The Effects of FED Interest Rate Policies on Tourism Stock Prices

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ABSTRACT

This study investigates the impact of the United States Federal Reserve's (FED) monetary policy on the stock returns of publicly listed tourism and hospitality firms located in the world's top tourist destination countries, as ranked by the World Tourism Organization in 2022. Using firm-level quarterly time series data—characterized by heterogeneity in coverage periods across countries—this research employs a combination of econometric techniques, including the Autoregressive Distributed Lag (ARDL) bounds testing approach and the Generalized Method of Moments (GMM), to analyze both long-run and dynamic effects. The ARDL results reveal significant long-term relationships between changes in FED monetary policy and stock returns in the tourism and hospitality sectors across most of the examined countries, while the GMM estimations further validate the robustness and consistency of these effects under potential endogeneity. Notably, the results indicate that FED policy changes generally exert a positive and statistically significant influence on tourism and hospitality stock performance, with some deviations observed—particularly among firms in China. The study concludes by offering practical policy recommendations tailored to tourism-dependent economies and emphasizes the importance of integrating global monetary developments into financial and investment strategies within the tourism and hospitality sector.

Keywords: Monetary Policy; Stock Return; FED; Tourism; Hospitality; France

ÖZ

Bu çalışma, Amerika Birleşik Devletleri Merkez Bankası'nın (FED) para politikasının, 2022 Dünya Turizm Örgütü sıralamasına göre en çok turist çeken ülkelerdeki halka açık turizm ve konaklama firmalarının hisse senedi getirileri üzerindeki etkilerini incelemektedir. Ülkelere göre farklılık gösteren zaman dilimlerine sahip firma bazlı üçer aylık zaman serisi verileri kullanılarak, hem uzun dönemli hem de dinamik etkileri analiz etmek amacıyla çeşitli ekonometrik yöntemler uygulanmıştır. Bu kapsamda, Sınır Testi yaklaşımına dayalı Otoregresif Dağıtılmış Gecikmeler (ARDL) modeli ile birlikte Genel Anlamda Momentler Yöntemi (GMM) kullanılmıştır. ARDL sonuçları, FED para politikası değişiklikleri ile turizm ve konaklama sektöründeki hisse senedi getirileri arasında uzun vadeli anlamlı ilişkiler olduğunu ortaya koyarken, GMM tahminleri bu etkilerin olası içsellik sorunları karşısında da geçerliliğini koruduğunu doğrulamaktadır. Elde edilen bulgular, FED'in para politikası değişikliklerinin incelenen ülkelerdeki turizm ve konaklama firmalarının hisse performansları üzerinde genel olarak pozitif ve istatistiksel olarak anlamlı etkiler yarattığını göstermektedir; ancak Çinli firmalar gibi bazı istisnalar da gözlemlenmiştir. Çalışma, turizme bağımlı ekonomiler için politika önerileri sunmakta ve turizm ve konaklama sektörlerinde yatırım ve finansal stratejilere küresel para politikalarının entegre edilmesinin önemini vurgulayarak sonuçlandırılmaktadır.

Anahtar Kelimeler: Para Politikası, Hisse Senedi Getirileri, FED, Turizm, Konaklama, Fransa

DEDICTATION

Anneme

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LIST OF ABBREVATIONS

AIDS	Almost Ideal Demand System
AMH	Adaptive Market Hypothesis
ARDL	Autoregressive Distributed Lag
CAPM	Capital Asset Pricing Model
CMH	Coherent Market Hypothesis
DDM	Dividend discount model
DGE	Dynamic general equilibrium
DMH	Discovering Market Hypothesis
ECT	Error correction term
EME's	Emerging market economies
EMH	Efficient Market Hypothesis
EMs	Emerging markets
FED	United States Federal Reserve
FFF	Federal Funds Futures
FFR	Federal funds rate
FMH	Fractal Market Hypothesis
GMM	Generalized Method of Moments
HMH	Heterogeneous Market Hypothesis
IMH	Intersubjectivity Market Hypothesis
IOR	Interest on reserves
M2	Money supply
NEG	New Economic Geography
NNH	Novelty-Narrative Hypothesis The

NTA	The Noise Trader Approach
OMOs	Open market operations
OTC	Over-the-counter
QARDL	Quantile autoregressive distributed lag
QE	Quantitative Easing
ROA	Return on assets
TLG	Tourism-Led Growth
UIP	Uncovered Interest Parity
UMP	Unconventional monetary policy
WCM	Working capital management

Chapter 1

INTRODUCTION

1.1 Background of the Study

In today's interconnected economy, financial markets are more globally entangled than ever, with investment flows, capital movements, and market sentiment easily crossing national boundaries. This growing integration means that decisions made by national central banks increasingly influence financial conditions beyond their own borders. The U.S. Federal Reserve, in particular, plays a key role in this dynamic due to the dominant position of the U.S. dollar in global trade, finance, and reserves. When the Fed adjusts its policy stance—through interest rate changes, quantitative easing, or policy signals—the ripple effects can be felt worldwide, influencing economic activity and financial market behavior across borders (Tillmann et al., 2019; Clark et al., 2020).

Among the sectors most affected is tourism, a field deeply tied to international mobility and economic stability. Tourism is not only shaped by domestic financial factors like income and borrowing costs but also by global shifts such as exchange rate fluctuations and broader monetary conditions—all of which are sensitive to U.S. policy changes. For example, when the Fed tightens monetary policy, the resulting stronger dollar can reshape international travel patterns, increase tourism costs, and influence investment in tourism-related assets. On the other hand, looser monetary conditions tend to boost demand by improving liquidity and lowering financing costs for both consumers and businesses.

Given this exposure, it's critical to examine how shifts in U.S. monetary policy affect the tourism industry, especially in economies heavily reliant on tourism income. Such analysis not only bridges gaps in current research but also equips policymakers and investors with insights to navigate financial volatility. As the tourism sector continues to operate within a globally linked economy, understanding its vulnerability to the Fed's actions becomes essential for building resilience and strategic preparedness (Tillmann et al., 2019; Clark et al., 2020).

1.2 Significance and Rationale of the Study

Tourism remains one of the most dynamic and globally connected industries in the world, serving as a major driver of economic growth, job creation, and a source of foreign exchange reserves for many countries. Consider France, which receives the most tourists in the world (World Bank, 2023), where the tourism and hospitality industry plays a crucial role in the country's economy. However, the financial situation and performance of businesses in this industry is influenced by more than just local economic factors. Oftentimes, they are also subject to the broader trends and changes in international monetary policy.

Because tourism is so heavily influenced by macro-financial factors (such as liquidity, interest rates, cost of investment, exchange rate volatility, etc.), any change in the global financial landscape can have a substantial impact on how tourism firms price their services, make investments, and perform on the stock market. This impact is particularly notable given the current global financial system, where multinational operations and the flow of capital across borders are the status quo.

Normally, the monetary policy of the United States Federal Reserve (FED) would have a disproportionate impact in the context of any global financial crisis. The US dollar's

unique position in the international monetary system means that the domestic credit conditions set by the FED and its management of liquidity are globally significant, impacting financial flows, asset values and exchange rate returns beyond the United States and into financially exposed sectors such as tourism and hospitality, where firm-level revenues and investor sentiment are correlated with macroeconomic shocks. In turn, returns in the financial sector are likely to be influenced not only by firm-specific factors and local economic fundamentals, but also by investor expectations or responses to anticipated or realised US monetary policy changes. A knowledge of how US monetary policy continues to impact on the financial returns of tourism firms across the globe is therefore crucial to academics investigating financial transmission mechanisms, investors attempting to mitigate sectoral risk and policymakers looking to protect domestic economic prosperity from international monetary shocks.

What distinguishes this study from previous literature is its focus on the tourism and hospitality sector as an inherently labor-intensive industry, where human capital is central to service delivery and guest experience. In contrast to capital-heavy industries, the tourism sector creates value primarily through interpersonal interaction and real-time responsiveness. As shown in Haktanır and Harris (2005), decision-making in hospitality heavily relies on employees at the point of customer contact, where observation and verbal communication are key performance indicators. This unique dependency on human interaction makes the sector highly sensitive to exogenous shocks such as pandemics, justifying the need to investigate how external monetary policy—such as that of the U.S. Federal Reserve—disproportionately affects such labor-driven industries.

1.3 Objectives and Research Questions

This study primarily aims to analyze the effects of FED monetary policy changes on the stock returns of companies in France's tourism and hospitality sectors. The key research questions addressed include:

- How do FED monetary policy decisions influence the short-term and long-term stock returns of tourism companies in France?
- Do contractionary and expansionary FED monetary policies have asymmetric effects on the financial performance of tourism sector firms?
- How do FED interest rate decisions interact with investor expectations and market sentiment to influence tourism sector stock returns?

1.4. Research Gap and Original Contribution

While a substantial body of research has explored the broader implications of U.S. Federal Reserve (FED) monetary policy on financial markets—examining variables such as interest rates, asset pricing, and capital flows (Neuhierl & Weber, 2019; Irani et al., 2022)—there remains a noticeable gap in the literature concerning its sector-specific effects, particularly on global service industries such as tourism and hospitality. Most existing studies tend to generalize the transmission mechanisms of monetary policy across aggregated financial indices or macroeconomic aggregates, often overlooking the nuanced ways in which such policies interact with industries that are highly sensitive to economic sentiment, discretionary spending, and cross-border financial volatility. Tourism, as a globally integrated and financially vulnerable sector, is particularly exposed to such macroeconomic shocks. Given its dependence on consumer confidence, travel financing, and exchange rate movements, even modest changes in monetary policy can have amplified consequences on the financial stability and market performance of tourism-related firms.

This oversight is even more apparent when considering particular national markets that are of great significance for international tourism as in the case of France. Although France has always been the most visited tourist country in the world (World Bank, 2023), the hospitality and tourism market in this country has not attracted the attention of empirical studies examining the cross-border impacts of FED monetary policy, thereby leaving a gap in the literature on how international monetary impacts are reflected in sectoral stock returns in tourism dependent countries. Filling this research gap in the literature, this study's new and unique empirical contribution is to examine the direct and indirect impacts of FED policy changes on the stock returns of French tourism and hospitality companies. The study makes a valuable contribution to the related academic literature on international monetary transmission mechanisms as well as providing practical implications to investors, financial analysts and policy makers in tourism dependent countries.

1.5 Methodology, Scope, and Limitations

The methodological foundation of this study is grounded in advanced econometric techniques, with a particular emphasis on the Autoregressive Distributed Lag (ARDL) bounds testing approach, unit root tests, and Granger causality analyses to explore both short- and long-run relationships between variables (Pesaran et al., 2001). The empirical analysis utilizes monthly time-series data spanning from 1995 to the present, encompassing publicly listed tourism and hospitality firms in France alongside a set of U.S. Federal Reserve monetary policy indicators. This sector-specific focus allows for a detailed examination of how global monetary conditions influence firm-level financial performance within a tourism-driven national economy. While the methodology is robust and well-suited for analyzing dynamic interactions, the study acknowledges certain limitations, including potential constraints in data availability

for earlier years and the simplifying assumptions embedded within the econometric models, which may influence the interpretation of causality and long-term equilibrium dynamics.

1.6 Structure of the Thesis

This thesis is organized into five chapters, beginning with the Introduction, which outlines the research context, objectives, and significance of the study. Chapter 2, titled *Global Impacts of FED's Monetary Policy and Its Relationship with Stock Returns*, provides a comprehensive review of the theoretical and empirical literature on the international transmission of U.S. Federal Reserve monetary policy and its influence on global financial markets. Chapter 3, *The Strategic Importance of the Tourism and Hospitality Sector and Its Reflection on Stock Market Performance*, examines the economic relevance of the tourism and hospitality industry, highlighting its sensitivity to macroeconomic conditions and financial volatility. Chapter 4, *The Effects of FED Monetary Policy Changes on Tourism & Hospitality Stock Returns: Evidence from France*, presents the empirical analysis using time-series econometric methods to evaluate the relationship between FED policy actions and stock returns of French tourism firms. Finally, Chapter 5, *Conclusion and Policy Recommendations*, summarizes the key findings, discusses their implications for investors and policymakers, and offers recommendations for future research and economic strategy.

Chapter 2

GLOBAL IMPACTS OF FED'S MONETARY POLICY AND ITS RELATIONSHIP WITH STOCK RETURNS

2.1 Definition and Objectives of Monetary Policy

The formulation of monetary policy has historically centered around two main objectives: ensuring price stability and supporting real economic activity such as output and employment. Janet Yellen (1996) articulates a dual mandate approach, asserting that while price stability should remain the Federal Reserve's long-term goal, output stabilization must also be actively pursued: "The Federal Reserve should be directed to pursue multiple objectives simultaneously" (p. 41). This sentiment is echoed by John Taylor through his seminal rule-based policy framework, which suggests that central banks should adjust interest rates systematically in response to both the inflation gap and output gap. Taylor's (1993) rule has been influential in aligning monetary interventions with both inflation control and real economic fluctuations, and Yellen herself highlights the utility of this rule as a practical guide for policymakers (Yellen, 1996).

Building upon this framework, Ben Bernanke, in his tenure as Federal Reserve Chair, supported flexible inflation targeting and emphasized the need for monetary policy to be forward-looking and responsive to financial crises. Bernanke et al. (1999) emphasized that "monetary policy rules like Taylor's should incorporate expectations and not respond purely to realized variables," thus enhancing policy effectiveness

during periods of economic uncertainty. Alan Blinder (1999), a former Vice Chair of the Federal Reserve, warned against relying too heavily on rigid policy formulas, emphasizing the need for informed discretion—particularly when navigating financial innovation or responding to unexpected supply shocks. In contrast, Milton Friedman (1968) championed a monetarist model, arguing that central banks should maintain a steady growth rate in the money supply to secure long-term price stability, while rejecting active short-term intervention.

Yet, Friedman's strict approach has come under scrutiny in light of more recent empirical findings. For example, research by Clarida, Gali, and Gertler (2000) showed that central banks following forward-looking, Taylor-rule-style frameworks tended to achieve stronger macroeconomic stability. This divergence in thought reflects a broader shift—from the rigid prescriptions of early monetarism to more adaptive, rule-informed approaches.

Janet Yellen's position reflects this evolution: she acknowledges that while long-term credibility depends on maintaining price stability, a degree of flexibility is necessary to address real-time economic fluctuations and support broader social welfare. In essence, effective monetary policy today avoids both extremes—neither confined to strict targets nor driven by unstructured discretion—and instead seeks balance through strategic, rule-based actions tempered by expert judgment.

2.2 Instruments of Monetary Policy

In today's banking system, monetary policy transmission is affected by multiplicative interactions between interest rates, reserve holdings, and liquidity conditions in interbank markets. Bianchi and Bigio (2022) extend a general equilibrium model to

incorporate over-the-counter interbank frictions into monetary transmission, and they show that the effectiveness of policy tools depends critically on market structure and bank-level frictions.

The paper's key novelty is to distinguish between conventional and unconventional open market operations (OMOs). Conventional OMOs consist of asset swaps of similar liquidity (such as reserves for government bonds). Unconventional OMOs comprise central bank purchases of illiquid assets, such as loans.The authors find that during crises, and particularly when interbank market frictions increase, unconventional OMOs become the only effective policy tool to avoid collapses in the credit supply.

Monetary policy implementation hinges on managing both interest on reserves (IOR) and the central bank's balance sheet. These instruments independently influence the federal funds rate (FFR) and the lending rate, thereby altering pass-through dynamics and liquidity premia. For instance, an increase in IOR can either stimulate or contract lending depending on whether capital requirements bind. When unbinding, reserves and credit are complements; when binding, they become substitutes, tightening financial conditions.

The study also empirically documents that liquidity risk, as proxied by volatility in deposit withdrawals and matching frictions in interbank lending, leads to higher liquidity premia and reduced credit. By constructing counterfactual simulations, Bianchi and Bigio show that in the absence of liquidity shocks, the credit decline during the 2008 crisis would have been significantly smaller—by as much as 5% at the peak.

Moreover, the paper's methodological innovation is the integration of interbank matching frictions into a tractable macroeconomic framework. In equilibrium, banks adjust their portfolios—balancing reserves, loans, and bond holdings—to manage expected liquidity needs. This behavior implies that the composition of liquid assets matters for aggregate credit dynamics, despite indeterminacy at the individual bank level.

From a policy standpoint, the findings underscore the importance of dynamic and targeted credit policies, especially during times of systemic stress. The effectiveness of monetary interventions depends not only on rate settings but also on the structural capacity of the central bank to absorb risk through its balance sheet. As such, modern central banks must consider how their policies affect market tightness, interbank rate dispersion, and the availability of credit in the economy.

There is also a rich literature, including Brunnermeier and Koby (2018) for a discussion of the “reversal interest rate” and the contractionary effects of high IORs, Gertler & Karadi (2011) for a discussion of how to extend New Keynesian models to include financial intermediaries, Keister and McAndrews (2009) for evidence on the implications of excess reserve holdings, and Holmström and Tirole (1998) for a discussion of public liquidity provision during freezes in markets.

2.3 Impacts of Monetary Policy Changes on Stock Markets

Monetary policy plays a fundamental role in shaping investor behavior and price formation in stock markets. Hojat (2015) contributes to this literature by empirically modeling the influence of monetary policy instruments—specifically, changes in the money supply (M2), Federal Funds Rate (FFR), and Federal Funds Futures (FFF)—

on the expected returns of publicly traded companies. The dissertation adopts a multifactor extension of the Capital Asset Pricing Model (CAPM) and demonstrates that monetary policy shocks influence asset prices through risk premia adjustments, liquidity conditions, and investor expectations.

A key finding of the study is that an increase in M2 positively moderates the relationship between the market rate of return and individual stock returns, suggesting that monetary expansion enhances liquidity and supports asset valuation. Conversely, changes in FFR and FFF exert negative mediation effects, meaning that expectations of tightening monetary policy reduce equity returns by increasing discount rates and perceived uncertainty (Hojat, 2015, p. 132). These findings align with Bernanke and Kuttner's (2003) seminal work, which showed that unanticipated monetary policy shocks significantly alter equity prices by changing the equity premium, rather than through real interest rate channels.

Moreover, the study reaffirms that monetary signals, such as FOMC announcements, influence investor sentiment and expectations, affecting pricing beyond fundamental cash flows. The integration of Federal Funds Futures as a proxy for market expectations strengthens the evidence that policy expectations, not just realizations, are pivotal in equity market responses (Hojat, 2015, pp. 16–18). Supporting studies by Gürkaynak et al. (2005) reinforce this finding by documenting that market reactions are more sensitive to forward guidance and surprise components of monetary policy announcements than to announced rate changes themselves.

Hojat's model, also suggests how the firm-specific variables, like market capitalization, act as mediator in the monetary changes impact on equity returns. The

results support the Fama-French Three-Factor Model's claim that, because of the higher associated risk and limited access to capital, small firms are significantly more sensitive to macroeconomic shocks, including monetary tightening, due to increased risk perception. In other words, Hojat's results aid in the realization that monetary policy influences the stock market not only through interest rate changes, but also through expectations and liquidity factors, and firms' characteristics as well. This study supports the call for a departure from the traditional one-factor CAPM models in favor of a more dynamic multifactor model that incorporates both macroeconomic policy and microeconomic firm characteristics in explaining monetary policy transmission mechanisms.

2.4 Monetary Policy and Stock Prices within the Efficient Market Hypothesis (EMH)

The Efficient Market Hypothesis (EMH) has long stood as a central tenet in financial economics, positing that asset prices reflect all available information at any given time. Martin Sewell (2011) outlines the historical development of this hypothesis, tracing its intellectual lineage from 16th-century gambling theories to modern statistical finance. EMH, in its purest form, asserts that it is impossible to consistently outperform the market through any informational advantage because all known data are already incorporated into prices (Fama, 1970). This foundational claim led Fama to define an efficient market as one where "prices fully reflect all available information" (Fama, 1970, p. 383), and subsequently to distinguish between weak, semi-strong, and strong forms of efficiency.

Sewell's work offers a unique chronological narrative, beginning with early insights from Cardano and Bachelier, whose random walk theory predates even Einstein's formulation of Brownian motion. Yet, it wasn't until the mid-20th century that EMH

was formalized by Fama (1965), Samuelson (1965), and others who framed price fluctuations within martingale processes—a mathematical structure implying future price changes are independent of past movements.

Notably, empirical scrutiny has both reinforced and challenged EMH. For example, Jensen (1968) famously tested mutual fund performance and concluded that fund managers did not earn returns exceeding market benchmarks net of fees. Ball and Brown (1968), however, introduced event studies showing that markets do react predictably to earnings announcements—initially interpreted as evidence for EMH's semi-strong form. Later, Grossman and Stiglitz (1980) dealt a theoretical blow, proving that if markets were perfectly efficient, there would be no incentive for investors to gather information, making perfect efficiency logically impossible.

The 1980s and 1990s brought a wave of behavioral finance literature, sparked by De Bondt and Thaler (1985), which identified consistent overreaction and reversal patterns in stock prices—direct violations of EMH. Shiller (1981, 2000) further demonstrated that asset prices display excessive volatility inconsistent with rational valuation models. In response, Fama (1991, 1998) adjusted the EMH framework to account for long-term return anomalies, arguing that inefficiencies were not persistent enough to warrant a rejection of market efficiency as a useful working model.

A middle ground emerged in Andrew Lo's Adaptive Market Hypothesis (2004), which recasts EMH through an evolutionary lens. Lo suggests that market efficiency is not a binary state but a dynamic process influenced by environmental conditions, behavioral shifts, and institutional changes—thus reconciling empirical irregularities with theoretical elegance.

As Sewell (2011) concludes, although EMH in its strictest form is empirically untenable, it remains "profoundly true in spirit." Markets may never be perfectly efficient, but they are efficient enough to defy simple predictive strategies. The ongoing refinement of asset pricing models, from CAPM to multifactor models and behavioral extensions, suggests that EMH is best viewed not as a doctrine but as a foundational benchmark against which all anomalies must be tested.

The Efficient Market Hypothesis (EMH) has long served as the bedrock of modern financial theory, asserting that asset prices fully reflect all available information and that no investor can consistently outperform the market through skill or timing (Fama, 1970). Rooted in classical finance, EMH builds on rational investor assumptions and market-clearing mechanisms where deviations from intrinsic value are arbitraged away. As Malkiel (2003) famously summarized, "a blindfolded monkey throwing darts at the financial pages could select a portfolio that would do just as well as one carefully selected by experts."

However, Nyakurukwa and Seetharam (2023) argue that while EMH provided a valuable benchmark, it rests on assumptions—rationality, investor homogeneity, and instantaneous information diffusion—that are too stringent for today's complex, behavioral, and tech-driven markets. Their review presents eight compelling alternatives to EMH, each addressing a specific flaw and offering a more dynamic, interdisciplinary understanding of market efficiency.

Noise Trader Approach (Shleifer & Summers, 1990); The Noise Trader Approach (NTA) integrates psychological biases into finance, asserting that irrational traders affect prices and that arbitrage is limited due to risk. This framework explains persistent mispricing and volatility not accounted for by EMH. Empirical support

comes from investor sentiment studies (e.g., Baker & Wurgler, 2007), which show that "noise" is not always neutralized by rational actors.

Coherent Market Hypothesis (Vaga, 1990); This hypothesis introduces **nonlinear dynamics** and chaotic transitions into financial modeling. Unlike EMH's assumption of normal return distributions, the Coherent Market Hypothesis (CMH) allows for changes driven by fundamental bias and group sentiment—echoing real market phenomena like bubbles and crashes.

Fractal Market Hypothesis (Peters, 1994); Peters' FMH posits that markets are stable when a variety of investment horizons coexist, but instability arises when short-term traders dominate. This fractal nature introduces scale-invariance into price behavior, aligning with the extreme returns observed in crises (Kristoufek, 2013).

Heterogeneous Market Hypothesis (Müller et al., 1995); HMH emphasizes diversity in investor behavior, particularly with respect to time horizons, risk tolerance, and information processing. This heterogeneity undermines the EMH's assumption of representative agents and instead supports agent-based modeling of market dynamics.

Adaptive Market Hypothesis (Lo, 2004);Andrew Lo's AMH merges EMH with behavioral finance, proposing that markets evolve in response to changing environmental pressures. Investors adapt like biological species; markets are efficient under stability but behave irrationally during disruption (Lo, 2017). This dynamic efficiency model better fits real-world observations of bubble-crash cycles.

Discovering Market Hypothesis (Kleinheyer & Mayer, 2020);DMH uses **narrative economics** to explain asset pricing. Markets shift between calm and turbulence based on the spread of dominant narratives, drawing on Kuhn's (1996) theory of scientific revolutions. Social media's role in driving the GameStop (2021) short squeeze is a vivid example.

Novelty-Narrative Hypothesis (Mangee, 2021);The NNH emphasizes the role of **novel events** (e.g., COVID-19, 9/11) that render historical models ineffective. In such environments, investors shift toward **story-based heuristics**, using narratives to fill gaps in information and restore a sense of control amid uncertainty.

Intersubjectivity Market Hypothesis (Bocher, 2022); Bocher integrates philosophy, sociology, and econophysics into asset pricing. The IMH frames markets as self-organizing systems driven by shared narratives and swarm intelligence. This model captures real phenomena like herding, bubbles, and meme stock dynamics more effectively than EMH.

While each alternative diverges from EMH's assumptions, they share a commitment to capturing the complex, nonlinear, and behavioral nature of financial markets. Rather than being mutually exclusive, these hypotheses are complementary, offering a multi-layered lens through which market efficiency can be studied (Cornell, 2018). They emphasize that mispricing is not anomalous but expected, and that understanding narrative dynamics, sentiment contagion, and structural diversity is key to forecasting market behavior.

As financial markets evolve, so too must our theoretical frameworks. EMH remains a useful benchmark, but modern realities demand models that accommodate bounded rationality, adaptive learning, and social dynamics. The future of asset pricing may lie not in choosing one hypothesis over another, but in constructing hybrid models that embrace this diversity.

2.5 The Federal Reserve (FED) and Global Financial System

The role of the United States Federal Reserve (Fed) in the global economy has increasingly become a focal point in academic literature on international macroeconomics and monetary policy. While the Fed's dual mandate—price stability and maximum employment—remains domestically oriented, its influence on global financial conditions is substantial and growing. Stanley Fischer (2015) underscores this dual reality, noting that financial globalization has rendered national central banks increasingly sensitive to external shocks and transmission mechanisms, even as their policy frameworks remain primarily domestic in legal scope.

Historically, the transmission of U.S. monetary policy to the global economy has been conceptualized within the Mundell-Fleming framework, which predicts that lower U.S. interest rates lead to capital outflows from the U.S., resulting in currency appreciation abroad and declines in foreign interest rates—effects that are stronger in economies with fixed or managed exchange rates (Mundell, 1963; Fleming, 1962). Fischer (2015) reinforces this understanding, showing that monetary easing in the U.S. during the post-2008 period—especially through quantitative easing (QE)—not only boosted domestic liquidity, but also contributed to capital inflows and asset price inflation in emerging market economies (EMEs).

The spillover effects of the Fed's policies are documented in multiple studies. Neely (2011) finds that U.S. QE significantly lowered foreign bond yields and influenced exchange rates across advanced and emerging economies. Similarly, Bowman, Londono, and Sapriza (2014) report that unconventional monetary policy announcements had measurable effects on EME equity prices, exchange rates, and capital flows. Fischer (2015) points out that these dynamics were most pronounced

during the QE1 period, when global financial stress was at its peak. The effects were also evident during the 2013 “taper tantrum”, when Fed signals about unwinding QE triggered sharp reversals in EME capital flows, especially in countries with large current account deficits or weak fiscal positions (Powell, 2013).

The Fed’s role extends beyond macroeconomic spillovers to encompass liquidity provision and global financial stability. During the 2008 crisis, the Fed established swap lines with other central banks to alleviate global dollar shortages, effectively acting as a lender of last resort to the international financial system (Fischer, 2015). These swap lines remain a crucial, if rarely used, backstop for managing cross-border liquidity crises. In this context, the Fed’s actions are aligned with the view articulated by Kindleberger (1986), who argued that systemic stability in international finance often requires leadership from a dominant economic power.

In addition to liquidity channels, the literature has explored the risk-taking channel of monetary policy, whereby accommodative U.S. policy encourages investors to pursue higher-yielding, riskier assets globally. Studies by Borio and Zhu (2012), Rey (2013), and Bruno and Shin (2015) document how lower U.S. interest rates incentivize leverage and credit growth in foreign economies, increasing systemic vulnerability. Fischer (2015) notes that while some EMEs criticized the Fed’s policies for inflating asset bubbles, many also welcomed the capital inflows and looser financial conditions in the wake of the global financial crisis.

Despite its far-reaching influence, Fischer cautions against framing the Fed as a global central bank. Unlike a supranational institution, the Fed is bound by its congressional mandate and answers to U.S. citizens and legislators. However, given the dominant

role of the U.S. dollar in international trade, reserves, and cross-border lending, the Fed's domestic policy decisions have unavoidable international ramifications (Fischer, 2015; Eichengreen, 2013). Accordingly, Fischer emphasizes the need for transparent communication and predictable normalization to prevent future market disruptions—a view echoed in Bernanke (2014) and Tarullo (2014), who stress that regulatory and policy clarity is essential to ensure global financial stability during policy transitions.

2.6 Effects of FED Interest Rate Decisions on Global Capital Flows

The monetary policy stance of the United States Federal Reserve (Fed)—particularly its interest rate decisions—has long been recognized as a principal determinant of international capital flows, especially toward emerging markets (EMs). As global financial integration has deepened, empirical studies have increasingly highlighted how changes in U.S. interest rates act as a systemic "push" factor, redirecting global liquidity toward or away from higher-yielding but riskier assets in EMs.

Koepke (2019) synthesizes over three decades of empirical evidence showing that declines in U.S. interest rates consistently trigger increased capital flows into EMs, especially in the form of portfolio debt and equity flows, while higher rates tend to precipitate capital retrenchment. The paper relies on the enduring push-pull framework (Calvo et al., 1993), which distinguishes external (push) and domestic (pull) factors. Within this context, U.S. monetary policy—proxied by Federal Funds Rate (FFR) levels and yield curve movements—is one of the most consistently significant push factors.

A notable finding is that portfolio flows—particularly into debt instruments—are most sensitive to U.S. rate movements. When U.S. interest rates fall, the resulting yield compression encourages global investors to seek returns in EM bond markets,

triggering large inflows. Conversely, during periods of tightening, such as the 2013 “Taper Tantrum”, EMs experienced sharp reversals in inflows, higher volatility, and exchange rate depreciation (Koepke, 2019, pp. 527–528). These reactions were particularly pronounced in economies with weaker macroeconomic fundamentals or high dependence on external financing.

The literature Koepke surveys confirms that interest rate levels in mature economies exhibit a stronger and more statistically robust relationship with EM capital flows than domestic interest rates in recipient countries. This supports the view advanced by Rey (2013) that monetary policy in the U.S. is a driver of the global financial cycle, influencing risk-taking and capital mobility beyond what traditional interest rate differentials can explain.

Furthermore, Koepke (2019) critiques the differential-based view that capital flows are primarily shaped by relative interest rates between the U.S. and EMs. Instead, the evidence suggests that absolute changes in U.S. policy rates play a larger role, as they often trigger risk reassessments and liquidity rebalancing across international portfolios. Indeed, rising U.S. rates not only alter the risk-reward calculus but also influence EM rates themselves due to global transmission channels (Edwards, 2012; Frankel et al., 2004).

Empirical studies cited by Koepke—including those by Ahmed and Zlate (2013), De Vita and Kyaw (2008), and Fratzscher (2012)—corroborate that Federal Reserve tightening leads to outflows from EMs, particularly in portfolio categories. For banking flows, the response to Fed rates is more nuanced, as institutional credit may adjust more slowly, though still directionally aligned with portfolio movements.

The qualitative meta-analysis presented in Koepke's Figure 7 further reveals a strong negative correlation between higher U.S. interest rates and all major categories of EM capital inflows (portfolio equity, portfolio debt, and banking). This broad impact underscores the Fed's systemic relevance: its interest rate policies influence not just domestic credit conditions but also international capital allocation, EM macroeconomic stability, and exchange rate volatility.

In sum, Koepke (2019) reinforces the consensus that Federal Reserve interest rate decisions exert powerful and asymmetric effects on global capital flows, acting as a principal driver of cyclical capital surges and sudden stops in EMs. This literature review aligns with the findings of Bruno and Shin (2015), Rey (2013), and Obstfeld (2012), who have all argued that U.S. monetary policy occupies a central position in shaping global financial cycles and thus merits careful consideration in both domestic and international macroeconomic policy frameworks.

2.7 Spillover Effects of FED Policies on Emerging Market Economies

The spillover effects of U.S. monetary policy—particularly unconventional measures like Quantitative Easing (QE)—on Emerging Market Economies (EMEs) have generated significant academic and policy debate since the 2008 global financial crisis. A growing body of literature demonstrates that large-scale monetary interventions by the Federal Reserve (Fed) transmit substantial financial and macroeconomic effects beyond U.S. borders, particularly in the form of capital flows, asset price shifts, and financial market volatility in EMEs.

Several empirical studies confirm that QE expanded capital inflows into EMEs. Using a Qual VAR approach, Tillmann (2016) quantifies the impact of QE1, QE2, and QE3 on EM financial variables and shows that unconventional policy significantly increased capital inflows, reduced bond spreads, appreciated EME currencies, and raised equity prices. The portfolio balance and signaling channels serve as the main conduits: asset purchases lower U.S. yields and increase the attractiveness of EME assets, while the expectation of persistently low rates reinforces capital reallocation to higher-yielding emerging markets.

Lavigne et al. (2014) further confirm that QE created unwelcome appreciation pressures and looser financial conditions in EMEs, especially for those with open capital accounts and flexible exchange rates. The net effect, however, was not uniformly negative. The trade and confidence channels—where stronger U.S. growth under QE bolstered global demand—generated positive spillovers through increased exports and sentiment gains.

Beyond the direction of capital flows, the volatility of those flows poses systemic risks. Apostolou and Beirne (2019) emphasize that volatility spillovers from Fed balance sheet changes were especially pronounced for EME exchange rates and moderately impactful for stock and bond markets. Their study, covering 13 EMEs from 2003 to 2018, shows that the Fed's QE operations, more than the announcements, induced volatility in EMEs through rebalancing effects and risk sentiment shifts.

Interestingly, their research finds only limited spillover to real macroeconomic variables, such as inflation and industrial output, indicating that financial channels dominate transmission. Furthermore, the magnitude of spillovers varied over time,

being most severe during the tapering announcement of May 2013, which triggered the so-called "Taper Tantrum." This event underscored the risk of reversal shocks when monetary accommodation is withdrawn.

The response of EMEs to Fed policy is highly conditional on domestic fundamentals, including exchange rate regimes, macroprudential strength, and financial market development. Lavigne et al. (2014) note that more resilient EMEs with robust macroeconomic policy frameworks experienced less destabilizing spillovers, while those with pre-existing vulnerabilities (e.g., twin deficits or banking fragility) saw magnified responses.

Similarly, Tillmann (2016) concludes that capital controls and financial buffers did not fully insulate EMEs from QE-driven inflows and outflows. Even EMEs with restrictive regimes experienced the “monetary tsunami” effect described by Brazilian policymakers during QE2. Apostolou and Beirne (2019) echo this finding, adding that portfolio reallocation decisions were not always aligned with fundamentals, increasing the potential for destabilizing surges or stops.

A recurrent theme in the literature is whether unconventional monetary policy (UMP) generates stronger or more unpredictable spillovers than traditional interest rate cuts. The findings are mixed. Lavigne et al. (2014) and Apostolou & Beirne (2019) suggest that spillovers from QE are not radically different in kind, but they may be larger in magnitude and more volatile due to the novelty and scale of balance sheet expansions. Tillmann (2016), by incorporating both announcement effects and macroeconomic data, finds QE2 and QE3 had greater spillover effects than QE1, suggesting cumulative or nonlinear effects.

2.8 Impacts of FED Policies through Exchange Rates and Consumer Spending

The relationship between monetary policy, real exchange rates, and consumer behavior has long been central to macroeconomic analysis in open economies. Traditional models like the Mundell-Fleming-Dornbusch framework and dynamic general equilibrium (DGE) models with complete financial markets predict that expansionary fiscal or monetary policy results in real exchange rate appreciation. However, empirical studies increasingly document the opposite: a persistent real depreciation following government spending shocks (Corsetti & Müller, 2006; Ravn et al., 2011; Bouakez et al., 2014).

Bouakez and Eyquem (2015) bridge this theoretical-empirical gap by developing a small open economy model that incorporates three crucial features: imperfect international financial markets, sticky prices, and moderately aggressive monetary policy. Their central finding is that, contrary to traditional predictions, an increase in government spending may lead to a depreciation of the real exchange rate, contingent on the behavior of long-term real interest rates and the response of monetary authorities.

At the heart of their model is a modification to the standard Uncovered Interest Parity (UIP) condition. Due to market imperfections (such as debt-elastic interest rate premia), the exchange rate is influenced not solely by expected interest rate differentials but also by a country-specific risk premium that increases with external debt levels (Bouakez & Eyquem, 2015, p. 179–183). When fiscal expansion raises inflation and the monetary policy response is subdued, the real interest rate does not

rise proportionally. This causes the long-term real interest rate differential to decline, leading to currency depreciation in real terms.

This mechanism is substantiated both analytically and through numerical simulations. The model shows that the depreciation is stronger in economies with more pronounced financial frictions and less aggressive inflation targeting (pp. 187–192). The authors validate this with SVAR evidence from countries like Canada, Australia, Sweden, and the UK, finding that exchange rate depreciation is more pronounced in pre-inflation targeting eras, when monetary policy was less disciplined (p. 198).

While earlier models predict a crowding-out effect on consumption via interest rate rises, Bouakez and Eyquem consider cases where Edgeworth complementarity exists between public and private consumption. In such scenarios, government spending raises the marginal utility of private consumption, leading to a crowding-in effect. Even under this extended specification, their model continues to predict a real depreciation, driven by the balance of payments adjustment rather than intertemporal consumption smoothing (pp. 195–197).

Importantly, when monetary policy is highly aggressive (i.e., raises nominal rates more than one-for-one in response to inflation), the model can flip: the long-term real interest rate increases significantly, and the currency appreciates. This dichotomy demonstrates the sensitivity of exchange rate responses to the monetary regime, reinforcing the notion that policy stance—not just fiscal impulses—shapes international transmission.

The findings align with broader empirical literature (e.g., Ravn et al., 2011; Corsetti et al., 2012) which has increasingly reported "spending-induced depreciations" as a stylized fact. They also resonate with policy discussions surrounding the Fed's global influence. For instance, U.S. quantitative easing and low-rate regimes post-2008 are widely credited for causing capital flow surges and currency pressures in emerging markets—dynamics akin to the mechanisms modeled by Bouakez and Eyquem. Their contribution thus refines how Federal Reserve policy can indirectly shape exchange rate paths and consumer dynamics globally, by influencing inflation expectations, real interest differentials, and the financial conditions faced by other economies.

Chapter 3

THE STRATEGIC IMPORTANCE OF THE TOURISM AND HOSPITALITY SECTOR AND ITS REFLECTION ON STOCK MARKET PERFORMANCE

3.1 Tourism-Led Growth Hypothesis and Economic Contributions

Tourism-Led Growth (TLG) hypothesis argues that tourism is not a secondary but a primary factor for economic growth, especially for open economies. The hypothesis emerged strongly after Balaguer and Cantavella-Jordá (2002) found long-run causality between tourism and GDP in Spain. Since then, TLG model has been applied in various regions with different income levels and institutional quality with contradictory empirical results. Tang and Tan (2017) attempt to resolve the above contradictory empirical results by providing global-level evidence and control for income heterogeneity and institutional quality, two neglected variables in the literature. Empirical results based on global panels of 167 countries in 1995-2013 support the TLG hypothesis. That is, tourism is positive and significantly associated with economic growth. In particular, using dynamic panel GMM estimation approach, when real per capita tourism receipts increase by 10%, the per capita real GDP is estimated to increase by about 0.3%. The above results show that tourism is a primary factor for economic growth at global level, which is consistent with many other empirical studies such as Sequeira and Nunes (2008), Lee and Chang (2008) and

Seetanah (2011) that tourism can be a driver for job creation, infrastructure development and foreign exchange earnings.

Tang and Tan (2017) further interact tourism with country fixed effects including income, political stability and control of corruption. The results indicate that the economic effect of tourism is not a universal one. Countries with better development conditions will gain more from tourism due to their better infrastructure, service quality and absorptive capacity to be international tourists. The tourism-growth elasticity for high-income countries is estimated to be about 0.07% more than that for middle- and low-income economies. This result corroborates with the results from Sequeira and Nunes (2008), Lee and Chang (2008) and Seetanah (2011). Castro-Nuño et al. (2013) argue that the impact of tourism is more significant in developing countries rather than developed countries. Therefore, to benefit more from tourism, developing countries need to establish modern institutions and infrastructures.

The study also emphasizes the role of institutional quality. Countries with higher levels of political stability and lower levels of corruption experience stronger tourism-led growth effects. Political stability enhances destination attractiveness, while reduced corruption improves both the investment environment and the tourist experience. The findings resonate with work by Saha and Yap (2014) and Das and Dirienzo (2010), who argue that corruption deters inbound tourism and limits the sector's growth potential.

From a policy perspective, the paper argues that while tourism is a viable development strategy, its effectiveness depends on structural factors such as governance, infrastructure, and macroeconomic management. Governments in lower-income

countries should invest in institutional reform and destination marketing, improve safety and regulatory clarity, and enhance connectivity to better harness tourism's growth potential. These initiatives can also contribute to poverty reduction, employment generation, and regional development, thereby aligning tourism with broader developmental goals, as highlighted by Jamieson et al. (2004) and Muganda et al. (2010).

Importantly, Tang and Tan's methodological innovation lies in its interaction-term modeling within a dynamic panel context. By incorporating GMM estimators that control for endogeneity and omitted variable bias, the study enhances causal inference and provides a robust basis for global policy generalization. It establishes that Tourism-Led Growth is conditional—that is, while tourism is beneficial across the board, its full economic potential is unlocked only under supportive economic and institutional conditions.

3.2 Stock Performance of Companies in the Tourism and Hospitality Sectors

The stock performance of tourism and hospitality firms reflects a complex interplay of financial management, international tourism dynamics, crisis sensitivity, and broader economic trends. Research has increasingly focused on understanding how industry-specific factors and macroeconomic events shape the equity market valuation of firms operating in this sector.

Chambers and Cifter (2022) examine the role of working capital management (WCM) in influencing the financial and stock performance of 1,156 firms from 33 countries in the tourism and hospitality industry. Using panel data and a system GMM approach, they establish an inverted U-shaped relationship between working capital and return

on assets (ROA), suggesting that both underinvestment and overinvestment in current assets harm firm performance. Importantly, they find that firm-level profitability—closely tied to WCM—translates into improved shareholder value and market performance, especially in accommodation, food, and travel sub-industries.

The study further notes that financial leverage, liquidity, and capital expenditures act as critical mediators. While short-term cash management can boost equity returns, excessive debt may deteriorate shareholder value. The stock performance of firms is shown to correlate positively with cash efficiency and strategic capital deployment, consistent with findings in the broader corporate finance literature (e.g., Aktas et al., 2015; Deloof, 2003).

Chen (2011), on the other hand, presents evidence from Taiwan that international tourism development (ITD)—proxied by the growth rate of inbound tourism—has a stronger impact on operational performance (e.g., occupancy rates, RevPAR) than on stock prices. Through panel regressions covering 1997–2008, Chen demonstrates that while inbound tourism significantly boosts revenue and profitability, its impact on hotel stock returns is limited and often statistically insignificant.

This weak link is attributed to a time-varying discount rate in investors' valuation models. Stock prices not only reflect firm earnings but also investor perceptions of risk and future cash flow volatility. During crisis periods such as the 9/11 attacks or the SARS outbreak, Chen finds that stock performance is driven more by elevated risk premia than revenue shocks, highlighting a disconnect between fundamental performance and market valuation.

Interestingly, the study finds that the positive effects of tourism on stock returns become more pronounced during economic contractions, suggesting a state-dependent response. In downturns, tourism growth appears as a stronger signal of resilience, enhancing investor sentiment.

Tourism and hospitality firms are unusually vulnerable to shocks, including health pandemics, terrorism, and natural disasters. Chen (2011) identifies that the SARS outbreak in 2003, for instance, caused sharp declines in Taiwanese hotel stock returns not just because of declining revenue, but also due to a sharp increase in investor risk aversion, reflected in higher discount rates. This result aligns with global findings on event studies in the tourism sector (Drakos, 2004; Kim & Gu, 2002), which show heightened volatility and risk premiums following crises.

Both studies acknowledge that stock performance varies across sub-sectors (e.g., accommodation vs. gambling) and regional economic contexts. Chambers and Cifter (2022) find that gambling firms show no measurable stock performance sensitivity to working capital changes, while sports firms display a positive linear relationship. These results underscore the need for sector-specific investment strategies, especially for portfolio managers with exposure to tourism equities.

The findings across both studies support a modified dividend discount model (DDM) view: stock prices are a function of expected cash flows (driven by tourism demand and operational efficiency) and the discount rate (driven by macroeconomic stability, crisis risk, and investor expectations). Tourism firms thus face dual challenges—maximizing internal efficiency and managing external perception and risk. From a strategic perspective, firms and investors must consider not just cash flow potential

from tourism demand, but also how financial resilience, capital structure, and crisis preparedness influence stock performance. WCM strategies that optimize liquidity without excessive risk-taking are central to sustained market performance.

3.3 Impacts of Macroeconomic Factors on Stock Returns of Tourism Companies

The stock performance of companies in the tourism and hospitality sectors is highly sensitive to macroeconomic dynamics due to the industry's cyclical nature and global exposure. While the Efficient Market Hypothesis (EMH) implies that stock prices reflect all available information, specific macroeconomic indicators often serve as key predictors of equity market movement—particularly in sectors like tourism where demand and investment fluctuate with broad economic conditions (Fama, 1981; Chen et al., 1986; Barrows & Naka, 1994).

Chen, Kim, and Kim (2005) focus on five widely studied macroeconomic indicators to explain hotel stock returns in Taiwan Using monthly data from 1989–2003 for four hotel companies listed on the Taiwan Stock Exchange, their regression analysis reveals that only changes in money supply (DM2) and the unemployment rate (DUEP) have statistically significant impacts on hotel stock returns. The findings support earlier literature (Barrows & Naka, 1994) that posit expansionary monetary policy (i.e., increased M2) positively affects stock prices by enhancing liquidity, reducing interest rates, and stimulating consumption and investment.

Conversely, rising unemployment is associated with declining stock returns, as it signals reduced income and consumption, particularly for discretionary spending sectors like tourism. This aligns with Fama (1981), who argued that inflation and unemployment reduce real economic activity, thereby depressing equity values.

Interestingly, expected inflation (EINF) and the yield spread (SPD)—often used as proxies for investor expectations and future economic growth—were found to have no statistically significant effect on hotel stock returns in this context. This suggests that for tourism companies, investor sentiment may respond more strongly to current liquidity and employment trends than to long-term macro expectations.

While industrial production (DIP) showed a positive coefficient, it was statistically insignificant, indicating that output growth alone does not directly translate into tourism stock price movements. The modest overall explanatory power (adjusted R^2 = 0.08) echoes Barrows and Naka (1994), who reported similar figures for hospitality stocks in the U.S.

These results highlight that monetary policy plays a pivotal role in shaping investor behavior and valuations in the tourism sector, even more so than traditional growth or inflation indicators. For investors and portfolio managers, shifts in money supply and employment data may serve as early signals for adjusting exposure to hospitality equities.

From a managerial perspective, tourism firms should recognize that external macroeconomic cycles—particularly central bank liquidity trends and labor market conditions—can materially influence their stock market valuation, even when firm-level fundamentals remain stable. Moreover, in emerging markets like Taiwan, where tourism demand is closely tied to domestic economic cycles and regional stability, the transmission of monetary impulses through consumer spending and capital allocation becomes especially important.

Chapter 4

THE EFFECTS OF FED MONETARY POLICY CHANGES ON TOURISM & HOSPİTALITY STOCK RETURNS: EVIDENCE FROM FRANCE

4.1 Introduction

Monetary policy, which encompasses components such as interest rates, money supply, and the availability of credit, significantly influences stock market returns. When interest rates are low, investors are generally more inclined to allocate funds into equities, resulting in higher stock valuations. Conversely, elevated interest rates tend to deter stock market investments, leading to a decline in stock prices. The primary explanations for stock market behavior often refer to the Efficient Market Hypothesis (EMH), a widely debated yet foundational concept in financial literature and one that has received empirical backing (Titan, 2015). Alternatively, one can also argue that monetary policy affects the equity market based on the expectations hypothesis which suggests that investors expect certain future monetary policy actions apart from current monetary policy rate impacts on stock returns (Bekaert & Hodrick, 2001). If market expectations are that policy would become accommodative (i.e., policy would reduce rates or become more contractionary), investors may react by becoming more bullish on stocks and the stock price may increase. Alternatively, if investors expect monetary policy to become tighter (i.e., policy will raise rates or become more contractionary), they may become less optimistic about the future and

react by selling their holdings in equities leading to a fall in stock prices. In any case, the monetary policy impact on stock returns is complicated by other variables that affect stock prices. The overall mood of the market, macroeconomic conditions, and other exogenous shocks can have a significant effect on the movement of stocks (Irani et al., 2022). Forward guidance and communications by the monetary authorities about future policy intentions also influence investors' expectations and affect behavior in capital markets (Hansen & McMahon, 2016). Thus, monetary policy may not always have a significant impact on stock returns depending on the economic conditions and mood of the market.

Academic studies have also shown that monetary policy changes affect the stock market. For example, Tiryaki et al. (2018) find that during Turkey's recent history monetary policy changes have had an asymmetric effect on equity returns such that restrictive monetary policy has a larger negative effect than the positive effect coming from expansionary monetary policy. Neuhierl & Weber (2019) also find that the direction of interest rates is an important driver of asset valuations and that monetary policy is never "off-duty" in affecting the financial market.

Normally, as a matter of wide importance, contemporary world financial system is interconnected. There are various interdependent factors that build up and determine the modern day global financial system (1) international trade and investment (2) interconnected financial markets (3) connected world banking system (4) shared sets of world economic indicators (5) innovations (6) world agreements and institutions. It is essential to be conscious of these global interconnectedness elements for investors, policymakers, and companies for a proper evaluation of risks and opportunities in the global market. Due to the above-mentioned interconnectedness, economic activities in

one region also affect the economic situations in the other regions and the global markets. Cross-border financial assets and investment channels play a vital role in the above-mentioned transmission mechanisms. One of the most prominent examples of connectedness is the fact that the US dollar is the primary reserve currency. Therefore, the global power of the US monetary policy increases. Any changes in the US interest rates also have substantial effects on the capital flows and asset preferences all around the world. These effects are not only observed through the interest rates mechanism but also through the exchange rate changes and the consumer behavior.

However, the literature offers few views about the effects of US monetary policy on emerging market countries through the above-mentioned transmission channels. For instance, Irani et al. (2022) study Mexican tourism firms and find that the domestic consumer sentiment has a greater effect on the tourism stock returns than business sentiment. They also report that changes in US interest rates have positive effects on the Mexican tourism stock returns. Likewise, Clark et al. (2020) study capital inflows to emerging market economies (EMEs) and highlight the critical role of U.S. Federal Reserve policy, in addition to credit spreads, growth differential, and commodity price movements. Tillman et al. (2019) report asymmetric and nonlinear spillovers from U.S. monetary policy to EMEs, while Mavromatis (2018) finds that shifts in U.S. monetary regimes significantly affect the optimal policy stance within the Eurozone, particularly through inflation and output volatility dynamics.

The tourism and hospitality sector stands as a crucial contributor to national economies and global services, encompassing industries such as aviation, lodging, food services, and related activities. The tourism-led growth (TLG) hypothesis in existing literature captures the sector's growth-stimulating role (Katircioglu, 2009; Balaguer &

Cantavella-Jorda, 2002). However, despite this industry's economic relevance, there is limited research on what determines the stock performance of tourism and hospitality firms. Chen (2007) demonstrates that macroeconomic conditions have long-term effects on tourism firm stock prices in China and Taiwan. Likewise, Katircioglu & Katircioglu (2022) provide evidence that Turkey's business and financial environment significantly affects the valuation of tourism stocks. Although macroeconomic determinants have been considered, limited work has been done to explore the specific link between monetary policy and stock returns within the tourism and hospitality sector, as previously noted.

In light of this research gap, the current study seeks to explore the influence of changes in the U.S. Federal Reserve's monetary policy on the stock returns of the tourism and hospitality industry in France—a global leader in tourism with 89.4 million international visitors (World Bank, 2023). Distinct from earlier studies that primarily focused on domestic monetary impacts (excluding Irani et al., 2022), this investigation examines the global spillover of U.S. policy. The rationale stems from the U.S. Federal Reserve's dominant role in global finance, with its policy shifts likely to cause immediate reverberations in international markets, including changes in interest rates and currency valuations. Such financial changes may subsequently influence borrowing costs, investment decisions, consumer behavior in travel and hospitality, and ultimately stock market responses. Therefore, understanding the broader implications of the FED's policy moves is crucial. France, being the top international tourist destination for years, offers a compelling case to analyze this relationship. This study contributes to the academic literature by offering new insights into the transmission of global monetary shocks to tourism-related financial markets,

enhancing risk analysis, informing policy, and aiding investment decisions within the international hospitality sector.

H1: Changes in the FED's Monetary Policy exert statistically significant effects on international tourism stock markets

4.2Theoretical Background

4.2.1 France's Position and Importance in International Tourism

France's importance in international tourism is not only reflected in its visitor numbers but also in its macroeconomic impact. Tourism contributes significantly to France's GDP and supports a large portion of the labor market in sectors such as hospitality, transport, and entertainment (Pizam, 1999). Chen (2007) references France alongside other global leaders like the United States and Spain to illustrate how large-scale tourism inflows strengthen a country's service sector and investor confidence, especially when macroeconomic and political conditions are stable.

In contrast to emerging tourism markets like China or Taiwan, where hotel stock returns are highly sensitive to macroeconomic volatility and geopolitical risks, France demonstrates more resilient performance in tourism-linked equities. As Chen (2007) notes, tourism firms in advanced economies like France are generally less reactive to variables such as inflation, interest rate spreads, and industrial production due to the structural maturity and financial depth of their markets. This reflects France's institutional strength and robust tourism infrastructure, which act as buffers against short-term economic shocks.

Moreover, France's global brand equity in tourism is strengthened by its ability to leverage international events, such as the 1998 FIFA World Cup and the 2016 UEFA

Euro Championship. While Chen (2007) focuses on Chinese hotel stocks' sensitivity to crises like SARS or 9/11, the comparative data suggest that countries like France are perceived as safe and desirable destinations, contributing to more stable investment patterns in tourism firms during global events.

Additionally, France is deeply involved in EU-level tourism policy, advocating for sustainable practices and heritage conservation. These priorities align with global goals outlined in WTO reports and reflect France's dual role as both a market leader and policy influencer in global tourism governance (Chen, 2007).

4.2.2 Financial Structures of French Tourism and Hospitality Firms

Kolupaeva and Galimzyanova (2019) found that France's success in international tourism is the result of a structured and strategic national policy, coordinated through a network of governmental bodies including the Ministry of Foreign Affairs, the Interdepartmental Committee on Tourism, and the tourism development agency Atout France. Their research highlights that France does not rely on a single tourism ministry but manages its tourism strategy through inter-agency collaboration under the Tourism Code. They emphasize France's use of targeted initiatives such as the "30 Specific Solutions for French International Tourism as a World Leader" and the diversification strategy introduced in 2015 to strengthen underdeveloped sectors like wine and ecotourism. Additionally, the authors note that France integrates tourism policy with cultural diplomacy and soft power, using campaigns like "Made in Paris" and "Tourisme Sûr" to restore its international image following security concerns, demonstrating that tourism is positioned not only as an economic asset but as a tool of foreign cultural policy.

Jean-Pierre and Perrain (2016) describe France as a global leader in international tourism, consistently ranking as the most visited country worldwide, with 83 million inbound tourists annually. This leadership is rooted in France's rich natural and cultural assets, strategic European location, and long history in the development of tourism infrastructure, dating back to the 19th century with the rise of coastal and spa resorts. The authors highlight that tourism contributes significantly to the French economy, accounting for 7.3% of GDP and nearly one million jobs, particularly in hospitality and accommodation. Despite its historical dominance, France now faces increased competition from emerging destinations in Asia and North Africa and must respond with innovation, improved governance, and modernization of its tourism offerings. Efforts such as upgrading accommodations, enhancing training, and implementing inclusive policy frameworks are viewed as necessary steps to maintain France's competitiveness and adapt to shifting global tourism trends.

4.2.3 Sensitivity of the French Tourism Sector to Global Economic Developments

France's tourism sector, while one of the most mature and globally recognized, demonstrates significant sensitivity to macroeconomic fluctuations and global demand shifts. Benkraiem et al. (2021) investigate this relationship using a quantile autoregressive distributed lag (QARDL) framework to assess how tourism development influences economic growth across ten of the world's most visited countries, including France. Their results for France indicate a nonlinear and asymmetric long-run relationship, where the impact of tourism on GDP varies depending on the prevailing economic environment. This finding challenges the conventional assumption of a uniformly positive tourism-growth nexus, highlighting that France's tourism sector may contribute negatively to economic performance

during periods of lower output, a phenomenon attributed to structural saturation and diminishing marginal returns (Benkraiem et al., 2021, p. 7).

The study further references the work of Lee and Chang (2008) and Brida et al. (2016), who emphasize the varying responses of tourism-dependent economies to global economic shocks. In this context, France's sophisticated yet mature tourism infrastructure may limit its adaptability compared to more dynamic or emerging destinations. Benkraiem et al. (2021) explain that the short-run sensitivity of tourism to external factors—such as global financial instability, geopolitical disruptions, or health crises—translates into volatile contributions to French GDP, particularly in the lower quantiles of economic growth (p. 9). The authors also reference Narayan et al. (2010) to highlight that tourism-led growth effects are not homogeneous and are influenced by institutional quality, income levels, and market openness—all relevant variables in understanding France's experience.

Moreover, the French case contrasts with countries like Turkey or Mexico, where tourism still acts as a consistent engine of growth. Benkraiem et al. (2021) suggest that the relative maturity and saturation of France's tourism market mean that increased tourist flows do not necessarily translate into proportionate gains in output, especially during recessionary periods. This conclusion builds on previous work by Dritsakis (2004) and Sequeira and Nunes (2008), who also found mixed or nonlinear effects in developed economies. Ultimately, the authors argue that French tourism's contribution to economic resilience is conditional, requiring more adaptive and diversified policy approaches to counteract its vulnerability to external demand shocks and cyclical downturns (Benkraiem et al., 2021, pp. 11–13).

Tourism demand, particularly outbound demand from France, is highly responsive to macroeconomic variables such as relative prices, income levels, exchange rates, and external shocks. Durbarry and Sinclair (2003) emphasize that relative price movements are the most influential factor in determining the destination market share of French tourists, a view supported by a broad body of literature. For instance, White (1982) and Dritsakis (2001) confirm that price competitiveness significantly affects tourism flows across European countries, with tourists quickly substituting between destinations when prices shift unfavorably.

Income elasticity is also central in explaining tourism flows. Studies by Crouch (1994) and Lim (1997)—both cited in the article—show that income tends to have a positive and significant impact on tourism demand, though its magnitude varies depending on destination maturity and tourism type. In the French context, Durbarry and Sinclair observe that real tourist expenditure budgets (REXP) do not uniformly affect all destinations; they are significant for Italy and the UK, but not for Spain, implying asymmetric sensitivity in French tourist preferences depending on the structure of offerings and destination familiarity.

Exchange rates are another critical determinant, especially for countries outside the Eurozone. Supporting this, Song and Witt (2000) and Martin and Witt (1988) show that exchange rate fluctuations significantly influence demand, particularly where travelers are sensitive to perceived value-for-money. Durbarry and Sinclair's findings align with this literature: the appreciation of the British pound relative to the franc led to a noticeable decline in French tourist flows to the UK.

Additionally, external economic shocks and geopolitical events—such as the Gulf War and global recessions—are shown to have temporary yet substantial effects on tourism demand. As cited in the article, Witt and Witt (1995) and Sinclair (1998) highlight that macro-level uncertainty depresses outbound tourism by increasing consumer risk aversion. Durbarry and Sinclair (2003) integrate dummy variables to account for such shocks, revealing statistically significant downturns in tourism flows during periods of international crisis.

Finally, the methodological shift from single-equation demand models to systems-based approaches—like the Almost Ideal Demand System (AIDS) used in this study—is consistent with the direction proposed by Song et al. (2000), who advocate for models that can capture price and income elasticities simultaneously across multiple destinations. This broader framework reflects the growing recognition that tourism demand is highly elastic and dynamically responsive to global economic conditions, especially in well-traveled and economically open countries like France.

The relationship between tourism and regional development is increasingly understood through the lens of New Economic Geography (NEG), which emphasizes spatial concentration, mobility, and accessibility. Foundational to this theoretical framing are the works of Krugman (1991) and Fujita, Krugman, and Venables (1999), whose models explain how agglomeration effects shape regional disparities and influence the geographic distribution of economic activity—including tourism. Building on this framework, Pascariu and Țigănașu (2014) apply NEG logic to compare tourism's role in regional development in Romania and France, revealing that France's tourism economy, though globally competitive, displays territorial imbalances and sensitivity to infrastructure, governance, and spatial planning.

In exploring tourism's contribution to sustainable growth, the authors draw on Dwyer, Forsyth, and Dwyer (2010), who argue that long-term competitiveness in tourism depends on innovation, investment, and institutional quality. France, while performing well nationally, shows internal divergence: mature regions like Île-de-France dominate tourism revenue, while peripheral areas often lack visibility and integrated strategies. The study also references Candela and Figini (2012) to highlight the duality of tourism as both an economic opportunity and a source of potential environmental and spatial externalities.

Moreover, the role of regional governance is emphasized through the work of Botti et al. (2008), who evaluated the environmental performance of French regions and demonstrated that tourism development requires careful coordination between economic and sustainability goals. Chon and Mayer (1995) are cited to underscore the importance of branding and destination competitiveness, particularly in increasingly globalized tourism markets. Meanwhile, Bourguignon and Morrisson (1998) provide the macroeconomic context, suggesting that globalization can exacerbate income and territorial inequalities, a risk especially evident in France's less-developed rural regions.

Taken together, these sources reflect a consensus that tourism's regional impacts are not uniform and must be managed through policy innovation, spatial planning, and institutional coherence—principles that are central to both NEG and sustainable development approaches.

4.2.4 Macroeconomic and Financial Sensitivity of Tourism Firms' Stock Performance

Tourism firms' financial performances are increasingly seen as tightly linked to the macroeconomic and financial environments of their host countries. According to Irani et al. (2021), stock price performance in the tourism, hospitality, and leisure industries is not only reactive to immediate business conditions (BCs) but also driven by broader financial development (FD) factors. Their findings build on earlier studies such as Barrows and Naka (1994), who identified positive correlations between hospitality stock returns and macroeconomic variables like money supply and consumption, and negative effects from inflation. Similarly, M.H. Chen et al. (2005, 2007b, 2010) established that hotel stocks are influenced significantly by variables such as GDP, industrial production (IND), and foreign tourist arrivals.

Expanding this macro-financial perspective, Fama (1981) and Asprem (1989) argue that stock returns reflect real activity, showing strong associations with GDP growth and industrial output, while others like Chen, Roll, and Ross (1986) emphasize the pricing of macroeconomic risk factors. In the tourism context, Irani et al. (2021) underline the finding that tourism stock indices are particularly responsive to foreign tourist arrivals, which showed the largest elasticity (2.33%) among all variables in their dynamic ordinary least squares (DOLS) estimates—supporting earlier claims by Chen (2007c) that tourism expansion directly boosts corporate earnings.

The review also draws on Shahbaz et al. (2017) and Katircioglu (2017), who demonstrate bidirectional causality between financial development and tourism growth. Their work aligns with Irani et al.'s conclusion that credit (DC) and money supply (M2) play significant roles in shaping tourism firms' financial health, with M2

demonstrating a highly elastic and positive effect on stock prices. This is supported by studies such as Chen et al. (2012) and Demir et al. (2017), who further integrate exchange rate and inflation dynamics (CPI, RER) into stock price modeling. RER and CPI were shown to exert negative impacts, confirming the inflation-averse and exchange rate-sensitive behavior of tourism equities, as also seen in findings by Fama & French (1988) and Jensen et al. (1996).

Additional literature cited in the article includes work by Kumar & Kumar (2013) and Ohlan (2017), both of whom confirm that tourism development in emerging economies depends heavily on financial inclusion and capital flows. Notably, Başarir and Çakir (2015) observed that in countries like France, Spain, and Turkey, carbon emissions, financial expansion, and tourism share causal pathways, illustrating the entangled nature of sustainable economic planning and tourism-led growth. Consumer sentiment and structural breaks in financial flows are also flagged by Singal (2012) and Ersan et al. (2019), indicating that non-macro factors like public confidence and global crises (e.g., the 2008 financial crash) introduce volatility into tourism firm stock behavior.

Taken together, this body of work supports Irani et al.'s central thesis: that stock prices of tourism firms are strongly conditioned by macro-financial factors, with international arrivals acting as the strongest direct determinant, and financial and business climates playing increasingly strategic roles in forecasting firm performance and market behavior in tourism-centric economies like France.

4.3 Data & Methodology

4.3.1 Data

The current study uses monthly data whose periods differ according to sample firms under inspection as described in Table 1. The study sample comprises publicly listed tourism and hospitality firms in France. The main selected U.S. monetary policy variables are also presented in Table 1. Additionally, national monetary variables in France are used as control variables in addition to the U.S. monetary policy variables. The selection of independent variables is done in parallel with previous works.

4.3.2 Methodology

The study proposes the following functional form of regression to estimate the effects of the U.S. monetary policy changes on French tourism and hospitality stock returns:

$$SR_t = f\,(US_MP_t, CV_i) \quad (1)$$

Where

S.R. stands for stock returns at time *t*, US_MP stands for the U.S. monetary policy tool at time t, and CV stands for control variables at time *t* under inspection.

The following double logarithmic regression is then estimated to capture the growth effects of all regressors on stock returns:

$$lnSR_t = \beta_0 + \beta_1(lnUS_MP_t) + \beta_2(lnCV_t) + \varepsilon_t \quad (2)$$

Where;

the term *ln* stands for the logarithmic form of series, β_0 is the intercept, β_1 is the elasticity coefficient of US_MP, β_2 is the elasticity coefficient of CV, and ε is error disturbance at time *t*.

Before estimating equation (2), econometric priori needs to be investigated. Firstly, the Dickey-Fuller unit root tests are used in the study, which considers one breakpoint in the series and uses the framework of Perron (1989) to test the stationary nature of the series under consideration. All the tests are done with (1) intercept but without trend and (2) trend and intercept specifications. Then, the study estimates the long-run coefficients, the coefficient of short-run adjustments, and diagnostic properties for equation (2) by the autoregressive distributed lag (ARDL) from Pesaran et al. (2001) after conducting the bounds tests for level relationships in equation (2), which includes non-stationary series. Finally, to further support the study's earlier findings, Granger causality tests using the block exogeneity approach, impulse response functions, and variance decompositions have also been carried out.

Table 1: Data Description

Variable	Measurement	Shortcut	Data Period	Source
Stock Prices				
Accor SA	EURO (2015: M12 = 100)	ACCP	1995:M01 – 2022:M12	www.investing.com (2023)
Bernard Loisa	EURO (2015: M12 = 100)	ALDBL	1999:M01 – 2022:M12	www.investing.com (2023)
Les Hotels Bav	EURO (2015: M12 = 100)	ALLHB	1995:M01 – 2022:M12	www.investing.com (2023)
Voyageurs Du Monde SA	EURO (2015: M12 = 100)	ALVDM	2006:M08 – 2022:M12	www.investing.com (2023)
Bains Mer Monaco	EURO (2015: M12 = 100)	BAIN	1995:M01 – 2022:M12	www.investing.com (2023)
Ferm. Casino Mun. Canne	EURO (2015: M12 = 100)	FCMC	1995:M01 – 2022:M12	www.investing.com (2023)
Hotels De Paris	EURO (2015: M12 = 100)	LZTL	2001:M03 – 2022:M12	www.investing.com (2023)
Groupe Pertouche SA	EURO (2015: M12 = 100)	PARP	1995:M04 – 2022:M12	www.investing.com (2023)
Pierre Et Vacances SA	EURO (2015: M12 = 100)	PVAC	1999:M07 – 2022:M12	www.investing.com (2023)
Soc France Casinos	EURO (2015: M12 = 100)	SFCA	1997:M04 – 2022:M12	www.investing.com (2023)
Monetary Policy Proxies for the USA				
Federal Funds Effective Rate	Percentage	USFFER	1995:M11 – 2022:M12	FRED (2023)
Discount Rate	Percentage	USIR	1995:M11 – 2022:M12	FRED (2023)
Consumer Price Index	Index (2015: M12 = 100)	USCPI	1995:M11 – 2022:M12	FRED (2023)
Domestic Credit	As a percent of GDP	USDC	1995:M11 – 2022:M12	FRED (2023)
Lending Interest Rate	Percentage	USLIR	1995:M11 – 2022:M12	World Bank (2023)
Money Supply	As a percent of GDP	USM2	1995:M11 – 2022:M12	World Bank (2023)
Real Interest Rate	Percentage	USRIR	1995:M11 – 2022:M12	World Bank (2023)
Control Variables from France				
Domestic Credit to the Private sector by banks	Ratio	D.C.	2001:M01 – 2022:M12	World Bank (2023)
International tourist arrivals	Numbers	ITA	1995:M01 – 2022:M12	World Bank (2023)
Deposit Interest Rate	Percentage	DIR	1995:M01 – 2022:M12	World Bank (2023)

The dependent variable (SP_t) in equation (2) might not react toward its long-term equilibrium path quickly; therefore, the discrepancy between the long-term and short-term values of SP_t can be eliminated by error correction modeling (ECM) as formulated below in the case a cointegrated relationship is obtained in equation (2):

$$\Delta lnSP_t = \beta_0 + \beta_1 \sum_{i=1}^{n} \Delta \ln (lnUS_MP)_{t-j} + \beta_2 \sum_{i=0}^{n} \Delta \ln (CV)_{t-j} + + \beta_3 \varepsilon_{t-1} + \mu_t \quad (3)$$

Equation (3) can be rewritten in the following detailed form with regard to monetary policy tools:

$$\begin{aligned} \Delta lnSP_t = \beta_0 &+ \beta_1 \sum_{i=1}^{n} \Delta \ln (lnUSFFER)_{t-j} + \beta_2 \sum_{i=1}^{n} \Delta \ln (lnUSIR)_{t-j} \\ &+ \beta_3 \sum_{i=1}^{n} \Delta \ln (lnUSCPI)_{t-j} + \beta_4 \sum_{i=1}^{n} \Delta \ln (lnUSDC)_{t-j} \\ &+ \beta_5 \sum_{i=1}^{n} \Delta \ln (lnUSLIR)_{t-j} + \beta_6 \sum_{i=1}^{n} \Delta \ln (lnUSM2)_{t-j} \\ &+ \beta_7 \sum_{i=1}^{n} \Delta \ln (lnUSRIR)_{t-j} + \beta_8 \sum_{i=0}^{n} \Delta \ln (CV)_{t-j} + + \beta_9 \varepsilon_{t-1} + \mu_t \end{aligned} \quad (4)$$

Where Δ is the first difference operator, ε_{t-1} is the one-lagged error correction term (ECT), and μ_t is the error disturbance. The ECT term shows how fast SP_t in equation (2) reacts toward its long-term equilibrium path every period in percent terms.

Table 2 presents the Dickey-Fuller unit root tests exhibiting that series, except for lnDC and lnDIR for France, are integrated of order one, I (1). However, lnDC and lnDIR are stationary at their level forms; thus, they are integrated of order zero, I (0). This is because the DF test statistics for the level forms of these two series are statistically significant and the null hypothesis of a unit root can be rejected. Since a mixed order of integration in regressors is obtained, the ARDL approach would be ideal for estimating equation (2). The pre-condition for using the ARDL methodology is that the dependent variable needs to be integrated of order one, I (1), the results of this study meet it (Pesaran et al., 2001).

Table 3 presents the ARDL results for equation (2). Firstly, bounds F-statistics are statistically significant in the case of the selected companies, denoting that the long-term link between the U.S. monetary policy changes and firm-level tourism and hospitality stock movements in France is confirmed. Thus, it is inferred that changes in the U.S. monetary policy exert statistically long-term effects on the stock performances of French tourism and hospitality firms where these major findings are consistent with the findings of Irani et al. (2022). It is worth noting the speed of adjustment between short-term and long-term equilibrium values as estimated through the coefficients of ECTs are also negative, as expected, and statistically significant in the case of all firms. This finding reveals that firms' stock values converge towards their long-term equilibria significantly but at different and moderate levels for each firm through the channels of U.S. monetary policy changes.

Table 2: Unit Root Test

	Levels		1st Differences	
	DF_T	DF_I	DF_T	DF_I
Stock Prices				
lnACCP	-4.018	-4.037	-19.571*	-19.574*
lnALDBL	-4.869	-4.179	-20.059*	-20.084*
lnALLHB	-4.008	-2.638	-22.751*	-22.782*
lnALVDM	-2.843	-2.778	-14.074*	-14.096*
lnBAIN	-3.213	-3.288	-19.259*	-19.297*
lnFCMC	-4.102	-4.063	-19.687*	-19.725*
lnLZTL	-3.834	-3.292	-19.648*	-19.641*
lnPARP	-4.964	-4.640	-17.211*	-17.113*
lnPVAC	-3.591	-2.800	-16.594*	-16.487*
lnSFCA	-4.479	-4.340	-23.668*	-23.715*
U.S. Monetary Policy Tools				
lnUS_FFER	-3.058	-3.083	-17.070*	-18.829*
lnUS_DR	-3.093	-2.940	-25.314*	-25.298*
lnUS_LIR	-4.187	-3.674	-6.034*	-5.999*
lnUS_RIR	-4.200	-2.669	-8.610*	-8.625*
lnUS_DC	-2.849	-2.326	-11.077*	-11.007*
lnUS_M2	-2.664	-2.195	-7.889*	-7.698*
lnUS_CPI	-2.478	-4.105	-10.834*	-10.431*
Domestic Control Variables				
lnITA	-4.570	-4.015	-10.373*	-10.272*
lnDC	-4.337	-4.527**	-4.852***	-4.830**
lnDIR	-4.427	-4.217***	-9.508*	-9.499*

*Notes: DF_T stands for Dickey-Fuller min. t-statistic including trend and intercept; DF_I stands for Dickey-Fuler min t-statistic including intercept only. *, **, and *** denote statistical significance at the 0.01, 0.05, and 0.10 levels.*

On the other hand, long-term coefficients from equation (2) seem to be generally and statistically significant in Table 3. It is seen that the U.S. monetary policy changes generally exert mixed effects on firm-level stock returns; in some firms, stock returns are influenced adversely by those policy changes, while in others, those influences are in the same direction. This finding is attributed to (1) the type of U.S. monetary policy tool under inspection and (2) firm-level financial and operational characteristics. Possible reasons and factors are detailed in the conclusion section.

Domestic factors such as international tourist arrivals to France positively affect the stock returns of most firms, as expected. Changes in domestic money supply volume, as proxied by domestic credits, exert positively significant effects on some stock returns, which mean lower interest rates and cause switches from deposit accounts towards stock markets as expected. Such a reality can also be observed in the case of domestic deposit rates (lnDIR), where the coefficients of these rates for some firms are negatively significant.

As a further checking, Table 4 presents the Granger causality test results in a unidirectional form where stock returns are dependent variables. It is observed that changes in money supply in the US as proxied by domestic credit volume precede significant changes in tourism firms' stock returns most of the time while changes in the other US monetary policy tools precede changes in stock returns only in several firms. Thus, it is apparent that financing via the banking system of the United States plays a significant and crucial role in driving foreign stock movements in the tourism and hospitality industry. Table 4 also shows that domestic factors such as international tourist arrivals and domestic monetary policy tools precede rare effects on tourism stocks in France. Finally, Table 4 shows that there is an overall causality that runs from the US monetary policy tools and domestic factors to the French tourism stock movements all the time.

Table 3: The ARDL Results

	lnACCP	lnALDBL	lnALLHB	lnALVDM	lnBAIN	lnFCMC	lnLZTL	lnPARP	lnPVAC	lnSFCA
U.S. Monetary Policy Tools										
lnUS_FFER	-0.15*	0.10***	0.04	0.31*	0.17	0.02	-0.11**	-0.19	0.31	0.27***
lnUS_DR	0.37*	0.038	0.08	-1.11*	-0.02	0.08	0.07	-0.26	-0.98**	-0.56***
lnUS_LIR	-0.60***	-0.63***	-0.34	2.92*	-0.06	-0.62**	0.96*	2.37*	-0.62	-0.26
lnUS_RIR	0.43*	0.04	0.23**	0.05	-0.41***	0.09	0.04	0.22	0.59	0.57**
lnUS_DC	0.70	1.94**	2.36*	0.82	1.99	1.24	-2.69*	2.27	17.25*	11.23*
lnUS_M2	0.53	0.93	2.77**	0.61	-0.53	-2.28***	3.60**	4.35	-5.14	-6.60***
lnUS_CPI	4.78	0.04	9.45*	25.30*	22.37*	8.51*	11.66*	-20.56**	-5.73	-14.99***
Domestic Control Variables										
lnITA	5.30*	3.10**	4.52*	0.00	4.36	2.27***	3.82*	-6.30	-3.18	8.71**
lnDC	-0.49	3.96*	-3.20*	2.23	4.24***	1.61	-0.66	10.25*	0.97	3.58
lnDIR	-0.58*	-0.44***	-0.39**	-1.29*	-1.24*	0.05	-0.55**	0.86	-0.52	-1.80*
Short-Run Adjustment										
ε_{t-1}	-0.39*	-0.29*	-0.41*	-0.37*	-0.17*	-0.44*	-0.47*	-0.24*	-0.12*	-0.31*
Bounds F-stat.	6.08c	4.81c	5.01c	5.82c	2.59c	5.93c	5.51c	5.44c	4.68c	3.80c
Bounds t-stat.	-7.51c	-5.76c	-6.65c	-5.35c	-3.90c	-7.71c	-6.90c	-6.02c	-4.30c	-5.72c
Adj. R^2	0.28	0.31	0.29	0.41	0.15	0.31	0.33	0.31	0.22	0.28
S.E. of Regr.	0.07	0.05	0.06	0.05	0.07	0.06	0.08	0.09	0.09	0.14
F-stat.	5.81	7.18	6.63	0.25	7.01	7.21	7.30	4.68	6.85	6.16
D-W Stat.	1.92	1.96	2.00	7.06	2.00	1.93	1.91	2.05	1.93	2.06
LM Stat. (prob)	0.65	0.96	0.06	1.91	0.05	0.25	0.96	0.12	0.70	0.65
J.B. Prob.	0.42	0.11	0.42	0.32	0.27	0.16	0.34	0.23	0.16	0.41
Ramsey F-prob.	0.78	0.29	0.13	0.56	0.69	0.33	0.46	0.50	0.14	0.86
Ramsey LR prob.	0.76	0.26	0.10	0.52	0.67	0.29	0.4290	0.46	0.11	0.85

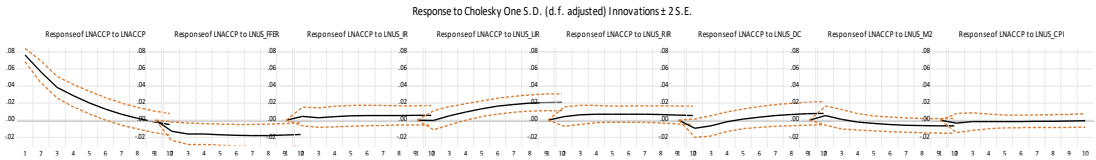
*Notes: ε_{t-1} is the error correction term. L.M. is the Lagrange multiplier test for autocorrelation; J.B. is the Jargue-Bera test for normality; the Ramsey test is for the stability of parameters. In bounds F and t-tests, c denotes statistical significance, a denotes statistical insignificance, and b denotes that the test is inconclusive. Finally, *, **, and *** denote statistical significance at the 0.01, 0.05, and 0.10 level*

Table 4: The Granger Causality Test Results

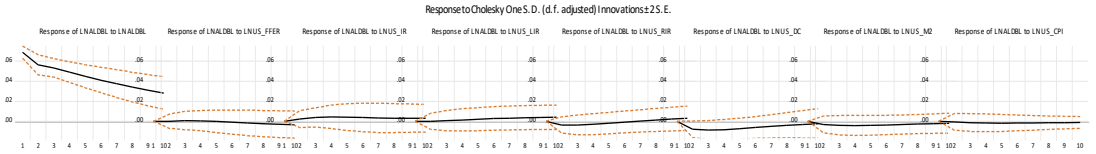
	lnACCP	lnALDBL	lnALLHB	lnALVDM	lnBAIN	lnFCMC	lnLZTL	lnPARP	lnPVAC	lnSFCA
U.S. Monetary Policy Tools										
lnUS_FFER	6.274**	3.843	0.598	3.300	2.934	2.102	5.757***	2.103	9.258*	9.161*
lnUS_DR	1.685	4.900***	3.448	3.287	4.380	0.157	3.757	2.984	2.929	1.227
lnUS_LIR	0.405	0.878	1.860	3.499	2.526	5.381***	18.705*	1.504	0.926	1.515
lnUS_RIR	6.811**	1.840	1.074	0.915	3.458	6.958**	5.573***	2.668	3.536	3.817
lnUS_DC	7.485**	8.671**	10.780*	2.490	7.590**	11.031*	1.297	6.829**	11.436*	7.211**
lnUS_M2	3.494	0.796	0.240	0.798	1.039	7.466**	1.735	2.188	3.875	1.721
lnUS_CPI	1.382	2.430	0.384	4.168	0.202	8.391**	2.630	1.733	1.506	0.728
Domestic Control Variables										
lnITA	1.401	0.231	5.761***	3.119	2.885	0.011	1.595	2.914	0.971	1.084
lnDC	2.240	2.384	1.164	3.009	1.411	4.016	0.477	5.511***	0.494	2.445
lnDIR	4.999***	4.371	0.276	1.256	0.016	14.317*	0.084	4.559***	2.374	6.844**
Overall $\chi 2$	52.640*	35.708**	51.678*	57.437*	27.540	49.359*	52.863*	43.349*	48.202*	38.696*

Notes: ε_{t-1} *is the error correction term. L.M. is the Lagrange multiplier test for autocorrelation; J.B. is the Jargue-Bera test for normality; the Ramsey test is for the stability of parameters. In bounds F and t-tests, c denotes statistical significance, a denotes statistical insignificance, and b denotes that the test is inconclusive. Finally, *, **, and *** denote statistical significance at the 0.01, 0.05, and 0.10 levels.*

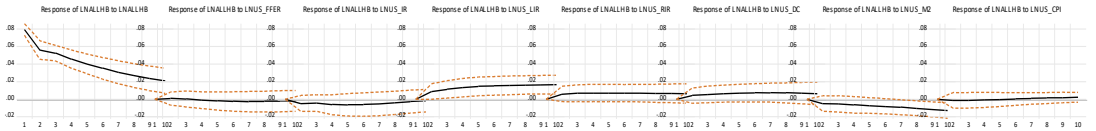
lnACCP



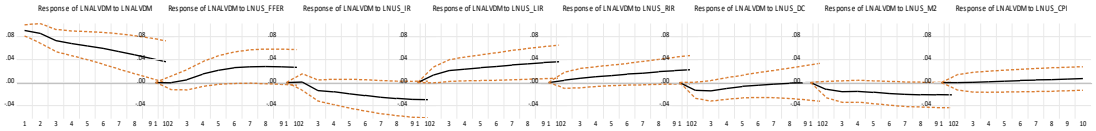
lnALDBL



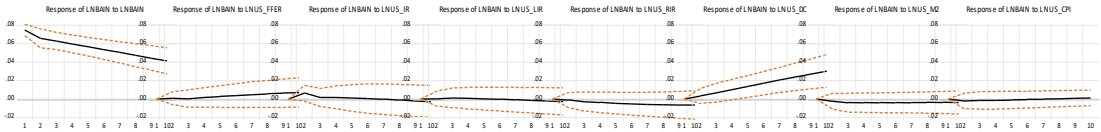
lnALLHB



lnALVDM



lnBAIN



lnFCMC

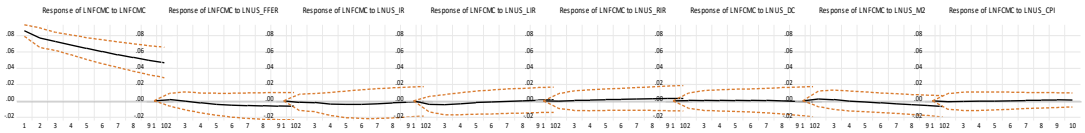
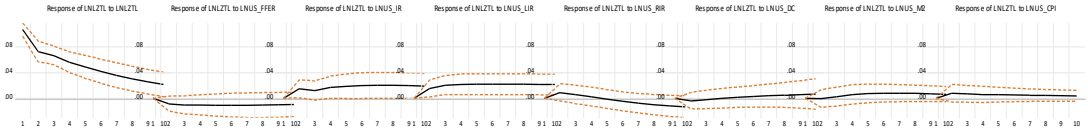
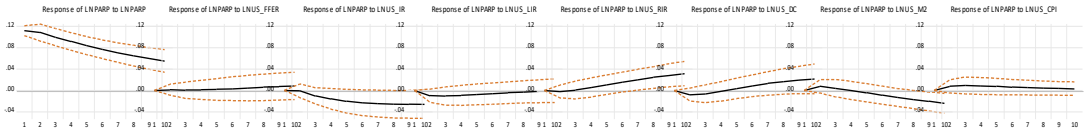


Figure 1: Impulse Responses

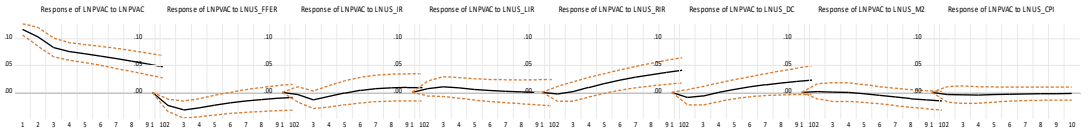
lnLZTL



lnPARP



lnPVAC



lnSFCA

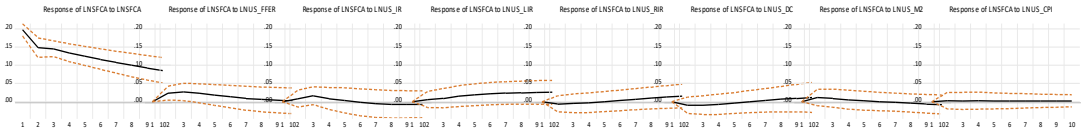


Figure 1:Impulse Responses (Continued)

Figure 1 plots the impulse responses of stock prices to shocks in regressors under consideration. It is observed that shocks given to the US long-term interest rates, for example, lead to significant reactions in the French tourism stock markets in general slightly more than the other US monetary policy tools. Among the other significant US monetary policy tools are US deposit interest rates, real interest rates, domestic credits, and US money supply (M2).

Finally, Table 5 presents the variance decompositions, which reveal that in the initial periods, lower levels of the forecast error variance of the French tourism stocks are explained by exogenous shocks to the US monetary policy tools and domestic factors. These ratios seem to increase in the later periods. The highest ratios in general are obtained in the cases of deposit interest rates and long-term interest rates which are

then followed by real interest rates and money supply (M2). Variance decomposition ratios are not high in the case of the US inflation rates (CPI).

Table 5: Variance Decompositions

Variance Decomposition of LNACCP:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.071693	0.117012	0.054231	0.071451	0.211663	0.440628	0.186083
3	0.364860	0.090561	0.285828	0.215549	0.284852	1.164548	0.285753
4	0.746292	0.083149	0.612166	0.452239	0.273187	1.845679	0.336111
5	1.179719	0.091665	0.997298	0.765151	0.241652	2.498623	0.348487
6	1.621490	0.129066	1.412230	1.143690	0.220075	3.140249	0.340514
7	2.046028	0.206791	1.842551	1.575613	0.216490	3.791983	0.323368
8	2.436631	0.333319	2.278595	2.049078	0.228582	4.466563	0.304143
9	2.784389	0.511042	2.713047	2.552305	0.250068	5.171052	0.286943
10	3.085598	0.736918	3.139438	3.074055	0.274059	5.908382	0.273881

Variance Decomposition of lnALDBL:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.000105	0.069881	8.25E-06	0.155224	0.766280	0.112574	0.002039
3	0.006357	0.190037	0.005027	0.223334	1.235021	0.212813	0.015525
4	0.008926	0.301286	0.021133	0.238251	1.500496	0.293697	0.030554
5	0.007763	0.378251	0.050782	0.225258	1.626536	0.351113	0.043131
6	0.010057	0.427274	0.092877	0.204683	1.670384	0.387726	0.052763
7	0.021889	0.459590	0.145047	0.189702	1.667844	0.408550	0.059901
8	0.045711	0.484322	0.204905	0.188264	1.640778	0.418454	0.065107
9	0.081111	0.507265	0.270695	0.204711	1.602490	0.421335	0.068852
10	0.126261	0.531783	0.341388	0.240947	1.560989	0.419999	0.071504

Variance Decomposition of lnALLHB:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.005610	0.269589	0.785141	0.350446	0.168968	0.256753	0.016260
3	0.004913	0.366220	1.565666	0.634781	0.354707	0.424912	0.027337
4	0.013252	0.575680	2.478296	0.859564	0.563522	0.638552	0.027452
5	0.037403	0.758976	3.407599	1.047723	0.774076	0.877831	0.024846
6	0.071806	0.900944	4.344792	1.210492	0.980483	1.165910	0.022899
7	0.106102	0.982234	5.276233	1.355832	1.174566	1.515351	0.024245
8	0.134075	1.010320	6.197190	1.487134	1.348249	1.940033	0.030647
9	0.153335	1.000827	7.102965	1.606374	1.494043	2.451364	0.043009
10	0.164292	0.971165	7.988203	1.714736	1.606279	3.058638	0.061445

Variance Decomposition of lnALVDM:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.001457	0.006745	1.047750	0.085673	1.133304	0.925844	0.000297
3	0.099964	0.877528	2.661356	0.316074	1.740469	1.767052	0.001535
4	0.830439	1.628987	4.019851	0.619609	1.744259	2.207924	0.007443
5	2.015949	2.455987	5.208035	0.948197	1.580259	2.649039	0.021832
6	3.331878	3.331205	6.337596	1.308810	1.395846	3.121573	0.045341
7	4.535662	4.286421	7.485958	1.714148	1.234192	3.602720	0.078116
8	5.533942	5.275548	8.675704	2.173323	1.102521	4.055170	0.120736
9	6.310959	6.235147	9.902165	2.690644	0.998199	4.460644	0.173844
10	6.886241	7.101717	11.14963	3.267648	0.915862	4.815732	0.237550

Variance Decomposition of lnBAIN:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.008654	0.410887	0.001405	0.009286	0.107746	0.051542	0.038436
3	0.007755	0.314416	0.014030	0.059198	0.393055	0.149450	0.043128
4	0.024036	0.270513	0.015776	0.118887	0.891781	0.201239	0.045432
5	0.057331	0.232400	0.014162	0.192065	1.630233	0.240388	0.042509
6	0.110996	0.202834	0.012358	0.272507	2.623700	0.269713	0.038040
7	0.182868	0.180427	0.012836	0.356765	3.879494	0.293253	0.033822
8	0.271099	0.166436	0.017202	0.440882	5.398179	0.312117	0.031075
9	0.373304	0.162685	0.026606	0.521502	7.173840	0.326909	0.030541
10	0.487197	0.170878	0.041961	0.595737	9.194150	0.337851	0.032678

Variance Decomposition of lnFCMC:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.016703	0.026602	0.128707	0.000136	0.001025	0.041482	0.003631
3	0.012012	0.043231	0.201396	0.000782	0.002032	0.040283	0.004684
4	0.034495	0.094551	0.211899	0.003631	0.002979	0.032225	0.004156
5	0.089976	0.144632	0.199244	0.010214	0.003731	0.033185	0.003555
6	0.167035	0.180324	0.181042	0.020646	0.004075	0.047008	0.003243
7	0.252464	0.196788	0.164485	0.034584	0.003960	0.076294	0.003560
8	0.337372	0.197966	0.151989	0.051441	0.003654	0.124055	0.004750
9	0.416735	0.190434	0.144146	0.070647	0.003810	0.193346	0.006916
10	0.488286	0.180477	0.140834	0.091719	0.005432	0.286981	0.010034

Variance Decomposition of lnLZTL:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.400457	1.233003	1.362683	0.486037	0.082456	0.001429	0.331780
3	0.800854	1.578510	2.899061	0.524094	0.082306	0.030363	0.463641
4	1.082935	2.431426	4.216070	0.467766	0.069702	0.156802	0.523162
5	1.345995	3.287247	5.344139	0.420881	0.069187	0.315062	0.564457
6	1.589581	4.186940	6.350436	0.451637	0.088114	0.477029	0.595820
7	1.812627	5.041577	7.268112	0.583891	0.128415	0.621956	0.619494
8	2.009019	5.836473	8.120105	0.815579	0.189337	0.742011	0.636727
9	2.175765	6.552550	8.921066	1.133567	0.268319	0.833567	0.648590
10	2.311790	7.184668	9.681336	1.518774	0.361814	0.896778	0.655954

Variance Decomposition of lnPARP:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.004113	0.003069	0.414740	0.018419	0.255572	0.220651	0.232264
3	0.003075	0.320571	0.627233	0.013745	0.299732	0.202861	0.408602
4	0.004266	0.847200	0.709896	0.076738	0.246192	0.161999	0.485691
5	0.009811	1.530150	0.719333	0.278198	0.234058	0.183040	0.513700
6	0.024082	2.268923	0.694921	0.651832	0.332552	0.304118	0.516762
7	0.051020	3.000209	0.655899	1.205189	0.558461	0.543148	0.507057
8	0.093193	3.681057	0.612158	1.930453	0.897664	0.907707	0.490431
9	0.150964	4.288099	0.568925	2.810303	1.320465	1.398841	0.469998
10	0.222657	4.810816	0.529097	3.822168	1.791657	2.012312	0.447598

Variance Decomposition of lnPVAC:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	2.353427	0.067862	0.193649	0.040202	0.353544	0.010118	0.066216
3	4.923371	0.625864	0.474177	0.035375	0.390770	0.008222	0.114940
4	6.143430	0.657534	0.558877	0.243886	0.324336	0.006872	0.155601
5	6.568354	0.573604	0.549388	0.794595	0.350205	0.018078	0.171863
6	6.591303	0.541740	0.510662	1.693772	0.514816	0.074161	0.175399
7	6.427932	0.577326	0.468773	2.911040	0.816071	0.197248	0.173358
8	6.182226	0.648862	0.431093	4.407581	1.237837	0.391092	0.169391
9	5.905776	0.725256	0.399158	6.137555	1.757785	0.648552	0.165012
10	5.623319	0.788328	0.372871	8.050622	2.350567	0.957311	0.160864

Variance Decomposition of lnSFCA:

Period	lnUS_FFER	lnUS_IR	lnUS_LIR	lnUS_RIR	lnUS_DC	lnUS_M2	lnUS_CPI
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.862628	0.106231	0.053741	0.061422	0.165750	0.219379	0.010826
3	1.481373	0.394550	0.144548	0.071530	0.233406	0.264163	0.012307
4	1.725908	0.394195	0.340064	0.067554	0.245082	0.240371	0.015434
5	1.770932	0.348892	0.596143	0.058269	0.224025	0.211688	0.016505
6	1.716789	0.314963	0.890784	0.059991	0.200164	0.189145	0.017239
7	1.629730	0.308532	1.198721	0.084394	0.192160	0.175971	0.017946
8	1.540127	0.320980	1.506533	0.138504	0.208428	0.174014	0.018916
9	1.459833	0.339265	1.807539	0.225841	0.249706	0.185693	0.020250
10	1.391623	0.354683	2.099834	0.347418	0.312037	0.214224	0.021977

Chapter 5

CONCLUSION

5.1 Summary of Findings

This study examines the influence of the United States Federal Reserve's monetary policy on the financial performance of French tourism and hospitality firms, with a particular emphasis on stock returns. The empirical analysis reveals that changes in the Federal Reserve's policy stance—particularly in relation to interest rates and liquidity measures—have statistically significant and lasting effects on the valuation of tourism and hospitality stocks in France. These effects are neither linear nor uniform; rather, they vary depending on the specific monetary policy tool used and the financial structure and exposure of the firms in question. In certain contexts, the impact is expansionary and enhances firm performance, while in others it generates contractionary pressures and suppresses equity valuations. These findings are consistent with recent empirical work by Hou et al. (2024), who report similar sensitivities in the banking and finance sectors, and with studies by Liu and Chen (2024) and Irani et al. (2022), which underscore the responsiveness of hospitality equities to macro-financial indicators.

A key contribution of this study lies in its identification of several distinct transmission mechanisms through which U.S. monetary policy affects the French tourism sector. One important channel is the exchange rate mechanism: expansionary U.S. monetary policy, which typically results in a depreciation of the U.S. dollar or in greater capital

mobility, can make travel to France more affordable and attractive to American tourists, thereby increasing demand for French tourism services and supporting stock performance. Another mechanism is the wealth and consumption effect, where monetary easing in the U.S. stimulates domestic economic growth and raises global consumption, including outbound travel. In such environments, U.S. consumers tend to increase discretionary spending, benefiting tourism-dependent economies such as France. Similarly, looser monetary conditions tend to improve investor sentiment and reduce perceived financial risk, prompting greater capital allocation into cyclical industries such as tourism. The increase in global liquidity also means that institutional and retail investors are more likely to diversify their portfolios internationally, seeking higher yields in non-U.S. markets, which could boost demand for French equities, particularly in sectors that are expected to rebound or grow during periods of global economic expansion.

Despite these positive scenarios, the findings also reveal that restrictive monetary policy in the United States can generate adverse spillover effects on the French tourism and hospitality sector. A tightening of monetary conditions—typically reflected in interest rate hikes—can strengthen the U.S. dollar, making European destinations relatively more expensive and thereby reducing tourism inflows from the U.S. Additionally, contractionary monetary policy can suppress global growth, dampen investor confidence, and increase the cost of borrowing across markets, all of which can weigh heavily on tourism-related firms. French companies that rely on debt financing for expansion or operations may find it more difficult to maintain profitability in such an environment. Investor risk aversion, triggered by a more hawkish Federal Reserve, could also lead to capital reallocation away from relatively volatile sectors like tourism and hospitality, placing downward pressure on stock

valuations. Macroeconomic uncertainty, fueled by rapid policy shifts or ambiguous forward guidance, may further undermine consumer and business confidence globally, reducing travel demand and weakening the earnings prospects of tourism firms.

5.2 Implications

The implications of these findings are manifold, particularly for firm-level strategic planning and policy formulation. In periods of adverse spillovers from U.S. monetary tightening, firms in the French tourism and hospitality sector would benefit from adopting proactive risk management strategies. These could include diversifying their target markets to reduce dependence on U.S. visitors, expanding domestic tourism offerings, and securing alternative financing options to offset potential increases in borrowing costs. Public authorities, for their part, could provide targeted support through tax incentives, low-interest financing programs, or emergency liquidity measures to sustain firms through periods of financial turbulence. Investment in workforce development, digitalization, and service innovation could also enhance the sector's resilience and long-term competitiveness.

Conversely, in periods of favorable monetary spillovers—such as those associated with expansionary policies in the U.S.—there exists an opportunity to capitalize on rising global liquidity and investor optimism. Firms and policymakers could prioritize infrastructure upgrades, destination marketing, and sustainability-oriented investment. Emphasis should also be placed on preparing for volatility by developing contingency plans to address sudden reversals in tourist flows or capital markets. Human capital development, including the upskilling of personnel in customer service, sustainability, and crisis response, will further reinforce institutional and operational agility in the face of changing global dynamics.

Ultimately, this research underscores the complex and multifaceted relationship between global monetary policy and the financial outcomes of tourism-oriented firms in advanced economies. In an increasingly interconnected world, where capital, consumers, and policy changes transcend national boundaries, it becomes imperative for both firms and policymakers in France to incorporate global financial signals—especially those from the United States—into their decision-making processes. The findings highlight that the two most influential transmission channels remain interest rate and exchange rate effects, both of which have critical implications for investment decisions, consumption patterns, destination competitiveness, and the structural resilience of tourism economies. Preparing for both the risks and opportunities that emanate from U.S. monetary policy will be central to ensuring sustainable growth and financial stability in France's tourism and hospitality sector.

5.3 Limitations and Further Research Directions

Studying the interplay between changes in the United States Federal Reserve's (FED) monetary policy and the behavior of global tourism-related stock markets presents a number of methodological and conceptual challenges. One of the most critical limitations lies in data availability and quality, as accurate, high-frequency, and sector-specific data on tourism equities—particularly across diverse markets—can be inconsistent or incomplete. This issue may undermine the reliability and generalizability of empirical findings. A second limitation involves econometric causality, as isolating the direct effects of U.S. monetary policy from the influence of other macroeconomic or geopolitical variables can be highly complex. Tourism stock movements may, in fact, be more strongly driven in certain periods by external shocks, such as oil prices, pandemics, or regional fiscal policies, than by FED rate decisions.

Another analytical complication is the issue of lagged policy transmission. The impact of monetary policy typically unfolds over time, and determining the appropriate lag structure in econometric models can be arbitrary or sensitive to model specification. Misestimating this lag may distort the interpretation of policy effectiveness or lead to misattribution of effects. Additionally, the increasingly interconnected nature of global financial markets introduces further complications. Global interdependencies—such as coordinated central bank policies, multinational investment flows, and synchronized economic cycles—can obscure the specific contribution of U.S. monetary actions to observed movements in tourism equities.

Equally challenging is the role of market sentiment and investor expectations. Financial markets are not driven solely by observable economic fundamentals but are also influenced by investor psychology, risk perception, and behavioral biases. Quantifying these factors remains an ongoing challenge in empirical finance, particularly when attempting to model forward-looking investor behavior in response to anticipated interest rate changes or central bank communications. Moreover, the choice of econometric methodology and the robustness of the model used can significantly shape research outcomes. The selection of variables, treatment of endogeneity, and handling of structural breaks or volatility clustering are all technical decisions that may affect the conclusions drawn.

In light of these limitations, scholars investigating the link between FED monetary policy and tourism-related stock performance are advised to approach their analyses with methodological rigor and to acknowledge the potential for alternative explanations. Triangulating findings with qualitative insights or using hybrid models

that incorporate both macroeconomic and behavioral dimensions could yield more robust interpretations.

Furthermore, several promising avenues exist for future research. One direction involves extending the analysis to include other major monetary authorities, such as the European Central Bank (ECB), Bank of Japan (BOJ), or People's Bank of China (PBoC), whose policy decisions may have equally significant global spillovers. Another worthwhile pursuit is to examine how monetary policy impacts other economic sectors beyond tourism and hospitality, such as transport, leisure, or consumer discretionary industries in both developed and emerging markets. Finally, greater attention should be paid to the psychological and behavioral responses of investors, particularly how sentiment, heuristics, and biases shape reactions to central bank policy announcements. Exploring this behavioral layer could deepen understanding of the mechanisms through which monetary shocks are transmitted to equity markets and enhance the predictive power of tourism stock models in an increasingly sentiment-driven financial environment.

Another potential study for future research is to investigate the impact of changes in the French government (particularly during times of French political change or political instability) on the relationship between U.S. Federal Reserve monetary policy and tourism and hospitality stock returns. Since the French government changes frequently, it would be interesting to see if the impact of the Fed policy announcements are enhanced, reduced, or otherwise changed during times of change in the French government. This would help to determine if the French tourism sector becomes more or less sensitive to monetary announcements during times of political change in France.

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