

FACTORS INFLUENCING CONSUMERS' PARTICIPATION IN INVESTMENT-LINKED INSURANCE PRODUCTS: FROM INTENTION TO DECISION

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ABSTRACT

This study examines the factors influencing consumers' intentions and decisions to participate in investment-linked insurance products (ILPs) within an extended TRA/TPB framework. Data were collected from 344 valid responses and analyzed using partial least squares structural equation modeling (PLS-SEM). The findings show that perceived benefits, perceived risk, fund performance expectations, risk-return tradeoff perception, product flexibility, and social influence positively influence participation intention, with social influence exerting the strongest effect. Participation intention, in turn, strongly influences participation decisions. The study highlights that ILP participation is shaped by a combination of protection-, investment-, product-, and social-related considerations. It further contributes to the literature by emphasizing risk-return tradeoff perception as a distinct consumer evaluation and by extending the analysis beyond participation intention to its subsequent effect on participation decisions.

Keyword: investment-linked insurance products; participation intention; participation decision; risk-return tradeoff perception; social influence; PLS-SEM.

1. INTRODUCTION

Life insurance traditionally serves as an important mechanism for protecting households against the financial consequences of mortality and other adverse life events [1]. Beyond its traditional protection function, life insurance can also serve as a vehicle for long-term savings and investment, reflecting consumers' broader financial objectives [2]. This dual role of protection and investment is particularly evident in investment-linked insurance products (ILPs), which combine life insurance coverage with an investment component.

Investment-Linked Insurance Products (ILPs) first emerged in the insurance markets of the United Kingdom and the United States in the 1970s [3]. Unlike conventional life insurance, however, ILPs require consumers to simultaneously evaluate insurance protection and investment-related attributes [4]. Consumers must consider not only their protection needs and perceived product benefits but also expected fund performance, investment risks and returns, and product flexibility [5]. This dual nature makes participation in ILPs a more complex decision than the purchase of purely protection-oriented

insurance products. Moreover, because policyholders bear investment risk associated with the underlying funds, their decisions involve assessing whether potential investment outcomes are commensurate with the risks undertaken. These distinctive characteristics suggest that consumer participation in ILPs represents a multidimensional decision-making process that may not be fully explained by factors traditionally examined in the broader life insurance literature. Accordingly, a more integrated examination of protection-related, investment-related, product-related, and social factors is needed to better understand consumers' intentions and subsequent participation decisions regarding ILPs.

Despite extensive research on the determinants of life insurance purchase behavior, existing evidence remains fragmented across demographic, socioeconomic, psychological, behavioral, and product-related factors [6, 7]. More importantly, relatively limited attention has been paid to how these determinants operate within the dual protection-investment nature of ILPs. Unlike conventional protection-oriented insurance, ILPs require consumers to simultaneously assess their need for financial

protection and the investment-related attributes of the product. This suggests a need for an integrated framework that captures both protection-related factors, such as perceived risk and perceived benefits, and investment- and product-related factors, including fund performance expectations, risk–return tradeoff perception, and product flexibility. Such an approach may provide a more comprehensive understanding of consumers' participation intentions toward ILPs.

2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

2.1. Theoretical foundation

Consumer participation in ILPs represents more than a conventional insurance purchase decision. By combining financial protection with investment opportunities, ILPs require consumers to evaluate not only whether they intend to obtain insurance coverage but also whether the product is consistent with their expectations, risk considerations, financial objectives, and social environment. Understanding such a decision therefore requires a theoretical perspective capable of explaining both the formation of participation intention and its translation into actual participation.

The Theory of Reasoned Action (TRA) and its extension, the Theory of Planned Behavior (TPB), provide a well-established foundation for explaining this process [8, 9]. At the core of these theories is the proposition that behavioral intention represents the most proximal motivational antecedent of actual behavior, while intention itself is shaped by individuals' evaluations and social considerations surrounding the behavior. TPB further extends this reasoning by incorporating perceived behavioral control, recognizing that the translation of intention into behavior may also depend on individuals' perceived ability to perform the behavior [9, 10]. These theoretical perspectives have been widely applied to explain consumer decision-making across financial and insurance contexts.

Building on this theoretical foundation, the present study adopts the intention–behavior logic of TRA/TPB while extending the framework to capture the distinctive protection–investment characteristics of ILPs. Such an extension is consistent with previous insurance research that has incorporated context-specific factors into the

TPB framework to better explain insurance purchase intentions [11].

2.2. Determinants of Participation Intention

Perceived Benefits: Perceived Benefits reflect consumers' evaluations of the advantages and value that they expect to obtain from an insurance product. In the insurance context, these benefits may include protection against financial losses arising from life uncertainties, greater financial security, support for wealth planning, and opportunities for wealth accumulation [12]. Previous research has demonstrated that consumers' perceptions of insurance benefits contribute to favorable evaluations of insurance and subsequent behavioral intentions [12], while perceived value has also been associated with favorable behavioral responses in life insurance contexts [13]. More recent research has further incorporated perceived benefits into theoretical models explaining life-insurance purchase intention [14]. These considerations are particularly relevant to ILPs, which combine financial protection with investment opportunities. Consumers who perceive greater benefits from this combination are therefore more likely to view ILPs as valuable instruments for achieving both protection and long-term financial objectives, thereby strengthening their intention to participate. Accordingly:

H1: Perceived Benefits positively affect consumers' intention to participate in investment-linked insurance products.

Perceived Risk: Perceived Risk in this study refers to individuals' awareness of potential adverse life events and the financial consequences that such events may impose on themselves and their families, rather than the perceived risk associated with the insurance product itself. Such risk perceptions involve individuals' subjective assessments of their exposure to uncertain events and the severity of the potential losses arising from them. When individuals perceive themselves as being more exposed to adverse events or anticipate more serious financial consequences, they are more likely to recognize their financial vulnerability and the need for mechanisms that can mitigate potential losses.

From a protection perspective, insurance represents an important mechanism through which individuals can transfer or mitigate the financial consequences of uncertain events.

Accordingly, greater awareness of potential risks may increase the perceived need for insurance protection and strengthen consumers' motivation to obtain coverage. Previous empirical evidence supports this mechanism. Tsai (2017) [15], for example, found that perceived risk positively influenced both the perceived need for accident insurance and consumers' intentions to purchase insurance. More recent evidence similarly indicates that greater perceived severity of potential threats strengthens protection motivation and purchase intentions toward protection insurance products [10]. These findings suggest that risk perception may operate as a motivational factor in insurance decisions: as individuals become more aware of the likelihood or potential severity of financial losses, the perceived value and necessity of insurance protection may increase.

This mechanism is particularly relevant to ILPs because, despite their investment component, these products retain the fundamental protection function of life insurance. Consumers who perceive greater exposure to life risks and their potential financial consequences may therefore attach greater importance to the protection provided by ILPs and develop stronger intentions to participate. Based on the above arguments, the following hypothesis is proposed:

H2: Perceived Risk positively affects consumers' intention to participate in investment-linked insurance products.

Social Influence: Social Influence refers to the extent to which consumers' intentions are shaped by the experiences, recommendations, and opinions of people around them. This concept is closely related to subjective norms in TRA/TPB, which emphasize the role of important others in shaping behavioral intentions [9]. In insurance decisions, consumers may rely on experiences and recommendations from family members, friends, colleagues, and other trusted individuals when evaluating whether to purchase a product.

Previous studies have demonstrated the importance of social influence in insurance purchase decisions. Subjective norms have been positively associated with life insurance purchase intention [16, 17], while studies in other insurance contexts have also shown that social influence from family, friends, colleagues, and other important referents can strengthen consumers'

purchase intentions [18]. This mechanism may be particularly relevant to ILPs because their combined protection and investment features can make product evaluation more complex, increasing consumers' reliance on the experiences and recommendations of trusted others. Therefore, positive social influence is expected to strengthen consumers' intention to participate in ILPs.

H3: Social Influence positively affects consumers' intention to participate in investment-linked insurance products.

Fund Performance Expectations: Fund Performance Expectations refer to consumers' expectations regarding the investment outcomes generated by the underlying funds of investment-linked insurance products. Unlike conventional protection-oriented life insurance, ILPs link part of the policy value to the performance of selected investment funds, making expected investment performance an important consideration in consumers' evaluation of these products.

Previous life insurance research has examined a broad range of determinants of purchase behavior, including individual, family, financial, behavioral, product-related, and market-related factors [7]. However, the role of consumers' expectations regarding the performance of underlying investment funds has received comparatively limited attention, as much of the existing literature focuses on life insurance in general rather than specifically on investment-linked products. This distinction is important because investment attributes constitute an integral component of ILPs. Recent research on unit-linked life insurance shows that consumers consider investment-related characteristics when choosing underlying funds, with risk-return profiles and ongoing costs playing an important role in their choices [4]. Favorable expectations regarding fund performance may therefore enhance the perceived attractiveness of ILPs and strengthen consumers' expectations of achieving long-term financial objectives through the investment component of the product. Accordingly, consumers with more favorable expectations regarding fund performance are expected to exhibit stronger participation intentions.

H4: Fund Performance Expectations positively affect consumers' intention to participate in investment-linked insurance products.

Risk-Return Tradeoff Perception: Risk-Return Tradeoff Perception refers to consumers' assessment of whether the expected returns from an investment are commensurate with the level of risk undertaken. The risk-return relationship is a fundamental consideration in financial decision-making, as the pursuit of higher expected returns is generally associated with greater investment risk [19]. Consumers may therefore evaluate an investment opportunity not only in terms of expected returns or risk separately, but also by considering the balance between the two.

This consideration is particularly relevant to ILPs, as policyholders bear the investment risk associated with the underlying funds and may choose among funds with different risk-return profiles. Previous research on unit-linked life insurance has shown that risk-return characteristics play an important role in consumers' evaluations and fund choices [4]. However, while risk-return characteristics have been examined as attributes of investment alternatives, relatively limited empirical attention has been paid to consumers' perceptions of the risk-return tradeoff as a distinct psychological antecedent of participation intention in ILPs. This distinction is important because consumers may not evaluate expected returns independently; rather, their willingness to participate may depend on whether they perceive the potential returns as adequate compensation for the risks undertaken. By conceptualizing risk-return tradeoff perception as a consumer-level cognitive evaluation within an extended TRA/TPB framework, this study seeks to capture an investment-related mechanism that has received comparatively limited attention in the broader life insurance literature. Accordingly, consumers who perceive a more favorable balance between potential returns and associated risks are expected to develop stronger intentions to participate in ILPs. Therefore, the following hypothesis is proposed:

H5: Risk-Return Tradeoff Perception positively affects consumers' intention to participate in investment-linked insurance products.

Product Flexibility: Product Flexibility refers to the extent to which ILPs allow policyholders to

adjust their policies and investment arrangements in response to changing financial circumstances and investment preferences. Compared with more traditional protection-oriented life insurance arrangements, ILPs may provide policyholders, subject to policy terms, with greater flexibility to switch among investment funds with different risk-return profiles, adjust regular premium contributions, and make additional investments through top-up premiums [4]. These features enable policyholders to adjust their investment strategies and financial commitments over the life of the policy in accordance with their changing needs and preferences.

Such flexibility is particularly relevant because ILPs are long-term financial products, while policyholders' financial capacity, investment objectives, and risk preferences may change over time. The ability to switch funds enables consumers to adjust their investment allocations as their risk preferences or market expectations change; flexibility in regular premiums allows them to adapt their financial commitments to changing circumstances; and top-up options provide opportunities to increase investment when additional financial resources become available. Although product-related attributes have been widely examined in the broader life insurance literature [7], comparatively limited attention has been paid to these flexibility features as a distinct consumer evaluation influencing participation intention in ILPs. Consumers who perceive greater flexibility in managing their premium contributions and investment allocations may therefore view ILPs as more adaptable to their changing financial needs, thereby strengthening their intention to participate. Accordingly:

H6: Product Flexibility positively affects consumers' intention to participate in investment-linked insurance products.

Participation Intention and Participation Decision: Participation Intention reflects consumers' motivational readiness and willingness to participate in an insurance product. According to TRA and TPB, behavioral intention is a proximal antecedent of behavior, such that stronger intentions generally increase the likelihood that the corresponding behavior will be performed [8, 9]. This intention-behavior relationship has also received empirical support in the life insurance context, where purchase intention has been

shown to contribute to subsequent purchasing behavior [20, 21].

However, much of the existing insurance literature has primarily focused on identifying the antecedents of purchase intention, with comparatively less attention paid to the subsequent transition from intention to actual participation decisions. This distinction is particularly important for investment-linked insurance products (ILPs), as forming a favorable intention does not necessarily imply that consumers will ultimately commit to participation. By explicitly examining the pathway from participation intention to participation decision, this study extends the conventional intention-focused approach and captures a more complete decision-making process, from consumers' evaluations of ILPs, through the formation of participation intention, to the subsequent participation decision. Accordingly, consumers with stronger participation intentions are expected to be more likely to decide to participate in ILPs. Therefore:

H7: Participation Intention positively affects consumers' decision to participate in investment-linked insurance products.

The proposed research model and hypothesized relationships are presented in Figure 1:

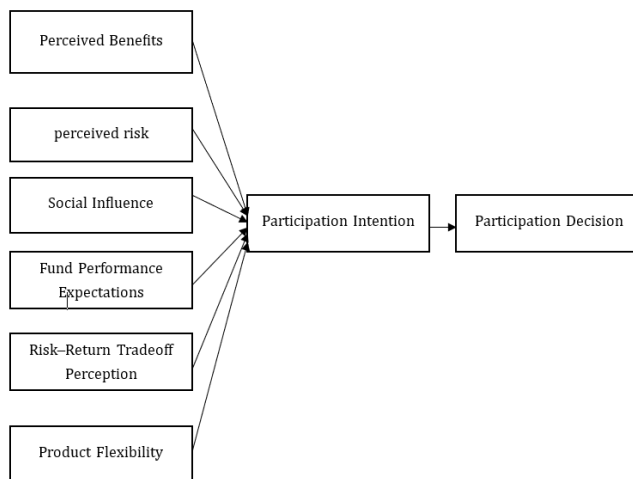


Figure 1. Proposed research model

3. RESEARCH METHODOLOGY

This study employed a quantitative research design using a structured questionnaire to examine the factors influencing consumers'

intentions and decisions to participate in ILPs. A total of 350 questionnaires were distributed, of which 344 valid responses were retained for the final analysis, corresponding to a valid response rate of 98.3%. The measurement items were adapted from relevant previous studies and refined to fit the specific context of ILPs. All constructs were measured using a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree").

The questionnaire measured eight constructs: perceived benefits (PB), perceived risk (PR), fund performance expectations (FPE), risk–return tradeoff perception (RRTP), product flexibility (PF), social influence (SI), participation intention (ITP), and participation decision (DTC). Partial least squares structural equation modeling (PLS-SEM) was employed to test the proposed research model. The analysis followed a two-stage procedure. First, the measurement model was assessed based on indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Second, the structural model was evaluated using collinearity diagnostics, path coefficients and their statistical significance, coefficient of determination (R^2), effect size (f^2), and predictive performance.

In 344 valid responses, predominantly female (85.2%) and concentrated in the economically active 25–44 age group (63.3%). The sample was also highly educated, with 98.2% holding at least a university degree. Monthly income was largely concentrated in the 500–1,500 USD range (74.1%), indicating a middle-income profile with sufficient disposable income to consider investment-linked insurance products. Notably, 77.0% of respondents reported fewer than three years of investment experience, suggesting that the sample primarily comprised relatively novice investors. Table 1 provides detailed distributions.

Collectively, these demographic characteristics closely align with the core target market for ILPs in emerging economies. This alignment enhances the relevance of the findings for understanding initial participation decisions in complex investment-linked insurance products, where attitudinal and informational factors tend to exert stronger influence than prior investment experience.

Category	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Gender				
Female	293	85.2	85.2	85.2
Male	51	14.8	14.8	100.0
Age				
Under 25	67	19.5	19.5	19.5
25-34	137	39.8	39.8	59.3
35-44	81	23.5	23.5	82.8
45-54	42	12.2	12.2	95.1
55 and above	17	4.9	4.9	100.0
Education Level				
College	6	1.7	1.7	1.7
University	256	74.4	74.4	76.2
Master's or above	82	23.8	23.8	100.0
Monthly Income (USD)				
Below 500	35	10.2	10.2	10.2
500 - 1,000	142	41.3	41.3	51.5
1,000 - 1,500	113	32.8	32.8	84.3
Above 1,500	54	15.7	15.7	100.0
Investment Experience				
Less than 1 year	94	27.3	27.3	27.3
1 - 3 years	171	49.7	49.7	77.0
3 - 5 years	71	20.6	20.6	97.7
More than 5 years	8	2.3	2.3	100.0

Source: Author's survey data

Table 1. Descriptive statistics of the full sample

4. RESULT

4.1. Measurement Model Assessment

The measurement model was assessed using four key criteria: indicator reliability (outer loadings), internal consistency reliability (composite reliability - CR), convergent validity (average variance extracted - AVE), and discriminant validity (HTMT ratio)[22].

As show in Table 2, all indicator loadings exceeded the recommended threshold of 0.70, ranging from

0.701 to 0.864, indicating satisfactory indicator reliability.

The internal consistency reliability of the constructs was confirmed, as Cronbach's alpha values ranged from 0.651 to 0.805 and composite reliability values ranged from 0.808 to 0.882, exceeding the minimum acceptable threshold of 0.70. Although the Cronbach's alpha value for Perceived Benefits (PB) was slightly below 0.70, its composite reliability exceeded the recommended level, suggesting acceptable reliability for exploratory research.

Convergent validity was also established, as all average variance extracted (AVE) values were

greater than the recommended threshold of 0.50, ranging from 0.530 to 0.714. These results indicate that the constructs adequately explained the variance of their respective indicators. Overall,

the measurement model demonstrated satisfactory reliability and convergent validity, supporting its suitability for subsequent structural model assessment.

Constructs	Item	Loadings	CA	CR	AVE	Convergent Validity (AVE > 0.5)
Perceived Benefits (PB)	PB1	0.813	0.651	0.808	0.585	Yes
	PB2	0.701				
	PB3	0.776				
Perceived Risk (PR)	PR1	0.804	0.805	0.873	0.633	Yes
	PR2	0.824				
	PR3	0.755				
	PR4	0.799				
Social Influence (SI)	SI1	0.850	0.799	0.882	0.714	Yes
	SI2	0.824				
	SI3	0.860				
Fund Performance Expectation (FPE)	FPE1	0.773	0.736	0.836	0.561	Yes
	FPE2	0.750				
	FPE3	0.771				
	FPE4	0.699				
Risk-Return Tradeoff Perception (RRTP)	RRTP1	0.715	0.774	0.858	0.603	Yes
	RRTP2	0.788				
	RRTP3	0.790				
	RRTP4	0.809				
Product Flexibility (PF)	PF1	0.805	0.771	0.868	0.686	Yes
	PF2	0.864				
	PF3	0.815				
Intention to Purchase (ITP)	ITP1	0.745	0.704	0.819	0.530	Yes
	ITP2	0.713				
	ITP3	0.730				
	ITP4	0.724				
Decision to Purchase(DTC)	DTC1	0.813	0.687	0.827	0.615	Yes
	DTC2	0.766				
	DTC3	0.773				

Source: Author's survey data

Table 2 . Measurement model assessment

To assess discriminant validity, this study employed the Heterotrait-Monotrait ratio of correlations (HTMT), as recommended by [22, 23], HTMT values should be below the conservative threshold of 0.85 or the more liberal threshold of 0.90 to establish adequate discriminant validity. As presented in Table 3, the

results indicate that the vast majority of HTMT values are well within acceptable limits, with most values ranging from 0.283 to 0.747, substantially below the conservative threshold of 0.85. However, two construct pairs warrant particular attention:

The HTMT value between ITP and DTC (HTMT = 0.866) slightly exceeds the conservative threshold of 0.85, approaching but remaining below the

more lenient threshold of 0.90. This suggests these two constructs exhibit a relatively high degree of conceptual overlap, which is theoretically justifiable given that intention to purchase and decision to commit are closely related behavioral constructs in consumer behavior research.

The HTMT value between ITP and SI (HTMT = 0.825) approaches the 0.85 threshold, although it

remains below the cutoff, indicating an acceptable level of discriminant validity.

These findings suggest that each latent construct captures a distinct conceptual domain and is empirically different from the other constructs in the model.

	PB	PR	SI	FPE	RRTP	PF	ITP	DTC
PB								
PR	0.443							
SI	0.396	0.540						
FPE	0.331	0.433	0.474					
RRTP	0.283	0.490	0.646	0.546				
PF	0.388	0.491	0.512	0.530	0.564			
ITP	0.657	0.710	0.825	0.685	0.747	0.705		
DTC	0.342	0.371	0.620	0.461	0.521	0.451	0.866	

Source: Author's survey data

Table 3. Heterotrait-monotrait ratio (HTMT)

4.2. Structural Model Assessment

The structural model was evaluated by examining collinearity issues, the significance and relevance of path coefficients, the coefficient of determination (R^2), effect size (f^2) and out-of-sample predictive power using PLSpredict. Bootstrapping with 5,000 resamples was employed to assess the significance of the hypothesized relationships [24].

The VIF values ranged from 1.000 to 1.586, indicating no collinearity concerns among the predictor constructs. The bootstrapping results

showed that all hypothesized relationships were positive and statistically significant, with p-values below 0.05 and 95% bias-corrected confidence intervals excluding zero. Among the predictors of participation intention (ITP), social influence (SI) had the strongest positive effect ($\beta = 0.281$), followed by perceived benefits (PB) ($\beta = 0.207$), perceived risk (PR) ($\beta = 0.185$), risk-return trade-off perception (RRTP) ($\beta = 0.173$), fund performance expectations (FPE) ($\beta = 0.152$), and product flexibility (PF) ($\beta = 0.142$). Furthermore, intention to participate had a strong positive and statistically significant effect on the decision to participate (DTC) ($\beta = 0.605$, $t = 14.524$, $p < 0.001$, 95% BC CI [0.528, 0.691]). Accordingly, all hypothesized relationships were supported (see Table 4).

Path	VIF	β	T statistics	P values	95% BC CI	f^2	Result
FPE -> ITP	1.374	0.152	3.342	0.001	[0.061, 0.237]	0.043	Supported
PB -> ITP	1.173	0.207	5.097	<0.001	[0.127, 0.286]	0.094	Supported
PF -> ITP	1.448	0.142	3.085	0.002	[0.053, 0.234]	0.036	Supported
PR -> ITP	1.383	0.185	4.053	<0.001	[0.094, 0.274]	0.064	Supported
RRTP -> ITP	1.586	0.173	3.548	<0.001	[0.077, 0.268]	0.049	Supported
SI -> ITP	1.564	0.281	6.571	<0.001	[0.197, 0.366]	0.131	Supported
ITP -> DTC	1.000	0.605	14.524	<0.001	[0.528, 0.691]	0.577	Supported

Source: Author's survey data

Table 4. Structural Model Results and Hypothesis Testing

The explanatory power of the structural model was assessed using the coefficient of determination (R^2). The results showed that the model explained 61.3% of the variance in participation intention (ITP) ($R^2 = 0.613$; adjusted $R^2 = 0.606$) and 36.6% of the variance in the decision to participate (DTC) ($R^2 = 0.366$; adjusted $R^2 = 0.364$), indicating meaningful explanatory power for both endogenous constructs.

The effect size (f^2) was further examined to assess the individual contribution of each predictor to the endogenous constructs. Following Cohen's (1988) guidelines, f^2 values of 0.02, 0.15, and 0.35 indicate small, medium, and large effects, respectively. Among the predictors of ITP, social influence (SI) exhibited the largest effect size ($f^2 = 0.131$), followed by perceived benefits (PB) ($f^2 = 0.094$), perceived risk (PR) ($f^2 = 0.064$), risk-return trade-off perception (RRTP) ($f^2 = 0.049$), fund performance expectations (FPE) ($f^2 = 0.043$), and product flexibility (PF) ($f^2 = 0.036$). Although their magnitudes varied, all six predictors exhibited small individual effect sizes on ITP. In contrast, participation intention (ITP) had a large effect on the participation decision (DTC) ($f^2 =$

0.577), highlighting the substantial explanatory contribution of participation intention to the actual participation decision (see Table 5).

Endogenous construct	R-square	R-square adjusted
DTC	0.366	0.364
ITP	0.613	0.606

Source: Author's survey data

Table 5. Coefficient of Determination

The predictive performance of the structural model was further assessed using PLSpredict. All Q^2 predict values were greater than zero, ranging from 0.125 to 0.330, indicating that the model exhibits predictive relevance for all indicators of the endogenous constructs. Furthermore, the PLS-SEM model yielded lower RMSE values than the linear model (LM) benchmark for all seven indicators. A similar pattern was observed for MAE, with PLS-SEM producing lower prediction errors than the LM benchmark across all indicators. These results provide evidence of the model's out-of-sample predictive capability (see Table 6).

	Q^2 predict	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE
ITP1	0.330	0.539	0.429	0.543	0.434
ITP2	0.328	0.523	0.412	0.542	0.426
ITP3	0.296	0.530	0.416	0.542	0.428
ITP4	0.285	0.580	0.453	0.588	0.467
DTC1	0.167	0.722	0.542	0.755	0.557
DTC2	0.141	0.757	0.585	0.774	0.609
DTC3	0.125	0.732	0.565	0.760	0.590

Source: Author's survey data

Table 6. PLSpredict Assessment

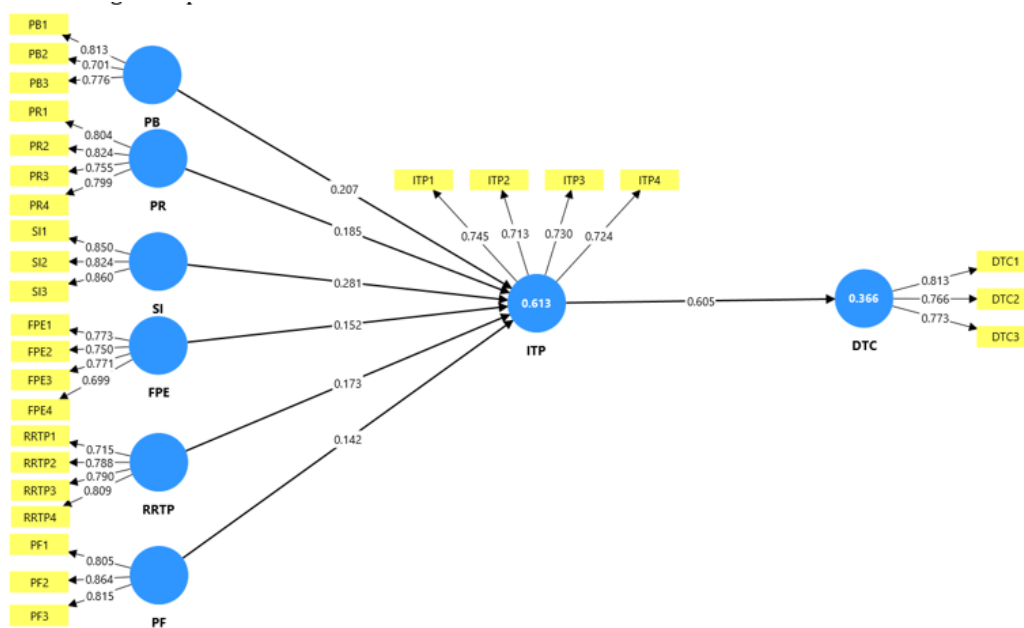


Figure 2 presents the result of the structural model.

Source: Author's survey data

Note: Social Influence (SI), Perceived Benefits (PB), Perceived Risk (PR), Fund Performance Expectations (FPE), Risk-Return Tradeoff Perception (RRTP), Product Flexibility (PF), participation intention (ITP), and participation decision (DTC).

Figure 2. Structural model result

5. DISCUSSION

The findings support all hypothesized relationships in the proposed model and reveal a two-stage process underlying consumers' decisions to participate in investment-linked insurance products. Fund performance expectations (FPE), perceived benefits (PB), product flexibility (PF), perceived risk (PR), risk-return tradeoff perception (RRTP), and social influence (SI) positively influence consumers' participation intention, which subsequently exerts a strong positive effect on participation decisions. Thus, these factors contribute to participation decisions primarily through the formation of behavioral intention, highlighting the central role of intention in translating consumers' protection-, investment-, product-, and social-related evaluations into subsequent participation decisions.

Among the determinants of participation intention, social influence (SI) emerged as the strongest predictor ($\beta = 0.281$). This finding suggests that consumers' intentions to participate in investment-linked insurance products are particularly sensitive to opinions, recommendations, and information obtained from individuals or groups that they consider important. This may be particularly relevant to investment-linked insurance because the product combines insurance protection with an investment component, making the purchase decision relatively complex and information-intensive. Under such conditions, consumers may rely more heavily on interpersonal information and social reference groups when forming their participation intentions. The positive effect of social influence on participation intention is consistent with previous research [25-27], which showed that consumers are more motivated to engage in a particular behavior when they perceive support from significant others. Managerial implication: Given the prominent role of social influence in shaping participation intention, insurers should leverage credible social interactions while avoiding pressure-based selling. Specifically, firms can facilitate experience sharing among existing and prospective customers, provide verifiable customer reviews, encourage family involvement in financial consultations, and offer access to independent expert advice. In addition, standardized social media communication and concise, verifiable pre-purchase information should be provided to ensure that recommendations and social

interactions are based on accurate and transparent information. These measures can strengthen positive social influence while reducing the risk of misinformation and unrealistic expectations regarding investment-linked insurance products.

Perceived benefits (PB) was the second strongest predictor of participation intention ($\beta = 0.207$). This result indicates that consumers are more likely to consider participating when they perceive investment-linked insurance as providing meaningful benefits. Compared with more traditional protection-oriented life insurance products, ILPs combine insurance protection with investment opportunities. Consumers' evaluations of the benefits generated by this combination may therefore play an important role in their willingness to participate. This finding is consistent with the view that perceived value and expected benefits constitute important determinants of consumer acceptance of financial and insurance products [18, 28, 29]. Managerial implication: Given the positive influence of perceived benefits on participation intention, insurers should enhance consumers' understanding of the overall value of investment-linked insurance products rather than focusing primarily on expected investment returns. This can be achieved by providing concise and transparent product information, personalized illustrations of benefits and cash flows under different investment scenarios, and clear comparisons between protection and investment components. Insurers should also adopt needs-based advisory approaches that align product features with customers' financial goals and risk profiles, while ensuring that customers adequately understand product benefits, costs, and risks before purchase. Continuous and transparent reporting on policy value after purchase can further reinforce customers' perceived benefits and support long-term policy retention.

Perceived risk (PR) had a positive effect on participation intention ($\beta = 0.185$), indicating that greater risk awareness may strengthen consumers' intention to participate in investment-linked insurance products. When individuals perceive potential risks as more serious and recognize the financial losses they may cause, they are more likely to seek insurance protection to mitigate such losses. Thus, risk perception may act as a motivational factor that increases the

perceived need for insurance and, consequently, strengthens participation intention. This finding is consistent with previous research [15, 18, 30], which suggests that heightened risk perception can increase individuals' motivation to seek insurance protection. Managerial implication: Given the positive influence of perceived risk on participation intention, insurers should enhance consumers' awareness of potential life risks and their financial consequences without relying on fear-based communication. Specifically, insurers can integrate personalized risk assessment, financial loss estimation, and protection-gap analysis into the advisory process, enabling customers to identify relevant risks and quantify their potential financial exposure. Risk communication should also be tailored to customers' life stages and positioned within the broader context of personal financial risk management. In addition, periodic reassessment of protection needs should be conducted as customers' family circumstances, income, financial obligations, and long-term goals change. These measures can help consumers recognize insurance as a proactive mechanism for mitigating the financial consequences of risk, thereby strengthening participation intention based on genuine protection needs.

Risk–return tradeoff perception (RRTP), fund performance expectations (FPE), and product flexibility (PF) all positively influence participation intention, although their f^2 effect sizes are relatively small. These findings suggest that consumers evaluate investment-linked insurance not only in terms of expected investment performance and product flexibility but also by considering whether expected returns are commensurate with the risks undertaken. While the roles of investment performance and product characteristics have been recognized in previous studies [31, 32], empirical evidence on the role of consumers' risk–return tradeoff perception in the context of investment-linked insurance remains limited. By demonstrating a significant positive relationship between RRTP and participation intention, this study extends the existing literature by highlighting risk–return evaluation as an additional cognitive mechanism underlying consumers' participation in investment-linked insurance products. Managerial implication: Although RRTP, FPE, and PF have relatively small effects on participation intention, insurers should not overlook these attributes, as

they represent distinctive features of investment-linked insurance products. Insurers should provide transparent information on fund performance, clearly communicate the relationship between potential returns and associated risks, and enhance product flexibility to accommodate customers' changing financial needs. In particular, risk and return should be communicated jointly rather than emphasizing investment returns alone, enabling customers to make more balanced assessments of investment opportunities. Strengthening these features may also help broaden consumers' traditional perception of life insurance as primarily a protection instrument toward recognizing investment-linked insurance as a product that integrates protection, long-term investment, and financial flexibility.

Participation intention exerts a strong positive effect on the decision to participate in investment-linked insurance products ($\beta = 0.605$). This finding is consistent with [33, 34] who demonstrated that purchase intention significantly influences actual life insurance buying behavior. However, while previous insurance studies have predominantly focused on the antecedents of purchase intention, relatively limited empirical attention has been given to the transition from intention to actual participation, particularly in the context of investment-linked insurance products. By empirically establishing this relationship, the present study extends the existing literature by demonstrating the critical role of participation intention in translating consumers' evaluations of investment-linked insurance into participation decisions. Managerial implication: Given the strong effect of participation intention on actual participation decisions, insurers should not focus solely on generating consumer interest but also facilitate the conversion of intention into participation. This can be achieved by simplifying the enrollment process, providing timely and personalized follow-up, addressing customers' remaining concerns before purchase, and ensuring easy access to transparent product information and advisory support. Importantly, such interventions should facilitate informed decision-making rather than exert sales pressure, thereby helping consumers translate genuine participation intentions into appropriate purchase decisions.

Taken together, the findings portray ILPs participation as a two-stage decision-making process in which consumers first form participation intentions through a combination of protection-related, investment-related, product-related, and social evaluations, and subsequently translate these intentions into participation decisions. Notably, the prominence of social influence, perceived benefits, and perceived risk suggests that consumers' intentions are not driven solely by the investment characteristics of ILPs. At the same time, the significant effects of FPE, RRTP, and PF demonstrate that investment-related and flexibility considerations remain relevant in distinguishing ILP participation from more conventional protection-oriented insurance decisions.

6. CONCLUSION

This study examined the factors influencing consumers' intentions and decisions to participate in ILPs within an extended TRA/TPB framework. The findings show that perceived benefits, perceived risk, fund performance expectations, risk-return tradeoff perception, product flexibility, and social influence all positively influence participation intention, which subsequently has a strong positive effect on participation decisions.

Overall, ILP participation reflects a multidimensional decision-making process involving protection, investment, product-related, and social considerations. Social influence emerged as the strongest determinant of participation intention, while the significant effects of fund performance expectations, risk-return tradeoff perception, and product flexibility highlight the distinctive investment-related characteristics of ILPs. In particular, risk-return tradeoff perception provides further insight into how consumers jointly evaluate potential returns and associated risks. By linking these determinants to participation intention and subsequently to participation decisions, the study provides a more comprehensive explanation of consumer decision-making in the ILP context.

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