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Dynamics of Valence Framework on Adoption Intention of Financial Derivatives in Developing Markets

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ABSTRACT

This study examines the intention to adopt financial derivatives by integrating valence-based factors, perceived benefit and perceived risk, while examining the moderating role of perceived complexity. Data were collected from 142 finance and risk directors across financial institutions in Tanzania and model tested using Structural Equation Modelling (SEM). The results reveal that both Perceived Benefit and Perceived Risk significantly influence the intention to adopt financial derivatives. Complexity significantly moderates the relationships. This study contributes theoretically by validating an extended Valence-risk-Benefit framework. It enhances derivative adoption, emphasises the benefits and related risks while cautioning on complexity as a hindrance.

Keywords: Perceived risks, Perceived Benefit, Valence, Complexity, Financial derivative

JEL Codes : *G41, G23, G32*

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1. INTRODUCTION

Prior to the global financial crisis, financial derivatives were seen as a very valuable instrument to help in mitigating risk, managing portfolio management, and mitigating cash flow volatility. After the great financial crisis, there were significant changes in their perceptions; some called them evil, gambling assets. Therefore, Financial derivatives continue to generate continuous debates because of their complex nature and potential impact on financial markets globally. Ongoing debate highlights the profound impact of derivative instruments on the global financial system. The effect of these perceptions' debates made many non-adopters fear and restrict their firms and institutions from using these instruments. These arguments highlight the imperative for ongoing scholarly assessment of their benefits and potential risks.

The Bank of International Settlements show the difference in adoptions globally; the developed economies are the leading adopters that have shown tremendous growth, although those are also the ones that were affected by several regional and global crises (BIS, 2023). However, Most African derivative markets, including Tanzania, are undeveloped; they operate only on unregulated Over-the-Counter (OTC) platforms(Al Janabi, 2023). There are a countable few derivative exchanges in Africa. The expansion of financial derivatives trading in terms of quantity and types is the establishment of derivative exchanges that allow options and futures types to be traded besides swaps and forwards alone.

Join the debate; this study critically explores the factors that influence investors' intentions to adopt financial derivatives, using the Valence Framework theory and complexity from Innovation Attributes theory as a guiding lens. Previous studies on the factors affecting financial derivative adoption are diverse and multifaceted, based on firm-specific factors (size and ownership). Motivational factors (hedging and speculation) and Regulatory factors. Other factors contradict each other; they are inconsistent, having different results. Several factors have been tested, including general benefit, hedging risk, profitability, increasing firm value, reducing cash flow, and reducing volatility. However, these factors all fall under the benefit category, and thus, factors related to risks and complexity have not been sufficiently researched.

Moreover, valence theory was not used in financial derivatives adoption; the significant gap remains in the role of complexity, which was claimed to be a challenge in OTC trading. Complexity in this study is a moderator that was not tested in previous literature. Moreover, previous studies relied on secondary objective measures that may not effectively capture individual or situational variations (Lavieri and Bhat, 2019). Subjective measures can provide predictive insights by tapping into institutions' intentions and motivations related to adoption(Gough, 2015). This gap exists because context-specific factors capture important context-specific justifications that traditional constructs may overlook. From a psychological perspective, this suggests that context-specific reasons can directly influence intentions without individuals fully engaging with broader motive perceptions (Sahu et al., 2020).

This study makes a valuable contribution to the literature by addressing the gap in theory on the application of valence factors. Moreover, studies focus on the adoption, not the adoption intentions, of financial derivatives. This is because many of these studies resulted from developed economies where their financial derivatives have been developed for decades. The context of financial institutions was not examined enough, and the gap remained in non-banking financial institutions. The findings are particularly relevant to both financial institutions and

policies relating to the financial derivatives market. Otherwise, the remainder is organised as follows: Section 2 provides a review of the relevant literature and outlines the development of the research hypotheses. Section 3 details the research methodology employed to test the proposed model. Section 4 presents the empirical results and offers a discussion of the key findings. Finally, Section 5 provides a comprehensive discussion, followed by the conclusions and practical recommendations derived from the study.

2. LITERATURE REVIEWS AND HYPOTHESIS DEVELOPMENT

2.1. Theoretical Reviews

The theory framework is built upon the Valence theory (Peter and Tarpey, 1975) and the innovation attributes theory (Rogers, 1961). The Valence theory originated from the Leninian vectors hypothesis. According to this hypothesis, forces operate to draw individuals or groups toward desirable objects while repelling them from undesirable ones with positive vs negative Valence (Lewin, 1946), (Bilkey, 1955). Therefore, perceived risk —the benefit of financial derivatives —is the likelihood and importance or concern that influences decision-making. Valence has extensive literature, and numerous studies leverage the concept of valence to elucidate relationships between positive and negative factors concerning adoption/adoption, as well as adoption intention (Chin et al., 2022); (Cui et al., 2019); (Mou et al., 2017); (Ryu, 2018). However, those studies are on other products and financial innovation but do not involve financial derivatives. The Innovation Attribute Theory (Rogers, 1961) demonstrated that the five main attributes, such as relative advantage, complexity, compatibility, and friability influence adoption. This study has chosen complexity as it has been the problem and the cause of crisis. (Schuldenzucker, 2019). Derivatives essentially make a financial network "more complex" as contrasted with one devoid of them.

2.2. Empirical Reviews and Hypothesis Development

This review critically analyses previous research on the adoption of financial derivatives, particularly in various institutional and regional contexts. It focuses on institutional elements like perceived benefit, risk, moderated by complexity, based on theories like Innovation Attributes Theory and Valence Theory. The aim is to establish a robust empirical foundation for formulating specific hypotheses relevant to underdeveloped financial markets like Tanzania, where derivatives use is still constrained.

2.2.1. Perceived Benefit and Relationship with Adoption Intention

Drawing on Davis (1989), perceived benefit encompasses the perceived likelihood and significance of enhanced outcomes resulting from adoption. In this study, Perceived Benefit refers to the belief about the extent to which a financial institution stands to gain—whether in efficiency, risk mitigation, or profitability—through the adoption of financial derivative instruments. Studies have shown that financial derivatives play a crucial role in risk mitigation by allowing firms to hedge against unpredictable market fluctuations, ensuring excellent financial stability (Grima et al., 2017; Vu et al., 2020: Al-Slehat et al., 2018). Derivatives also enhance liquidity by allowing firms to manage short-term cash flow risks, ensuring they maintain operational stability even in volatile markets(Narasimhan and Kalra, 2015). Debt management is made possible using interest derivatives as advocated by. (Blanco and Garcıa, 2017) show the effects of bonds. (Ashton et al., 2016) show how financial derivatives play a

critical role in the privatisation process of pricing public goods. Other benefits are tax planning and speculation.

The benefits on a macro level is linked to the deepening of the financial sector, with the growth of the underlying market dependent on the development of derivatives, creating a complementary relationship (Dodd, 2015). Less developed countries may benefit from a vibrant financial market with financial derivatives. All these previous reviews have shown that there are numerous benefits associated with financial derivatives instruments. Previous studies on the relationship between the benefits and adoption of derivatives have shown significant and positive results (Grima et al., 2017; Vu et al., 2020; Al-Slehat et al., 2018). Adoption intention studies show a significant positive relationship (Haqqi and Suzianti, 2020; Sichone et al., 2017). Therefore, it can be hypothesised that,

H_1. Perceived benefits positively influence the intention to adopt financial derivatives.

2.2.2. Relationship between Perceived Risk and Adoption Intention

As initially articulated by Bauer (1967), in the context of this study, Perceived Risk (PR) is defined as the investor's cognitive appraisal of the possible adverse and uncertain outcomes linked to the adoption of financial derivatives. When misused, financial derivatives also introduce substantial financial losses. One significant risk associated with derivatives is misuse or mismanagement Grima et al., 2017). Similarly, Vu et al. (2020) and Al-Slehat et al. (2018) found that in Vietnam, (Liu (2023) adds that in China, many firms engage in derivative trading for speculative rather than risk mitigation purposes, which increases financial volatility and market uncertainty.

Derivatives also introduce counterparty risk when the counterparty defaults. This Risk is particularly evident in over-the-counter (OTC) derivative markets, where contracts are not standardised, and counterparties may lack sufficient collateral (Jorion and Zhang, 2015). To address counterparty risk, Central Clearing Counterparties (CCPs) have become a cornerstone of regulatory efforts. However, their effectiveness remains debated (Duffie and Zhu, 2016). Liquidity risk is another significant concern associated with derivatives, as they may create short-term cash flow challenges (Zhang and Ding, 2018). This Risk is popular with OTC derivatives because they are tailor-made and cannot be resold to the markets (Narasimhan and Kalra, 2015). Another critical risk is tax avoidance, as evidenced by (Oktavia et al., 2019) in the research on ASEAN countries (Philippines, Indonesia, Malaysia, and Singapore)..

the relationship between perceived risk and adoption shows that perceived risk has no significant relationship with the adoption of financial derivatives Jacob (2016). Other non-financial derivatives research has a negative impact. These studies are on online banking (Fadare et al., 2016), fintech (Xie et al., 2021), and e-banking (Mer and Virdi, 2023). However, investors do not seek risk when adopting innovations; instead, they are motivated by the benefits, and that is the reason for taking those risks (Krug, 2017).

This inconsistency in findings also extends to studies on non-financial technological innovations. For example, several studies have found that perceived risk does not significantly affect adoption intention in contexts such as FinTech and mobile financial services (Sridharan et al., 2023); (Meyliana and Fernando, 2019), In contrast, other studies report a negative relationship between perceived risk and adoption, particularly in mobile and internet-based

financial platforms, including mobile payments, internet banking, online banking, and online purchasing behavior (Bhatti and Rehman, 2019); (Park et al., 2019).

However, in the case of cryptocurrency, a positive relationship has been consistently observed, attributed to its high-risk, high-return nature (Dewi and Diwya, 2024); (Sridharan et al., 2023); (Dabbous et al., 2022). Moreover, Financial theory (Fama, 1971) has shown that people take more risks because they want the benefits associated with them; this is because the increase in risk is related to the rise in return. Investors take on risk when the benefits of using financial derivatives are substantial; Therefore, the study hypothesised that:

H_2. Perceived Risk positively influences the intention to adopt financial derivatives.

2.2.3. Complexity of financial derivatives as moderators

Complexity, significantly influences individuals' decisions regarding adoption, particularly in the realm of financial derivatives (Rogers, 2010). The complexity of financial derivatives stems from their structural intricacies, varied applications, and changing regulatory requirements (Hairston et al., 2023). Accounting for derivatives involves complex areas like hedge accounting, fair value measurement, and adherence to various International Financial Reporting Standards (IFRS), complicating reporting processes (Hairston and Brooks, 2019). The perceived complexity results in tangible implications, including higher auditing costs, as firms face challenges in ensuring accurate valuation and disclosure (Hairston et al., 2023). Empirical research indicates that derivative complexity is associated with financial reporting errors and reduced accuracy in performance metrics, thereby increasing the operational burden on adopters (Chang et al., 2016).

Perceived complexity influences users' assessments of the risks and benefits associated with innovations. This relationship is crucial to the Valence framework, In this context, complexity can increase perceived risk or decrease perceived benefits, despite objective risk levels staying the same (Durney et al., 2023). Individuals facing high complexity may misinterpret potential advantages as unattainable or irrelevant, which can hinder benefit-driven adoption. Malaquias and Zambra (2020) support this assertion, demonstrating that perceived complexity notably hinders financial decision-making by diminishing perceived control and elevating cognitive effort. Recent innovations, including smart derivatives, blockchain-based contracts, and decentralised finance instruments, have introduced new layers of technical, operational, and regulatory complexity (Agarwal et al., 2024). highlighting the significance of perceived complexity in contemporary financial ecosystems. These studies highlight that complexity serves not only as a barrier but also as a contextual factor influencing individuals' perceptions of the appeal and risks associated with financial innovations. Within the valence framework, complexity influences user perception, leading to either risk aversion or benefit pursuit, contingent upon the product's clarity, usability, and transparency. This indicates that complexity significantly influences the perceived value of financial derivatives, affecting the likelihood of positive or negative adoption outcomes. It is proposed that:

H_3 Complexity negatively influences the intention to adopt financial derivatives.

H_4: Complexity has a moderating influence on perceived benefit and the intention to adopt financial derivatives.

H_5: Complexity has a moderating influence on perceived risk and intention to adopt financial derivatives.

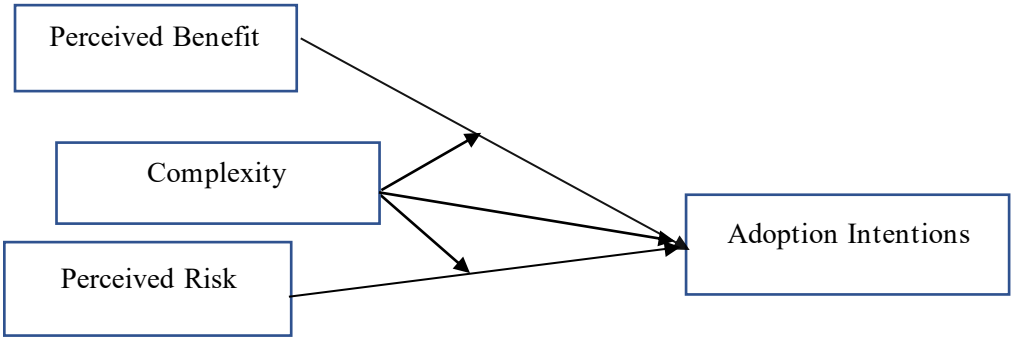

Figure 1. Conceptual Framework **Source** Literature Review

3. SAMPLE, DATA COLLECTION AND MEASUREMENTS

The banks based in Dar es Salaam and Dodoma were the primary subjects of this research because of their prominence among Tanzania's financial institutions. The researcher intentionally chose these two locations because that is where most of the country's financial institutions are based. Insurance firms, mutual funds, and pension funds were among the non-banking organisations included in the study's sample. A total of 158 heads of risk, finance or treasury were selected as key informants from these organisations' directorates,

Before data collection, the questionnaire was prepared by adopting the previous study and tailored to suit the financial derivative context, as shown in Table 1.

Table 1. Measurement of Variables

Construct	Measurement indicators	Reference
Perceived Benefit	Likelihood and importance of	Peter and Tarpey (1975); (Bodnar et al., 2008); (Davis, 1989)
	Hedging risk	
	Portfolio management	
	Liquidity Benefit	
	Debt management Benefit	
	Tax planning Benefit	
Perceived Risk	Likelihood and concern on	(Featherman & Pavlou, 2003); (Peter and Tarpey 1975); (Bodnar et al., 2008)
	Market risk	
	Counterparty risk	
	Liquidity risk	
	Tax avoidance risk	
	Financial loss	
Complexity	Difficult to report	(Davis, 1989) (Rogers ,2010)
	Difficult adopt	
	Difficult operate	
	Not flexible to interact with	
	Need more time	
	Need significant effort	
Adoption intention	Intends to adopt	(Freedman, 2011); (Tre leaven, 2015)
	Plan to use	
	Recommends the use	
	Benefits outweigh the risks.	
	Preferably to our institutions	

Source: Literature review

To ensure content validity, the instrument was reviewed by a finance expert and an English language editor. Following their feedback, the finalised questionnaire was distributed to the identified informants. A well-structured, closed-ended questionnaire was employed, adapted from established instruments used in prior studies. An overview of the study's key variables and their respective measurement items is presented in Table 1. The primary constructs examined in this study include perceived risk and perceived benefit as direct predictors of adoption intention, with complexity conceptualised as a moderating variable that influences the strength of these relationships.

4, RESEARCH FINDINGS

4.1.Descriptive analysis of constructs using SPSS

The descriptive statistical analysis was performed to explore the means, standard deviations, Skewness, and Kurtosis of the constructs studied. The results are shown in Table 2.

Table 2. Descriptive analysis of constructs using SPSS

Constructs	Min	Max	Mean	Std. Dev.	Skewness	Kurtosis
Perceived Benefit	1.57	4.86	3.91	0.54	-0.524	1.047
Perceived Risk	2.29	4.86	4.13	0.46	-0.521	0.546
Complexity	2.00	5.00	3.23	0.74	0.185	-0.982
Adoption Intention	2.80	5.00	3.99	0.59	0.159	-1.315
Average			**3.82**	**0.58**		

Source: SPSS

In general, the mean of constructs reflected the level of respondents' perceptions of the construct. Perceived risk and benefit had higher mean ratings than other variables, suggesting that respondents are aware of financial derivative risks but are still eager to accept them owing to the anticipated benefits. Diversity in respondents' knowledge may explain the large complexity score dispersion. A minority of respondents ranked complexity and adoption intention lower, but their distributions were almost symmetric, with little positive skewness.

4.2. Measurement Model Assessments using Smart PLS 4

In this study, the measurement model was evaluated through a series of statistical tests to test reliability and validity as outlined by Hair et al. (2019). The tests, including factor loadings, Composite Reliability (CR), Cronbach's Alpha (α), Rho_a, Average Variance Extracted (AVE), Heterotrait-Monotrait Ratio (HTMT), and the Fornell-Larcker criterion, are shown in Table 3.

Table 3. Validity and Reliability Testing

Construct	Indicator	Reliability				Validity		
		IR	ICR			CV	DV	
		Loading	CR α	Rho_a	Rho_c	AVE	HTMT	FonelLarker
		> 0.5	> 0.7	> 0.7	<CR but >α	> 0.5	< 0.85	row/column
Perceived Benefit	PB1	0.86	0.858	0.868	0.893	0.584	0.435	0.764
	PB2	0.73						
	PB3	0.79						
	PB4	0.78						
	PB5	0.69						
	PB6	0.74						
Perceived Risk	PR1	0.73	0.779	0.789	0.848	0.527	0.701	0.726
	PR2	0.73						
	PR3	0.73						
	PR4	0.68						
	PR5	0.76						
Complexity	CO1	0.84	0.918	0.92	0.939	0.754	0.658	0.868
	CO3	0.86						
	CO4	0.91						
	CO5	0.88						
	CO6	0.85						
Adoption Intention	AI1	0.84	0.857	0.87	0.897	0.638		0.728
	AI2	0.72						
	AI3	0.71						
	AI4	0.87						
	AI5	0.83						

Source: Smart PLS 4

These measurement assessments on reliability and validity confirm that the constructs used in the research meet the required standards for both reliability and validity, ensuring the robustness of the findings.

4.3. Structural Model Assessments

This assessment involved the measurement of Value Inflation Factors (VIF) for collinearity purposes. The requirement is that the path coefficient must be less than 3.3, the path coefficient must be greater than 1>0<-1, the T-statistic must be greater than 1.67, and the p-value must be less than 0.05 to be significant. The effect size F2, where <0.2 is no effect. (Cohen 1988). The researcher tested the structural model both with and without interaction effects to see if complexity moderates the correlations between perceived benefit, perceived risk, and adoption intention.

All three direct effects were determined to be statistically significant prior to the introduction of moderation terms. Confirming that users are more inclined to embrace a system when its benefits are readily understood and appreciated, the perceived benefit demonstrated a

robust positive correlation with adoption intention ($\beta = 0.346$, $t = 4.923$, $p < 0.001$, $f^2 = 0.19$). Perceived risk also had a positive effect, but it was less significant ($\beta = 0.153$, $t = 2.13$, $p = 0.017$, $f^2 = 0.028$). This could mean that risk is seen as acceptable or even desirable in specific situations, like high-reward financial technology.

Table 4a. Hypothesis testing before moderations

Relationships	Path coefficient	F square	T statistic	P values	Significant	Positive /Negative
H1: Perceived Benefit -> Adoption intention	0.346	0.19	4.923	0	Yes	Positive
H2: Perceived Risk -> Adoption intention	0.153	0.028	2.13	0.017	Yes	Positive
H3; Complexity -> Adoption intention	-0.428	0.277	6.668	0	Yes	Negative
Before moderation r^2	0.587					

Table 4b. Hypothesis after Moderations

Relationships	Path coefficient	F square	T statistic	P values	Significant?	Positive /Negative
H4; Complexity x Perceived benefit -> Adoption Intention	-0.185	0.053	3.058	0.001	Yes	Negative
H5: Complexity x Perceived risk -> Adoption Intention	-0.13	0.021	2.225	0.013	Yes	Negative
After moderation r^2	0.628					

Source Smart PLS4

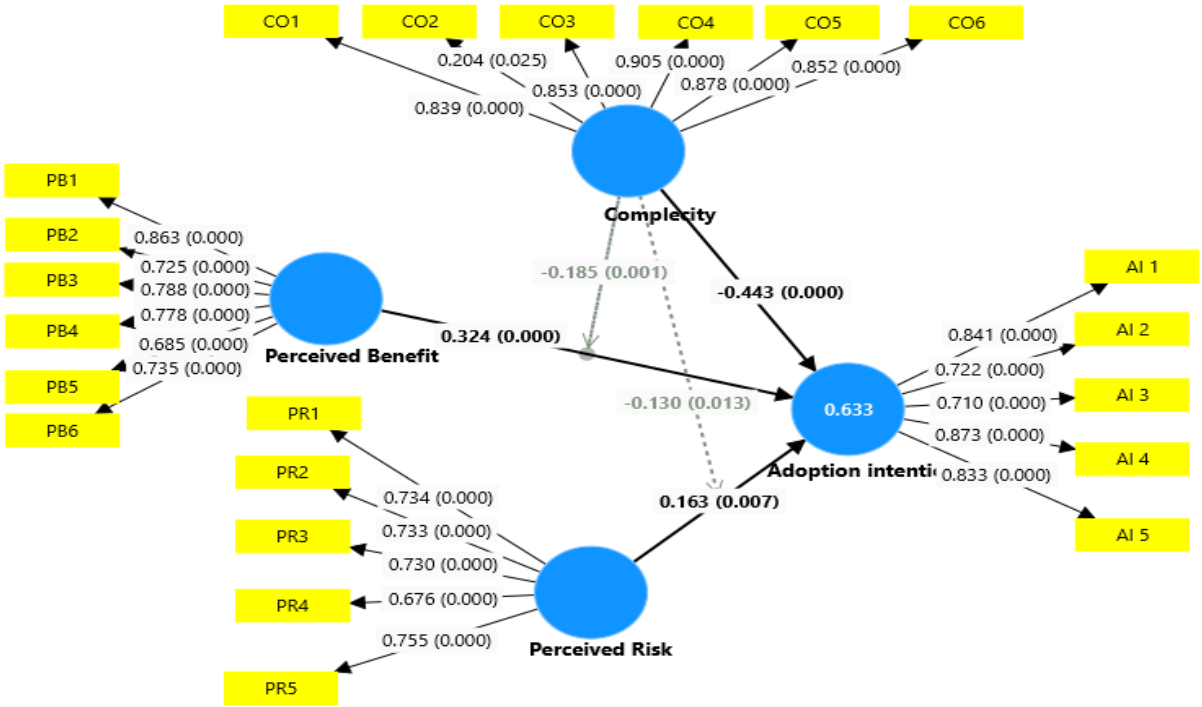

Figure 2. Measurement and Structural Model Assessments **Source:** Smart PLS 4

On the other hand, the relationship between complexity and adoption intention was negative and statistically significant (β = -0.428, t = 6.668, $p < 0.001$, $f^2 = 0.277$), indicating that perceived difficulty acts as a barrier to adoption. Hypotheses H4 and H5 were both confirmed after the interaction terms were introduced to test for moderation. The positive impact of perceived benefits on adoption intention diminishes with increasing complexity, as indicated by the significant adverse moderating effect of the interaction between perceived benefit and complexity (β = -0.185, t = 3.058, p = 0.001, $f^2 = 0.053$). It appears that excessive levels of complexity can hinder adoption, even when consumers are aware of the benefits, because they make such benefits less accessible or usable. In a similar vein, a negative moderating impact was also shown by the interaction between perceived risk and complexity (γ = -0.130, t = 2.225, p = 0.013, $f^2 = 0.021$), suggesting that complexity makes perceived risk worse, discouraging adoption even more. The valence paradigm, which our results support theoretically, proposes that users' cognitive evaluations of possible gains and losses determine adoption decisions; complexity, as a contextual component, distorts these evaluations by altering perceptions of risk and advantage.

Adding to that, the model's explanatory power was enhanced by integrating interaction effects, as the explained variance (R^2) in adoption intention went from 0.587 before moderation to 0.628 after. This improvement verifies that complexity mediates the relationship between the perceived value and risk of an innovation and its actual implementation, in addition to acting as a direct inhibitor. In complicated sectors like financial technologies, it is critical to build user-friendly, clear, and simple systems to maximise adoption. These results highlight this. The structural model assessment table 4 and figure 2 summarise the results extracted from the Smart PLS4.

4.4 Discussions of Findings

The objective of this study was to examine valence factors moderated by complexity. It is divided into hypothesised relationships. The fire Hypothesis was H1: Perceived Benefit influences Adoption Intention ($\beta = 0.346$, $p = 0.000$). As hypothesised, benefit has a significant positive influence on adoption intention, evidenced by a modest effect size ($f^2 = 0.19$) and a high (t-value 4.923). Similar results were found in various studies (Al-Slehat et al., 2018); (Bezzina and Grima, 2015); (Vu et al., 2020); (Abramova and Böhme, 2016) (Chong, 2019); (Jain and Raman, 2022) (Kumar et al., 2022).This implies that financial institutions acknowledge various benefits and intend to adopt financial derivatives. This confirms that institutions are inclined to embrace derivatives when they foresee distinct financial or operational benefits.

The second hypothesis, H2: perceived risk influences adoption intention ($\beta = 0.153$, $p = 0.017$). Perceived risk is typically regarded as a deterrent to many innovations, but not financial derivatives. It demonstrates a positive and substantial impact, but with a minimal effect size ($f^2 = 0.028$).. Similar results were found in various studies (Sridharan et al., 2023); (Field and Inci, 2023); (Dewi and Diwya, 2024). These studies are risk-related fintech instruments that is cryptocurrency. However, the studies differ from those with Bhatti and Rehman (2019). Xie et al. (2021), Bangkit et al. (2022), Sridharan et al. (2023), Kaur and Arora (2021). This indicates that, in this setting, organisations might accept or even purposefully utilise specific risks when the anticipated gains are deemed tolerable or manageable.

The third hypothesis H3: Complexity influence Adoption Intention ($\beta = -0.428$, $p = 0.000$). Complexity has a considerable negative effect, with the biggest effect size ($f^2 = 0.277$). This research highlights that complexity serves as a substantial impediment, emphasising the necessity for streamlined products and more transparent regulatory frameworks to facilitate adoption. This confirms that institutions are inclined to embrace derivatives when they foresee distinct financial or operational benefits. A similar result was found in various studies.

The last two hypotheses were the moderating influence of complexity on direct relationships. The fourth hypothesis, H4: The interaction of Complexity of Perceived Benefit influences Adoption Intention ($\beta = -0.185$, $p = 0.001$). This interaction term is statistically significant, exhibiting a small-to-moderate effect size ($f^2 = 0.053$). The negative coefficient shows that as complexity goes up, the positive effect of perceived advantage on the intention to adopt goes down. In other words, even if a derivative is thought to be useful, institutions may not want to use it if it is too complicated. The fifth hypothesis, H5: The interaction of Complexity of Perceived Risk on Adoption Intention ($\beta = -0.130$, $p = 0.013$).

Similarly, complexity changes the risk-adoption connection in a statistically significant way. The effect size is minor ($f^2 = 0.021$), but the data show that institutions may be more sensitive to risk when things are complicated, which makes them less likely to adapt. The result is similar to other studies Malaquias and Zambra (2020) ; (Gope and Mitra, 2018); (Campbell et al., 2019) and (Agarwal et al., 2024). (Hairston et al., 2023). (Wang et al., 2016); (Gutierrez et al., 2015); (Sun et al., 2021); (Christiansen et al., 2022); (Marano and Kostova, 2016); This implies that adoption of financial derivatives is hindered if there is high complexity that is backed by low knowledge in a less developed market.

These findings have significant consequences to add scholarly knowledge on adoption intention in less developed markets such as Tanzania, and have become a significant tool to

policymakers, financial regulators, and product innovators. In emerging and underdeveloped economies like Tanzania, where people struggle to understand much about derivatives and institutions have very different levels of ability, complexity is a barrier. The results show that institutional investors adopt financial derivatives when it is easy to understand. The financial derivatives must also be easy to use so that as many investors as possible will be able to adopt them. They will not adopt something just because they think it will help them if it is not clear, simple, and easy to use. Therefore, training is important, which will be organised by the regulator and key stakeholders in the financial derivatives market. This cooperation will help them to share the experience and knowledge. The regulator must provide the infrastructure. The needed infrastructure; the regulation must be responsive and effective, align with global standards. The regulations must address the issue of closeout netting, which is important in mitigating counterparty risks.

5.CONCLUSION AND RECOMMENDATIONS

The study analysis indicates that both perceived benefits and risks positively affect the propensity of financial organisations to adopt financial derivatives. However, the inclusion of complexity, both as a direct contributor and as a moderator, substantially modifies these connections. Complexity has a significant negative influence on the intention to adopt anything, and it also makes the positive effects of perceived benefit and perceived risk much weaker. This means that even if institutions see the value of derivatives or are willing to take on some risk, they are much less likely to use these tools if the processes, reporting standards, or operational requirements that come with them are seen as too complicated or burdensome.

This research leads to three primary recommendations: first, derivative designers and market developers need to prioritise user-friendly design by focusing on customisation, clarity, and ensuring compatibility with existing systems. This is especially important for over-the-counter (OTC) derivatives that can be adapted to local needs while developing standardised derivatives. Second, regulatory agencies need to align standards and create programs to help institutions better understand derivative instruments and facilitate their compliance with the rules. This includes training, simplified document writing guidelines, and step-by-step instructions for how to use the new system. Third, leaders of institutions should invest in systems and people who can help simplify things. These combined initiatives can help build more trust in derivative use and encourage more financial innovation in developing countries by closing the gap between usefulness and usability.

6. LIMITATIONS AND FUTURE RESEARCH

This study concentrated on adoption intention rather than actual adoption behaviour. Intention is often considered the most immediate and reliable predictor of adoption, as highlighted in frameworks like the Theory of Planned Behaviour (Ajzen, 1991) and the Technology Acceptance Model (Davis, 1989). However, it does not always ensure follow-through, as various contextual or behavioural barriers may impede this process. Future studies may investigate adoption intention as a mediating variable between antecedents such as perceived benefit, complexity, and risk, and actual adoption behaviour. This would provide a more nuanced understanding of the translation of intention into action. The present study utilised a quantitative approach, which, although effective in identifying statistical

relationships, may not adequately capture the nuanced perspectives of users, especially in complex decision-making contexts such as financial derivative adoption. Future research may enhance its findings by integrating a qualitative component, such as interviews or focus groups, to investigate underlying motivations, contextual factors, and experiential dimensions. This approach facilitates the creation of a mixed-methods design, which enhances the interpretation and validation of findings through both quantitative and qualitative data.

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