

Crises and Global Tourism: Economic, Accounting and Capital Market Dimensions

Dr. Maria Kalogera ^{†1}, Dr. Elen Paraskevi Paraschi², Nikolaos Georgopoulos³

¹ Department of Business Administration, University of Patras, Greece

² Department of Tourism Management, University of Patras, Greece

³ Psychology, European University of Cyprus, Cyprus

ARTICLE INFO	ABSTRACT
Review Article	Purpose: The main aim of the study was to develop a tri-dimensional analytical framework classifying global crises into four typologies - Financial/Economic Crises, the COVID-19 Pandemic, Geopolitical Crises and Wars, and Terrorism - and to examine their differentiated impacts on global tourism across economic, accounting, and capital market dimensions.
Received 28/04/2026 Accepted 28/05/2026 <i>JEL Classifications</i> Z30, G01, M41, G15, L83	Design/methodology/approach: The study employs a structured narrative review methodology to synthesize diverse literature. The primary search was conducted across Scopus and Web of Science (1990–2025), utilizing representative Boolean search strings to identify quantitative, empirically-grounded studies on crisis impacts across the four typologies. To ensure transparency, inclusion and exclusion criteria were applied to filter the corpus, while a structured narrative synthesis was used to manage the methodological heterogeneity of the sources. The analysis integrates peer-reviewed empirical studies with published industry and intergovernmental reports to triangulate findings, ensuring both academic rigour and empirical grounding in verified sectoral data.
Keywords: Tourism finance, Crisis management, Financial crisis, COVID-19, Geopolitical risk, Terrorism, Stock market; RevPAR, Structured narrative review	Findings: The analysis found that all four crisis typologies generate negative demand shocks but differ fundamentally in speed, depth, spatial reach, and recovery trajectory. COVID-19 produced the most severe disruption, with international arrivals declining by 73% and hotel RevPAR collapsing by 84% in April 2020 - an impact 18 times greater than the GFC. Financial crises were found to operate through income and credit compression; pandemics through universal mobility disruption; geopolitical conflicts through asymmetric market displacement; and terrorism through psychological risk perception and reputational impairment. The study also identified four differentiated exit frameworks - Liquidity, Vaccine and Trust, Redirection, and Security and Communication - each calibrated to the specific mechanisms of the corresponding crisis typology.
	Research limitations/implications: The research relied on published literature, which may introduce publication bias toward statistically significant crisis effects. Cross-country aggregation of quantitative indicators obscures heterogeneity across destinations and firms. The overlapping boundaries between crisis typologies represent a classification limitation. Future research is encouraged to validate the proposed framework empirically using firm-level panel data across multiple crisis episodes.
	Originality/value: This study provides a structured tri-dimensional comparison. It contributes to theory by integrating crisis management with financial economics and accounting perspectives, contributing to an emerging dialogue between tourism management and financial economics that remains underdeveloped in the literature. At a practical level, the study offers tourism practitioners, policymakers, and researchers an operational, typology-specific policy guide that extends general recovery models into actionable crisis management frameworks.

©Democritus University of Thrace

[†] Corresponding Author: Dr. Maria Kalogera

e-mail: kalogera@upatras.gr

1. Introduction

Tourism's place in the global economy is marked by a remarkable paradox. While it is one of the most powerful economic sectors in the world, it remains extremely vulnerable to external forces that are impossible to control. Before the outbreak of the pandemic, the sector had developed into a huge economic engine, contributing around 10% of global GDP and generating export earnings of more than \$1.7 trillion, according to UNWTO data for 2019. In fact, this activity supported over 320 million jobs in a wide range of services, from hospitality and aviation to retail, catering and culture.

As Heraclitus noted, "everything flows", but the flow of tourists across borders is proving to be one of the most fragile economic constants. Over the past three decades, the global tourism industry has been challenged by a series of crises with radically different characteristics, starting with the terrorist attacks of September 11, 2001, and the SARS epidemic in 2003. This was followed by the global financial crisis of 2007-2009, the Arab Spring with its regional repercussions in 2011-2013, as well as the escalation of geopolitical conflicts in various regions of the world. More recently, the COVID-19 pandemic has dealt the sector an unprecedented blow. In 2020 alone, the number of international visitors fell by a dramatic 73%, a decline that has lasted for thirty years. Revenue losses reached \$1.1 trillion, while 62 million jobs were put at immediate risk, according to UNWTO (2021) data. Each of these events confirms the extreme vulnerability of tourism to what is defined in the literature as exogenous shocks (Ritchie, 2009; Duan et al., 2022).

These are sudden and unpredictable shocks that originate from the external environment of the tourism system and disrupt the data in a very short period. Despite the growing body of research on tourism crises, the academic literature still shows a significant gap, as most studies focus on specific events, treat them as stand-alone phenomena, and omit a systematic comparison of transmission mechanisms, accounting effects, or capital market responses. This picture is further complicated by the large methodological heterogeneity, with approaches ranging from event studies and panel VAR models to qualitative case analyses, which makes direct comparison of results difficult and leads to a fragmented knowledge base. In particular, while Duan et al. (2022) systematically map the effects of the crisis at the macroeconomic and microeconomic levels, their framework does not extend to accounting effects at the firm level or capital market responses. Similarly, Ritchie and Jiang (2019) in their review of 142 studies on risk and disaster management focus mainly on the operational and strategic dimensions of recovery, leaving financial reporting and the implications for investors largely unexamined. Studies of individual crises, such as the global financial crisis (Smeral, 2010), the COVID-19 pandemic (UNWTO, 2021) or terrorism (Walters et al., 2019), provide depth within a typology, but prevent a cross-typological comparison of transmission mechanisms and recovery profiles.

This article attempts to fill this gap by developing a comprehensive, three-dimensional comparative framework. This framework is defined as the simultaneous analysis of the effects of the crisis in three distinct, but empirically interrelated dimensions: (a) macroeconomic variables that capture demand shocks to tourist arrivals and revenues; (b) company-level accounting measures that document the deterioration of balance sheets, compression of revenue per available room (RevPAR) and asset values according to IFRS; and (c) capital market indicators that capture investor reactions through changes in stock market values, capital expenditures (CapEx) and financial indicators of systemic risk.

To implement this framework, four crisis typologies are defined: financial/economic crises, the COVID-19 pandemic, geopolitical crises/wars and terrorism. The study is based on Ritchie's (2009) crisis management model and synthesizes a broad set of empirical and institutional data from international organizations, such as UNWTO, OECD, IMF, IATA and the World Economic Forum, to examine three central research questions:

RQ1: How do the four crisis typologies differ in their mechanisms of transmission to tourism demand and financial performance?

RQ2: What is the typology-specific accounting and capital market effects at the firm and sectoral levels?

RQ3: What differentiated exit strategy frameworks are most effective for each crisis typology?

This study contributes to the literature in three ways. First, it provides a structured, three-dimensional comparative analysis of the four main typologies of crises in global tourism. This allows for a direct assessment of macroeconomic, accounting, and financial impacts within a single framework, a synthesis that is not available in existing studies that tend to be unidimensional or focus on a single typology. Second, it links crisis management theory (Ritchie, 2009; Coombs, 2007) with financial economics perspectives (Mishkin, 1992; Smeral, 2010; O'Neill and Mattila, 2006). In doing so, it enhances the emerging dialogue between tourism management and finance. Third, it proposes specialized exit scenarios per crisis typology, thereby enriching the normative literature on tourism recovery beyond the general guidelines of Ritchie's (2009) prevention-response-recovery model.

The structure of the article is as follows: Section 2 presents the methodology, while Section 3 defines the conceptual and typological framework through a comprehensive comparative table. Sections 4 to 7 develop the analysis per typology (financial crises, COVID-19, geopolitical crises/wars and terrorism). Section 8 attempts a combined comparative analysis of all four categories. Finally, Section 9 proposes differentiated exit strategy scenarios, while Section 10 concludes the study with implications for research and policy.

2. Methodology

To map the complex landscape of global tourism crises, this study uses the methodology of structured narrative review. This approach is considered the most appropriate for the thematic scope of the research, as it allows for the combined analysis of different crisis types, analytical dimensions and scientific disciplines. Through this method, it is possible to identify broader comparative patterns that often remain invisible in individual case studies (Tranfield et al., 2003; Duan et al., 2022). The review was structured in four clear phases: targeted literature search, screening, relevance assessment and finally a structured narrative synthesis.

The choice of a structured narrative review over a standard systematic review (SLR) was dictated by specific methodological reasons. First, the nature of the research is deliberately broad and comparative, requiring a flexibility that is not consistent with the strictly limited research questions of the SLR protocols (Tranfield et al., 2003). Second, the search strategy was purposive rather than exhaustive, focusing on studies that provide quantified data on demand in tourism and capital markets (Duan et al., 2022). Furthermore, the significant methodological heterogeneity of the existing literature makes it impossible to apply uniform criteria for qualitative assessment. Finally, the synthesis of the results is organized thematically, following the example of established reviews with similar scope in the field (Ritchie and Jiang, 2019; Khardani and Schmude, 2024).

The search process was conducted in the main academic databases Scopus and Web of Science (WoS), which cover the leading journals in the fields of tourism, economics, finance and accounting. Following the international practice of structured narrative search, the strategy was based on a targeted search with Boolean operators (Duan et al., 2022). The search terms included combinations of terms such as “financial crisis” or “economic crisis” in conjunction with the terms “tourism” or “hospitality”, as well as specialized terms for the COVID-19 pandemic, geopolitical risks and terrorism. These terms were iteratively refined to isolate studies with strong empirical and quantitative evidence. As the main objective was a comparative synthesis rather than a complete bibliography, the final sample was determined based on strict inclusion criteria.

The selection process involved the systematic screening of 380 initial entries. After screening based on relevance to the three-dimensional analytical framework, the final list was reduced to 66 sources. Of these, 54 studies and institutional reports form the main part of the synthesis, while the remaining 12 provide the necessary theoretical background (organizational theory, market efficiency). The time period of the research (1990–2025) was deliberately chosen to combine fundamental crisis management theories with the most recent data from the post-pandemic period. To ensure a complete picture, benchmark data from international organizations such as UNWTO, OECD, IATA, IMF and World Economic Forum were also integrated.

Each source was subjected to a three-point assessment. The required inclusion criteria: (a) direct relevance to the selected crisis typologies, (b) publication in reputable journals (Scopus/WoS), and (c) provision of quantifiable empirical evidence. In contrast, purely theoretical works, studies that focused exclusively on natural disasters, and data before 1990 - the year that symbolizes the beginning of modern, globalized tourism flows - were excluded.

In the next phase, we moved to a structured narrative synthesis (Duan et al., 2022). The choice of this method allowed us to classify the results around our analytical model, using comparison tables that make the evaluation clearer (benchmarking). The biggest advantage here is that the methodological specificity of each study is not offset, but its informative richness is maintained. We integrated a wide range of tools into the analysis: from heterogeneous Bayesian panel VARs (Papagianni et al., 2024) and connectivity studies (Gunay et al., 2025) to event studies (Kolaric and Schiereck, 2016; Yousaf et al., 2022). We have also examined more specialized approaches, such as fractional integration of time series (Gil-Alana and Poza, 2020), quantile regressions (Lee and Chen, 2022), Markov regime switching models (Lin and Falk, 2021), and qualitative case analyses (Goodrich, 2002; Araña and León, 2008).

This diversity of data is examined through three different perspectives:

- The macroeconomic dimension focuses on demand management by national authorities.
- The accounting dimension focuses on financial reporting (IFRS/GAAP) for management and auditors.
- The capital markets dimension monitors systemic risks for analysts and supervisors.

Finally, some methodological limitations must be explicitly mentioned. Reliance on published literature can lead to publication bias in favor of statistically significant results. Furthermore, the aggregation of data from different geographic regions can obscure idiosyncratic responses of specific destinations or companies. The boundaries between crisis typologies also remain fluid. For example, a geopolitical conflict can trigger economic pressures through energy prices, while a pandemic can cause both geopolitical tensions and supply chain disruptions. Such multidimensional episodes contain a complexity that a strict typological framework cannot fully capture.

3. Typology of Crises: Definitions, Characteristics and Comparative Framework

The conceptual foundation for this article's typological framework rests on established definitions from both crisis management theory and financial economics. According to Ritchie (2009) and Coombs (2007), a crisis is 'an event that threatens to harm human development, damage organizations, and lead to negative outcomes.' In the tourism context, the distinguishing features of a crisis are sudden shock, disruption of travel flows, uncertainty of demand, and acute difficulty in restoring destination reputation (Ritchie, 2009). Complementing this perspective, Mishkin (1992) defines

a financial crisis more narrowly as 'a deterioration in the ability of financial markets to allocate funds efficiently', a definition that captures the supply-side financial impairment mechanism that is central to the GFC typology but largely absent in terrorism or geopolitical crises. From a financial economics perspective, our analytical model is based on three strong theoretical traditions. First, Kindleberger's (1978) model of financial transmission is used to explain how crises spread systemically through networks of credit and market confidence. In parallel, the efficient market hypothesis (Fama, 1970) serves as a reference point for the analysis of abnormal returns. On this basis, the stock market reactions to the four crisis typologies, as recorded in event studies, are assessed. Finally, the framework is complemented by agency theory (Jensen and Meckling, 1976). This approach is essential for understanding management decisions in hotels and airlines regarding accounting difficulties, especially when these are made under the weight of asymmetric information and extreme demand uncertainty. Together, these definitions establish that different crisis typologies operate through fundamentally distinct primary mechanisms: financial impairment, mobility disruption, political conflict, and psychological insecurity respectively.

Table 1 summarizes the four typologies of crises across five comparative dimensions: causal origin, geographic scope, speed of onset, depth of impact, and recovery horizon. This approach provides a structured basis for the differentiated analysis that follows, revealing patterns of sharp contrasts and subtle nuances that directly affect management strategies and policymaking.

The causal origin dimension categorizes crises based on their fundamental generative mechanism. Financial crises arise endogenously from systemic dysfunctions in the banking and credit system, such as the accumulation of toxic assets and the collapse of liquidity. The lack of confidence initially spreads to financial markets before reaching the real economy as a demand contraction (Mishkin, 1992). In contrast, the pandemic is a purely exogenous biological event, the origins of which lie entirely outside economic systems, rendering preventive economic policies before the outbreak virtually powerless.

Geopolitical crises and wars stem from the breakdown of political and diplomatic order, driven by state strategic calculations and military escalation. Although these forces are exogenous to the tourism system, their impact is transmitted primarily through changes in the costs and sense of security of travel. Finally, terrorism represents a distinct category of intentional violence, where the main mechanism of influence on tourism is primarily psychological rather than material. It operates by cultivating uncertainty and changing risk perceptions, rather than by physically destroying the hospitality infrastructure (Walters et al., 2019; Goodrich, 2002).

Geopolitical crises are primarily regional in their initial scope, centred on the conflict theatre and its immediate neighbours, though their secondary effects, energy cost escalation, aviation route disruptions, capital market uncertainty, and market displacement flows, can ripple globally, as the Russia–Ukraine war demonstrated from 2022 onwards. Terrorism is typically local or at most regional in its direct impact, with the destination-level shock geographically concentrated around the affected site, even as global airline networks experience indirect systemic effects following high-profile attacks such as 9/11.

The third and fourth dimensions, event speed and depth of crisis, capture the temporal dynamics and magnitude of the initial shock respectively, and together constitute the core of the typological framework's analytical power. The most important contrast is between COVID-19, characterised by sudden onset and extreme depth, and the GFC, characterised by gradual onset and high but not catastrophic global depth. The pandemic produced a simultaneous, complete shutdown of both tourism supply and demand within a matter of weeks, a scenario without historical precedent in modern tourism that generated impacts 18 times greater in terms of arrival declines than the GFC's worst year (see Table 3). The GFC, by contrast, compressed demand through income reduction and credit tightening over a period of months, providing some opportunity for business adaptation and partial demand management. Terrorism shares the sudden, high-velocity onset of pandemic-type shocks but is vastly more limited in global depth, precisely because its geographic concentration prevents systemic market failure at the aggregate level, even as the impact at the destination level can be severe and prolonged. Geopolitical crises can exhibit either gradual escalation or sudden outbreak depending on the specific episode, with depth that is typically moderate to high but subject to significant variance depending on the scale and geographic reach of the conflict.

The fifth dimension, recovery time, shows an ordering that broadly, but not perfectly, corresponds to crisis depth: COVID-19 requires the longest recovery horizon (3–5 years, with global arrivals returning to 2019 levels only in 2024 according to WEF, 2024), followed by geopolitical crises (1–3 years, with important variation across affected and unaffected destinations), financial crises (12–18 months for demand-side indicators, though balance-sheet recovery for heavily leveraged firms extends considerably longer), and terrorism (6–18 months at the global level). However, this apparent ordering obscures an important asymmetry specific to geopolitical crises: 'recovery' in that typology is differentially distributed, with displacement-beneficiary destinations recovering immediately while conflict-adjacent destinations endure prolonged losses (Araña and León, 2008; Önder and Mucuk, 2019). For terrorism, global-level recovery occurs faster than destination-level recovery, where reputational damage and altered traveller risk perceptions can persist well beyond the headline recovery window (Walters et al., 2019).

Table 1: Comparative Typology of Crises in Tourism

Typology	Cause	Geographical Scope	Event Speed	Depth of Crisis	Recovery Time
Financial (GFC)	Systemic banking risk	Global	Gradual (months)	High	12–18 months
Pandemic (COVID-19)	Biological factor	Global	Sudden (weeks)	Extremely high	3–5 years
Geopolitics / War	Political conflict	Regional / Global	Gradual to sudden	Medium–High	1–3 years
Terrorism	Human violence	Local / Regional	Sudden (minutes)	Medium	6–18 months

4. Financial Crises and Tourism: The GFC 2007–2009 as a Model

The Global Financial Crisis (GFC), which began with the collapse of the subprime mortgage market in the US in 2007 and culminated in the bankruptcy of Lehman Brothers on September 15, 2008, is the most significant economic crisis since World War II. The analysis reveals a transmission mechanism operating through three interrelated channels that progressively compressed demand for tourism: the income channel, through which declining household wealth and rising unemployment reduced discretionary spending on travel; the credit channel, through which tighter economic conditions increased costs and reduced the availability of financing for both tourism businesses and consumer credit for holiday spending; and the business travel channel, through which corporate cost-cutting programs reduced conference, incentive and executive travel, a high-margin segment for hotels and airlines (Papatheodorou et al., 2010).

The macroeconomic impact of the COVID-19 pandemic on global tourism, although severe, was significantly more limited than the subsequent shock of the pandemic. International arrivals fell by 4% worldwide in 2009, the first annual decline in two decades, with tourism receipts recording a 6% contraction (UNWTO, 2009). Greece experienced a more pronounced adjustment, as the country's sovereign debt crisis exacerbated the global recession: arrivals fell from around 16 million in 2008 to 14.9 million in 2009, a decrease of 6.7%, while the crisis in the domestic tourism sector continued for 15 consecutive months, with the sector returning to 2007 arrival levels only in 2013 (Papatheodorou and Arvanitis, 2014; Pegkas, 2022). Globally, the recovery trajectory followed a “V-shape” at an aggregate level, with total arrivals recovering by +7% in 2012 and exceeding pre-crisis levels by 2013. Table 2 summarizes the key economic and accounting indicators for the GFC period, documenting the trajectory from peak to trough and subsequent recovery.

A pattern that stands in sharp contrast to the protracted, piecemeal recovery seen after the pandemic. At a company-level accounting level, the Global Financial Crisis (GFC) triggered a series of balance sheet deteriorations across the hospitality and aviation value chain. Revenue per available room (RevPAR) for European hotels fell by an average of 18.5% in 2009, reflecting the combined impact of declining occupancy and compressed average daily rates (ADR) as operators competed for a shrinking demand pool (O'Neill and Mattila, 2006). EBITDA margins (Earnings Before Interest, Taxes, Depreciation and Amortisation) deteriorated by 23–30% across the hotel sector, causing widespread defaults on credit facilities that had been structured on pre-crisis revenue assumptions, particularly for highly leveraged portfolio acquisitions undertaken during the peak of the 2005–2007 period.

Table 2 examines Greece as a typical destination case alongside global figures. Its selection was not accidental: its pre-existing public debt burden makes it an excellent example of how a country's structural weaknesses can act as “multipliers” of global demand shocks. However, it should be noted that sector averages often “hide” large internal variations. For example, limited-service hotels have proven to be much more resilient in terms of RevPAR compared to luxury accommodations. This is explained by the fact that the upper segment caters to corporate clients and high-income tourism – two segments that have been severely “frozen” as businesses have reduced travel costs and wealthy consumers have shifted their luxury spending (Singh and Dev, 2015). Similarly, while global data point to a rapid V-shaped recovery around 2012–2013 (Smeral, 2010), local data contradict this simplistic narrative. As Papatheodorou and Arvanitis (2014) document, it took Greece until 2015 to see the numbers of 2007 again. This fact shows that the speed with which a destination recovers is inextricably linked to its internal problems, such as debt and fiscal austerity, which general global indicators tend to ignore.

The impact of the GFC on the capital market was equally dramatic. The S&P 500 Travel and Leisure Index fell 52% from its peak in May 2007 to its trough in March 2009, broadly comparable to the 55% decline in the overall market, but with a faster and more aggressive recovery profile thereafter (Smeral, 2010). Airline stocks (as tracked by IATA indices) underperformed even this depressed sector average, falling by 60–70% as the revenue collapse combined with pre-existing structural vulnerabilities, high fixed costs, fuel price exposure, and labour inflexibility, to compress operating margins to near-zero or negative levels. Capital expenditure by hospitality companies was severely curtailed as a result: global investment in new hotel construction was reduced by approximately 40% between 2008 and 2010, with projects either deferred or abandoned as credit became unavailable and debt service pressures crowded outgrowth spending (DesJardine et al., 2019).

Table 2: Economic and Accounting Impacts of the 2007–2009 GFC on Tourism

Indicator	2007 (Base)	2008	2009	Recovery (2012)
International Arrivals (billion)	0.92	0.92	0.88 (−4%)	1.04 (+18%)
Tourism Receipts (\$trillion)	\$1.08	\$1.09	\$1.03 (−6%)	\$1.12
Average RevPAR Europe (€)	€85	€82	€69 (−18.5%)	€78
Arrivals Greece (million)	16.2	15.9	14.9 (−6.3%)	15.5
IATA Airline Revenue (\$trillion)	\$0.47	\$0.51	\$0.42 (−17%)	\$0.60
S&P Travel & Leisure Index	1.00	0.72	0.48 (−52%)	0.88
Hotel Property Prices (index)	100	90	72 (−28%)	81

Three patterns emerge from Table 2. First, the impact on RevPAR (−18.5%) was significantly out of proportion than the decline in arrivals (−4%), reflecting the pricing pressure operators faced as they competed for a contracted demand pool. Second, Greece’s steeper arrival decline (−6.3% vs −4% globally) illustrates how pre-existing structural vulnerabilities amplify global shocks at the destination level. Third, the recovery column confirms the V-shape trajectory at aggregate level, though as noted above, this masks substantial destination-level and firm-level heterogeneity in recovery speed.

5. The COVID-19 Pandemic: The Greatest Shock in the History of Tourism

Unlike the global financial crisis, the COVID-19 pandemic has dealt a fundamentally different and historically unprecedented blow, causing simultaneous and global disruptions to both supply and demand in the global tourism market. This difference is not only quantitative, but also qualitative, as no demand management tool, price adjustment or marketing strategy could have saved tourism flows when 217 countries had already imposed strict travel restrictions by the end of March 2020 (UNWTO, 2020).

The mechanism of cascading effects of the pandemic has developed at a rapid pace. Since the emergence of the virus in late 2019, its global spread has been achieved through the same international flight networks that are freezing tourism. By March 2020, when the WHO officially declared a pandemic, IATA recorded the withdrawal of more than 80% of international commercial air traffic, leading to an almost total and simultaneous closure of borders. The figures that followed confirm the scale of the disruption: international arrivals fell by 73% in 2020, falling to 1990 levels in a single year. This is a decline 18 times greater than the worst period of the global financial crisis (UNWTO, 2021). With tourism revenues shrinking by \$1.1 trillion and 62 million jobs at risk, a sector that accounted for 10% of global GDP was brought to a virtual standstill in a matter of weeks. The scale of this disruption, relative to the GFC, is quantified across key dimensions in Table 3.

This ratio is derived from a comparison of peak annual arrival declines: −4% in 2009 (UNWTO, 2009) against −73% in 2020 (UNWTO, 2021) and should be interpreted as an indicator of relative demand shock magnitude rather than a precise econometric estimate. The ratio is sensitive to the choice of base year and crisis window: comparing cumulative multi-year losses rather than single worst-year figures would yield a different but complementary picture of relative severity. With this caveat in mind, the 18× figure remains a useful order-of-magnitude indicator of the structural discontinuity between the two typologies.

Table 3: Comparative Impacts of GFC vs COVID-19 on Global Tourism

Indicator	GFC 2009 (worst year)	COVID-19 2020 (worst year)	Intensity Ratio
Drop in International Arrivals	−4%	−73%	18.25×
Fall in Tourist Receipts	−6%	−64% (−\$1.1 trillion)	10.7×
Jobs at Risk	6–8 million	62 million	~8–10×
Decline in RevPAR	−18.5%	−57% (annual), −84% (Apr.)	3–4.5×
Airline Revenue Drop	−17%	−65%	3.8×
Tourism Stock Index Drop	−52%	−65% (in 5 weeks)	Speed ×15+
State Support (EU)	Moderate	Huge (SURE, RRF)	Scale ×10+

Table 3 reveals that the COVID-19 shock differed from the GFC not only in magnitude but in kind. The arrivals column confirms the 18× ratio discussed above, but the labour market row is equally instructive: 62 million jobs at risk represents 8–10 times the GFC exposure, disproportionate even to the arrival decline ratio, reflecting the structural difference between a demand-side compression and a full operational shutdown that eliminates labour utilisation regardless of capacity. The state support row reveals a further policy discontinuity: the unprecedented fiscal interventions deployed during COVID-19 (SURE, RRF, national furlough schemes) confirm that the pandemic required a fundamentally different policy paradigm rather than an amplified version of existing crisis response toolkits. The speed and capital market dimensions of the shock are examined in detail below.

On an accounting level, the impact of the pandemic has created situations for which existing financial reporting frameworks have no precedent. RevPAR for US hotels collapsed from \$90 in January 2020 to \$14.5 in April of the same year. This 84% decline in a single quarter transformed the industry's most important revenue metric from a performance evaluation tool into an indicator that now reflects almost zero operational activity (O'Neill and Mattila, 2006; UNWTO, 2021).

It should be noted that this RevPAR trough of \$14.5 reflects the US national lodging market aggregate at its most acute phase (UNWTO, 2021); cross-sectional variation was substantial. Resort and leisure properties in drive-to destinations recovered considerably faster than urban and airport hotels dependent on business and international travel, a heterogeneity that aggregate RevPAR figures obscure but that carried significant implications for asset valuation and impairment testing at the individual property level.

A critical observation regarding the accounting dimension is the escalation of Impairment Risk during the pandemic. Under IAS 36, the requirement for impairment testing became particularly challenging as the lockdowns rendered future cash flow estimations highly speculative. While the 2008 Financial Crisis primarily affected asset values through credit tightening and market devaluations, the COVID-19 era introduced an unprecedented level of uncertainty in Discounted Cash Flow (DCF) models. This forced many hospitality and tourism entities to recognize significant impairment losses on goodwill and long-lived assets, reflecting the total disruption of their income-generating capacity compared to the more gradual impact observed in previous economic downturns.

Major chains reported unprecedented losses: Marriott International recorded a Q1 2020 loss of \$267 million, against a profit of \$331 million in the same period of 2019, a \$598 million swing in a single quarter attributable almost entirely to the pandemic demand collapse. Across the airline industry, passenger revenue fell by an estimated \$118.5 billion in 2020 (IATA, 2021), with the 7-day moving average of global flights remaining approximately 42% below pre-pandemic levels even at year-end. At the balance sheet level, the pandemic forced a series of accounting adjustments with no recent precedent: airlines reclassified significant portions of their fleets as non-current assets with impaired carrying values, conducting write-off tests that in some cases reduced aircraft valuations by 20–30%; hotel chains reviewed and, in many cases, impaired the carrying values of goodwill attached to franchise brands in severely affected markets; and governments developed emergency accounting frameworks such as the Greek 'Refundable Advance' programme, that did not exist prior to the crisis. The European Commission's Joint Research Centre estimated that between 6.6 and 11.7 million EU tourism jobs were directly at risk from the pandemic shock, underscoring that the accounting crisis at the firm level translated directly into a social crisis at scale (Rodriguez-Anton et al., 2020).

The capital market response to the pandemic was both rapid and severe. The MSCI Hotels & Cruises index declined by approximately 65% within the first five weeks of 2020, a pace of deterioration without precedent in modern financial markets (Yousaf et al., 2022). Airline stocks fell by 65–72% over the same period, compressing operating margins well below zero as revenue collapsed while fixed costs (aircraft leases, labour contracts, maintenance obligations) remained largely inflexible. Event study evidence from 65 countries confirms that the severity of stock market declines was positively associated with the stringency of lockdown measures (Lee and Chen, 2022). Critically, however, the subsequent partial recovery of tourism equities in 2021 must be interpreted with caution: Yousaf et al. (2022) note that extraordinary monetary policy interventions (including near-zero interest rates and central bank asset purchase programmes) inflated asset valuations broadly, potentially decoupling financial market performance from the underlying demand fundamentals of the sector. This disconnect implies that capital market indicators may overstate the pace of genuine operational recovery in the immediate post-pandemic period.

6. Geopolitical Crises and Wars: The Asymmetric Threat to Tourism

Geopolitical crises and armed conflicts represent a category of tourism shocks with fundamental differences from the economic or health typologies previously examined. Their main feature is the strong asymmetry that governs them, since while war zones face a dramatic, often total, collapse of inbound tourism, competing destinations tend to benefit significantly from the relocation of travel flows to safer areas.

The study by Papagianni et al. (2024), which applied a Bayesian Heterogeneous Panel VAR model to 14 emerging economies, confirms that geopolitical shocks have severe and medium-term negative impacts on tourism flows. In this context, the Russian invasion of Ukraine in February 2022 represented the most significant geopolitical crisis in Europe since World War II and provides a real-time analysis of how geopolitical risks are transmitted to tourism through different channels.

The direct demand channel has led to the sudden disappearance of Russian and Ukrainian travellers, who accounted for about 12% of arrivals in popular Mediterranean resorts, leading to serious revenue shortfalls in markets such as Greece, Turkey and Cyprus (Papagianni et al., 2024). At the same time, the energy channel has transmitted the crisis through a sharp increase in prices, with the price of jet fuel reaching \$175 per barrel in the summer of 2022 (Gunay et al., 2025; IATA, 2022). This development has increased the operating costs of airlines by 40–60%, squeezing profit margins that were just recovering from the pandemic. In addition, the network restructuring channel has brought additional burdens due to the closure of Russian airspace, which has forced European airlines to take detours that have increased the time and cost of flights to Asia by 20–40%. This change has disproportionately affected companies such as Finnair, whose strategic advantage has traditionally been based on the use of the Russian corridor (Finnair Oyj, 2023).

The cross-country evidence, however, reveals important heterogeneity that the Russia–Ukraine case study alone cannot capture. Papagianni et al. (2024), analysing 14 emerging economies, find that geopolitical shocks generate severe medium-term contractions in tourism demand, but Caldara and Iacoviello (2022) demonstrate that the magnitude of these effects varies substantially with structural country characteristics, particularly energy import dependence and trade openness. Countries with diversified energy supply and lower dependence on conflict-zone source markets absorb geopolitical shocks considerably faster than those structurally exposed to affected trade routes. This implies that the 1–3-year recovery horizon cited in the typological framework should be treated as a central estimate around which substantial variance exists, rather than a fixed recovery trajectory.

Finally, the assessment of these crises by the capital market follows the same asymmetric pattern, as airlines directly exposed to the affected routes show unusually negative returns of -8% after the announcement of hostilities. Conversely, tourism companies in competitive and safe destinations can show positive returns, as investors value the phenomenon of tourist displacement directly to them (Kolaric and Schiereck, 2016).

7. Terrorism and Tourism: The Psychological Multiplier Phenomenon

Terrorism is the most psychologically specific category of the four crisis typologies examined, as the way it affects tourism is radically different from the others. While financial crises affect incomes, pandemics affect mobility, and geopolitical conflicts affect costs and territories, the main mechanism of terrorism is the manipulation of perceived risk. Through deliberate and projected violence, the aim is to spread fear, which creates a paradoxical relationship between real infrastructure and demand. A destination can remain functionally intact but suffer an overall decline in visitors simply because the subjective sense of safety of travellers has changed.

Understanding this mechanism is crucial for developing communication strategies and interpreting economic data. Goodrich (2002) laid the groundwork for this analysis after September 11, 2001, and found that the reluctance of travellers to visit the United States lasted for three full years. Although the physical capacity of air traffic was fully restored within a few months, traffic did not return to crisis levels until July 2004. Subsequently, Araña and León (2008) showed that the reduction in demand, which typically ranges from 6% to 30% of arrivals, depends not so much on the extent of the attack as on the intensity of media coverage and how it changes global perceptions of risk.

An important methodological caveat applies here. Araña and León (2008) find that demand reductions attributable to terrorism depend more on the intensity of media coverage than on the objective severity of the attack, a finding with significant implications for cross-study comparability. Studies that use different proxies for media exposure, or that measure impact over different time windows, may generate systematically divergent impact estimates even for the same event. The wide range of reported arrival declines, from 6% to 30% across studies, likely reflects this methodological heterogeneity at least as much as genuine variation in attack severity or destination vulnerability.

A notable recent example is the attacks in Barcelona in August 2017. Although the city's infrastructure was intact, air traffic was significantly reduced in the following months, costing Spain hundreds of millions of euros in tourism revenue. At the same time, Portugal and Greece, which were considered safer alternatives, recorded measurable gains from the displacement phenomenon. This confirms that terrorism, just like geopolitical crises, creates “winners and losers” on the global tourism map by redistributing flows based on perceptions of security.

From an accounting perspective, terrorism creates a distinct impact profile that focuses on intangible assets rather than the physical or financial assets affected by other types of crises. Destination goodwill (the accumulated reputational capital of a tourism brand) is an off-balance sheet resource that decisively determines the valuation of hotel franchise agreements, travel agency contracts and airline rights, but does not appear as a recognized asset under IFRS or national GAAP. Large chains with franchise networks in the affected markets, AccorHotels after the Paris attacks (2015), IHG after the London bombings (2005), have undertaken IFRS 3 impairment reviews and revisions to the guidance on future EBITDA that formalized reputational damage as a recognized accounting cost. Furthermore, the country risk premium used in discounted cash flow (DCF) valuations of hotel properties increases after attacks, reducing the estimated present value of future cash flows and triggering further asset write-downs, particularly for properties in markets where risk perceptions remain high for prolonged periods. Third, business interruption insurance provisions are re-evaluated and travel insurance products are restructured to cover terrorism risk, creating additional escalation in insurance costs for operators in affected markets.

The effects of terrorism on the capital market are characterized by three distinctive features that collectively differentiate this typology from all others: extreme speed of onset, high initial magnitude, and relatively rapid partial recovery. Following the September 11 attacks, the S&P 500 fell 14.3% in the first five trading days after the market opened on September 17, 2001. Airline stocks, particularly American Airlines and United Airlines, whose aircraft were used in the attacks, plunged 40–50% in the first week of trading, reflecting both the immediate impact on revenues and an extreme repricing of aviation demand risk. Hotel stocks in unaffected markets and cruise lines recovered relatively faster than airlines, as the substitution of land-based vacations for air travel partially offset the losses in hospitality demand. Unlike the Global Financial Crisis and the pandemic, where stock market declines were sustained by ongoing fundamental deterioration, terrorism-related declines tend to exhibit faster mean reversion as the destination's natural recovery becomes apparent and behavioural adjustment reduces initial fear responses. Research by Walters et al. (2019) finds, however, that this apparent rapid recovery in aggregate indicators masks a persistent micro-level effect: terrorism systematically reduces travellers' willingness to pay and increases risk aversion

over extended periods of time, suppressing the quality-adjusted demand levels that determine long-term profitability, even when key arrivals figures return to pre-attack levels. Table 4 documents the stock market and RevPAR impacts of the five most significant terrorist events of the past two decades, illustrating both the initial shock magnitude and the destination-specific recovery horizons.

Table 4: Stock Market Impacts of Major Terrorist Events on Tourism

Event	Date	Airline Index Drop	RevPAR Impact	Recovery Time
9/11 USA	Sept. 2001	−40% to −50%	−15 to −25%	3–4 years
Bombing of Madrid	March 2004	−8% to −12% (Spain)	−10%	12 months
London bombing	Jul. 2005	−5% to −8% (UK)	−12% (London)	6–9 months
Paris / Brussels	2015–2016	−6% to −10% (France/Belgium)	−18 to −22%	12–18 months
Barcelona	Aug. 2017	−4% to −6% (Spain)	−8 to −12%	8–12 months

Table 4 reveals two patterns that aggregate terrorism impact assessments typically obscure. First, airline stock declines were systematically larger and more prolonged than RevPAR impacts, reflecting the network-wide demand repricing that follows high-profile attacks even for routes unconnected to the affected destination. Second, recovery time correlates inversely with attack scale at the global level but not necessarily at the destination level; Barcelona recovered faster in aggregate indicators than Madrid or Paris, yet destination-level reputational effects persisted beyond the headline recovery window in all cases.

8. Comparative Analysis: Four Typologies, One Integrated Framework

The comparison of the four types of crises through the prism of macroeconomics, accounting and the capital market, reveals a series of structural findings that form the core of our research. The analysis presented in Table 5 essentially implements the theoretical framework of Table 1, converting the theoretical distinctions into specific quantitative data, which are divided into nine different dimensions of performance.

A methodological note on the quantitative ranges presented in Table 5 is warranted. The figures represent central estimates derived from the reviewed literature and institutional sources; the ranges reflect genuine cross-study and cross-destination variation rather than measurement error. Direct numerical comparison across typologies should be treated with caution, as the underlying studies differ in geographic scope, time window, and measurement methodology, factors that limit the precision of cross-typology ratio calculations such as the 18× arrival decline comparison between COVID-19 and the GFC. The figures in Table 5 are accordingly intended to indicate orders of magnitude and directional differences rather than precise equivalences and should be read in conjunction with the destination-level and firm-level caveats documented in Sections 4–7.

The relationship between the speed, depth and width of each crisis forms four completely different profiles. In this context, the COVID-19 pandemic occupies a rather unique position, as it is the only case that combines global scope and sudden occurrence with extreme depth and an extremely slow recovery process, simultaneously affecting all three dimensions of our analysis. This combination of factors, which is often described in the literature as a "complete shutdown of the market", explains why the decline in total demand 18 times was greater compared to the global financial crisis – a ratio that is not found in any other case.

On the other hand, the global financial crisis was clearly deeper and more systemic than terrorism or geopolitical crises, but its evolution was slower, allowing market participants to adapt at least partially. Again, terrorism, while characterized by tremendous speed and depth at the local level, has a limited geographical extent and leads to a relatively quick recovery if we look at it on a global scale. Finally, geopolitical crises, depending on the situation, can escalate either gradually or abruptly, leaving behind moderate to severe chronic effects, which, however, present large discrepancies between destinations due to the phenomenon of the displacement of travellers.

Table 5: Comparative Characteristics of Four Crisis Typologies - Economic, Accounting and Capital Market Dimensions

Dimension	Financial Crisis	COVID-19	Geopolitical Crisis	Terrorism
Main Mechanism	Income / Credit	Mobility / Fear	Cost / Market Loss	Fear / Reputation
Change in Arrivals	-4% to -8%	-73%	-10% to -30%	-6% to -30% (local)
RevPAR Impact	-18% to -25%	-57% to -84%	-8% to -20%	-10% to -22%
Airline Stock Drop	-40% to -60%	-65% to -72%	-8% to -15%	-5% to -50%
EBITDA Impact	-25% to -35%	Negative (absolute)	-10% to -25%	-5% to -20% (local)
Impairment Risk	Medium-High	Very High	Moderate	Low-Medium
Arrivals Recovery	12-18 months	3-5 years	12-36 months	6-18 months
Displacement Effect	Small	Non-existent	Important	Important
State Intervention	Regulatory / Fiscal	Massive (fiscal)	Geopolitical	Security

A close reading of Table 5 reveals clear patterns that characterize each type of crisis. The series on ****Main transmission mechanisms**** shows us the channel through which each crisis "hits" tourism: financial crises suppress income and credit, the COVID-19 pandemic imposes restrictions on movement and causes fear, geopolitical crises increase costs and lead to lost markets, while terrorism is based on fear and damage to the reputation of the destination. These differences are not just theoretical, as they determine which management tools are effective. For example, the provision of liquidity in economic crises, health protocols in pandemics, market diversification in geopolitics and correct communication in terrorism help.

The series on ****Changes in arrivals**** shows with absolute clarity the extent of the damage to overall demand. The differences are substantial: from the globally synchronized but modest -4% to -8% of economic crises, we arrive at the devastating -73% of the pandemic. Therefore, the series for the ****RevPAR**** indicator shows that, while all types of crises reduce hotel revenues, they do so in different ways. The drop of -57% to -84% due to COVID-19 meant the complete disappearance of customers, while the drop of -18% to -25% during the 2008 financial crisis was mainly due to the reduction of prices (ADR), as hotels competed fiercely for a limited clientele.

But perhaps the most important distinction for destination strategy lies in the series of ****displacement phenomena****. Only geopolitical crises and terrorism divert tourists from the affected destination to its competitors. COVID-19 was the only exception, as it did not cause displacement: all destinations were "lost" at the same time and none benefited from the collapse of the others. This happened because the pandemic simultaneously closed the supply worldwide, eliminating the possibility of replacing one destination with another.

For destination management organisations (DMOs), this distinction carries important practical implications. A geopolitical or terrorist crisis at a competitor represents a real market opportunity that requires immediate investment to attract displaced flows. In contrast, a global pandemic offers no such opportunities, as the problem is universal.

9. Crisis Exit Scenarios: Differentiated Frameworks by Typology

The analytical framework developed in previous sections converges on a single practical conclusion: the crisis exit strategy cannot be one-size-fits-all. Each crisis typology requires a distinct "policy color" – a differentiated mix of instruments, institutions, stakeholders and time horizons calibrated to the specific mechanisms through which the typology disrupts tourism flows and degrades economic performance. The provision of liquidity and fiscal stimulus tools appropriate for economic crisis recovery would be of no use against the geopolitical root causes of a Russia-Ukraine-style conflict. Ritchie's (2009) three-phase model of prevention, response and recovery provides the fundamental structure, but its broad guidelines require substantial typological specialization to create operational policy guidance. Pricing flexibility through aggressive ADR management, combined with value-for-money positioning, recaptured price-sensitive leisure segments during the income-constrained recovery phase. Greece's return to 2007 arrival levels only in 2013–2015 demonstrates that even well-designed sectoral recovery measures cannot fully overcome the binding constraint of general economic performance and consumer confidence.

For pandemic recovery, the fundamental constraint, the absence of a medical solution to cross-border transmission risk, defined a clear sequencing of recovery tools. The EU Digital COVID Certificate, deployed in June 2021, demonstrated that technology-enabled health credentialing can serve as an effective 'trust signal' enabling international travel even before disease elimination, and that the summer 2021 European tourism season's partial recovery (particularly in Greece, Italy, and Spain) was meaningfully attributable to this specific policy tool. Holland et al.'s (2021) NIESR modelling confirms the global economic cost of vaccine distribution inequity: failure to achieve equitable access would have reduced global trade by approximately 0.8% compared to the baseline, with a corresponding 12–18-month delay in tourism recovery illustrating that tourism recovery policy extends well beyond the tourism sector itself into global public health governance. Beyond vaccination, pandemic exit required

differentiated strategies by segment: the luxury travel segment recovered earliest (2021), benefiting from the wealth effects of asset price inflation and the pent-up demand of high-income consumers; mass market leisure recovered through 2022–2023 as vaccination coverage expanded and travel confidence grew; MICE (Meetings, Incentives, Conferences and Events) tourism recovered last, reaching near-2019 levels only in 2023–2024 as corporate travel policies adapted to post-pandemic hybrid work norms. Globally, total international arrivals returned to 2019 levels only in 2024, confirming COVID-19's status as a 3–5-year recovery typology (WEF, 2024).

Geopolitical crisis recovery requires a strategic reorientation from restoration to redirection an acknowledgement that the specific market flows disrupted by conflict cannot be quickly restored and that sustainable recovery depends on their systematic replacement by alternative markets. Greece's 2022–2023 response to the Russia–Ukraine war provides the most instructive recent case study: the collapse of Russian and Ukrainian tourist flows was partially replaced through aggressive marketing campaigns targeting the US, Middle Eastern, and Indian markets, with US arrivals increasing by 42% in 2022, a redirection that required investment in new distribution channels, travel agent relationships, and targeted digital marketing campaigns.

Investments in energy efficiency have proven to be significant for the resilience of the industry. Hotels and tourism businesses that planned to invest in renewable energy sources (RES) before the conflict saw their costs increase by 15–20% less than their fossil fuel-based competitors. This confirms that investments in structural resilience, when made in calm times, create a meaningful advantage in the face of geopolitical shocks. At the same time, airlines have managed to compensate for some of the capacity lost due to the closure of Russian airspace by developing new routes and rerouting their flights to alternative markets to maintain connectivity.

When it comes to recovering from terrorist attacks, the most critical factor is the speed of response, with communication management as a key tool. According to the World Economic Forum (2016), destinations that respond with fast, transparent and honest communication with travellers and partners recover 30–40% faster than those that follow a slow or overly corporate and defensive approach — a finding directionally consistent with the academic literature on destination crisis communication (Ritchie and Jiang, 2019), though precise quantification of recovery speed differentials remains methodologically challenging given the absence of controlled comparison cases. Campaigns such as “Bonjour Paris” and “Visit Barcelona” are examples of this approach, as they have managed to convey a message of resilience, reassure the public about security and give travellers practical incentives not to cancel their reservations.

In addition, the visible reinforcement of security measures - such as increased police presence in tourist areas and better crowd management - acts as a reassurance signal that can mitigate the psychological uncertainty caused by terrorism and moderate travellers' perception of residual attack risk. The development of specialized terrorism insurance products also helps in this direction, strengthening the confidence of travellers even in high-risk environments.

Finally, cooperation between competing destinations can prove extremely fruitful. For example, joint campaigns in the Mediterranean region, jointly promoting Greece, Spain, Italy and Portugal as safe alternatives, can transform the individual advantage of tourist displacement into a general regional strategy that benefits all participating countries. Table 6 provides a consolidated comparative policy guide, mapping each crisis typology to its primary exit scenario, operational tools, recovery horizon, and documented pilot case.

Table 6: Crisis Exit Scenarios Comparative Policy Guide

Typology	Main Exit Scenario	Basic Tools	Horizon	Success Pilot
Financial Crisis	"Liquidity"	VAT relief, credit guarantees, promotion	12–18 months	Greece 2012–2014, USA 2010–2011
COVID-19	"Vaccine & Trust"	Digital certificate, domestic tourism, luxury-first	3–4 years	EU Digital Certificate 2021
Geopolitics	"Redirection"	Market diversification, RES, safe haven image	1–2 years	Greece/EU 2022–2023
Terrorism	"Security & Communication"	Visible security, rapid comms, campaigns	6–12 months	Paris 2016, Barcelona 2017

The comparative reading of Table 6 underscores a central finding of this study: no single recovery instrument is effective across typologies. Liquidity provision, the primary tool for financial crisis recovery, is irrelevant against pandemic-era border closures; communication campaigns, central to terrorism recovery, have no fiscal analogue in economic crises. The horizon column further illustrates that recovery speed is not simply a function of shock severity: terrorism, despite its acute initial impact, generates the shortest recovery horizon at the global level, while the pandemic, despite massive state intervention, required the longest.

10. Conclusions: Towards a Resilient Tourism Economy

This study developed a three-dimensional framework for the analysis of four types of crises, demonstrating that the general term “tourism crisis” does not capture the substantial differences observed in causality and recovery mechanisms. In the context of the first research question (RQ1), it was found that the transmission of shocks follows radically different paths. In particular, financial crises act through a slowly escalating compression of disposable income, while pandemics cause an immediate and universal disruption of mobility that requires a multi-year recovery period. At the same time, geopolitical conflicts cause an asymmetric shift of flows towards safer destinations, while terrorism operates mainly psychologically, making reputation management more important than the restoration of physical infrastructure.

Regarding the second research question (RQ2), the pandemic was the only crisis that caused absolute EBITDA losses, thus differing from the simple compression of profit margins that characterize financial crises. The risk of asset value deterioration reached its peak during COVID-19, while the decline in capital markets was more severe than in any other historical economic cycle. Furthermore, it was found that, although the speed of recovery is usually inversely proportional to the intensity of the shock, this rule was broken in the case of the pandemic, due to the structural damage suffered by airlines and companies' balance sheets.

Analysing RQ3, effective recovery requires accurate diagnosis before measures are implemented. The “Liquidity Scenario” for economic crises is powerless against travel restrictions, while the “Communication Scenario” for terrorism has no fiscal analogue in other types of crises. Geopolitical turmoil requires the “Redirection Scenario”, which aims for long-term energy and purchasing diversification.

The theoretical contribution of the research is threefold: it offers a structured tri-dimensional comparison of crises, contributing to an emerging dialogue between crisis management and financial economics, and transforms general prevention models into specialized policy guides. At a practical level, authorities should develop differentiated action protocols and businesses should incorporate pandemic and geopolitical risks into stress-testing models. Despite the limitations of using aggregated data, the study confirms the resilience of tourism. Its future survival, however, depends on the quality of institutional frameworks and the robustness of balance sheets against the next crisis, which is already being prepared beyond the current horizon of visibility.

The aggregate patterns documented across the four typologies should, however, be interpreted with caution: as demonstrated in Sections 4–7, recovery trajectories and impact magnitudes vary substantially across regions, market segments, and firm types. Limited-service hotels showed greater resilience than luxury properties during financial crises; resort destinations recovered faster than urban hotels during the pandemic; and geopolitical shocks produced winners and losers simultaneously depending on proximity to conflict zones. Future research is encouraged to validate the proposed framework empirically at the destination and firm level, disaggregating the aggregate indicators into market-specific analyses.

Notwithstanding these limitations, the tri-dimensional framework developed in this study offers a theoretically grounded and practically applicable lens through which policymakers, financial analysts, and tourism managers can anticipate, diagnose, and respond to the next crisis — whatever typology it may take.

Acknowledgements: No funding or institutional support was received for this research. This study was conducted on a fully self-funded basis by the authors. During the preparation of this work, the authors used Gemini (Google DeepMind) and Claude (Anthropic) for copy-editing purposes, specifically to check spelling, grammar, and language, aiming to improve readability. After using this tool/service, the authors reviewed and edited the content as needed and took full responsibility for the content of the publication.

References

-
- Araña, J.E. & León, C.J., 2008, “The impact of terrorism on tourism demand.”, *Annals of Tourism Research*, 35, 2, pp. 299–315.
- Caldara, D. & Iacoviello, M., 2022, “Measuring geopolitical risk.”, *American Economic Review*, 112, 4, pp. 1194–1225.
- Coombs, W.T., 2007, *Ongoing Crisis Communication: Planning, Managing, and Responding (2nd ed.)*, Sage Publications.
- DesJardine, M., Bansal, P., & Yang, Y., 2019, “Bouncing back: building resilience through social and environmental practices in the context of the 2008 global financial crisis.”, *Journal of Management*, 45, 4, pp. 1434–1460.
- Duan, J., Xie, C., & Morrison, A.M., 2022, “Tourism crises and impacts on destinations: A systematic review of the tourism and hospitality literature.”, *Journal of Hospitality & Tourism Research*, 46, 5, pp. 867–904.
- Fama, E.F., 1970, “Efficient capital markets: A review of theory and empirical work.”, *Journal of Finance*, 25, 2, pp. 383–417.
- Finnair Oyj, 2023, “Annual Report 2022.”, Helsinki: Finnair. <https://investors.finnair.com> (February 2026)
- Gil-Alana, L.A. & Poza, C., 2020, “The impact of COVID-19 on Spanish tourism: Evidence from fractional integration.”, *Tourism Management Perspectives*, 36, 100747.
- Goodrich, J.N., 2002, “September 11, 2001 attack on America: a record of the immediate impacts and reactions in the USA travel and tourism industry.”, *Tourism Management*, 23, 6, pp. 573–580.
- Gunay, S., Kırımhan, D. & Payne, J.E., 2025, “Geopolitical risks and tourism industry interactions: evidence from tokens and equity markets.”, *Tourism Economics*, 31, 1, pp. 1–25.
- Holland, D., Liadze, I., Machikina, A., & Naisbitt, B., 2021, *The global economic outlook in the wake of COVID-19*. National Institute Global Economic Outlook. London: NIESR.
- IATA, 2021, IATA Annual Report 2020, International Air Transport Association.

- IATA, 2022, IATA Annual Report 2022, International Air Transport Association.
- Jensen, M.C., & Meckling, W.H., 1976, "Theory of the firm: Managerial behavior, agency costs and ownership structure.", *Journal of Financial Economics*, 3, 4, pp. 305–360.
- Khardani, C., & Schmude, J., 2024, "A micro-level model for crisis management in tourism destinations: An interdisciplinary approach.", *Journal of Contingencies and Crisis Management*, 32, 3, e12619. <https://doi.org/10.1111/1468-5973.12619>
- Kindleberger, C.P., 1978, *Manias, Panics, and Crashes: A History of Financial Crises*. Basic Books, New York.
- Kolaric, S. & Schiereck, D., 2016, "Are stock markets efficient in the face of fear? Evidence from the terrorist attacks in Paris and Brussels.", *Finance Research Letters*, 18, pp. 306–310.
- Lee, C.C. & Chen, M.P., 2022, "The impact of COVID-19 on international tourism: evidence from quantile regression.", *North American Journal of Economics and Finance*, 64, 101875.
- Lin, V.S. & Falk, M., 2021, "Markov regime-switching model of stock market volatility in tourism: Nordic countries analysis.", *Tourism Economics*, 27, 6, pp. 1317–1335.
- Mishkin, F.S., 1992, "Anatomy of a financial crisis.", *Journal of Evolutionary Economics*, 2, 2, pp. 115–130.
- OECD, 2022, *OECD Tourism Trends and Policies 2022*, Paris: OECD Publishing.
- Önder, I., & Mucuk, M., 2019, "Impacts of terrorist attacks and political incidents in major cities on the tourism industry: Evidence from Turkey.", *Cities*, 91, pp. 130–142.
- O'Neill, J.W., & Mattila, A.S., 2006, "Strategic hotel development and positioning: The effects of revenue drivers on profitability.", *Cornell Hotel and Restaurant Administration Quarterly*, 47, 2, pp. 146–154.
- Papagianni, E., Evgenidis, A., Tsagkanos, A. & Megalooikonomou, V., 2024, "Tourism demand in the face of geopolitical risk: insights from a cross-country analysis.", *Journal of Travel Research*, 63, 2, pp. 395–412.
- Papatheodorou, A., & Arvanitis, P., 2014, "Tourism and the economic crisis in Greece: Regional perspectives.", *Anatolia*, 25, 2, pp. 191–203.
- Papatheodorou, A., Rosselló, J., & Xiao, H., 2010, "Global economic crisis and tourism: Consequences and perspectives.", *Journal of Travel Research*, 49, 1, pp. 39–45.
- Pegkas, P., 2022, "The efficiency of the tourism industry in Greece during the economic crisis (2008–2016).", *European Journal of Tourism Research*, 32, 3203.
- Ritchie, B.W., 2009, *Crisis and Disaster Management for Tourism*. Channel View Publications, Bristol.
- Ritchie, B.W., & Jiang, Y., 2019, "A review of research on tourism risk, crisis and disaster management: Launching the Annals of Tourism Research curated collection on tourism risk, crisis and disaster management." *Annals of Tourism Research*, 79, 102812. <https://doi.org/10.1016/j.annals.2019.102812>
- Rodriguez-Anton, J.M. & Alonso-Almeida, M.D.M., 2020, "COVID-19 impacts and recovery strategies: the case of the hospitality industry in Spain.", *Sustainability*, 12, 20, pp. 1–17.
- SETE, 2016, "Statistical Bulletin – July 2016.", Athens: Association of Greek Tourism Enterprises.
- Singh, A., & Dev, C.S., 2015, "Winners and losers during the Great Recession: The positive impact of marketing expenditures.", *Cornell Hospitality Quarterly*, 56, 4, pp. 383–396.
- Smeral, E., 2010, "Impacts of the world recession and economic crisis on tourism: Forecasts and potential risks.", *Journal of Travel Research*, 49, 1, pp. 31–38.
- Tranfield, D., Denyer, D., & Smart, P., 2003, "Towards a methodology for developing evidence-informed management knowledge by means of systematic review.", *British Journal of Management*, 14, 3, pp. 207–222.
- UNWTO, 2009, "World Tourism Barometer 2009.", Madrid: World Tourism Organization.
- UNWTO, 2020, "Impact Assessment of the COVID-19 Outbreak on International Tourism.", Madrid: UNWTO.
- UNWTO, 2021, "COVID-19 and Tourism 2020: A Year in Review.", Madrid: World Tourism Organization.
- UNWTO, 2022, "Tourism Trends and Policies. In collaboration with OECD.", Madrid: UNWTO.
- Walters, G., Wallin, A. & Hartley, N., 2019, "The threat of terrorism and tourist choice behavior.", *Journal of Travel Research*, 58, 3, pp. 370–382.
- WEF - World Economic Forum, 2016, "How destinations can bounce back after terrorist attacks.", Geneva: WEF.
- WEF - World Economic Forum, 2024, "Travel & Tourism Development Index 2024.", Geneva: World Economic Forum.
- Yousaf, I., Patel, R. & Yarovaya, L., 2022, "The reaction of G20+ stock markets to the Russia–Ukraine conflict: evidence from an event study approach.", *Finance Research Letters*, 48, 102988.

This is an Open Access article distributed under the terms of the Creative Commons Attribution Licence

