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From Ex Post Liability to Ex Ante Obligation: An Analysis of the Legal Nature of Governmental Duties in the Prevention and Mitigation of Damages Caused by Unforeseeable Incidents in Iranian and United States Law

1. Mohammad. Rajabinezhad [1*]: Graduated in Law, PhD, Edalat University, Tehran, Iran

*corresponding author's email: mrajabi.nezhad58@gmail.com

ABSTRACT

Social developments and the expansion of the State's role in managing public risks have moved governmental responsibility for unforeseen incidents beyond the traditional framework of force majeure and transformed it into a legal issue with ex ante and institutional dimensions. The central question addressed in this study is whether the omission of the State's preventive obligations in the face of foreseeable risks can constitute a basis for civil liability, and how such liability has been conceptualized in different legal systems. Focusing on the legal systems of Iran and the United States, this article examines the issue in light of the evolution of tort liability concepts, the limitation of sovereign immunity, and the institutionalization of prevention. The findings indicate that in United States law, the State's ex ante obligations have gradually evolved from the realm of administrative policymaking into legally assessable standards, and preventive omissions, under specific conditions, have been recognized as a breach of the public duty of care. By contrast, in Iranian law, despite the existence of jurisprudential foundations and constitutional principles aimed at protecting the life and property of citizens, the predominance of an ex post approach, ambiguity in liability standards, and judicial caution have hindered the effective linkage between prevention and governmental civil liability. The comparative analysis suggests that although the United States experience is not entirely replicable, it may provide a basis for the gradual redefinition of governmental liability in Iranian law on the foundation of ex ante obligations and the legal management of risk. Employing a descriptive–analytical method and a comparative approach, this study seeks to develop a conceptual framework for the transition from a purely compensatory model of liability toward a forward-looking form of responsibility aligned with the requirements of the contemporary State.

Keywords: *unforeseen incidents, civil liability, State, comparative law*

Introduction

Unforeseeable incidents and natural disasters, as among the most complex challenges of contemporary societies, are no longer regarded merely as natural phenomena or events beyond human control; rather, in many instances, owing to the manner in which governments confront foreseeable risks, they transform into a legal issue with extensive dimensions of public responsibility. Recurrent experiences arising from earthquakes, floods, storms, and other natural hazards demonstrate that the scope of resulting damages is not solely dependent on the intensity

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of the event, but is directly correlated with the level of preparedness, prevention, and ex ante management adopted by governments. This reality shifts the inquiry into the limits of governmental responsibility from the realm of ex post reaction and compensation toward the domain of prior and preventive obligations. In traditional legal systems, unforeseeable incidents were generally analyzed under concepts such as force majeure or external cause, which naturally minimized governmental liability. However, theoretical developments in tort law and the expansion of the State's role in regulating and managing social life have seriously challenged this perception. Today, the question increasingly arises whether the State may simply invoke the natural character of an event to evade accountability for resulting damages, or whether the omission of prior obligations—such as failure to foresee risks, lack of planning, or negligence in implementing safety requirements—may constitute a legal basis for governmental liability (1, 2).

In this regard, United States law, as one of the leading systems in the development of governmental tort liability, offers a significant model linking ex ante obligations, risk management, and legal accountability. The gradual evolution from absolute sovereign immunity toward conditional liability, the active role of courts in recognizing governmental negligence, and the institutionalization of prevention through federal and state legislation demonstrate that, within this legal system, disaster prevention has progressively shifted from a mere public policy objective to a legally assessable obligation (3, 4). By contrast, in Iranian law, although jurisprudential foundations and constitutional principles provide considerable capacity for the protection of life and property and for imposing preventive duties upon the State, these capacities have seldom crystallized into systematic, binding ex ante obligations enforceable in governmental tort claims. The predominance of an ex post approach, ambiguity in liability standards, and judicial caution in recognizing preventive omissions have resulted in governmental responsibility for unforeseeable incidents being largely confined to compensation after the occurrence of damage (5, 6).

This article adopts a descriptive–analytical approach and employs a comparative method to examine governmental civil liability arising from the omission of ex ante obligations in the context of unforeseeable incidents under Iranian and United States law. To this end, it first elucidates the theoretical and conceptual foundations of governmental ex ante obligations and the position of omissions within the tort liability framework. It then analyzes the legal framework and judicial practice of the United States in recognizing governmental liability for preventive negligence. Subsequently, through an examination of Iranian legal provisions and practices, it comparatively evaluates the convergences and divergences between the two systems. Finally, by assessing the possibility of transferring elements of the United States experience into Iranian law and identifying its structural and legal obstacles, the article seeks to provide a theoretical foundation for strengthening the linkage between prevention and governmental accountability within the Iranian legal system. Accordingly, the principal objective of this article is to demonstrate that governmental liability for unforeseeable incidents is neither reducible to a complete denial of force majeure nor to the acceptance of absolute liability, but rather is realized through the redefinition of ex ante obligations and the legal assessment of their omission—an approach that may open new horizons in understanding governmental tort liability and enhancing the effectiveness of compensation mechanisms in addressing public risks.

The Conceptual and Theoretical Framework of Governmental Ex Ante Obligations

Conceptualization of Ex Ante Obligation in Public and Private Law

An analysis of governmental ex ante obligations in the field of unforeseeable incidents requires a precise conceptual clarification of such obligations and their distinction from established institutions of tort law. In classical private law literature, the primary focus lies on ex post liability—liability arising after the commission of a harmful act and the occurrence of damage, aimed at compensating the injured party. This approach, rooted in traditional theories of strict liability and non-contractual obligations, conceives liability as a reaction to the breach of a prior duty or the commission of an unlawful act, and pays comparatively limited attention to the preventive function of law (7, 8). By contrast, the concept of "ex ante obligation" refers to a set of duties imposed upon individuals—and particularly upon the State—prior to the occurrence of an incident and independently of actual damage. These duties encompass measures such as risk forecasting, warning, planning, supervision, and the adoption of necessary precautions to reduce the probability or severity of unforeseeable incidents. From this perspective, an ex ante obligation is not merely a consequence of damage but constitutes an independent legal obligation aimed at safeguarding life, property, and public security before the realization of harmful conditions (9, 10).

Although private law has not always explicitly recognized ex ante obligations, their traces may be observed in doctrines such as the rule of warning, the duty of care, and the obligation to prevent harm. Legal doctrine, drawing upon principles such as the prohibition of harm and related jurisprudential rules, has gradually concluded that an individual's duty is not confined to compensating damage; in certain circumstances, preventing harm also forms part of one's legal obligations (11, 12). This conceptual development has paved the way for the acceptance of ex ante obligations in broader domains, including public and sovereign activities.

In public law, the notion of governmental ex ante obligation is closely linked to the modern functions of the State and its transformation from a "night-watchman State" into an interventionist and welfare State. The contemporary State is not merely the guarantor of public order in its classical sense; it is required, through policymaking, legislation, and executive action, to prevent the occurrence of widespread social risks or to minimize their consequences. Within this framework, governmental ex ante obligations may be regarded as inherent functions of sovereignty in securing human and social security—functions whose omission, even in the absence of actual damage, may amount to a violation of fundamental rights (13, 14).

The significance of ex ante obligation in the context of unforeseeable incidents is heightened by the typically collective and large-scale nature of such events, which extend beyond individual relationships. In such circumstances, exclusive reliance on ex post compensation mechanisms is not only inefficient but also inconsistent with the philosophy of protecting public interests. Consequently, contemporary analyses increasingly regard governmental ex ante obligation as a complementary—and at times prior—mechanism to tort liability, aimed at reducing the social, economic, and human costs of crises before their occurrence (15, 16).

In comparative law, particularly within common law–influenced systems, the concept of governmental ex ante obligation has developed through doctrines such as duty of care and risk assessment. Although these doctrines formally originate in tort law, in practice they serve as the foundation for obligating the State to undertake preventive action and for holding it accountable for hazardous omissions. This development demonstrates that ex ante obligation is not merely a moral or policy-based notion, but one capable of transformation into a legally enforceable and judicially reviewable duty (4, 17).

The Theoretical Foundations of the State's Ex Ante Obligation

The analysis of the State's ex ante obligation in the context of unforeseeable incidents requires reliance upon specific theoretical foundations that explain the role of the State, the limits of its intervention, and the relationship between public authority and citizens' rights. Unlike ex post civil liability, which becomes operative after damage has occurred, ex ante obligation rests upon a body of theories that regard the State as bound to take active and preventive measures prior to the emergence of crisis. In this regard, the welfare State theory, risk management theory, the theory of rights guarantee, and the theory of equality of citizens in bearing public burdens together provide a coherent theoretical framework for explaining the nature of this obligation.

According to welfare State theory, the State is not merely an institution safeguarding public order in its classical sense, but is responsible for ensuring a minimum level of security, health, and social welfare for citizens. Within this framework, widespread hazards such as earthquakes, floods, and other unforeseeable incidents are no longer categorized as “natural events outside governmental responsibility,” but are transformed into public matters, with governmental indifference being incompatible with the very philosophy of the welfare State. From this perspective, the State’s obligation to foresee, prevent, and mitigate the consequences of disasters constitutes part of its positive duties toward the fundamental rights of citizens; the failure to fulfill such duties may undermine public trust and violate social justice (18, 19). In this framework, the State’s ex ante obligation is not a discretionary policy choice but rather an expression of its structural responsibility for collective welfare and security.

Alongside welfare State theory, risk management theory provides an even more significant theoretical foundation for ex ante governmental obligation in contemporary legal systems. This theory is based on the premise that many natural and human-made hazards, although unavoidable, are foreseeable and manageable. Accordingly, the State’s duty is not limited to reacting to crises after they occur; rather, it encompasses the systematic identification of risks, assessment of potential consequences, and adoption of preventive measures to reduce the severity of damage. Within this framework, the omission of ex ante action by the State is regarded not merely as administrative inefficiency, but as a failure in the performance of sovereign duty—one that may give rise to legal liability (4, 20). Thus, risk management theory elevates the State’s ex ante obligation from the level of policy recommendation to that of a rational and legal imperative.

The theory of rights guarantee constitutes a third theoretical basis for the State’s ex ante obligation. According to this theory, citizens’ rights are not merely declaratory or abstract; they require concrete and effective guarantees by the State. The rights to life, security, and property, without the adoption of preventive measures against large-scale hazards, would be devoid of substantive content. From this perspective, the State’s obligation to prevent foreseeable damage forms part of its duty to guarantee fundamental rights, and the realization of these rights cannot be deferred solely to compensation after harm has occurred. In tort law, this approach has gradually gained recognition, and the notion of “prevention as a function of law” has been articulated alongside compensation (2, 7). Consequently, the State’s ex ante obligation may be understood as a manifestation of its guarantor role with respect to fundamental rights.

Finally, the theory of equality of citizens in bearing public burdens provides a justice-oriented foundation for the State’s ex ante obligation. According to this theory, the disproportionate imposition of losses resulting from unforeseeable incidents upon a particular group of citizens, in the absence of preventive governmental intervention, is inconsistent with the principles of justice and equality. Where the State is capable of preventing the concentration of losses upon a limited segment of society through prior measures, the omission of such measures amounts to the acceptance of structural inequality in the distribution of public burdens. Accordingly, the State’s ex ante obligation is significant not only for reducing the overall magnitude of damage but also for ensuring the equitable distribution of social risks among citizens (21, 22).

Taken together, these four theories demonstrate that the State's ex ante obligation in the context of unforeseeable incidents is neither an abstract concept nor merely an ethical recommendation, but a legal institution grounded in a coherent theoretical framework rooted in the evolution of the State's role, the imperatives of risk management, the guarantee of fundamental rights, and the realization of distributive justice. These theoretical foundations make it possible to analyze governmental ex ante obligations as legally assessable duties within the legal systems of Iran and the United States.

The Relationship Between Ex Ante Obligation and the Principle of the Rule of Law

The question whether the omission of the State's ex ante obligation may be regarded as a breach of a legal duty directly concerns the relationship between such obligations and the principle of the rule of law. So long as ex ante obligation remains at the level of policy guidance or administrative recommendation, the answer would be negative. However, once such obligations are recognized within the legal system as duties arising from statute, general principles of law, or fundamental rights, their omission may acquire the character of a legal violation and even give rise to liability. From this perspective, any analysis of the legal nature of ex ante obligation without reference to the principle of the rule of law would be incomplete and ineffective.

The rule of law requires that all acts and omissions of the State be grounded in law and subject to legal evaluation. In contemporary legal systems, this principle does not merely signify the formal subordination of the State to enacted statutes; it also entails the obligation of the State to respect the spirit of the law, general principles of law, and the fundamental rights of citizens. Accordingly, where statutes or governing legal principles require the State to adopt specific measures for the protection of life, property, and public security, the omission of such measures cannot be considered beyond the scope of legal scrutiny (13, 23).

In Iranian law, although the concept of ex ante obligation has not been explicitly articulated as an independent legal institution, a systematic interpretation of statutes and general principles permits the inference of binding prior duties. The Constitution, by recognizing responsibilities such as ensuring security, public welfare, and the protection of citizens' rights, obliges the State to undertake measures extending beyond mere post-damage compensation. Within such a framework, the omission of a preventive measure that is reasonably expected and falls within the scope of the State's legal duties may be characterized as an unlawful omission—one that conflicts with the principle of the rule of law and the State's obligation to implement laws properly (5, 14).

From the standpoint of tort law, particularly in modern analyses, an omission gives rise to liability where the actor was under a duty to act. Within this framework, if the State's ex ante obligation is recognized as a legal or quasi-legal duty, its non-performance may serve as a basis of liability in the same manner as a harmful act. Legal doctrine has increasingly emphasized that in the sphere of hazardous activities and public risk management, the omission of precautionary and preventive measures is not materially distinct from the commission of a harmful act; both may constitute a breach of legal duty (2, 24).

In comparative law, particularly within the United States legal system, the linkage between ex ante obligation and the rule of law is more explicitly observable. Although the government in that system enjoys certain immunities, judicial practice has gradually recognized that where statutes or accepted standards impose a duty of preventive action upon the government, the omission of such action may constitute a breach of legal duty. In such cases, courts have treated governmental omission not as a purely political decision but as a deviation from the duty of care and a violation of governmental accountability under the rule of law (1, 17).

It is important to note that recognizing the omission of an ex ante obligation as a breach of legal duty does not imply that the State must be held liable for every unforeseeable incident. Rather, the criteria include the foreseeability of the risk, the practical possibility of preventive action, and the existence of a statutory or principled basis obliging the State to act. Where these elements are present, the omission of ex ante obligation may be assessed as a violation of the rule of law and a breach of legal duty—even if the ultimate damage results from natural factors or circumstances not entirely within governmental control (4, 25).

The State's Ex Ante Obligations in Iranian Law

Legal and Documentary Foundations of the State's Ex Ante Obligations

The examination of the State's ex ante obligations in the context of unforeseeable incidents under Iranian law requires, first and foremost, an analysis of the legal and documentary foundations governing the State's role in safeguarding life, property, and public security. Although the concept of "ex ante obligation" has not been expressly articulated as an independent technical term within the Iranian legal system, a systematic interpretation of the Constitution, ordinary statutes, and higher-order policy documents reveals a body of binding duties that oblige the State to undertake preventive action and preparedness prior to the occurrence of crisis. These duties, in terms of their foundation and nature, extend beyond mere policy recommendations and are subject to legal evaluation within the framework of the rule of law.

The Constitution of the Islamic Republic of Iran, as the foundational document of the legal system, constitutes the primary and most significant basis for recognizing the State's ex ante obligations. Several constitutional provisions impose upon the State duties relating to the provision of security, welfare, and the protection of fundamental rights—duties whose realization is unattainable without preventing foreseeable and large-scale risks. Article 3 of the Constitution obliges the State to create a favorable environment for the development of moral virtues, to ensure social security, and to eliminate unjust discrimination; in the context of unforeseeable incidents, these objectives necessarily entail prior measures such as planning, warning, and risk reduction (13, 14). Likewise, Article 22 guarantees the inviolability of life, property, and dignity, subject only to lawful limitations; this guarantee implicitly requires the State to prevent foreseeable infringements upon these rights, even where their source is natural phenomena (26). Furthermore, Article 40 of the Constitution, which emphasizes the prohibition of harm to others, may, under a broad interpretation, extend to the State and preclude it from omitting measures that would lead to widespread harm. Accordingly, the State cannot be regarded as a neutral observer in relation to risks that may be mitigated through preventive measures; such an approach would conflict with the protective philosophy of the Constitution and the State's positive obligations (6, 27). From this perspective, the Constitution provides the necessary legal foundation for recognizing ex ante governmental obligations, although their practical realization depends upon ordinary legislation and executive mechanisms.

At the level of ordinary legislation, the Law on National Crisis Management represents the clearest manifestation of the recognition of ex ante obligations in Iranian law. By distinguishing among the phases of prevention, preparedness, response, and reconstruction, the legislator has consciously departed from a purely ex post approach and emphasized the necessity of action prior to crisis. Duties such as hazard identification, preparation of risk maps, public education, establishment of warning systems, and coordination among responsible institutions demonstrate that prevention and risk reduction are not optional matters but form part of the State's statutory responsibilities (15, 28). Accordingly, the omission of such duties cannot be regarded merely as managerial weakness; within the framework of public law, it may be assessed as a breach of legal obligations.

In addition to enacted statutes, higher-order policy documents and general policies of the system play a significant role in clarifying the State's ex ante obligations. General policies relating to security, environmental protection, sustainable development, and risk management require the State to adopt a preventive and forward-looking approach. Although such documents may not directly entail judicial enforceability, they exert a decisive influence in interpreting ordinary statutes and shaping the guiding principles governing governmental conduct, and may serve as criteria for assessing the legality or illegality of governmental omissions (29, 30). Consequently, these general policies should be considered part of the normative framework that reinforces and institutionalizes the State's ex ante obligations.

The Legal Nature of Governmental Duties: From Sovereign Discretion to Liability for Omission

A fundamental challenge in analyzing the State's ex ante obligations in Iranian law lies in determining their legal nature and answering whether preventive measures in the context of unforeseeable incidents constitute binding legal duties or merely sovereign powers subject to governmental discretion. The resolution of this question plays a decisive role in determining whether legal liability may be attributed to the State in cases of omission.

Under the traditional perspective of public law, a considerable portion of governmental actions—particularly in areas such as security, public order, and crisis management—were conceptualized as sovereign powers. The exercise of such powers was regarded as dependent upon political, technical, and economic considerations and generally immune from judicial intervention. According to this view, governmental decisions concerning how to address natural hazards fell within the realm of macro-sovereign decisions, and the failure to adopt certain preventive measures, absent an explicit statutory violation, could not give rise to liability (23, 31). While this approach aligns with the logic of separation of powers and the necessity of granting the executive branch freedom in high-level decision-making, it encounters significant limitations when confronted with the demands of the modern State.

The transformation of the State's functions and the expansion of its intervention in social and economic spheres have gradually led to a redefinition of the boundary between "power" and "duty" in sovereign activities. In contemporary law, wherever the legislature has determined a specific objective for the State and provided the means for its realization, it is no longer possible to speak of mere discretion. In the domain of crisis management, the obligation of the State to engage in prevention, preparedness, and risk reduction has been explicitly articulated not only in ordinary statutes but also in higher-order documents, indicating that the legislature expects active conduct rather than purely optional decision-making (29, 30). From this perspective, the State's ex ante duties possess a dual character: while discretion may exist regarding the methods of implementation, the principle of action itself is binding.

Accordingly, the distinction between "sovereign power" and "legal duty" must be analyzed based on the objectives and purposes of the law rather than on the formal appearance of discretion. Where governmental inaction results in the violation of fundamental rights or the frustration of statutory objectives imposed upon the State, it cannot be absolved of accountability by invoking sovereign discretion. In such circumstances, the State retains discretion in choosing the manner of action, but the duty to act itself constitutes a legal obligation (5, 32).

Within this discussion, the position of omission in governmental liability assumes particular importance. In tort law, omission gives rise to liability where the actor is under a duty to act. This principle, rooted in general doctrines of non-contractual liability, applies equally to the State, with the distinction that establishing duty in the governmental context requires analysis of statutes, higher-order documents, and the overarching objectives of the legal system (25, 33).

In the sphere of ex ante obligations, where the State is required by statute or established legal principles to adopt preventive measures, the omission of such measures may be characterized as an unlawful omission and serve as the basis of governmental civil liability. Iranian legal doctrine has gradually moved away from a restrictive approach toward omission and has accepted the possibility of governmental liability arising from omission where a legal duty is established. Particularly in areas where governmental activity involves widespread social risks, the omission of preventive action is not materially distinct from the commission of a harmful act; both may constitute breaches of the State's obligations toward citizens (34, 35). This evolution indicates that governmental liability is no longer confined to positive acts, and omission may, where the necessary conditions are satisfied, equally give rise to responsibility.

Challenges in the Realization of the State's Ex Ante Obligations in the Iranian Legal System

Despite the recognition of the legal and documentary foundations of the State's ex ante obligations and the possibility of analyzing their omission within the framework of legal liability, the Iranian legal system faces fundamental challenges at the stage of practical realization that prevent the transformation of theoretical duty into effective responsibility. These challenges stem less from the absence of legal norms and more from conceptual ambiguity, weaknesses in enforcement mechanisms, and the predominance of a traditional ex post approach in dealing with unforeseeable incidents.

The first major challenge concerns the lack of clarity regarding the criteria for establishing governmental liability in cases of omission of ex ante obligations. Although the principle of State liability is generally accepted in Iranian law, the precise standards for determining fault, causation, and the scope of governmental duty in preventive action have not been clearly articulated. Existing statutes frequently confine themselves to enumerating general duties without specifying objective benchmarks for assessing governmental negligence in preventing risks. In practice, this ambiguity results in case-by-case and inconsistent interpretations, hindering the development of coherent judicial precedent (5, 33). Under such conditions, even where preventive omission is manifestly ascertainable, the absence of clear criteria constitutes a serious obstacle to recognizing governmental liability.

Moreover, the failure to distinguish clearly between "unavoidable risk" and "manageable risk" has enabled the State, in many instances, to invoke the unforeseeable nature of an event in order to evade accountability for prior omissions. Contemporary public law analysis, however, shifts the focus from the natural character of the event to its foreseeability and the possibility of mitigating its consequences. The absence of this conceptual distinction in Iranian law weakens the doctrinal foundation of governmental liability in the sphere of ex ante obligations (6, 35).

The second challenge lies in the weakness of enforcement mechanisms for violations of ex ante governmental duties. Even where the State's legal duty to undertake preventive measures may be inferred, the legal system has not provided sufficiently effective and efficient mechanisms to compel performance or to compensate for damages resulting from omission. Existing supervisory mechanisms are predominantly administrative or political in nature and rarely culminate in effective legal sanctions. Furthermore, procedural limitations in bringing claims against the State—such as the difficulty of proving fault and causation—substantially reduce citizens' ability to utilize tort law instruments (30, 34).

This weakness in enforcement has significant institutional consequences. Where the omission of ex ante obligation does not entail clear and foreseeable legal consequences, incentives for investment in prevention and risk reduction are correspondingly diminished. As a result, the State may prefer to allocate resources to post-disaster compensation rather than to preventive measures. Although such an approach may address immediate social pressures in the short term, it conflicts in the long term with principles of efficiency and distributive justice (15, 28).

The third challenge concerns the dominance of an ex post approach within the Iranian legal and administrative system in addressing unforeseeable incidents. Traditionally, the legal and executive structure has concentrated on compensating losses after the occurrence of disaster, while prevention has remained marginal. This orientation is reflected not only in legislation but also in legal culture and administrative practice, resulting in ex ante governmental obligations being seldom regarded as independent and enforceable duties. In such an environment, governmental responsibility is typically framed after damage has materialized, in the form of compensatory or supportive measures, rather than as accountability for preventive omission (27, 29).

The predominance of this ex post mindset carries important legal consequences. On the one hand, the relationship between the State and citizens is reduced to one of support and assistance; on the other hand, the concept of a citizen's right to safety and prevention is weakened. Consequently, compensation becomes less a matter of legal responsibility and more a matter of welfare policy and discretionary decision-making—an outcome inconsistent with the logic of the rule of law and governmental accountability (25, 26).

The State's Ex Ante Obligations in United States Law

Legal Foundations of the State's Ex Ante Obligations

The United States legal system, in the domain of governmental liability for natural disasters and public hazards, operates within a framework that recognizes ex ante obligations not merely as ethical or political duties, but as legally analyzable obligations embedded within the structure of public and administrative tort liability. These obligations are institutionalized through doctrines such as "duty of care," the "public duty doctrine," and a network of federal and state statutes that entrench prevention, risk management, and damage mitigation as inherent governmental functions.

The first and most fundamental concept within this framework is the duty of care. Rooted in tort law, this concept refers to the legal obligation of persons—whether private or public—to exercise a reasonable standard of care to prevent foreseeable harm to others. In United States law, governmental entities may, under certain circumstances, be subject to this duty, particularly where their actions or omissions create or exacerbate risk (1, 36).

Modern analyses extend the duty of care beyond post-damage reaction to encompass ex ante governmental obligations in identifying hazards, assessing risks, and adopting preventive measures. From this perspective, where an incident is foreseeable and reasonable means of risk reduction are available to the government, the omission of preventive action may constitute a breach of the duty of care—even where the event itself is natural in origin (4, 37). This approach represents a significant departure from the traditional conception of disaster as force majeure and expands governmental liability into the realm of manageable risk.

However, the recognition of a duty of care on the part of the government in United States law is not absolute and is tempered by the public duty doctrine. According to this doctrine, governmental obligations toward the public at large are generally regarded as general duties, and their breach does not automatically give rise to individual civil liability. In other words, the government is held liable to a particular individual only where a special relationship exists between the government and the injured party—one that exceeds the general duty owed to society (38, 39). The public duty doctrine thus seeks to balance governmental accountability with the avoidance of limitless sovereign liability.

Nevertheless, United States judicial practice demonstrates that this doctrine has become increasingly flexible. Courts have, in certain circumstances, declined to apply it rigidly where the government has actively engaged in risk management or created legitimate expectations through its conduct. In such cases, the omission of ex ante action may be characterized as a breach of a specific governmental duty and give rise to civil liability (3, 22).

A third element in explaining the foundations of ex ante governmental obligations in United States law is the prominent role of federal and state legislation in institutionalizing prevention and crisis management. Unlike systems that confine prevention to the policy sphere, United States law, through binding statutory frameworks, has structurally embedded ex ante obligations. Federal emergency management legislation and the institutional framework of the Federal Emergency Management Agency (FEMA) play a central role in this regard. These statutes require federal and state authorities to undertake measures such as risk assessment, hazard mitigation planning, public education, and infrastructure reinforcement prior to disaster. Such duties are not merely advisory; in many instances, compliance is a condition for receiving federal funding and emergency assistance (16, 40).

In addition to federal legislation, numerous states have enacted specific regulations concerning natural risk management and public safety, thereby expanding the scope of the duty of care imposed upon local governments. In areas such as building safety, flood management, and earthquake preparedness, these regulations render local authorities accountable for preventive omissions and limit the ability to rely exclusively on the public duty doctrine (41, 42).

The Role of Judicial Practice in the Evolution of Governmental Liability

Judicial practice in the United States legal system has played a foundational role in redefining the boundaries of governmental liability in relation to natural disasters and public hazards. Unlike systems in which governmental liability develops primarily through explicit legislation, in United States law it has been the courts that, through the gradual interpretation of tort principles, have paved the way for the transition from broad sovereign immunity toward the recognition of conditional and case-specific governmental liability. This transformation is particularly evident in cases involving governmental negligence in the performance of ex ante obligations.

At the initial stage, United States judicial practice, influenced by the traditional principle of sovereign immunity, generally exempted the government from civil liability for its acts and omissions. Rooted in common law and the maxim that "the King can do no wrong," this approach gradually revealed its inadequacy as the role of government in social and economic life expanded (3). From the mid-twentieth century onward, courts began reconsidering the limits of sovereign immunity in light of the modern State's active engagement in public affairs. A pivotal development in this transformation was the adjudication of claims arising from governmental negligence in managing foreseeable risks. In such cases, courts shifted their focus from the natural character of the event to the government's role in creating, aggravating, or failing to control risk. Consequently, the concept of negligence emerged as a central basis of governmental liability, requiring proof of duty, breach, causation, and damage (1).

In leading cases concerning natural disasters, courts increasingly accepted the argument that although the government is not an absolute guarantor against all harm, it is responsible for failing to undertake reasonable and ordinary measures to mitigate known risks. In litigation related to floods, earthquakes, or infrastructure collapse, courts have examined whether the relevant governmental entity was aware of the risk, possessed the necessary technical and legal means to address it, and nevertheless refrained from preventive action. Where these elements were established, reliance on force majeure or the natural character of the event alone was deemed insufficient to preclude liability (38, 40).

Concurrently, judicial practice delineated the transition from absolute immunity to “conditional liability.” Conditional liability signifies that the government is neither absolutely responsible for all damages arising from disasters nor absolutely immune; rather, its liability depends upon factors such as the foreseeability of risk, the existence of a statutory or customary duty to act, and the practical feasibility of preventing or mitigating harm. This approach has been particularly emphasized in the interpretation of federal and state statutes relating to crisis management (4).

Courts have also distinguished between sovereign acts of a policy-making nature and operational or executive acts. While high-level policy decisions continue to enjoy a margin of immunity, omissions at the operational level—such as failure to enforce safety regulations, disregard of technical standards, or neglect of expert warnings—may constitute grounds for governmental civil liability (37, 39). This distinction has functioned as a key instrument for limiting the scope of immunity and strengthening governmental accountability.

Within this framework, United States judicial practice has also drawn upon economic and distributive analyses of liability to balance public interests with the rights of injured parties. Certain decisions, emphasizing theories of distributive justice, have regarded governmental liability as a mechanism for the equitable distribution of social risk costs, particularly where victims lacked the capacity to bear losses or to prevent harm individually (22, 43).

The Preventive Crisis Management Model and the Redefinition of Governmental Accountability

The evolution of governmental liability in relation to unforeseeable incidents in United States law has increasingly been grounded in a “preventive crisis management” model, whose core lies in shifting the focus from ex post reaction to structural and institutional prevention. Within this framework, prevention is not merely a policy option but part of the government’s legal obligations, the breach of which may give rise to legal accountability. This transformation has forged a close connection between ex ante governmental duties and mechanisms of public accountability, elevating governmental responsibility from the level of compensation to that of risk management.

The institutionalization of prevention in United States law is primarily the product of synergy among legislation, public policy, and judicial practice. Federal and state statutes concerning crisis management require the government, prior to the occurrence of disasters, to engage in hazard identification, risk assessment, mitigation planning, and public education on a continuous basis. Unlike traditional approaches, these duties do not remain within the realm of non-binding recommendations; in many instances, compliance constitutes a prerequisite for the allocation of federal funds, issuance of permits, or continued operation of local institutions (16, 40).

Theoretically, this development reflects the transition from a minimal State to a State responsible for social risks—a State whose duty extends beyond reacting to crises to anticipating and mitigating their consequences. Within this paradigm, prevention is conceptualized as an “organized duty” distributed across multiple levels of governance, and its omission—particularly where the risk was foreseeable—may be regarded as institutional fault (3, 4).

The linkage between ex ante obligation and governmental accountability is realized through the redefinition of tort liability standards. United States courts, in adjudicating claims arising from natural disasters, have gradually shifted from asking solely about the "nature of the event" to examining the "government's role in managing or mismanaging risk." The central inquiry becomes whether, in light of available technical knowledge, expert warnings, and statutory requirements, the government undertook reasonable preventive measures. A negative answer to this question may ground liability even where the event itself was natural (1, 37).

This approach has found strong theoretical justification in distributive justice analyses. According to such analyses, the costs of widespread social risks should not be disproportionately imposed upon specific individuals or groups; rather, the government, as custodian of the public interest, must prevent the concentration of harm through preventive and risk management measures. In this sense, governmental accountability for the omission of ex ante duties serves not merely to compensate individual victims but to ensure the fair distribution of risk costs across society (22, 43).

Importantly, the preventive crisis management model has not entailed the complete abolition of sovereign immunity; rather, it has redefined immunity within a rational and conditional framework. High-level policy decisions continue to benefit from a degree of judicial deference, whereas at the operational level, the omission of ex ante obligations—such as failure to enforce safety regulations or to implement approved risk mitigation plans—may give rise to liability. In this manner, governmental accountability has been strengthened gradually and incrementally, yet effectively (39, 41).

Comparative Analysis and Critical Assessment

Points of Divergence Between Iran and the United States Regarding the State's Ex Ante Obligations

A comparative examination of the State's ex ante obligations in the legal systems of Iran and the United States shows that there are fundamental differences in both the degree of binding force attributed to these obligations and the role of the judiciary in recognizing and enforcing them. These differences are not merely the product of divergent tort rules; rather, they reflect two distinct approaches to the concept of the State, the limits of sovereign accountability, and the place of prevention in public law.

The first point of divergence concerns the binding character of the State's ex ante obligations. In the United States legal system, ex ante governmental duties are largely derived from the interaction of tort principles, specific federal and state statutes, and binding judicial precedent. Although these duties may appear, on the surface, in the form of public policies or executive programs, in practice they carry a discernible legal weight, such that their omission—where risk foreseeability and the feasibility of reasonable action are established—may form the basis of civil liability (1, 4). In other words, prevention in United States law has moved beyond the level of a "soft commitment" and, in many fields, has become a "conditional binding obligation."

By contrast, in Iranian law, the State's ex ante obligations concerning unforeseeable incidents are often articulated as general duties, policy objectives, or programmatic provisions. Although multiple legal and higher-order instruments emphasize prevention, risk management, and loss mitigation, these emphases have less frequently been formulated as specific legal obligations that are directly justiciable in governmental tort litigation.

The result is that the State's omission of preventive measures is rarely treated as an independent breach of a legal duty and instead remains at the margins of broader analyses framed in terms of fault or force majeure (5, 7). This divergence in binding force directly affects the feasibility of holding the State accountable. Whereas in the United States, ex ante obligation can operate as a concrete benchmark for evaluating governmental conduct, in Iran the frequent absence of an explicit statutory command or a defined standard facilitates reliance on negative arguments that deny liability. Accordingly, prevention in the Iranian legal system tends to remain closer to the level of recommendation or public policy than to that of enforceable obligation (6, 35).

The second point of divergence relates to the fundamentally different role of courts in the formation and application of the State's ex ante obligations. In the United States, courts have played an active and creative role in developing doctrines of governmental tort liability. Through dynamic interpretation of concepts such as duty of care, negligence, and causation, judicial practice has filled legislative gaps and gradually recognized and rendered enforceable the State's prior duties. For this reason, courts function not merely as appliers of enacted law, but as one of the principal sources through which governmental duties are formed (3, 37).

In Iranian law, by contrast, the judiciary's role in developing ex ante governmental duties has been considerably more limited. A legal structure grounded in legislative primacy and judicial caution has led courts to refrain from expansive or innovative constructions of governmental duties. In many decisions, courts have treated the existence of an explicit statutory text as a prerequisite, and in its absence have declined to recognize governmental liability arising from preventive omission. While this approach may be justified by separation of powers and rule-of-law considerations, it has, in practice, reduced the capacity for effective governmental accountability in crisis management (5, 30).

Moreover, the divergence in judicial role corresponds to differences in the approach to judicial justice. In the United States, courts frequently draw upon distributive and functional analyses, treating governmental liability as an instrument for the fair allocation of the costs of social hazards. In Iran, the prevailing approach remains largely grounded in classical fault-based analysis and direct causation—an approach that struggles to accommodate the complexity of large-scale disasters and public risks (2, 22).

Points of Convergence Between Iran and the United States in Protection and Prevention

Despite the structural and conceptual differences between the Iranian and United States legal systems in the sphere of governmental liability, comparative inquiry reveals meaningful convergences at the level of general foundations and normative orientation. These shared elements—particularly the acceptance of the protection of citizens' life and property as an inherent governmental function, and a gradual movement toward preventive approaches in addressing public hazards—provide common ground for comparative analysis and potential conceptual convergence.

The first point of convergence is the recognition of the fundamental principle that protecting citizens' life and property constitutes an inherent governmental duty. In United States law, this principle emerges through concepts such as duty of care and the governmental responsibility to ensure public safety, and has gradually been given legal form through tort rules and specialized statutes. Although the government is not subject to absolute immunity, the protection of life and property is accepted as a normative basis for many preventive interventions and even for conditional governmental liabilities (1, 3).

In Iranian law, although this principle is less frequently articulated through explicit governmental tort doctrines, its roots may be identified in jurisprudential foundations, constitutional principles, and general public law rules. Human dignity, the prohibition of harm, and the governmental duty to secure public order and security all indicate the necessity of protecting individuals' life and property. Moreover, the Constitution's emphasis on safeguarding fundamental rights positions the State as the custodian of citizens' personal and financial security—an orientation that can be interpreted as a theoretical foundation for governmental liability with respect to foreseeable risks (27, 44).

The second point of convergence is the gradual movement of both legal systems—albeit at different speeds and depths—toward a prevention-oriented model. In United States law, this movement is clearly observable through the institutionalization of risk management, the development of federal and state legislation, and the evolution of judicial practice. Prevention has progressively shifted from a purely policy-based approach into a conditional legal duty, such that omission may, in specific circumstances, ground governmental tort liability (4, 16).

In Iran, although the dominant approach remains largely ex post compensation after the occurrence of disaster, certain indications of a preventive orientation can be observed in legislation and public policy. The enactment of crisis management laws, the emphasis of higher-order documents on reducing vulnerability, and the development of warning and preparedness mechanisms all suggest that the Iranian legal system has gradually recognized the importance of prevention. Nevertheless, this movement has not yet reached the level of full institutionalization, and in many instances remains weakly connected to the regime of governmental tort liability (5, 15).

A noteworthy point is that in both systems, the shift toward prevention has been driven less by purely theoretical developments than by practical confrontation with the extensive consequences of natural disasters and the heavy costs of compensation. The growing complexity of hazards, increased urbanization, and the interdependence of infrastructure have compelled governments to move away from exclusively reactive approaches and toward ex ante risk management. This shared social reality has provided a common context for legal evolution in both systems (2, 43).

The Feasibility of Legal Borrowing and Its Obstacles in Iranian Law

A comparative analysis of governmental liability for unforeseeable incidents inevitably leads to a fundamental question: whether, and to what extent, the legal experience of the United States may be transferred to the Iranian legal system. The answer does not lie in the wholesale adoption of foreign models nor in their categorical rejection, but rather in a careful feasibility assessment grounded in the theoretical foundations, legal structure, and institutional realities of Iranian law. The United States experience—particularly in linking ex ante governmental obligations with mechanisms of legal accountability—contains elements that may inspire reconsideration within Iranian law, provided that any borrowing is selective, localized, and critically adapted.

From the perspective of transferability, it must first be noted that many of the normative foundations underlying the United States model do not inherently conflict with the fundamental principles of Iranian law. Ideas such as the primacy of protecting citizens' life and property, the necessity of preventing foreseeable risks, and the State's responsibility in managing public hazards are not alien to Iranian law; rather, they possess deep roots in Imami jurisprudence and Islamic public law. Doctrines such as the prohibition of harm (la darar), causation, and liability for damage, as well as the conception of guardianship and the ruler's responsibility in safeguarding public interests, provide a theoretical basis for recognizing the State's ex ante obligations (12, 44).

Moreover, the Iranian legal structure in recent years has exhibited indications of gradual movement toward a preventive model. The enactment of crisis management legislation, the emphasis of higher-order documents on vulnerability reduction, and the development of specialized institutions in the fields of safety and prevention all suggest that Iranian law is progressively distancing itself from an exclusively ex post approach. In this regard, the United States experience in institutionalizing prevention and linking it to governmental accountability may serve as a guiding model for strengthening the legal weight of such obligations in Iran (5, 15).

Nevertheless, the transfer of this experience encounters significant structural and legal obstacles, the neglect of which would render any borrowing merely formal and ineffective. One of the most important obstacles concerns the difference in the role and position of courts in the two legal systems. In the United States, courts possess broad authority to interpret tort principles creatively and to develop governmental duties incrementally, whereas in Iran, courts generally regard themselves as bound by statutory texts and refrain from expansive interpretations of governmental obligations. Although this judicial caution may be justified by the principle of legality, it constitutes a serious impediment to recognizing governmental liability arising from the omission of ex ante duties (30, 35).

A second obstacle lies in the ambiguity and fragmentation of governmental liability standards in Iranian law. Unlike United States law, where criteria such as risk foreseeability, the feasibility of reasonable action, and the distinction between policy-making and operational acts have gradually been consolidated through judicial practice, Iranian law lacks explicit and consistently applied benchmarks of this kind. This deficiency limits the ability to rely upon preventive omissions in litigation and constrains judicial capacity to analyze institutional fault (6, 7).

A third obstacle is the predominance of an administrative and policy-oriented view of prevention. In many instances, disaster prevention in Iran is regarded primarily as an executive or managerial matter within the exclusive competence of the executive branch, and is less frequently conceived as a legal duty enforceable through judicial mechanisms. This approach creates a disconnect between preventive policies and the regime of tort liability, reducing governmental accountability to administrative or political oversight rather than legal responsibility (5, 29).

Ultimately, borrowing from the United States experience does not require the wholesale adoption of its institutional mechanisms. Rather, it may proceed through a "minimal and targeted adaptation." For example, the gradual recognition of the omission of ex ante duties as a form of governmental fault, the formulation of clear criteria for assessing the State's role in risk management, and the strengthening of the connection between crisis management legislation and tort liability represent areas in which comparative experience may be utilized without conflicting with the foundations of Iranian law (4, 22).

Conclusion

The analysis of governmental liability in relation to unforeseeable incidents acquires meaningful substance only when the focal point of legal evaluation shifts from the "nature of the event" to the "manner in which the State confronted the risk." Within this framework, the natural origin of a disaster cannot, by itself, serve as a sufficient ground for denying liability. Rather, what becomes decisive is the degree of foreseeability of the risk and the extent of reasonable preventive action undertaken by the State prior to the occurrence of damage. This conceptual shift redraws the boundary between force majeure and institutional fault, placing governmental liability in close connection with its ex ante obligations.

Comparative analysis demonstrates that, in United States law, this linkage has gradually been consolidated through judicial practice and specialized legislation. The limitation of sovereign immunity, the recognition of a public duty of care, and the distinction between high-level policy decisions and the execution of safety requirements have together created the possibility that preventive omissions may, under certain conditions, be regarded as breaches of legal duty. This development does not imply the imposition of unlimited liability upon the government; rather, it reflects an effort to balance public interests, individual rights, and the practical realities of managing risk in a complex modern society.

By contrast, in Iranian law, although jurisprudential foundations and constitutional principles contain the potential for a similar analytical framework, these capacities have seldom been articulated systematically in the form of clear and operational legal standards. The predominance of an ex post perspective, judicial caution in addressing governmental omissions, and the tendency to treat prevention as a purely managerial matter have weakened the connection between ex ante obligations and governmental civil liability. Consequently, a gap persists between normative commitments and effective mechanisms of accountability.

In this context, the United States experience is not wholly transferable; however, it offers a horizon for rethinking within Iranian law. The gradual acceptance of the idea that disaster prevention constitutes an integral component of the State's public obligations to protect life and property provides a foundation for analyzing the omission of such duties—where risk is foreseeable and reasonable action is possible—within the domain of legal responsibility. Such an approach, without disturbing institutional balance, can redirect the logic of governmental accountability from purely compensatory reactions toward a forward-looking responsibility grounded in the legal management of risk.

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Transparency of Data

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