

The Issue of Determining the Causal Relationship in Light of the Development of Administrative Liability

Naima Cheloufi.

Mohamed Lamine Debaghine University – Sétif 2 (Algeria)

nessmacheloufi@gmail.com

Ghania Abbas

Badji Mokhtar University – Annaba (Algeria)

ghaniaabes2018@gmail.com

Received: 05/06/2026

Accepted: 01/09/2026

Published: 06/10/2026

Abstract

The world has witnessed tremendous scientific and technological development, which has, in turn, affected the development of administrative liability in the absence of scientific certainty regarding the risks that may arise. This places the State before a new form of liability that requires it to adopt precautionary measures to prevent risks that cannot be avoided. As a natural consequence of establishing administrative liability in the absence of scientific certainty, when damage occurs, compensating victims raises certain issues, given that the damage may be catastrophic, making it impossible to restore the situation to what it was before, in addition to the uncertainty surrounding the causal relationship between administrative fault and the damage. Accordingly, this study aims to demonstrate how the causal relationship can be determined in the absence of scientific evidence regarding the risks that may potentially occur.

Keywords: Administrative liability, causation, uncertainty, risks.

Introduction

Administrative liability, as a form of legal liability, has undergone several stages before assuming its current form. Following the denial of State liability for damage caused by its agents, such liability was subsequently recognized. In light of the scientific development taking place at all levels, legal liability has undergone changes in terms of the grounds upon which it is based. Fault was initially the sole basis of such liability, after which it evolved toward a presumption of fault. At a more advanced stage, the theory of risk was adopted as a new basis for this liability, despite the absence of fault, but as a result of the State's hazardous activities. However, the adoption of the precautionary principle by national and international legislation has brought about changes in the law of liability in general and administrative liability in particular, including the grounds upon which it is based.

This administrative liability is attributable to the administration's fault, which may result from negligence due to its failure to take the precautionary measures that it is required to adopt in order

to prevent the occurrence of administrative fault, which is closely related to tortious fault. Any minor fault gives rise to the administration's liability, as the rule of gradation of administrative faults has been abandoned.

The causal link between the wrongful act and the resulting harm is also considered one of the most important conditions that legal scholarship and legislation have deemed necessary for establishing administrative liability, whether in the case of personal liability based on fault or liability based on the element of damage, known as objective liability. According to legal scholarship, it is not sufficient, for tortious liability to arise, for a person to suffer damage as a result of a fault committed by a person governed by public law; rather, such fault must be the direct cause of the occurrence of the damage, otherwise the administration's liability is negated.

In view of the substance of the precautionary principle, which requires the adoption of the necessary precautionary measures to address serious and irreversible harm, and although the latter is characterized by scientific uncertainty regarding the nature and extent of such risk, what first draws attention here is that its essence revolves around the element of scientific uncertainty, which constitutes the cornerstone of the precautionary principle. Therefore, in the event that damage occurs, the judge before whom a dispute concerning compensation for damage resulting from a breach of the precautionary principle is brought will find himself faced with a liability claim in which he is required to assess the causal relationship within a context of scientific uncertainty. This is certainly no easy task. Accordingly, the issue raised is: **To what extent has the development of the rules of administrative liability contributed to reformulating the concept of the causal relationship, and has this led to a shift from traditional certain causation to probabilistic causation, thereby undermining the stability of the administration's legal positions?**

To answer the issue raised, this article will address the concept of the causal relationship and the factors that preclude its existence, and then attempt to assess the causal relationship in light of the precautionary principle.

First: The Concept of the Causal Relationship and Factors Precluding Its Existence

We will address the concept of the causal relationship, followed by an examination of the factors that lead to the absence of the causal relationship, thereby resulting in the absence of liability.

1- The Concept of the Causal Relationship

Determining the causal relationship is one of the most difficult tasks in all branches of law, as well as for legal scholars and the judiciary. This difficulty in determining such a relationship and establishing rules governing it is due to the fact that overlooking this matter may have extremely serious consequences, because the failure to identify the cause that led to the damage makes it difficult, in turn, to determine the person responsible, thereby negating liability in the first place. The main reason for the difficulty in determining the causal relationship is also that, in many cases, the damage results from a combination of faults or acts, making it necessary to determine the fault that caused the damage. Furthermore, a single fault may result in multiple and successive instances

of damage, which makes it necessary to determine the extent of liability for such damage. This has led to the emergence of numerous theories in this regard¹.

With regard to the plurality of causes, two theories have emerged: the theory of equivalence of causes and the theory of the adequate cause, in addition to the theory of successive damages, in cases where a single act produces a series of consequences that follow one another.

According to the theory of equivalence of causes, all causes that have contributed to the occurrence of the damage must be taken into consideration, even if such causes are remote, as long as they are necessary. The absence of any one cause would result in the damage not occurring. Therefore, it is not possible to distinguish between causes according to their importance or the degree of their influence in causing the damage; rather, all causes are equivalent and occupy an equal position, because the damage occurs as a result of the combination of these causes. The result cannot occur if one of the causes is absent, just as no single cause can, by itself, bring about the result².

This theory leads to a considerable expansion of the scope of causation, making it difficult to confine the causes that contributed to the occurrence of the damage. If the notion of fault in fault-based liability makes it possible to delimit causation to some extent, thereby preventing an excessive expansion of its scope, the shortcomings of this theory become more pronounced when fault is presumed, as it is easy to establish the existence of presumed fault³.

The theory of the adequate cause subsequently emerged as a result of the shortcomings characterizing the aforementioned theory. This theory contributed to identifying the adequate cause of the occurrence of the damage, as it takes into consideration only the adequate cause or causes, meaning the ordinary cause that normally leads to the occurrence of damage in accordance with the natural course of events. In other words, an incidental cause is not sufficient to establish liability, because it is an extraordinary cause that does not ordinarily lead to the occurrence of damage in the normal course of events, yet it nevertheless caused the damage. The criterion for an adequate cause is that the act must be of a nature that leads to the occurrence of damage according to the natural course of events⁴. The legislator has adopted this theory⁵.

The theory of successive damages was also introduced, as it differs from the plurality of causes. A single act may result in a series of consequences that follow one another. If the sequence of

¹ Muhammad bin Barrak Al-Fawzan, *The State's Liability for Its Unlawful Acts and Their Administrative Applications*, 2nd ed., Library of Law and Economics, Riyadh, Saudi Arabia, 2014, op. cit., p. 400.

² Al-Zine Azri, "The Causal Relationship as a Condition for Administrative Liability in the Field of Urban Planning," *Journal of Human Sciences*, Mentouri University, Constantine, Algeria, No. 22, December 2004, p. 92.

³ Al-Zine Azri, op. cit., p. 92.

⁴ Muhammad bin Barrak Al-Fawzan, op. cit., p. 401.

⁵ Article 182 of the aforementioned Civil Code provides that: "...Compensation shall include the loss sustained by the creditor and the profit he has failed to obtain, provided that this is the natural consequence of the non-performance of the obligation or the delay in performing it...".

consequences results in multiple and successive instances of damage, the question arises as to which damages retain a causal relationship with the wrongful act⁶.

It can be concluded that, in cases involving multiple causes producing the damage, legal scholarship and the judiciary adopt the theory of the adequate cause rather than the theory of the plurality of causes. Accordingly, compensation is awarded against the person whose act constituted an adequate cause of the damage. The rule is that compensation is granted only for direct damage. On this basis, direct damage is damage considered to be among the ordinary consequences occurring in the normal course of natural events, which generally result from a sequence of events. Accordingly, the State may be held liable if it contributed through its fault to causing the damage and shall bear a portion of the compensation determined according to the extent of its contribution to causing such damage. However, if the external cause is the sole cause of the damage, the State shall be exempt from such liability⁷.

2- Absence of the Causal Relationship

The State is exempt from administrative liability if the causal relationship is interrupted, as the causes of the interruption of the causal relationship are attributable to circumstances in which the damage cannot be attributed to the activity of the actor. Despite the intervention of the administration's activity, the damage occurs not because of what the actor has done, but because there is another external cause unrelated to it. Thus, the causal relationship is absent and consequently interrupted between the activity of the actor, namely the administration, and the occurrence of the damage, because another factor intervened in causing the damage⁸.

Force majeure is also considered an external cause recognized by law for the absence of the causal relationship, which results in exemption from civil liability and constitutes an excuse for the debtor for not being required to perform his obligation, either permanently due to its impossibility or temporarily until the circumstances of force majeure cease to exist⁹. Accordingly, the State is exempt from bearing liability for the risks caused by its employees, resulting in the absence of administrative liability. Force majeure may be defined as an external event beyond the control of the debtor, the creditor, and third parties, such as war and the material events resulting therefrom, economic crises, the enactment of legislation or an external order that must be enforced, or the occurrence of an earthquake, fire, floods, a storm, or the spread of an epidemic¹⁰.

⁶ Al-Zine Azri, *ibid.*, p. 93.

⁷ Muhammad bin Barrak Al-Fawzan, *op. cit.*, pp. 402–403.

⁸ Muhammad Sabri Al-Jundi, *On Tortious Liability: Liability for the Acts of Others*, Vol. 1, Dar Al-Thaqafa for Publishing and Distribution, Jordan, 2015, *op. cit.*, p. 916.

⁹ Nada Abdul-Kadhim Hussein, *Temporary Force Majeure and Its Effect on Contract Performance: A Comparative Study*, *Al-Haqiqa Journal of Social and Human Sciences*, Ahmed Draia University, Adrar, Algeria, Vol. 22, No. 1, March 2023, p. 3.

¹⁰ Nada Abdul-Kadhim Hussein, *op. cit.*, p. 4, citing Abdul Majid, *A Concise Commentary on the Civil Code, Vol. 1: Sources of Obligations*, 5th ed., Nadim Press, Baghdad, 1977, p. 538.

A sudden event is also considered an external cause precluding the causal relationship, resulting in the administration being exempt from liability. By a sudden event, we mean any unforeseen occurrence or incident that may originate from various material or social causes and that, if it intervenes during the performance of human activity, may divert such activity from its course and lead to the occurrence of damage. Examples include unexpected demonstrations and acts of rioting¹¹. It is an internal, unforeseeable event that is difficult to prevent. In this case, the administration is exempt from liability in cases of fault because it is presumed that it committed no fault, and the unforeseen circumstance is referred to as “fault that is unaware of itself.” To facilitate obtaining compensation, it is recommended that the administration’s liability be established on the basis of risk, as it is not exempt from liability in such a case¹².

The causal relationship is also negated due to the act of a third party and the act of the injured party. The administration is exempt from liability if it is established that the damage sustained by individuals was caused solely by the fault of the third party, whether such third party is a public or private person. The burden of proving this rests with the administration by demonstrating that it had no connection to the damage, and if it is established that the fault of the external third party superseded the administration’s fault, if any. However, the administration’s liability is not negated if the damage resulted from joint faults committed by the administration and the third party. In such a case, as with the victim’s fault, each party is held liable in proportion to the fault committed by them¹³.

By the victim’s or injured party’s fault, or by the act of the injured person, we mean that the claimant (the injured party) commits an act of deviation and that such deviation leads to the occurrence or aggravation of the damage sustained by the injured party. Consequently, the causal relationship between the fault committed by the administration and such damage is negated¹⁴.

Second: Assessing the Causal Relationship in Light of Proactive Measures

As we have observed from the foregoing, when addressing the concept of the causal relationship as well as the reasons for its absence, this relationship must be clear between the event and the damage. However, the issue does not lie here; rather, it arises when discussing the causal relationship that must exist within the scope of proactive administrative liability.

¹¹ Muhammad Sabri Al-Jundi, *ibid.*, p. 917.

¹² Bouhamida Ata Allah, *A Concise Guide to Administrative Justice: Organization, Functioning and Jurisdiction*, 2nd ed., Dar Houma for Printing, Publishing and Distribution, Algeria, 2013, *op. cit.*, p. 334.

¹³ Abbas Oudini, *Damage in Administrative Liability*, Master’s Thesis in Public Law, Specialization: Public Administration Law, Faculty of Law and Political Sciences, Larbi Ben M’hidi University, Oum El Bouaghi, Algeria, 2015–2016, p. 83, citing Abdul-Ghani Bassiouni Abdullah, *Administrative Judiciary and the Lebanese State Shura Council*, Al-Dar Al-Jamia, Beirut, 1999, p. [page number missing], *The General Theory of Obligations in Algerian Civil Law*, 4th ed., Office of University Publications, Algeria, 2007, p. 734.

¹⁴ Abbas Oudini, *op. cit.*, p. 81, citing Belhadj Larbi, *The General Theory of Obligations in Algerian Civil Law*, 4th ed., Office of University Publications, Algeria, 2007, p. 205.

Legal scholarship is divided on this matter. Some consider that the causal relationship should be broadened, that is, approached in relative terms, while another view holds that this causal relationship has been completely abandoned, as evidenced by the reversal of the burden of proof.

1- The Relativity of the Causal Relationship (Broadening the Causal Relationship)

For tortious liability to arise, all its elements must be present, most importantly the existence of a causal relationship between the wrongful act and the damage. Moreover, this relationship must be unequivocal, that is, clear and established. Contrary to what was previously stated regarding the causal relationship, adopting the precautionary principle as a new and modern concept of liability may overturn the various established considerations, as this principle applies only to risks that are scientifically uncertain, as previously indicated. This means that the causal relationship that must exist between the fault and the damage (in this case, the relationship between the risk and the potential damage) is not established with certainty. Consequently, it is a relative relationship whose existence cannot readily be established.

Relying on the precautionary principle in the field of liability is based on potential and presumed risks that are not scientifically established. This makes establishing a causal relationship between the risk and the presumed damage difficult, if not impossible. Accordingly, a body of legal scholarship has argued that relying on the precautionary principle as a new basis for establishing civil liability in the environmental field, given the connection between the risk and the potential serious damage that remains uncertain in the absence of knowledge or scientific certainty, makes requiring the existence of a causal relationship between the risk and the potential damage unreasonable, particularly in light of the expanding scope of economic activities and technological development and their close connection with the environment, consumption, human, plant, and animal health, and food security. This is a matter that does not permit absolute certainty to be required to establish the causal relationship, given the judiciary's tendency to broaden the means of proof and accept data, indicators, and legal and material presumptions, as well as its discretionary power to rely on such presumptions, indicators, or circumstances, particularly in the absence of established knowledge or scientific certainty¹⁵.

Adopting a potential or presumed causal relationship in a manner that makes the requirement of absolute certainty in the causal relationship relative accordingly means that applying the precautionary principle in the field of administrative liability undoubtedly leads to broadening the concept of the causal relationship and developing the traditional rules of liability. This is achieved by adopting the concept of a relative or potential causal relationship between the risk and the potential damage. An example of this is the Mad Cow Disease case, in which the European Court adopted a broad concept of the causal relationship¹⁶.

¹⁵ Khaled Beljilali, *The Precautionary Principle as a New Basis for Establishing Precautionary Civil Liability for Potential Environmental Damage*, International Conference on the Legal Entrenchment of the Precautionary Principle and Its Applications, Faculty of Law and Political Sciences, University of Boumerdes, Algeria, held on April 12 and 13, 2021, p. 178.

¹⁶ Khaled Beljilali, op. cit., pp. 178–179.

Legal scholarship considers it unreasonable to require absolute certainty as to the absence of potential harm before authorizing the conduct of a polluting activity. Accordingly, it is no longer acceptable to require absolute certainty regarding the causal relationship, as the administrative judge broadens the acceptance of material indicators and presumptions and is satisfied with establishing a sufficient probability of causation. Thus, the certainty required for the causal relationship becomes relative. Therefore, it has been proposed to relax the assessment of the causal relationship on the basis of evidence, since such proof may be established by any means. The judge may form his conviction with the assistance of presumptions and factual inferences and may be satisfied with establishing a sufficient probability of causation, thereby making certainty relative. Furthermore, case law is sometimes satisfied with a negative indication derived from the absence of any other event capable of explaining the causal connection between a hazardous activity and the damage that occurred in a nearby location¹⁷.

The expanded concept of the causal relationship was adopted by the European judiciary when considering the case known as Mad Cow Disease, in which cattle in the United Kingdom were affected by this disease. In the absence, at the time, of scientific certainty and evidence regarding the direct causes that led to the occurrence of the disease, the causal relationship was broadened, as it was suspected that the disease resulted from feeding the cattle contaminated materials produced by mixing animal meal with bone meal derived from deceased animals¹⁸.

It can be concluded from the foregoing that the adoption of the precautionary principle would lead to broadening the traditional concept of the causal relationship. Instead of constituting a direct and established relationship between risks and damage, it would become merely a probabilistic and relative relationship, with the administrative judge having discretionary authority to infer its existence on the basis of all legal evidence, presumptions, and factual circumstances.

2- The Abandonment of Causation (Reversal of the Burden of Proving Causation)

Since precautionary measures are dictated by the risks of harm, even where such risks have not been established, the requirement of a causal link between the risk and the damage loses all meaning, as both fall within the realm of uncertainty. Hypothetical damage cannot be directly linked by a causal relationship to unknown risks. Even where the damage is potential, it is rarely entirely certain. In this context of uncertainty, establishing causation and the need to provide evidence that it exists therefore constitute a considerable difficulty for the victim, particularly as

¹⁷ Anne Guégan, “L’apport du principe de précaution au droit de la responsabilité civile,” *Revue Juridique de l’Environnement*, No. 2, 2000, p. 171.

¹⁸ This approach has been confirmed at the international level, namely, the adoption of flexibility and relativity in the causal relationship, as reflected in the Convention on Liability for Damage Resulting from Environmentally Hazardous Activities of 1993, which provides that: “When assessing the proof of the causal relationship between the event and the damage..., the judge shall take into account a significant risk giving rise to damage inherent in a hazardous activity.”

this requires lengthy and costly scientific expertise¹⁹. This raises the question of whether causation should be presumed rather than eliminated.

In light of the foregoing, it has become difficult to insist on the need to prove the causal relationship where potential damage has occurred. For many years, within the doctrinal debate over the possibility of the precautionary principle affecting the law of legal liability, the majority of scholars have acknowledged that this principle leads to easing the burden of proving the causal relationship when damage occurs. In this sense, according to Professor Jourdain, the failure to take precautionary measures presupposes, at least in fact, the existence of a causal relationship. According to Professor Mazeaud, the presumption should apply to “health or safety” to the extent that such fault creates an objective risk of harm²⁰.

Therefore, some legal scholars have called for a reversal of the burden of proof in the absence of scientific certainty, particularly where the causal relationship is ambiguous, in order to safeguard public health and environmental safety. This means that project developers and those responsible for them are required to provide prior evidence and proof that their projects and activities are free from any risk that could cause harm to health or the environment²¹.

In fact, the reversal of the burden of proving causation may be interpreted as a constraint on innovation, as, under such liability regimes, causation would be easy to establish, without it being impossible thereafter to prove the absence of causation with certainty. Nevertheless, the state of positive law already provides for certain presumptions of causation that constitute a genuine reversal of the burden of proof. Thus, a legal presumption of causation was accepted in favor of victims of nuclear accidents, pursuant to the Law of October 30, 1968, with regard to bodily injury and certain diseases identified according to the radiation and contamination received and the time at which they were observed, which are presumed to have resulted from the accident unless proven otherwise. There are also doctrinal presumptions of causation, whereby the judge may infer from the establishment of fault, even if precautionary in nature, and notwithstanding the uncertainty surrounding its definition, a presumption of causation. It should be clearly understood that the risks are no longer the same as those prevailing at the time the decision was made, because although causation does not appear with certainty, the damage is certain once it occurs in this context. The precautionary principle therefore justifies establishing presumptions of causation, as it highlights the evidentiary difficulties associated with scientific uncertainties and thus calls for moving away from an excessive demand for certainty in the face of serious and irreversible harm. For the same reason, it may lead to making the methods of assessing causation more flexible²².

¹⁹ Anne Guégan, op. cit., p. 170.

²⁰ Mathilde Boutonnet, “L’influence du principe de précaution sur la responsabilité civile en droit français : un bilan en demi-teinte,” *JSDLP-RDPDD*, Vol. 10, Issue 1, p. 22.

²¹ Khaled Abdelaziz, *The Precautionary Principle in the Environmental Field*, Master’s Thesis in Law, Specialization: Environmental and Urban Planning Law, Faculty of Law, University of Algiers 1, 2014–2015, p. 46.

²² Anne Guégan, op. cit., p. 171.

It appears that the precautionary principle facilitates the proof of the conditions of liability. Indeed, the scientific uncertainty inherent in the precautionary principle leads to easing the burden of proof, whereby the victim is able to establish the conditions for assuming legal liability, thereby establishing the event and the causal relationship through presumptions, whether factual or legal. These presumptions ultimately lead to a reversal of the burden of proof, so that the occurrence of the risk does not escape compensation due to the absence of sufficient evidence. Under the rule of the precautionary principle, doubt benefits the victim, which is also evident in the issue of multiple causes with regard to psychosocial occupational risks²³.

We ultimately conclude that, within the framework of precautionary administrative liability, and in order to ensure fairness for victims in obtaining fair compensation, the causal relationship is adapted according to the circumstances of the damage, where such damage exists, so as not to deprive anyone of their right.

Conclusion

We conclude that the precautionary principle plays a role in the development of the rules of administrative liability, and that its role cannot be understood without examining its role in the other branches of legal liability, whether civil or criminal liability. Despite the ambiguity surrounding its concept, as well as its legal status and whether a breach thereof gives rise to a legal obligation or merely constitutes a moral obligation, thereby precluding the existence of legal liability, this obligation has nevertheless evolved from a mere moral obligation into a legal obligation, giving rise to legal liability toward those who violate it.

Although proactive measures (the precautionary principle) have an impact on all branches of liability law, legal studies demonstrate that their impact is more apparent on the elements of administrative liability. This is achieved through broadening the concept of administrative fault, whereby excessive precaution has come to give rise to administrative liability. Furthermore, the idea of gradation of administrative fault has been abandoned, as simple fault is sufficient to establish such liability.

This impact is also apparent through both the elements of damage and the causal relationship, which is the subject of our study. This has been reflected in the rules governing compensation, the assessment of which is difficult due to the nature of the risks falling within the scope of application of the precautionary principle, which, when they materialize, may cause serious damage, making it difficult to restore the situation to what it was before.

The causal relationship, therefore, no longer retains its former concept, which links fault to damage. Rather, in order to establish this relationship, the burden of proof must be reversed, placing it on the administration, contrary to the traditional rules of evidence. In some cases, the burden of proof is eased in order to compensate those who have suffered damage.

²³ Ibid., p. 171.