cases, "*corresponds to approximately 57.6% of the total expense of the Judiciary Branch*".[13]

Thus, it is necessary to think of mechanisms that can address legal and economic solutions that help to reduce these numbers of lawsuits and expenses with the

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[9] *"The subject of Civil Law appears among the five subjects with the highest number of cases in all instances of State Justice, also highlighting the high number of Criminal Law cases in the second degree of State Justice, followed by the theme of Civil Law.. In the first degree, Civil Law and Tax Law emerge among the most recurrent subjects. Also noteworthy is the elevator of environmental rights of state justice of consumer law of the class, followed by appeal environmental rights of the class, followed by environmental law".* Conselho Nacional de Justiça. Justiça em números. Brasília: CNJ, 2021, p. 271 e 272.

[10] *"The subject of Civil Law appears among the five subjects with the highest number of cases in all instances of State Justice, also highlighting the high number of Criminal Law cases in the second degree of State Justice, followed by the theme of Civil Law.. In the first degree, Civil Law and Tax Law emerge among the most recurrent subjects. Also noteworthy is the elevator of environmental rights of state justice of consumer law of the class, followed by appeal environmental rights of the class, followed by environmental law".* Conselho Nacional de Justiça. Justiça em números. Brasília: CNJ, 2021, p. 271 e 272.

[11] Conselho Nacional de Justiça. Justiça em números. Brasília: CNJ, 2021, pp. 75 e 77.

[12] Conselho Nacional de Justiça. Justiça em números. Brasília: CNJ, 2021, pp. 76

[13] Conselho Nacional de Justiça. Justiça em números. Brasília: CNJ, 2021, pp. 76

Judiciary, especially because, it is very likely that not one cent of those billions of reais that were spent on "justice" served to generate additional wealth for society. The structuring of an Economic Analysis of Law methodology for the calculation of indemnities, which is more objective and controllable, can achieve this purpose, in addition to reducing the risks arising from the jurisprudential lottery.

It is precisely for this reason that it seems essential to me to discover the answer to the question: "*how to properly calculate the value of an indemnity for civil liability in consumer relations in Brazil?*".

The question seems to me to be absolutely relevant and current because, considering the existence of a regulatory function in civil liability, the adequate calculation of indemnities for material and moral damages arising from consumer relations can generate incentives[14] for suppliers to invest more in precaution[15] and, with As a result, they reduce the expected damage from their economic activities and tend to cause fewer situations of damage to consumers, which, among other possible impacts, would also imply a reduction in consumer rights disputes in Brazilian Courts, optimizing them.

Both pecuniary (property) and non-pecuniary (off-balance sheet) damages cause losses that reduce social well-being, which highlights the importance of adjusting incentives for the parties to reduce the risks of their conduct and economic activities.[16]

Suppliers and consumers, although they can cause harm to each other, do not usually negotiate in advance the adoption of more or less precaution by either of them (or they simply do not know or have no way of knowing whether to adopt more or less precaution), so, in this sense, the Economic Analysis of Civil Liability intends to correct

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[14] *"[...] if liability law is to be economically efficient, then it should creat incentives so that a tortfeasor exhibits care up to that level where na extra unit of care can reduce the level of expected damages by the same amount"*. OTT, Claus; SCHÄFER, H. B. The economic analysis of civil law. Cheltenham, UK: Edward Elgar. Publishing, 2004, p. 135.

[15] *"[...] the Law and Economics – to be truly real – must assume that human behavior responds to some specific kind of selfishness"*. ACCIARRI, Hugo A.. Elementos da análise econômica do direito de danos. Coordenação da edição brasileira Marcia Carla Pereira Ribeiro. São Paulo: Revista dos Tribunais, 2014. RAND, Ayn. The Virtue of Selfishness. New York: Signet, 1964, p. 22.

[16] *"Because both pecuniary and nonpecuniary losses reduce social welfare, it is clear that parties will be led to act appropriately under liability rules only if damages equal the sum of pecuniary and nonpecuniary losses. If damages do not fuflly reflect nonpecuniary losses, parties' incentives to reduce risks may be inadequate"*. SHAVELL, Steven. Foundations of Economic Analysis of Law. The Belknap Press of Harvard University Press. London, England, 2004, p. 242.

possible negative externalities[17]. Law and Economics must structure incentives that suggest (such as *nudges*[18]) or impose (such as legal duties), either for suppliers or for consumers (given the bilateral nature of damages and preventions), optimal levels of precaution that reduce the cost of consumer relations. In this sense, the article will be developed with a methodology of bibliographic research based on a review of the *Law & Economics* literature on civil liability, indemnities and protection of consumer rights.

The theoretical framework of this article will be the articles *"The Problem of Social Cost"*[19], by Ronald Coase (1960), and *"Some Thoughs on Risk Distribution and the Law of Torts"*[20], by Guido Calabresi (1960).

The tools of the Economic Analysis of Law and microeconomics will be indispensable to our study, especially the economics of opportunity costs and the so-called Hand Formula, or calculus of negligence, (B < P*L where B is the cost (burden) of taking precautions, P is the probability of loss (L) and L is the magnitude of harm, which gained fame on the case of United States v. Carroll Towing Co. of 1947[21], but whose structure had already been thought of by the same Hand in The T.J. Hooper case of 1932[22].

Therefore, in Chapter I, the main economic contours of the duty to indemnify in Brazil will be appreciated, for which I will focus the study of the legal institute of civil liability on the issue of incentives, at which time the Hand Formula will be deepened and, as a suggestion, transplanted to Brazil. Next, in Chapter II, some data from the National Register of Class Actions (CACOL), of the CNJ(Conselho Nacional

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[17] BATTESINI, Eugênio. Direito e Economia: Novos horizontes no estudo da responsabilidade civil no Brasil. São Paulo: LTr, 2011, p. 284.

[18] THALER, Richard; SUNSTEIN, Cass. Nudge: O Empurrão para a Escolha Certa. Trad. Marcello Lino. RJ, Elsevier: 2009.

[19] COASE, Ronald H. The problem of social cost. The Journal of Law and Economics, v. 3, 1960.

[20] CALABRESI, Guido. Some Toughts on Risk Distribution and the Law of Torts. Yale Law Journal, 70, 1960.

[21] *"[...] owner's duty, as in other similar situations, to provide against resulting injuries is a function of three variables: (1) the probability that she will break away, (2) the gravity of the resulting injury, if she does; (3) the burden of adequate precautions. Possibly it serves to bring this not into relief to state it in algebraic terms: if the probability be called P; the injury, L; and the burden, B; liability depends upon whether B is less than L multiplied by P: i.e. whether B < PL". Cf.* United States v. Carroll Towing Co., 159 F.2d 169 (2d Cir. 1947).

[22] *"Hand's opinion fell securely within the legal mainstream of his own time and was greeted with relatively little commentary. The T.J Hooper is not included, for example, in the 1939 edition of Leon Green's tort case book. It is a bit player in the first edition of Prosser's handbook on torts. Nor was the case explicitly mentioned by Clarence Morris in his classic 1942 article, "Custom and Negligence," which sets out the received wisdom on the subject and which has wielded enormous influence on the Field".* EPSTEIN, Richard A.. The Path to The T. J. Hooper: The Theory and History of Custom in the Law of Tort. Coase-Sandor Institute for Law & Economics Working Paper No. 2, 1991, p. 4.

de Justiça - National Council of Justice), will be presented about the collective actions in Brazil and, more specifically, about collective actions on consumer rights. In this opportunity, I will analyze the calculation of an indemnity based on a consumer class action that has had considerable repercussion in Brazilian courts, making further comments on the case, its characteristics and pointing out my main criticisms and recommendations according to Law and Economics. I selected a case of collective protection because I believe that the economic variables of an indemnity (and Hand's Formula) can be calculated more accurately in a single collective proceeding (consumer class action), through class actions for damages or injunctive class actions, than in several individual lawsuits, indicating that the molecularization of jurisdictional protection in consumer relations may be a good way for us to enhance the main function of civil liability, which is to discourage damage. The idea that "union makes strength" can be translated, in the sphere of class actions, by the economic expression "aggregation creates value"[23]. Finally, I will conclude the article in Chapter III by presenting a modest proposal for a method of calculating civil liability indemnity amounts, based on a reading of the Economic Analysis of Law of indemnities, adding the variable guilt for all forms of civil liability, so that the existence or not of a duty to indemnify arises from the fulfillment or not of a legal duty of precaution, which can be calculated by Hand's Formula ($B < P*L$). One should take into consideration, as a parameter for fixing an indemnity for damages, the value of the damage itself, but also the victim's opportunity costs, the value of what was invested (or what was not invested) in precaution, and the value of what the offender unjustly obtained as a benefit from conduct causing damage.

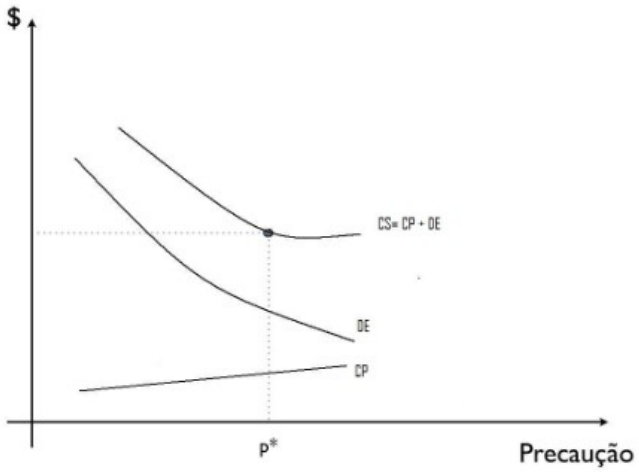
1. FOR AN ECONOMIC ANALYSIS OF COMPENSATION

An indemnity will be considered adequate when it manages to structure incentives that produce a scenario of 1) higher investments in precaution (no waste) and, consequently, 2) lower levels of damage incidence. The more precaution, the lower the probability of damage happening, that is, the lower the expected damage from a conduct or activity, which is socially desirable when the expected damage is compatible with the costs of this increase in precaution. In the context of consumer relations protection, the expectation of the EDA of civil liability is to encourage the adoption of an optimal level

[23] GIDI, Antonio. A *Class Action* como Instrumento de Tutela Coletiva dos Direitos, RT, 2007, p. 31.

of precaution (again without waste), from which investments in precaution minimize the social cost of these relations, including for consumers bystanders, without making it impossible for suppliers to continue their economic activities.

For this to occur, the amount of compensation for material and moral damages arising from consumer relations must reflect, as much as possible, the principle of full compensation, aiming to restore the *status quo ante* of consumers and consumption. In the case of property damages, *restitutio in integrum* is easier to achieve than in the case of non-property damages, precisely because one is faced with the Herculean challenge of trying to measure magnitudes that are difficult to measure such as life, psychophysical integrity and personality, for example. Those who cause damage should internalize their externalities, but how to calculate this cost of internalizing the damage in cases where not even the victims are able to know, with exactitude, the extent of the damage? Hence the importance that the calculation of compensation concatenates the private cost and the social cost of consumer relations, so that the civil liability of suppliers does not produce suboptimal convictions, below or beyond what is due, underestimated or overestimated.



CS = Social Cost
CP = Cost of Precautionary Exercise
DE = Expected Damage
Precaução = Precaution

According to the graph, p* represents the optimal point of social precaution at which the interaction of supplier and consumer precautions would minimize the social

cost (CS), that is, the sum of the cost of exercising precaution and the expected harm from the economic activity potentially causing harm. The way Law structures its liability rules and principles can generate inefficient incentives for suppliers and consumers to invest below or above the optimal point of precaution, raising the social cost of consumer relations. Some people think that Hand's Formula is not a theory of tort liability[24], but recognizing the importance of thinking the Law and Economics of tort liability in order to adjust incentives in the behavior of suppliers and consumers, our goal is to systematize the reasoning and make it applicable, more and more frequently, in Brazil.

The recognition (and realization) of the regulatory function of civil liability can generate a virtuous circle of reduction of the social cost of consumer relations, since, with greater legal and economic incentives for potential damage-causers to invest more in precaution, the probability of damage occurring tends to be lower, and thus there will be, in theory, less litigation, fewer lawsuits on consumer rights and less spending on the Judiciary.

Without this fine-tuning of the Economic Analysis of Civil Liability Law, damages in consumer relations in Brazil can lead to the so-called efficient damage, that is, damage in which the cost-benefit of investing in precaution is not worth it, so that offenders prefer to cause damage instead of avoiding it.

In Brazil, (un)fortunately, damage is usually efficient in consumer relations because, among other factors, the threat value of civil liability is very low.

If a consumer is a victim of damage arising out of a consumer relation and believes that he can receive up to R$5,000.00 of compensation at a probability of 85% and that, regardless of whether or not the lawsuit is granted, he will have the cost of R$1000.00 to file the lawsuit, the consumer's threat value as a plaintiff is equal to (R$5,000.00 * 0.85) - R$1,000.00, i.e. R$3,250.00. If a supplier or potential tortfeasor imagines that he can be ordered to pay R$5,000.00 in damages due to the damage caused at a probability of 85% and that, whether or not he is ordered to pay damages, he

[24] *"[...] Esta solução, que se expressa como 'há culpa quando o investido em prevencao é menor do que os danos esperados', ou 'há culpa se B<PL', parece um meio muito diferente de valorar as condutas envolvidas. No entanto, esta conclusão ainda está longe de constituir uma teoria"*. ACCIARRI, Hugo A.. Elementos da análise econômica do direito de danos. Coordenação da edição brasileira Marcia Carla Pereira Ribeiro. São Paulo: Revista dos Tribunais, 2014. RAND, Ayn. The Virtue of Selfishness. New York: Signet, 1964, p. 26.

will have the cost of R$1,000.00 to defend himself in the lawsuit, the threat value of this tortfeasor is equal to (-R$5,000.00 * 0.85) - R$1,000.00, i.e., -R$5,250.00.

In this scenario, given the low magnitude of the damage or the probability of conviction in high amounts, if the average compensation that the Courts usually award (expected damage, SD) is less than R$5,250.00, the threat is not credible and, as a consequence, there are incentives for suppliers and other potential causes of damage to consumers to invest little (below the optimal point) in precaution and for fewer private agreements between suppliers and consumers to take place, so that there are more lawsuits on consumer law than necessary.

Raising the threat value of civil liability in consumer relations could encourage suppliers and other potential damage causers to invest more in precaution, which would tend to produce lower rates of litigation due to a lower incidence of damage to consumers.

The proposed method for calculating compensation in this article suggests the addition of the variable "fault" to all types of civil liability, not as a requirement for establishing the duty to indemnify, but rather as an assumption for calculating compensation (along the lines of the provisions of the sole paragraph of art. 944 of the Brazilian Civil Code[25]). What I mean is that, for example, a consumer who intends to claim moral and material damages arising from a consumer relationship, because it is a case of strict liability (according to articles 12[26], 14[27] or 18[28], all of the Code of Consumer Protection, except in the case of a liberal professional[29]), will not need to

[25] Article 944, sole paragraph, of the Brazilian Civil Code. *The indemnity is measured by the extent of the damage. Sole Paragraph. If there is excessive disproportion between the seriousness of the fault and the damage, the judge may reduce the compensation equitably.*

[26] Article 12, of the Consumer Defense Code (CDC). *The manufacturer, producer, builder, national or foreign, and importer are liable, regardless of fault, for the repair of damage caused to consumers by defects arising from the design, manufacture, construction, assembly, formulas, handling, presentation or packaging of their products, as well as insufficient or inadequate information about their use and risks.*

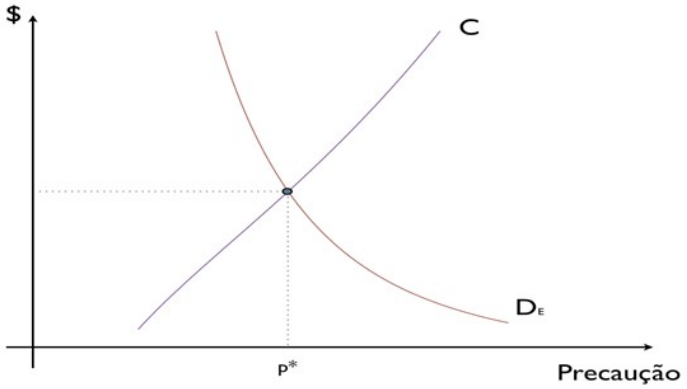
[27] Article 14, of the Consumer Defense Code (CDC). *The service provider is liable, regardless of fault, for the repair of damage caused to consumers by defects related to the provision of services, as well as by insufficient or inadequate information about their use and risks.*

[28] Article 18, of the Consumer Defense Code (CDC). *Suppliers of durable or non-durable consumer goods are jointly and severally liable for defects in quality or quantity that make them unsuitable or inadequate for the consumption for which they are intended, or reduce their value, as well as for those arising from disparity with the indications on the container, packaging, labeling or advertising message, subject to variations arising from their nature, and the consumer may demand the replacement of the defective parts.*

[29] Art. 14, paragraph 4º, of the Consumer Defense Code (CDC). *The service provider is liable, regardless of fault, [...]. Paragraph 4° The personal liability of liberal professionals will be ascertained upon verification of fault.*

prove fault of the supplier for there to be a duty to indemnify, it is enough to prove that there was 1) conduct of the supplier, 2) damage suffered and 3) causation between them. However, even though 'fault' is not a requirement to establish the duty to indemnify in a case of strict liability, we believe that 'fault' cannot be disregarded when calculating an indemnity, even in a case of strict liability.

Thus, the metric for the amount of an indemnity for subjective or objective civil liability should be weighted according to whether or not a legal duty of precaution (bilateral in nature, i.e., applicable both to the supplier-seller and to the consumer-victim) has been fulfilled, which, based on a reading of the Economic Analysis of Civil Liability Law, can be measured by Hand's Formula(B < P*L):



C = marginal precautionary cost
DE = marginal expected damage = pd
p = marginal probability of occurrence of damage
d = marginal damage
Precaução = Precaution

From this perspective, given that the Economic Analysis of Law *"is more concerned with who could, at the lowest cost, exercise precaution more efficiently,"*[30] civil liability in consumer relations must necessarily take into consideration, as a parameter for setting compensation for damages, 1) the value of the damage itself but also 2) the value of what was not invested in precaution or what was unduly profited by the harmful conduct or by the intentional carelessness and, if applicable, 3) the value of the opportunity costs of the consumer-victims, so that the main function of civil liability, which is to discourage damage from occurring, may be enhanced.

[30] PORTO, Antonio José Maristrello. GAROUPA, Nuno. Curso de Análise Econômica do Direito. São Paulo: Atlas, 2020, nota de rodapé nº 11 da p. 237.

And, as seen, the Hand's Formula would help us to identify the efficient care-level, for purposes of calculating the total value of an compensation, which would allow us to conclude whether or not there was fault on part of the supplier, whose measurement, by the formula B < PL, is certainly more objective than thinking fault as a synonym for negligence, imprudence or malpractice, which are essentially indeterminate legal concepts. A conduct would be considered culpable if the precautionary investments were lower than B* and, *a contrario sensu*, it would be inefficient, as it implies waste to impose on the supplier investments higher than B*[31].

Let us imagine, for example, that, in a competitive market scenario, the conduct of a supplier has caused damage of R$ 1,500.00 to a specific consumer. Let us also suppose that this same supplier has had three alternatives to try to prevent this damage from happening at a cost of R$ 10.00, R$ 100.00 or R$ 1,000.00, and that he had chosen the cheapest precautionary option. Each of these precautionary measures would imply a different probability that the said damage would occur, which are, respectively, 60%, 40% and 20%.

If the Courts impose an compensation whose value only reflects the damage caused to the consumer (R$ 1,000.00), there will be little or no incentive for the supplier to invest above the efficient care-level. On the other hand, if the difference between what was invested and what was not invested makes up the value of the compensation, the supplier and other potential harm doers will tend to invest above the efficient care-level.

In this case, with the option for the cheapest precautionary measure (R$ 10.00), the probability of a damage of R$ 1,500.00 happening was 60%, and the expected damage (which we will call ED1) from the supplier's conduct would be R$ 900.00. If the supplier had decided to invest R$ 100.00 in precaution, the probability of the damage of R$ 1,500.00 occurring would drop to 40% and the expected damage (which we will call ED2) would be R$ 600.00. The marginal benefit of adopting the intermediate precautionary measure (R$ 100.00) compared to the cheapest one (R$ 10.00) would be obtained from the equation ED1 - ED2, that is, R$ 900.00 - R$ 600.00

[31] *"[...] It is obvious that the optimal level of care is given by B = PL. In other words, according to the Learned Hand formula, there is a particular amount of precaution that is economically reasonable and is dependent upon the probability or the risk of damage. This in fact is quite in accord with legal reasoning"*. OTT, Claus; SCHÄFER, H. B. The economic analysis of civil law. Cheltenham, UK: Edward Elgar. Publishing, 2004, p. 136.

= R$ 300.00. In this case, it would be efficient to demand an investment of R$ 100.00 from the supplier in precaution to avoid an expected damage of R$ 1,500.00, that is, investing these R$ 100.00 would be a legal duty of the supplier (and the non-investment would imply his fault).

And what about the most expensive precautionary measure (R$ 1,000.00)? Would it be inefficient to require the supplier to do this precaution exercise or would that cause waste[32]? If he has chosen the costliest precautionary measure (R$ 1,000.00), the probability of causing the same damage of R$ 1,500.00 would be reduced to 20%, so that the expected damage would be R$ 300.00 (which we will call ED3). As the difference between ED1 (R$ 900.00) and ED3 (R$ 300.00) is R$ 600.00, the marginal benefit calculation would advise against the supplier being required to spend R$ 1,000.00 in precaution to avoid a expected damage of R$ 600.00, that is, this would not be socially desirable[33].

As a consequence, the most efficient precautionary measure, that is, the one that minimizes the social cost, is the intermediate one at the cost of R$ 100.00:

Precautionary cost	Expected damage	Social cost
R$ 10.00	R$ 900.00	R$ 910.00
R$ 100.00	R$ 600.00	R$ 700.00
R$ 1,000.00	R$ 300.00	R$ 1,300.00

[32] *"Information about firms' conduct and about their products and services may be particularly difficult for courts to obtain or evaluate as they arrive at a determination of negligence. Court's difficulty in obtaining and evaluating information about firms' conduct leads to two problems. First, courts may be likely to make errors in determining optimal levels of due care. When firms are able to predict courts' incorrectly calculated levels of due care, firms Will often be led to take care, as the case may be. And when firms are unable to predict levels of due care, or when there are other uncertainties surrounding the determination of negligence, firms may well be led to make excessive levels of care so as to avoid being found liable by mistake [...]. The second problem is that courts may fail altogether to consider certain dimensions of firms' behavior in negligence determination, either for want of any evidence or because evidence is scant. With respect to such dimensions of behavior, firms may do little or nothing to reduce risk".* SHAVELL, Steven. Foundations of Economic Analysis of Law. The Belknap Press of Harvard University Press. London, England, 2004, p. 217-218.

[33] *"[...] o nível de precaução aconselhável para atividades diversas pode variar. Na verdade, a necessidade de adoção de precauções distintas para diferentes atividades é uma ideia bastante intuitiva. Parece claro que o nível de precaução adotado por engenheiros de uma usina nuclear deva ser supeior ao adotado em outras atividades menos arriscadas. E, no entanto, mesmo os engenheiros de uma usina nuclear não seriam capazes de adotar precaução ilimitada, sem inviabilizar economicamente a atividade [...]".* PORTO, Antonio José Maristrello. GAROUPA, Nuno. Curso de Análise Econômica do Direito. São Paulo: Atlas, 2020, p. 236-237.

Let us assume than that the supplier in the example above invested only R$ 10.00 in precaution when, according to the Hand's Formula, he should have invested R$ 100.00: the supplier failed to comply with a legal duty of precaution, so the R$ 90.00 that he failed to invest should be part of the calculation of compensation for tort liability in consumer relations. So, the supplier should pay compensation to repair the R$ 1,500.00 of damage caused to the consumer in the example, but also the opportunity costs of the offended and the R$ 90.00 that he did not invest in precaution, but should have done so.

In the same way, there is the disclaimer that if the consumer could invest X dollars in precaution to avoid the own damage of R$ 1,500.00 and if there was the legal duty to do it, according to the same parameters of the Hand's Formula, he will not be compensated or will not be compensated in its entirety, and it is applicable here the reasoning of the partial figure of the objective good faith of the duty to mitigate the own loss and the legal institutes of the victim's exclusive fault (R$ 0.00 of compensation, by *contributory negligence*) or the concurrent fault (Y - X, where Y is the amount of compensation due and X is the value that the consumer did not invest in precaution, when there was a legal duty to do it, by *comparative negligence*). As a disclaimer of the disclaimer, however, the consumer is the vulnerable part of the consumer relation, precisely because of the informational asymmetry that is usually inherent in the suppliers and consumers' interaction, so that we cannot forget that consumers' knowledge about the risks is imperfect[34].

This is because, without suppliers and other harm doers being condemned to pay for what they failed to invest in precaution (or that consumers and other victims do not be sanctioned because of their intentional negligence or carelessness), there will be not threat value, nor efficient incentives to make they invest to avoid damages from happening, so that the damage will always tend to be efficient, especially if the liable

[34] *"Consumer's knowledge of risk is imperfect. Suppose now that customers do not have enough information to determine product risks at the level of individual firms [...]. Then firms will not take care in the absence of liability. No firm Will wish to incur added expenses to make its product safer IF customers Will not recognize this to be true and reward the firm with their willingness to pay a higher price. Liability Will thus be needed to induce firms to take optimal care. Furthermore, the level of care taken by customers Will not be optimal in the absence of liability. Customers Will take tôo little care IF they underestimate risks and tôo much care IF they overestimate them. In the presence of liability, however, customers Who possess accurate knowledge of the level of due care used to determine contributory negligence may be led to take due care despite their misperception of risk"*. SHAVELL, Steven. Foundations of Economic Analysis of Law. The Belknap Press of Harvard University Press. London, England, 2004, p. 214.

for the harmful conduct has earned or usually earns more than the amount of compensation for damages caused to consumers. If this is the case, we will have a greater incidence of damages in consumer relations and, therefore, greater litigation: there will be more demands for consumer law and fewer private agreements between suppliers and consumers, since the latter will only be willing to negotiate if this agreement results in a value that for both of them corresponds, at least, to the value they would obtain with a non-cooperative solution.

The adequate calculation of compensation for damages in tort liability would reduce the transaction costs and would allow the application of the Coase Theorem[35], which has as simultaneous premises to its application 1) the clear definition of the property rights (of tort liability) involved and 2) a scenario of zero transactions costs or low enough to allow a private agreement. Without both requirements coexisting, the efficiency of the tort liability rules would possibly not be achieved: if there were only reduction of transaction costs, but there was no definition of the rules of the game, the harm doer might prefer to keep provoking it, as well as if there was only a good definition of rights, but the transaction costs were high, there would be no bargaining.

Now let us suppose that the consumer in the previous example could avoid the loss of R$ 1,500.00 by investing R$ 350.00 in precaution, while the supplier could avoid it at a cost of R$ 100.00, with either of the two solutions would prevent such damage from occurring. The supplier, without spending a penny with precaution, usually earns R$ 10,000.00 from his economic activity. Let us assume too that there are three possible legal solutions *ex post* for the problem: 1) the consumer is obliged to invest R$ 350.00; 2) the supplier is demanded to pay a compensation for the damage caused (R$ 1,500.00); or 3) the supplier is required to invest R$ 100.00 to prevent damages happening. The efficiency of the tort liability rules in a case like this will depend on how the Law is structured to solve this type of problem:

Precautionary cost	Non-cooperative solution	Surplus	Cooperative solution

[35] *"A contribuição de Coase foi o ponto de partida para análises mais refinadas sobre o efeito que as diferentes regras de responsabilidade têm sobre o comportamento humano em relação ao objetivo de eficiência econômica"*. ACCIARRI, Hugo A. Elementos da análise econômica do direito de danos. Brazilian edition coordination: Marcia Carla Pereira Ribeiro. São Paulo: Revista dos Tribunais, 2014. RAND, Ayn. The Virtue of Selfishness. New York: Signet, 1964, p. 32.

	Supplier	Consumer		Supplier	Consumer
Rule n. 1	R$10,000.00	R$1,150.00	R$0.00	R$10,000.00	R$1,150.00
Rule n. 2	R$8,500.00	R$1,500.00	R$750.00	R$9,250.00	R$2,250.00
Rule n. 3	R$9,900.00	R$1,500.00	R$100,00	R$9,950.00	R$1,550.00

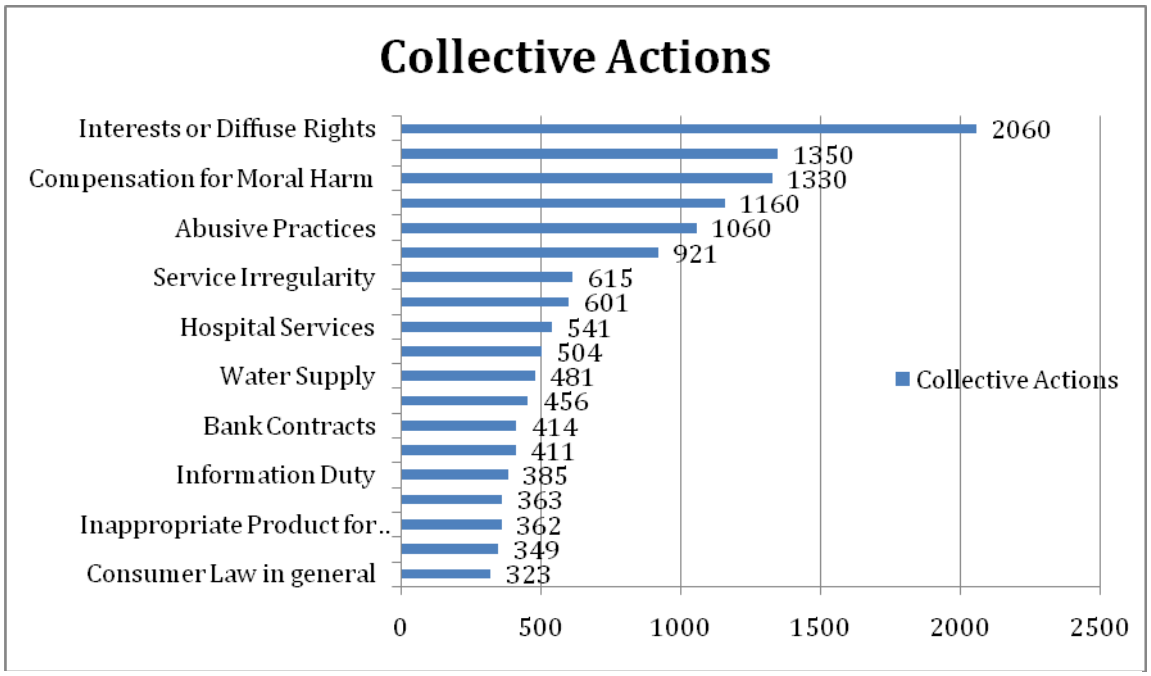
As this is a case of tort liability in consumer relations, the Brazilian law would not apply the Rule n. 1 as a solution to it. The solution, consequently, would lie between the Rule n. 2 (the supplier is demanded to pay compensation) and the Rule n. 3 (the supplier is required to invest in precaution), but the fact is that, regardless of the legal rule adopted, being the translation costs zero or sufficiently low, the cooperative solution will always be efficient. From this derives the importance of consumer law (and the Law as a whole) to be structured to clearly define the legal rules applicable to consumer relations and to lubricate the relations between suppliers and consumers, to reduce the transaction costs involved and to enable cooperative solutions[36].

2. THE REGULATORY ROLE OF TORT LAW (OR YOUR NON-OBSERVANCE): THE CASE OF THE INFINITE MOBILE PHONE PLAN THAT WAS PURPOSELY FINITE

In this Chapter, I intend to photograph the contemporary reality of collective actions on consumer rights in Brazil, so that it is possible to verify how compensation for damages resulting from civil liability in consumer relations is calculated. I will analyze, with an interdisciplinary perspective of Law and Economics, based on the Economic Analysis of Law, the collective actions that are being processed in the 27 state' Courts of Justice, considering that there are, in Brazil, 26 states plus the Federal District. These collective processes will be mapped according to data from the Panel of the National Register of Collective Actions (CACOL), organized by the National Council of Justice (CNJ). There are 14.312 class actions that deal with consumer rights,

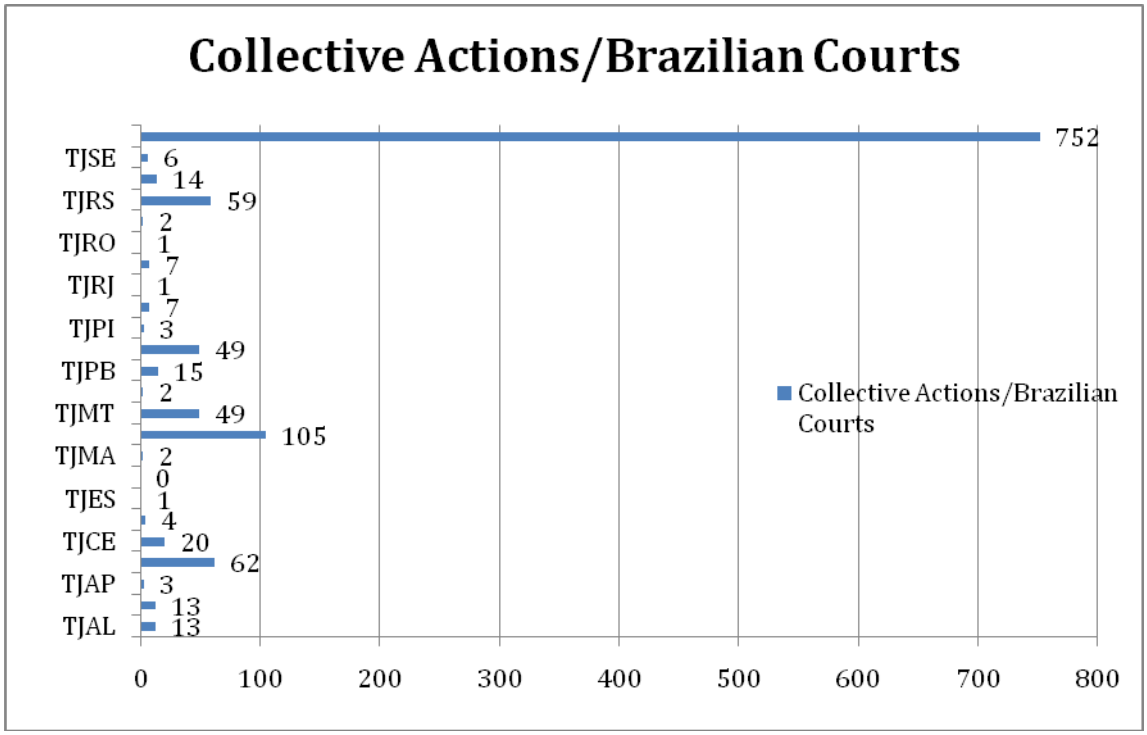
[36] A good alternative for consumer law to find cooperative solutions of tort liability in consumer relations is the use of alternative means of conflict resolutions, among which the Consumidor.gov.br Platform stands out as an instrument of Online Dispute Resolution (ODR), on which we have already had the opportunity to make further comments in a specific work on the subject. See PORTO, Antonio José Maristrello; FRANCO, Paulo Fernando de Mello; NOGUEIRA, Rafaela. Lawtechs e o consumidor. 1. ed. Rio de Janeiro: FGV Direito Rio, 2021.

which were cataloged in the main subjects discussed, with the register “Interests or Diffuse Rights”, “Interests or Homogeneous Individual Rights” occupy the first two positions of the ranking of subjects of the processes in processing:

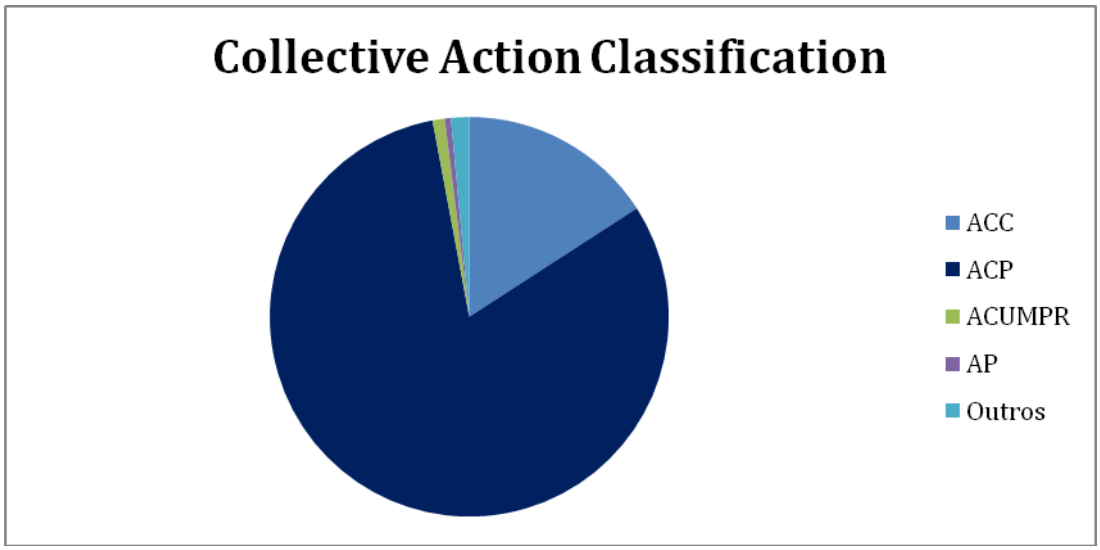


As the paper’ purpose is to study the indemnities arising from civil liability in consumer relations, for didactic purposes, I will focus the analysis on the 1.330 processes in progress that deal with the subject "Indemnification for Moral Damage". However, as among these 1.330 processes in progress there are electronic processes and physical processes, that is, that have not been digitized, I will focus the study on the 1.190 electronic processes in process that represent the number of collective actions whose main subject is “Indemnification for Moral Damages ”.

The Brazilian Court with the highest number of class collective actions on “Indemnification for Moral Damage” is the TJSP (São Paulo), with 752 claims in progress, followed by the TJMG (Minas Gerais, with 105 claims), TJBA (Bahia, with 62 claims), TJRS (Rio Grande do Sul, with 59 claims) and the TJMT and TJPE (Mato Grosso e Pernambuco, tied with 49 demands), but it is beyond the scope of the research to inquire why some Courts have only 1 or 2 cases pending judgment, if the respective Courts are fast in the conclusion of their processes or if they legitimize them for the Collective actions proposed few collective processes:



These 1,190 class actions are pending on "Indemnification for Moral Damage" or were proposed as Collective Civil Action (ACC), Public Civil Action (ACP), Compliance Action (ACUMPR), Popular Action (AP), Collective Writ of Mandamus (MSC) or other procedural classes that have collective law matters (Others), according to the classification chosen by the CNJ. Of these procedural classes, the Public Civil Action (ACP) and the Collective Civil Action (ACC) are the most common types of class actions in the Courts of Justice, with, respectively, 82.4% and 16.1% of the processes in progress:



As explained earlier, in a future Research Project, which will result from the conclusions of this paper, these 1.190 cases will be mapped according to updated data from CACOL, with the support of the CNJ and the National Council of the Public Ministry (CNMP) and then, will be analyzed the main arguments that were used as request and cause of action and as ratio decidendi to define the amounts of compensation in these cases, for those that have already been decided in 1st or 2nd instances. The case numbers are listed in the CACOL Report, which will make it possible for each of them to be consulted by the electronic systems of each of the Courts.

At the end of the Research Project, in a purposeful way, I will make a critical analysis of these 1.190 cases, supporting their initial discussions or conclusions or suggesting how they would have been decided in a fairer and more efficient way if the rationale of Economic Analysis of Law had been used as basis for the filing or decision of these collective actions.

I will choose some of these 1.190 processes to be analyzed with greater depth and specificity, in addition to comparing other paradigmatic cases to be debated in the Research. As I explained in the methodology part, I will not mention, when studying the cases, the names of consumers, nor of the legal entities involved in collective actions on consumer rights. I will narrate the main facts discussed in the process and, in particular, the legal and economic grounds that supported the value of compensation for moral or material damages in consumer relations or even justified a lack of pecuniary conviction.

For the present paper, I have selected one of these 1.190 processes to discuss in these brief lines. The case is about a certain mobile phone operator that, as of 2009, began to publicize a promotion in which consumers of their cell phone plans could talk as long as they wanted, unlimitedly, infinitely, even, if they so wished, but they would only pay for the first minute of a call (which, at the time, would cost BRL 0.25). The advertising was broadcast in the media and the promotion was offered to the public, but there were several reports from consumers that, after a certain time on the call, either the phone call dropped or the signal lost quality, which made it impossible for communication to continue.

After so many complaints from consumers, the National Telecommunications Agency (ANATEL) launched some Procedures for Investigating Noncompliance with

Obligations (PADOs) and the Public Ministry of the Federal District (MPDF) launched a Civil Inquiry[37] to investigate the reports.

At first (PADO 2010), there was no malice on the part of the mobile phone operator, but a quality defect that, according to the investigations, was due to the anti-fraud protection system and that ended up compromising the quality and call duration[38].

In a second moment (PADO 2011), however, it was proved that the connections dropped on purpose. The malicious intent (and not due to fault or quality defect) of the cell phone operator remained free of doubts because investigations pointed to a pattern in the interruption of calls, here are the calls usually dropped or lost quality when the call reached 1:20:00 duration.

These procedures found that, in fact, initially culpably and, later, intentionally, the cell phone operator was failing to comply with the publicity advertised and that the supposed infinite call plan was, in fact, finite, so the telephone operator mobile phone purposely interrupted calls so that consumers had to make a new call, which would impose a new cost of 1 minute more call.

Thereafter, the MPDFT filed a Public Civil Action (PCA)[39] ascertaining collective moral damages, in favour of society, in view of what it called *"inconsistency in the calls' transmission signal"* of the mobile telephony operator.

The ACP presented some curious mathematical calculations in order to define MPDFT's indemnity request amounts.

The MPDFT sustained that the mobile telephony operator would have managed to get, in face of the promotion offered to consumers, a "*daily additional billing of R$ 4.327.800,50 [...] in the national territory"*[40] and that, *"only in the DF [Federal District], on day 08/03/2012, 168.660 [...] consumers were reached by the unlawful conduct [...], providing an undue profit of R$ 87.474,25"*[41]. Also according the MPDFT, the mobile telephony operator would have been causing to consumers, as material damage, a monthly financial loss *"calculated at R$ 2.610.000,00 [...]"*[42], given

[37] *Inquérito Civil Público* (Public Civil Inquiry) n. 08190.089527/10-51.
[38] PADO n. 53504.026837/2010.
[39] *Processo* (Case) nº 0019710-80.2013.8.07.0001.
[40] Initial Application of PCA on the case nº 0019710-80.2013.8.07.0001.
[41] Initial Application of PCA on the case o nº 0019710-80.2013.8.07.0001.
[42] Initial Application of PCA on the case nº 0019710-80.2013.8.07.0001.

that *"the property damage reached R$ 127.890.000,00 [...]"*[43], which should be returned two-fold to consumers (art. 42, sole paragraph, do CDC) *"reaching R$ 255.780.000,00 [...]"*[44].

In conclusion, the MPDFT sustained that collective moral should be indemnified *"in the percentage of 10% of defendant's on 2012, reaching R$ 144.888.790,80"* and requested an *injunction* in order to compel the mobile telephony operador to publish an erratum in the mass circulation newspapers on DFT, for a certain period.

The PCA was judged partially upheld. The decision for collective moral damages was upheld for costs against the mobile telephony operator, obligated to pay a compensation of R$100.000.000,00 (one hundred million reais), destined for the Fundo Distrital da Lei de Ação Civil Pública, but the claim for material damage was dismissed, due to lack of evidence. As a response, the mobile telephony operator and the MPDFT have appealed[45].

The telephone provider appealed in face of the judgment and required that, among other requirements, the sentence for collective moral damages could be removed or, at least, reduced, sustaining that R$100.000.000,00 would be exorbitant"[46].

The MPDFT appealing, in turn, required the sentence reformulation on the dismissal of moral damage compensation, since the evidences exist and the collectiv cause would make viable a generic condemnation to be later cleared by the consumers/victims of the misleading or abusive advertising.

The judgment delivered on the appellation has some interesting economic elements, used as calculation parameters. The tachygraphy notes from the Court of Justice of Federal District and Territories (TJDF) deserve our commentaries.

According to TJDF, *"apart from the misleading advertising, there was culpable and wilful misconduct in stop the callings, action and houve ação culposa e dolosa da ré em interromper as ligações, leading to ther user's prejudice and profit the mobile telephony operator"* and, therefore, this should imply increase in *"the value of extrapatrimonial collective damage, due to the harm caused to collective moral*

[43] Initial Application of PCA on the case nº 0019710-80.2013.8.07.0001.
[44] Initial Application of PCA on the case nº 0019710-80.2013.8.07.0001.
[45] Civil Appeal nº 20130110762189.
[46] Defendant's Appeal on case nº 0019710-80.2013.8.07.0001.

integrity, since the trust in all prestations from the public service rested severely disrupted"[47].

The High Court Judge Maria Ivatônia, rapporteur for the procedure on TJDF, identified that the net operating revenue of mobile telephony opperator, on 2011 (when the promotions was disseminated), was R$16.282.388,000,00 (sixteen billion, two hundred and eighty two millions and three hundred and eighty eight reais) and this parameter was used by ANATEL for the settlement of fines imposed by the Regulatory Agency. Even so, the Rapporteur inicial vote was upheld to reduce the first sentence value of compensation from R$100.000.000,00 to R$15.000.000,00.

Other High Court Judges composing the court required extra time to analyse the facts, due to a sentence mention of inversion of the burden of proof, when the correct should be to take this decision as a rule of instruction, not a rule of judgment.

However, when the extra time was over, the inversion of the burden of proof topic was overcome, and there was no understanding that the alleged restriction of defence against the telephone provider happened. After the extra time, one of the High Court Judges consented to reduce the previously determined value of compensation for collective moral damage, but he diverged over the quantum. To the High Court Judge Josaphá Francisco dos Santos, who asked extra time, R$50.000.000,00 (fifty million reais) would be the reasonable and proportional value, agreeing with the Rapporteur about the net operating revenue topic, but sustaining that the new value should be fixed not at R$15.000.000,00, but at R$50.000.000,00, an amount that, in his words,*"is an appropriate quantum to discourage the infringing conduct, without being an excessive repression"*[48]. His understatement was that *"a lower value would be derisory, meaningless facing the defendant's financial capacity, increased, moreover, by the unlawful conduct"*[49].

The judge sustained that, *"the corporation had a profit of R$200.000.000,00 (two hundred million reais)"*[50] in a way that *"pay R$ 15.000.000,00 (fifteen million milhões de reais) for a corporation that had R$ 200.000.000,00 (two hundred million*

[47] Civil Appeal nº 20130110762189.
[48] Civil Appeal nº 20130110762189.
[49] Civil Appeal nº 20130110762189.
[50] Civil Appeal nº 20130110762189.

reais) as profit on the Federal District alone" would be translated, according to him, in *"a contribution for corporations to continue to mistreat and disrespect consumers""*[51].

The TJDFT highlighted that the number of potentially affected consumers by the unlawful conduct of telephone providers *"surpass the quantum of four"*[52].

With the notes, the Judge-Rapporteur revised her vote and reverberated the reduction of the amount of the conviction from R$100,000,000.00 to R$50,000,000.00 and no more to R$15,000,000.00, as initially would have taken a position, believing that the revised value *"proves to be more adequate as a way to prevent the defendant mobile telephony concessionaire from developing this same harmful and illicit practice to the detriment of its customers and consumers in general"*[53].

Other Judges did not agree with the value defined by the Judge-Rapporteur, as they considered it high, and sustained a divergence. In the end, the Rapporteur's vote prevailed in the score of 3 x 2 to amend the Judgment of 1st instance and reduce the amount of compensation for collective pain and suffering to R$50,000,000.00, maintaining the request for material harms.

The cell phone operator filed a Special Appeal[54] and the case reached the STJ, which was finally decided in 2021, with the maintenance of the conviction for collective moral damages in the amount of R$50,000,000.00. According to the STJ, "considering the misleading advertising and the culpable and malicious action of interrupting the calls"[55] of consumers, the value was understood as "reasonable and fulfilling the purposes of repairing off-balance sheet damages"[56]. The only exception made by the STJ was that the condemnation of the obligation to do in relation to the duty to publish an informative errata for consumers could be made via the Internet, not necessarily in newspapers, as the TJDFT had decided.

Having reported the necessary, let us use as parameters the values of the cellular operator's net operating revenue in 2011 (R$16,282,388,000.00), the additional daily revenue of (R$4,327,800.50) due to the alleged promotion and the alleged material damages, already with the legal double (R$ 255,780,000.00).

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[51] Civil Appeal nº 20130110762189.
[52] Civil Appeal nº 20130110762189.
[53] Civil Appeal nº 20130110762189.
[54] Special Appeal nº 1.832.217.
[55] Special Appeal nº 1.832.217.
[56] Special Appeal nº 1.832.217.

Bearing in mind that compensation for damages in consumer relations should reflect the value of the damage itself, but also what was not invested in precaution and what was unduly profited from the illicit act practiced, the ACP's indemnity claim and the condemnation, in our opinion, with due respect, fall short of what could be considered fair and efficient.

We don't know exactly how much the telephone provider would need to invest in order to prevent damage from happening, but, assuming that the damage caused to consumers could have been avoided with an investment X of precaution, but that such discussion was not held throughout the process, the only certainty we have is that if the alleged promotion had not been disclosed, there would have been no damages. Thus, if the aforementioned misleading or abusive advertising generated an undue additional daily billing of R$4,327,800.50, the undue additional annual billing was R$1,558,008,180.00, that is, 10.45% of the company's net operating revenue in 2011 (R$16,282,388,000.00), which should be compensated to the consumers.

Therefore, if the compensation must be measured by the extent of the damage, and this extent is not limited by the damage itself, the result of the process, without incurring in punitive damages, but mere guarantee of the cost of the economic activity of the one causing the damage, should have been of R$255,780,000.00 (for material damages) and R$1,558,008,180.00 (for collective moral damages), which, assuming that all these amounts were subject to exhaustive calculation and correctly calculated in the records, would total R$1,813.788,180.00. Another possibility would be to consider the material damages, as decided by the TJDFT and confirmed by the STJ, that would produce a compensation of R$1.558.008.180,00 of protection (for collective moral damages). In either case, however, the value is bigger than the one imposed by the Courts. These would be the maximum indemnity values (cap), which would later be the target of liquidation of the judicial sentence. Otherwise, it would not be a Pareto-efficient solution (but an efficient damage), since the imposed condemnation improved one’s situation (the telephone provider’s), but harmed another one’s situation (the consumers and the entire society, whose loss wasn’t fully repaired). And, consequently, there would be incentives for the supplier to continue causing damages and to invest less than they should in precaution.

Having defined the consumer's right and efficient compensation for damages in this specific case, the relationship would not necessarily end, since, according with the

Coase Theorem, the final pronouncement of the Courts could reduce the transaction costs so that, now, finished the process, supplier and consumers and Public Ministry can negotiate for a cooperative solution to minimize the social cost.

3. CONCLUSION

Getting back to the judicial calculation of moral or material damages compensations in consumerist relations, another aspect which needs to be faced is the question of punitive damages: if one of this article's partial conclusion is that damage compensation is composed by the damage itself, but not uniquely by it, wouldn't it be a compensation with punitive character?

The answer is no. The Research Proposal's premise is that the article 944 of the Brazilian Civil Code (CC), according to which *the compensation is measured by the extent of the damage*, already contains all of the element required to fulfill the regulatory function of the tort liability, without having to invoke the discussion about punitive damages.

After all, it is quite comfortable, specially to the one which is causing the damage, to argue that any and every value that exceeds the damage itself provokes unjust enrichment of the consumers who are victims of these damages and that the compensation would acquire punitive character, but, by my understanding, an also economic analysis of article 944 of the CC would recognize that the extent of the damage mentioned in the article cannot be self-absorbed by the damage uniquely considered, otherwise, as explained above, the damage will be considered efficient by the offenders[57].

Compensation for damages caused to consumers would be fair and efficient (Pareto or Kaldor-Hicks, depending on the case) if its value compensated for the damages directly caused, but also included what was not invested in precaution or, in other words, the amount unduly profited from the illicit act causing damage, since failing to invest in precaution means saving, as indirect damage. The purpose of "depriving the defendant of the illicitly obtained profit" is to "discourage the practice of unlawful conduct in society (deterrence)"[58].

[57] The so called "culpa lucrativa", very well developed by SANTOS, Antonio Jeová. Dano moral indenizável. 7. ed. Salvador: Editora JusPodivm, 2019, p. 215.
[58] GIDI, Antonio. A Class Action como Instrumento de Tutela Coletiva dos Direitos, RT, 2007, p. 39.

From the above, it is, through the legal institute of civil liability, to be able, at the same time, 1) to generate less situations of damage in consumer relations, due to the structuring of greater incentives for suppliers to invest more in precaution and, with this, 2) to generate fewer consumer lawsuits and, therefore, reduce excessive litigation in Brazil, in addition to 3) collaborate to reduce the risks of lottery jurisprudence and the inherent legal uncertainty, making compensation values in more objective, less subjective consumer relations, since filtered by the Economic Analysis of Law, thus concretizing what I called the regulatory function of civil liability in consumer relations.

Given that the calculation of the opportunity costs and the variables of the Hand Formula isn't trivial, specially in Brazil, where the interaction between Law and Economy is not (yet) part of the tradition of Courts, we believe that a script of Economic Analysis of Law of Tort Law would be better applied in a single class action than in several individual cases. It is precisely why we think that the molecularization of the judicial protection in consumer relations may be able to produce more efficient results and incentives than the atomization of individually proposed consumer law processes.

The merits of the process would be molecularized and debated in greater depth until a maximum amount of compensation (cap) was stipulated, which, at the end of the collective process, would be later discussed by consumers or other victims in order to investigate the extent of their respective damages. in the liquidation of the collective sentence, as a way of reducing the moral hazard of opportunistic behaviors and the tragedy of the commons such as market failures.

4. REFERENCES

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