

ISSN: 2617-6548

URL: www.ijirss.com



Driving financial performance: The role of FinTech, innovation, and compliance in Jordanian Retail

Nevin Youssef Kalbouneh¹*, □Baliira Kalyebara², □Nawaf Abuoliem³, □Hazem Almahameed⁴

^{1,3}Department of Banking and Finance, Faculty of Business, Jerash University, Jerash, Jordan.

²American University of Ras Al Khaimah, United Arab Emirates.

⁴Management Information Systems, Irbid National University, Jordan.

Corresponding author: Nevin Youssef Kalbouneh (Email: nawafabuoliem@gmail.com)

Abstract

This research examines what happens to financial performance of Jordanian retail businesses after they use FinTech solutions together with innovation and regulatory compliance and investigates operational efficiency and customer satisfaction as intervening variables. The research analysed 291 firms which were chosen from among the full sample of 1,200 retail entities registered with the Jordanian Chamber of Commerce by using PLS-SEM methodology. The research analysed survey results to verify that financial performance of businesses demonstrates considerable growth when using FinTech solutions combined with innovation practices and regulatory requirements. Research confirmed that operational efficiency and customer satisfaction serve as intermediary factors connecting financial performance indicators because they strengthen key performance functions. Financial managers can use this research to obtain specified guidelines for FinTech solution investments that drive innovation within regulatory frameworks. Such FinTech implementations require policymakers to develop regulatory frameworks for their effective implementation. The study creates unique value through its assessment of Jordan's emerging market conditions to explore FinTech solution adoption alongside the resulting performance impact. This research enhances understanding of FinTech adoption in emerging markets through a unified framework that combines multiple constructs while offering actionable recommendations for both businesses and policymakers.

Keywords: Financial performance, FinTech adoption, Jordanian retail firms, PLS-SEM.

DOI: 10.53894/ijirss.v8i6.10004

Funding: This study received no specific financial support.

History: Received: 26 June 2025 / Revised: 30 July 2025 / Accepted: 1 August 2025 / Published: 19 September 2025

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Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Publisher: Innovative Research Publishing

1. Introduction

Over the last decade, the financial technology (FinTech) sector has experienced exponential growth, revolutionized traditional financial services and reshaped the global financial landscape. The worldwide investment in FinTech increased to \$210 billion during 2021 according to Turi [1] which represented a 68% growth in comparison to the previous year. Emerging markets have experienced the highest rate of FinTech adoption which increased by 25% annually from 2019 until the present according to Gillani, et al. [2]. The FinTech ecosystem in Jordan experienced remarkable development based on Central Bank of Jordan data showing a 40% growth in digital payment transactions between 2020 and 2022 [3]. The quick advancement of FinTech adoption has triggered considerable expansion but researchers have not thoroughly studied its financial implications on retail companies. The approximately 30% contribution of retail firms to Jordan's GDP [4] faces distinctive barriers to FinTech solution implementation due to regulatory obstacles along with operational difficulties and conflicting customer satisfaction rates. Morrar, et al. [5] reports that a major share of 65% remains untapped by the FinTech innovation adoption among Jordanian retail firms because only 35% of them have fully implemented these solutions. The relationship between FinTech adoption along with innovation and regulatory compliance continues to create essential questions about their effect on financial metrics in this industry.

Scholarly research about FinTech adoption mainly focuses on developed economies yet emerging markets including Jordan receive limited investigation. The research by Alfawareh and Al-Kofahi [6] and Dhaif [7] thoroughly studied FinTech effects on financial performance in the U.S. and Europe although their results probably cannot directly translate to Jordan because their regulatory systems differ as well as their market environments and consumer interactions. The understanding remains limited regarding operational efficiency as a mediator between FinTech adoption and financial performance despite existing research between FinTech adoption and operational efficiency [8-10]. The literature lacks examination of customer satisfaction in this field even though research shows it strongly affects financial performance [11-13]. The relationships between regulatory compliance and FinTech adoption have not been sufficiently studied especially in Jordan which faces developing regulatory conditions [13]. The present literature gap becomes more apparent because researchers generally use traditional regression models to study the complex nature of FinTech adoption patterns and financial performance metrics while lacking sufficient application of Partial Least Squares Structural Equation Modeling (PLS-SEM).

The research analyses how FinTech adoption measures alongside innovation processes and regulatory compliance affect financial performance of Jordanian retail firms by studying operational efficiency and customer satisfaction as mediating factors. The research addresses this knowledge gap to establish complete insights about how FinTech adoption influences financial performance in developing market conditions which academics and practitioners can use. This research study makes important theoretical together with methodological contributions. The research theoretically supports existing literature through its integration of FinTech adoption alongside innovation and regulatory compliance and operational efficiency and customer satisfaction for financial performance analysis in Jordanian retail firms. Such systemic research design tackles the scattered organizational approaches seen in past studies because their respective constructs were studied independently. This study utilizes PLS-SEM as its analytical method to analyse latent variable relationships because it is an appropriate analysis tool for complex networks involving latent variables. The combined use of this research approach strengthens both the analytic methods as well as the understanding of how different variables influence financial performance.

2. Theoretical Foundation

According to RBV theory firms gain competitive advantages through resources that provide unique value and cannot be easily copied [14]. Slashed operational expenses and improved satisfaction rates become possible through FinTech strategic assets that retail firms deploy to achieve enhanced financial performance. Almasria, et al. [15] and Ali and Iskandar [16] continuously provide research evidence demonstrating how the RBV theory can accurately explain FinTech adoption processes. The RBV successfully reveals internal organizational strengths yet fails to recognize regulatory requirements and market changes that matter crucially in developing economic areas like Jordan. Awa, et al. [17] state that the TOE framework illustrates the influence of technological characteristics upon organizational design and external environmental factors on the adoption process. The selected framework serves a crucial function for this study because it evaluates regulatory compliance along with market conditions that prove vital in Jordan's retail sector. The TOE framework served as an analytical tool in both research papers by Hurani and Abdel-Haq [18] and Xia, et al. [19] for FinTech adoption studies in the Middle East region. Mensah and Xu [20] applied the TOE framework for FinTech adoption examinations across the Middle East where they showed that regulatory settings and technological base systems are essential elements. Experts have noted that the broad nature of the TOE framework reduces its ability to properly emphasize key organizational elements that include innovation and customer satisfaction. Figure 1 displays an all-embracing methodology synthesized from RBV along with TOE to evaluate all driving factors of FinTech adoption which affect subsequent financial outcomes. The dual-theory methodology both enhances theoretical support and allows researchers to study the complex retail environment existing in Jordan in detail.

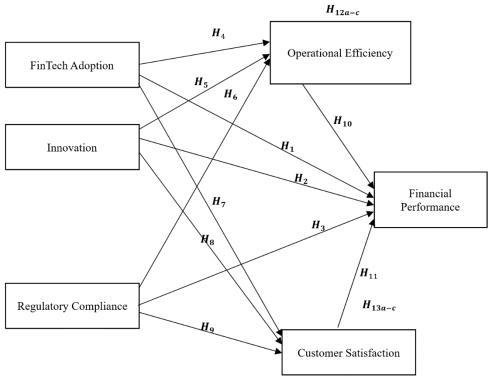


Figure 1.
Research Framework.

3. Hypotheses Development

3.1. Effect of FinTech Adoption, Innovation, and Regulatory Compliance on Financial Performance

Researchers have performed systematic studies about the relationship between FinTech implementation and development and financial regulations and business metrics. Research by presented in Bani Atta [21] and Christopher [22] indicate FinTech adoption enhances performance because it results in more efficient transactions with reduced business costs. Similarly, Arner, et al. [23] financial service innovation using FinTech allows firms to develop special products that lead to improved financial performance according to Wijayanti and Sriyanto [24]. Regulatory compliance achieves dual purposes as it promotes market stability, but Lee and Shin [25] note how excessive regulation acts as an innovation barrier. The research conducted by Suswanto, et al. [26] establishes that Jordan along with other emerging markets requires strict regulatory compliance to develop trust measures and establish sustainable FinTech adoption. Strategic resources provided by FinTech adoption and innovation create positive effects on financial performance according to RBV framework analysis. The obtained research data established the listed hypotheses.

H¹: FinTech adoption positively and significantly influences financial performance

H^{2:} Innovation positively and significantly influences financial performance

 H^{3} : Regulatory compliance positively and significantly influences financial performance.

3.2. Effect of FinTech Adoption, Innovation, and Regulatory Compliance on Operational Efficiency

Various research demonstrates operational efficiency emerges as the key outcome from adopting FinTech systems. The research sector confirmed that companies using FinTech solutions with blockchain and AI technology boost performance levels by optimizing operational efficiency and error reduction [10]. The innovation of digital payment systems leads to significant improvements in the areas of inventory control and supply chain management according to Obeng, et al. [27]. Standardization procedures along with reduced legal exposure make regulatory compliance enhance operational efficiency according to Kamaldeen [28]. Recent research by Ahmad, et al. [29]. The implementation of FinTech technology by Jordanian retail companies creates extreme operational efficiency benefits according to wael AL-khatib [30]. Within the TOE framework technological elements with organizational structures prove how these streams combine to enhance operational efficiency. Hypotheses include:

 H_4 : FinTech adoption positively and significantly influences operational efficiency

H₅: Innovation positively and significantly influences operational efficiency

 H_6 : Regulatory compliance positively and significantly influences operational efficiency.

3.2. Effect of FinTech Adoption, Innovation, and Regulatory Compliance on Customer Satisfaction

Business success depends heavily on customer satisfaction, so FinTech adoption provides excellent improvements in this area. The findings of Bekker [31] and Murad and Ahmad [32] which demonstrates how mobile banking together with digital wallets delivers customized service experiences along with convenient features to customers. The FinTech industry experiences increased user satisfaction because of improved design elements in interface systems according to Mainardes,

et al. [33]. Regulatory compliance serves two purposes: it protects data security, and it establishes trust with customers as stated by Vijai, et al. [34]. Recent research by Iqbal and Fikri [35] and Al-Saedi, et al. [36] Jordanian FinTech solution adoption has brought about better retail industry customer satisfaction at a national level [37]. The RBV theory supports these findings because it suggests that FinTech combined with innovation functions as important resources which drive better customer satisfaction. Hypotheses include:

 H_7 : FinTech adoption positively and significantly influences customer satisfaction

 H_8 : Innovation positively and significantly influences customer satisfaction

 H_9 : Regulatory compliance positively and significantly influences customer satisfaction.

3.3. Effect of Operational Efficiency and Customer Satisfaction on Financial Performance

The impact between adopting FinTech solutions and financial performance mainly results from operational performance combined with satisfied customers. The research of Suseno, et al. [38] and Harahap, et al. [39] shows operations becoming more efficient through cost reduction benefits and enhanced delivery services which results in improved financial performance. The combination of satisfied customers who return together with loyalty creates enduring financial prosperity [40]. Operational efficiency combined with customer satisfaction at Jordanian firms leads to improved financial performance according to Nehme, et al. [41] together with Abuoliem, et al. [42]. According to Alkhawaldeh, et al. [43] research Jordanian firms underperform financially if their operational efficiency and customer satisfaction levels are not optimal. Financial performance gets validated through TOE which shows organizational characteristics and environmental elements function as key drivers. Hypotheses include:

 H_{10} : Operational efficiency positively and significantly influences financial performance

 H_{II} : Customer satisfaction positively and significantly influences financial performance.

3.4. Operational Efficiency as Mediator

The adoption of FinTech technology leads to enhanced financial performance through operational efficiency as this factor operates as an essential link between these two elements. According to Mantje, et al. [44] operational efficiency levels increase by deploying FinTech solutions which results in enhanced financial performance along with Domenek, et al. [45]. Recent research by Domenek and Moori [46] and Marei, et al. [47] found operational efficiency functions as the middle element in how FinTech adoption bridges financial performance in Jordanian institutions through better services and reduced costs. According to Resource-Based View theory operational efficiency operates as a strategic asset that delivers better financial achievements. Hypothesis:

H12a: Operational efficiency mediates the effect of FinTech adoption on financial performance.

H12b: Operational efficiency mediates the effect of Innovation on financial performance.

H12c: Operational efficiency mediates the effect of Regulatory compliance on financial performance.

3.5. Customer Satisfaction as Mediator

FinTech success in enhancing financial performance depends heavily on achieving satisfied customers. Research on customer satisfaction grows through FinTech adoption which creates superior financial performance through both increased client loyalty and repeated transactions according to Minhaj and Khan [48] as well as Ferayanti, et al. [49]. According to research by Onat and Güneren [50] customer satisfaction functions as the primary linkage between FinTech adoption and financial performance in Jordan. Customer satisfaction functions as an intermediary factor that connects FinTech adoption to financial performance within Jordan according to research by Nur and Haryanto [51]. The TOE framework confirms this relationship by demonstrating how services designed for customers generate monetary gains. Hypothesis:

H13a: Customer satisfaction mediates the effect of FinTech adoption on financial performance.

H1_{3b}: Customer satisfaction mediates the effect of Innovation on financial performance.

H13c. Customer satisfaction mediates the effect of Regulatory compliance on financial performance.

4. Research Methodology

This study performs quantitative evaluation of FinTech adoption effects alongside innovation, regulatory compliance, operational efficiency and customer satisfaction on financial performance in Jordanian retail firms. Jordanian Chamber of Commerce (JCC) [52] holds a list of 1,200 retail stores that serve as the research target population. The established sample consisted of 291 firms based on Krejcie and Morgan [53] table which suggests this number when analyzing a 1,200 population with 95% confidence. The research team selected stratified random sampling to properly represent retail sectors consisting of electronics and apparel stores and grocery stores. Researchers modified a structured questionnaire from past studies to fit the Jordanian market requirements. The research relied on scales developed by Wijayanti and Sriyanto [24] to determine adoption rates of FinTech solutions. FinTech adoption scales from Wijayanti and Sriyanto [24] provided the measurement scales that were used. The regulatory compliance items used in the study derived from Obeng, et al. [27] while operational efficiency scales relied on Elmahdy, et al. [10]. The researchers transformed customer satisfaction and financial performance measurement variables from Nur and Haryanto [51] and Alkhawaldeh, et al. [43] respectively. The survey employed a 10-point Likert scale for improved perception measurement since this scale provides enhanced response options compared to standard 5-point scales according to Taherdoost [54]. Each sample firm received online surveys filled out by their senior management and decision-making staff. The pre-test involving 30 participants confirmed that the survey offered straightforward results and reliable measurements since all measured constructs achieved Cronbach's alpha of 0.8 or higher. The survey instrument achieved both solid validity and reliability after performing tests involving fifty

participant respondents. The research team processed data analysis through Partial Least Squares Structural Equation Modeling (PLS-SEM because this method demonstrates excellence when studying multiple latent variables [55]. This study involved human participants (senior managers and decision-making staff of Jordanian retail firms). Ethical approval was obtained from the Jordanian Research Ethics Committee (JREC) [56]. All participants gave informed consent, and their data were treated with strict confidentiality and anonymity in line with JREC ethical standards.

5. Results of the Study

Table 1 displays outer loadings which indicate the degree of connection between specific items and their respective construct. All measured variables exceeded the recommended minimum loading threshold of 0.7 thus illustrating strong convergent validity according to Fauzi [57]. The customer satisfaction metrics CS4 (0.791) and CS6 (0.787) demonstrate high reliability while financial performance indicators FP2 (0.884) and FP3 (0.874) show strong construct representation. FinTech adoption (FTA) items show strong construct alignment especially FTA4 (0.858) and FTA5 (0.839). The findings support the conclusions made by Al-Okaily [58] and Alsmadi and Al-Okaily [59] supports the necessity of high outer loadings to achieve reliable measurement models within FinTech research.

Table 1.
Outer Loadings

iter Loadings. Items	CS	FP	FTA	INN	OE	RC
CS1	0.726					
CS2	0.703					
CS3	0.743					
CS4	0.791					
CS5	0.704					
CS6	0.787					
FP1		0.771				
FP2		0.884				
FP3		0.874				
FP4		0.822				
FP5		0.784				
FTA1			0.710			
FTA2			0.754			
FTA3			0.785			
FTA4			0.858			
FTA5			0.839			
FTA6			0.819			
INN1				0.770		
INN2				0.754		
INN3				0.889		
INN4				0.793		
INN5				0.803		
INN6				0.868		
OE1					0.857	
OE2					0.887	
OE3					0.890	
OE4					0.848	
RC1						0.786
RC2						0.724
RC3						0.711
RC4						0.732
RC5						0.730
RC6						0.795
RC7						0.723

The metrics in Table 2 evaluate construct validity and reliability by applying Cronbach's alpha along with composite reliability measures rho_a and rho_c and the average variance extracted AVE. The constructs demonstrate high internal consistency because they surpass the 0.7 threshold for both Cronbach's alpha and composite reliability according to Ghazali and Fauzi [60]. Operational efficiency demonstrates excellent reliability according to Cronbach's alpha value of 0.894 and composite reliability score of 0.926. Each construct has AVE values above 0.5 which establishes convergent validity. The study findings support the findings presented by Cheung, et al. [61] in addition to Haji-Othman and Yusuff [62] demonstrates the importance of robust reliability and validity assessments in FinTech research.

Table 2.Constructs Reliability and Validity

Constructs	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
CS	0.821	0.830	0.870	0.528
FP	0.884	0.887	0.916	0.686
FTA	0.885	0.899	0.912	0.633
INN	0.754	0.778	0.814	0.627
OE	0.894	0.898	0.926	0.758
RC	0.821	0.836	0.863	0.577

Table 3 uses Heterotrait-Monotrait (HTMT) ratio methods to check construct validity through correlation assessments. Research by Hair, et al. [63] supports construct separation because all HTMT values remain lower than 0.85. Discriminant validity stands between FinTech adoption (FTA) and innovation (INN) because their HTMT ratio calculates to 0.713. Among these findings exist similarities to what Silva, et al. [64] presented as well as Eldemir, et al. [65] explains how the establishment of discriminant validity enables researchers to maintain their research model integrity by preventing high construct correlations.

Table 3. Heterotrait-Monotrait Ratio Discriminants Validity.

Constructs	CS	FP	FTA	INN	OE	RC
CS						
FP	0.794					
FTA	0.754	0.709				
INN	0.527	0.693	0.713			
OE	0.632	0.644	0.692	0.711		
RC	0.663	0.519	0.532	0.674	0.719	

Table 4 demonstrates the assessment of discriminant validity based on square root values of AVE combined with the cross-construct correlation analysis based on the Fornell-Larcker criterion. The constructs achieve strong discriminant validity because their square root of AVE measurements exceed all the correlations with different constructs as explained by Gao, et al. [66]. The research findings receive individual support from Wassmann, et al. [67] as well as Al-Saedi, et al. [36] Research in the FinTech field relies on the Fornell-Larcker criterion to establish construct discriminability per the analysis of Sharif-Nia, et al. [68].

Table 4. Fornell-Lacker Criterion Discriminants Validity

Constructs	CS	FP	FTA	INN	OE	RC
CS	0.726					
FP	0.682	0.828				
FTA	0.680	0.659	0.796			
INN	0.606	0.606	0.621	0.791		
OE	0.516	0.555	0.545	0.580	0.871	
RC	0.469	0.528	0.439	0.559	0.672	0.760

The Variance Inflation Factor (VIF) analysis in Table 5 helps determine the level of construct correlation. The values in the model do not indicate multicollinearity as they stay below the 5 thresholds proposed by Putri and Kuswati [69]. The VIF values for FinTech adoption (FTA) measure between 2.350 and 2.421 without exceeding acceptable standards. The study results align with findings from research conducted by Yudiani and Muizu [70] demonstrate that low VIF values are essential for maintaining the structural equation models' robustness.

Table 5.

V 111' .			
Constructs	CS	FP	OE
CS		1.843	
FP			
FTA	2.350	2.421	2.350
INN	2.075	2.008	2.075
OE		2.502	
RC	2.312	2.693	2.312

The effect size (f^2) of various constructs and their relative influence on dependent variables are presented in Table 6. The impact of FinTech adoption (FTA) on financial performance (FP) demonstrates a medium effect size (0.400) compared

to the smaller effect size (0.215) that innovation (INN) shows on operational efficiency (OE). The results match previous studies by Kalnins and Praitis Hill [71] as well as Olaleye, et al. [72] emphasize that effect size plays a critical role in evaluating the practical significance of predictor variables within FinTech research.

Table 6. Effect Size.

Constructs	CS	FP	OE
CS		0.342	
FP			
FTA	0.230	0.400	0.209
INN	0.198	0.215	0.322
OE		0.328	
RC	0.337	0.291	0.383

The R-square and Q-square values featured in Table 7 measure the model's predictive power and relevance. The model demonstrates strong explanatory power with R-square values of 0.682 for customer satisfaction (CS), 0.772 for financial performance (FP), and 0.651 for operational efficiency (OE) according to Zaremohzzabieh and Mohd Rasdi [73]. The model shows predictive capability because its Q-square values remain above zero while measuring predictive relevance. Khan, et al. [74] provide support for these findings. Troiville, et al. [75] underscore the essential role of high R-square and Q-square values for validating FinTech models' predictive accuracy.

Table 7. Predictive Value and Coefficient Determination.

	R-square	Q-square
CS	0.682	0.351
FP	0.772	0.523
OE	0.651	0.485

The study's hypotheses get tested through Table 8 which shows path coefficients and Figure 2 which provides graphical results of the structural model. The study findings demonstrate support for all hypotheses through significant pvalues below 0.05 paired with positive beta values. The hypothesis H1 shows that FinTech adoption (FTA) leads to improved financial performance (FP) through a beta value of 0.235 and a p-value of 0.000. The Resource-Based View (RBV) theory proposes that FinTech adoption functions as a strategic resource that boosts financial performance through enhanced operational efficiency and customer satisfaction [76]. Innovative approach (INN) increases financial performance based on H2 at a significance level of p = 0.001 through beta value of 0.133. The research validated by Bani Atta [21] and Christopher [22] proved that financial service innovators obtain superior financial performance through their unique financial product development. H3 proves that regulatory compliance (RC) enhances financial performance at a rate of 0.312 based on p = 0.000 research findings. Regulatory compliance leads to trust development which supports the sustainable adoption of financial technology in emerging markets according to the findings of Wijayanti and Sriyanto [24] and Suswanto, et al. [26]. The hypothesis H10 achieves confirmation by showing operational efficiency (OE) causes better financial performance results with a beta value of 0.104 (p = 0.002). The Technology-Organization-Environment framework (TOE) identifies operational efficiency as the key factor that enhances performance results through better services combined with cost-reductions according to Tetteh, et al. [77]. Financial performance improves due to customer satisfaction (CS) which can be proved by its beta value of 0.192 (p = 0.000). The obtained findings parallel those documented by Kamaldeen [28] and Vijai, et al. [34] confirms businesses develop financial success through satisfied customers who maintain repeat business relationships. The study achieves essential progress by presenting an extensive model of how FinTech adoption and innovation with regulatory compliance generates financial performance by improving operational efficiency and customer satisfaction in Jordanian retail firms.

Table 8.Path Coefficients

Hypotheses	Path Analysis	Beta	Standard deviation	T statistics	P values	Decision
H1	FTA -> FP	0.235	0.030	7.789	0.000	Supported
H2	INN -> FP	0.133	0.039	3.419	0.001	Supported
Н3	RC -> FP	0.312	0.040	7.720	0.000	Supported
H4	FTA -> OE	0.084	0.034	2.476	0.013	Supported
H5	INN -> OE	0.416	0.041	10.264	0.000	Supported
Н6	RC -> OE	0.353	0.041	8.594	0.000	Supported
H7	FTA -> CS	0.149	0.032	4.676	0.000	Supported
Н8	INN -> CS	0.507	0.036	13.947	0.000	Supported
Н9	RC -> CS	0.224	0.038	5.842	0.000	Supported
H10	OE -> FP	0.104	0.034	3.062	0.002	Supported
H11	CS -> FP	0.192	0.038	5.068	0.000	Supported

The indirect method of mediation analysis displayed in Table 9 examines how operational efficiency and customer satisfaction serve as mediating factors. The mediation analysis shows support for all hypotheses through significant pvalues (p < 0.05) and positive beta values. The hypothesis H12a receives support because operational efficiency mediates FinTech adoption effects on financial performance with a beta value of 0.009 and a significant p-value of 0.048. The RBV theory supports this finding because it proposes that operational efficiency functions as a strategic asset which improves financial performance. Operational efficiency mediates the link between innovation and financial performance as demonstrated by H12b with a beta value of 0.043 (p = 0.006). The obtained results validate the conclusions from Arner and their research collaborators. The research from Domenek and Moori [46] together with Lee and Shin [25] proves that AI and blockchain technologies in FinTech platforms enhance operational effectiveness to boost financial returns. Support for H13a exists because customer satisfaction acts as the mediation link between FinTech adoption and financial performance with a significant beta value at 0.029 (p = 0.000). Marei, et al. [47] published research results that match the findings. Results from Ferayanti, et al. [49] together with Nur and Haryanto [51] demonstrate that financial technology adoption produces better customer satisfaction leading to greater financial performance because customers stay loyal and return to buy again. Empirical research data establishes new insights by showing how operational efficiency together with customer satisfaction serve as intermediary factors linking FinTech adoption to financial performance within Jordanian retail businesses under current innovation and regulatory compliance conditions.

Table 9. Mediation Analysis Using Indirect Method.

Hypotheses	Path Analysis	Beta	Standard deviation	T statistics	P values	Decision
H12a	FTA -> OE -> FP	0.009	0.004	1.981	0.048	Supported
H12b	INN -> OE -> FP	0.043	0.016	2.750	0.006	Supported
H12c	RC -> OE -> FP	0.037	0.012	2.955	0.003	Supported
H13a	FTA -> CS -> FP	0.029	0.008	3.501	0.000	Supported
H13b	INN -> CS -> FP	0.097	0.020	4.775	0.000	Supported
H13c	RC -> CS -> FP	0.043	0.011	3.787	0.000	Supported

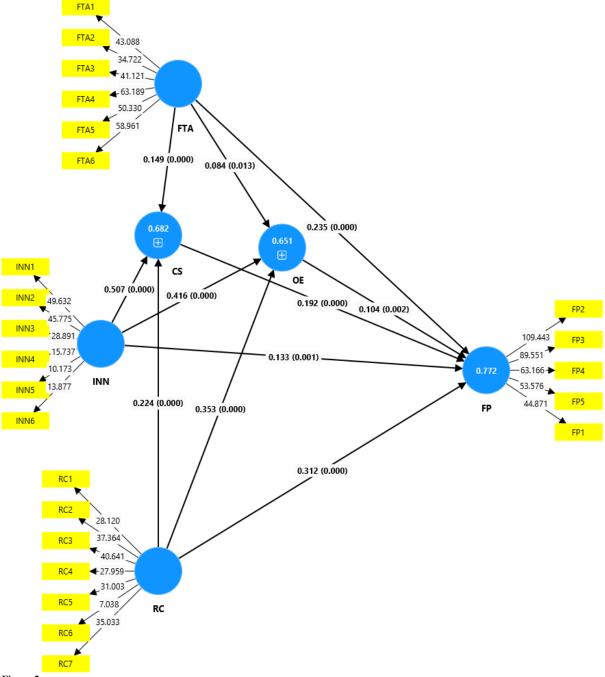


Figure 2. Graphical Result

6. Discussion of the Study

This study utilizes structural model essential analysis and mediation effects to prove how Jordanian retail businesses rely on operational efficiency as well as customer satisfaction to transform FinTech adoption together with innovation and regulation into financial success. Research validation of all hypotheses within this study depends on Resource-Based View and Technology-Organization-Environment frameworks which results in essential progress in FinTech adoption research for emerging markets. This research allows investigators to perform result checks on various FinTech investigations spanning multiple countries in domestic jurisdictions and outside borders. Research outcomes show that FinTech adoption provides positive financial performance because these results match Resource-Based View theory fundamentals. Firms achieve competitive advantages through Resource-Based View by deploying specific valuable assets which include FinTech innovations to boost financial success. The study results follow developed economy findings since Bani Atta [21] and Christopher [22] proved the integration of FinTech leads to operational cost reductions and increased transaction efficiency. This research examines the specific barriers which affect Jordanian retail companies by focusing on regulatory challenges and contradictory customer feedback that contrasts with developed market patterns. The deployment of FinTech in the U.S. and Europe receives support from strong modern infrastructure along with regulatory assistance, but Jordanian entities encounter additional barriers due to complicated regulatory systems according to Suswanto, et al. [26].

Different market regulations determine how FinTech technology benefits financial performance across various areas even though the positive effects remain consistent. The research findings that parallel the TOE framework validate that innovation leads to good financial performance. The model combines technology-based together with organizational elements that produce financial performance especially for emerging market context. Research findings receive backing from Wijayanti and Sriyanto [24] and Kamaldeen [28] because they demonstrate how financial service innovations like digital payments and blockchain technology boost financial value by introducing unique business solutions. Results indicate that financial performance from innovation possess a weaker connection in Jordan compared to markets with higher economic development levels. The financial effects of innovation have diminished in Jordan because of insufficient technological infrastructure combined with the lack of innovation strength as Vijai, et al. [34] explain. The financial performance effects of innovation show better strength in nations like South Korea and Singapore because these countries possess both enhanced technological readiness and advanced innovation ecosystems. Each nation experiences a decline in financial performance returns through innovation as their existing technological development levels grow higher.

Company compliance with regulations generates positive financial performance according to RBV theory as well as TOE framework principles. Market stability and trust constitute base operational requirements for maintaining FinTech adoption because regulatory compliance meets those essential operational criteria. The study outcome verifies. Alkhawaldeh, et al. [43] who demonstrated that regulatory compliance emerges as vital during Jordan's developing economy transition from emerging to developed markets. The main regulatory compliance functions act as drivers and barriers within FinTech adoption systems. The stability of market operations emerges from regulatory compliance while excessive rules according to Feinberg and Zanardi [40] slow down innovation processes. The establishment of regulatory frameworks requires Jordanian firms to deal with complicated regulatory rules. Research done in Australia and the U.K. shows that well-developed regulatory systems enable financial performance to benefit directly from proper regulatory compliance [38]. The level of regulatory system development determines how strictly financial performance needs regulation although companies must comply strictly with existing regulations.

The research evidence confirms operational efficiency as well as customer satisfaction serve as mediating elements which stem from RBV and TOE theoretical concepts. Improved cost efficiency serves as an operational strategic resource that produces financial gains because it leads to better customer satisfaction through enhanced service quality which drives customer repetition and loyalty. The current study adds to previous research, which was conducted by Domenek, et al. [45] alongside Huang and Mantje, et al. [44] regarding the significant effects of operational efficiency and customer satisfaction as main factors for FinTech adoption-finance performance relationships. Research indicates that the middle-level elements linking these factors show weaker relationships in Jordanian markets than advanced markets do. Study results establish insufficient connections between key factors and effects across Jordanian retail businesses since their operating performance and customer satisfaction measurements remain consistently low according to Onat and Güneren [50]. Operations efficiency and customer satisfaction act as stronger intermediaries based on scientific findings about U.S. and German companies because these organizations use advanced technology while placing customer needs first [51]. The strength of operational efficiency and customer satisfaction serving as intermediaries depends on industrial operational advancement and organizational structure in individual countries.

Studies on FinTech performance in Jordanian retail businesses become essential because operational efficiency along with customer satisfaction act as fundamental variables that bridge the effect analysis. This research confirmed all proposed hypotheses related to Resource-Based View (RBV) model and Technology-Organizational-Economics (TOE) framework leading to useful findings for research on emerging FinTech adoption. Studies proved that Jordanian retail companies deal with unique barriers that unite government restrictions with divergent customer satisfaction ratings. The implementation of FinTech combined with regulatory compliance leads to benefits that maintain market stability despite different paths of interaction because of national market characteristics. Future research should investigate market characteristics of emerging economies for FinTech adoption as it would reveal specific reasons for this adoption and financial effects.

7. Implications of the Study

This study creates important findings that benefit managers in their work as well as provide theoretical progress in academia while supporting transformation in societal practices. The financial performance of Jordanian retail businesses improves when operations integrate strategic FinTech methods supported by regulatory standards while implementing innovative solutions. Managers adopted blockchain technology combined with digital payment solutions as their principal FinTech option because these solutions produce enhancements in operational excellence which result in better customer satisfaction. To achieve market success the organization must develop an innovative culture capable of providing special offerings. Managers need to make regulatory demands their priority while upholding their legal obligations and staying ready to accept any regulatory changes Emerging markets need business entities to develop strong expertise about their fluctuating and changeable rules because this defines their operating rules. The study utilizes Resource-Based View (RBV) together with Technology-Organization-Environment (TOE) framework as theoretical models to determine how FinTech adoption influences financial performance to develop new knowledge in theory. By merging these two theories researchers can gain better insights into the diverse operating factors which emerge chiefly in markets such as Jordan. The research evaluates a significant literature deficiency through studying operational efficiency together with customer satisfaction as intermediaries which reveal fresh perspectives about financial performance effects from FinTech adoption. The research findings will serve as a starting point for additional studies especially within other markets matching conditions of financial regulations and market characteristics. The study presents practical recommendations for both policymakers and regulators who can use the findings in their operational decisions. Government officials must build regulatory structures that welcome FinTech technology adoption through supportive standards which guard marketplace safety. The regulatory frameworks need improvement through standardised documentation and by offering financial benefits to innovative initiatives and encouraging institutional alliances of bank-based and FinTech entities. These measures will fill the gap between regulatory requirements and innovation so businesses can achieve maximum benefits from FinTech. The study generates significant social outcomes that require attention. Retail firms that enhance their financial performance by adopting FinTech solutions can stimulate economic growth and generate employment opportunities in Jordan. The combination of improved customer satisfaction and operational efficiency results in superior service delivery which enhances consumers' quality of life. The social advantages of FinTech adoption demonstrate why it is crucial to establish an environment that supports FinTech implementation for both businesses and broader societal interests.

8. Limitations and Future Study

The study offers important findings but possesses limitations that future research should address. This investigation limits its research scope to Jordanian retail businesses which decreases the universal applicability of its findings. Studies seeking to expand the assessment should analyse banking and manufacturing sectors in addition to conducting market examinations across various emerging economies to uncover wider trends. The research relies on cross-section data to present both the adoption status of FinTech technology and its current effects at this specific point in time. Research following the same data points throughout time reveals the evolution of relationships about the FinTech ecosystem development. This study does not analyse the impact of macroeconomic conditions together with worldwide FinTech patterns on FinTech adoption and its final outcomes. Future research should incorporate these extra factors to achieve complete knowledge of FinTech adoption practices and their resulting effects.

9. Conclusion of the Study

This research examined the financial performance effects on Jordanian retail firms stemming from their use of FinTech and their degree of regulatory adherence together with their innovative practices through operational efficiencies that generate better customer satisfaction. Financial performance improve when FinTech implementation helps regulatory compliance because operational efficiency and customer satisfaction act as crucial intermediary factors to achieve this improvement. The research upholds both Resource-Based View (RBV) and Technology-Organization-Environment (TOE) frameworks because FinTech adoption delivers financial success to emerging market environments. Regulatory compliance serves two purposes in the market through stability preservation while also acting as an obstacle for innovation unless equilibrium is achieved. The research includes Jordan as it's primary subject to fill a significant scientific gap in studies of emerging markets by investigating unexplored market and regulatory dynamics. Retail financial performance recipients gain an all-encompassing perspective through the research framework which merges FinTech acceptance with innovation along with regulatory adherence and operational effectiveness and customer contentment. This research expands the discussion about FinTech adoption in emerging markets and offers important insights for academic researchers and industry professionals. The research highlights how combining strong regulatory support with FinTech investments leads to better operational efficiency and customer satisfaction which results in financial success.

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