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DETERMINANTS OF THE INTENTION TO PARTICIPATE IN FAMILY TAKAFUL IN A PRE-MARKET SETTING: A STRUCTURED REVIEW OF THE EVIDENCE AND A CONCEPTUAL FRAMEWORK FOR UZBEKISTAN

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Abstract: The paper asks what determines households' intention to participate in family takaful where no family takaful product yet exists, and how such an intention can be measured credibly. It combines a structured review of the empirical literature with the derivation of a conceptual framework and a survey protocol for Uzbekistan. Twenty-one peer-reviewed studies published between 2015 and 2026 and conducted in twelve named countries were located through bibliographic databases and prior reviews, verified against publisher records and coded in a concept matrix covering fifteen determinants. Attitude (significant in 11 of 11 studies), perceived behavioural control (6 of 6), compatibility (8 of 8), relative advantage (8 of 9), trust (5 of 5) and knowledge (4 of 4) are consistent across settings, whereas subjective norm (9 of 11), religiosity (8 of 11) and awareness (7 of 10) are context-dependent and perceived complexity is significant in only two of six studies. No study has been conducted in a jurisdiction where the product is absent, convenience samples predominate and only one study measures behaviour. The proposed framework combines the core of the theory of planned behaviour with innovation attributes, religiosity acting through attitude and trust, knowledge and perceived affordability, and specifies nine hypotheses and a set of moderators. The protocol prescribes an information stimulus, a stratified quota sample of at least 511 respondents (target about 700), PLS-SEM, mediation and multi-group analysis, and hypothetical-bias controls. The results give the regulator and prospective operators an evidence-based demand-side agenda ahead of the first product launches.

Keywords: family takaful; adoption intention; theory of planned behaviour; diffusion of innovation; religiosity; trust; structured review; PLS-SEM; Uzbekistan; Islamic insurance.

Аннотация: В статье рассматривается вопрос о том, что определяет намерение домохозяйств участвовать в семейном такафуле на рынке, где такой продукт ещё не предлагается, и как это намерение можно измерить достоверно. Структурированный обзор эмпирической литературы сочетается с построением концептуальной модели и протокола полевого исследования для Узбекистана. Двадцать одно рецензируемое исследование 2015–2026 годов, проведённое в двенадцати названных странах, отобрано по библиографическим базам и предыдущим обзорам, сверено с данными издателей и закодировано в концепт-матрице по пятнадцати детерминантам. Отношение (значимо в 11 из 11 исследований), воспринимаемый поведенческий контроль (6 из 6), совместимость (8 из 8), относительное преимущество (8 из 9), доверие (5 из 5) и знания (4 из 4) устойчивы во всех контекстах, тогда как субъективная норма (9 из 11), религиозность (8 из 11) и осведомлённость (7 из 10) зависят от контекста, а воспринимаемая сложность значима лишь в двух из шести исследований. Ни одно исследование не проведено в юрисдикции, где продукт отсутствует; преобладают выборки по доступности, и лишь одно исследование измеряет поведение. Предложенная модель объединяет ядро теории запланированного поведения с атрибутами инновации, религиозностью, действующей через отношение и доверие, знаниями и воспринимаемой доступностью взносов; сформулированы девять гипотез и набор модераторов. Протокол предусматривает информационный стимул, стратифицированную квотную выборку не менее 511 респондентов (целевой объём около 700), PLS-SEM, анализ медиации и многогрупповой анализ, а также контроль гипотетического смещения. Результаты дают регулятору и будущим операторам обоснованную повестку изучения спроса до выхода первых продуктов на рынок.

Ключевые слова: семейный такафул; намерение участия; теория запланированного поведения; диффузия инноваций; религиозность; доверие; структурированный обзор; PLS-SEM; Узбекистан; исламское страхование.

INTRODUCTION

Takaful is a fast-growing but still the smallest segment of Islamic finance: its assets grew 16.9% in 2024 yet account for only about 1.4% of global Islamic financial assets (IFSB, 2025), and ICD and LSEG estimate them at USD 136 billion (ICD and LSEG, 2025). Central Asia has barely entered the market. Islamic finance assets in the region amounted to about USD 699 million in 2023 (Eurasian Development Bank, Islamic Development Bank Institute and LSEG, 2025), and only four takaful operators were active across the region in 2024 (ICD and LSEG, 2025). Uzbekistan – a country of 38.2 million people (UzDaily, 2026), about 96% of whom are Muslim (UNDP, 2024) – adopted its first Islamic banking law in March 2026 (Republic of Uzbekistan, 2026), but takaful remains unregulated; the absence of takaful regulation is one of the binding legal constraints identified by Asadov and Turaboev (2023). Conventional life insurance is marginal: it generated only 4.4% of the UZS 13,463.5 billion of premiums written in 2025 (NAPP, 2026). At the same time, one insurer already offers a general takaful line on a wakalah model (Gross Insurance Company, 2025), and the regulator, the Islamic Development Bank and UNDP have begun to discuss a takaful framework (UNDP, 2024). Family takaful – the Islamic finance-compliant counterpart of life and savings insurance – is thus about to move from concept to product; in this paper a “pre-market setting” means a market in which family takaful is not yet offered.

Whether households will participate is an open question. The only nationwide evidence dates from 2020, when 28% of 4,937 surveyed individuals were aware of takaful and 74% of those aware were willing to use it (UNDP, 2020); Abdullaev, Juliana and Bekimbetova (2023), drawing on the same survey, report substantial religiously motivated demand for Islamic finance in general, and Asadov, Turaboev and Yildirim (2024) find latent demand for Islamic capital-market instruments despite low awareness. None of these studies models the behavioural determinants of participation, and none concerns family takaful specifically. In neighbouring Kazakhstan, expert interviews reported by Nagimova (2023) suggest that demand for Islamic finance is driven by affordability rather than religiosity – a warning against assuming that religious affiliation translates into uptake.

The international literature on takaful adoption intention has grown rapidly since 2016, chiefly in Malaysia and Pakistan, and it offers a menu of determinants drawn from the theory of planned behaviour (Ajzen, 1991), its decomposed variant (Taylor and Todd, 1995) and the diffusion of innovations (Rogers, 2003), extended by religiosity, awareness and trust. Two features of that literature limit its direct transfer to Uzbekistan. First, almost all studies assume that the product exists: respondents are users and non-users of an available product, awareness varies within the sample, and trialability and observability are meaningful. In a pre-market setting these conditions fail. Second, findings are context-dependent: subjective norm, awareness and religiosity are significant in some studies and not in others, and no review has yet quantified where and why. A study designed for Uzbekistan therefore needs both a synthesis of what is robust across contexts and a design that copes with the absence of the product.

This paper makes three contributions. First, it provides a structured review of 21 empirical studies of takaful and family takaful adoption intention published between 2015 and 2026 and conducted in twelve named countries, coded in a concept matrix that quantifies, for fifteen determinants, how often each was tested and how often it was significant in the theorised direction. Second, it derives a conceptual framework and nine hypotheses adapted to a pre-market, Muslim-majority, post-Soviet context. Third, it specifies a survey protocol – information stimulus, measurement, sampling, sample size and PLS-SEM analysis plan – with which the framework can be tested in Uzbekistan before the first product launches. The paper is thus a review-and-protocol study: its Results section reports the synthesis of the existing evidence and the resulting design; the primary survey it specifies is the next step, and no survey data are reported here.

The remainder of the paper is organised as follows. Review of literature on the subject sets out the theoretical background, prior reviews and the Uzbek context. Research methodology describes the review method, the rules used to derive the framework and the design of the survey protocol. Analysis and results reports the results: the profile of the evidence base, the evidence map, the gaps that matter for a pre-market setting, the framework and hypotheses, and the measurement, sampling and analysis plan. Analysis and results discusses what travels across contexts and what does not, the methodological implications for pre-market studies and the policy implications. Conclusion section concludes.

REVIEW OF LITERATURE ON THE SUBJECT

Studies of takaful adoption draw on three families of theory. The theory of planned behaviour holds that intention is the proximal determinant of behaviour and is itself determined by attitude towards the behaviour,

subjective norm and perceived behavioural control (Ajzen, 1991); the decomposed variant of Taylor and Todd (1995) breaks each of these into belief-based antecedents – attitude into relative advantage, compatibility and complexity, subjective norm into peer and superior influence, and perceived behavioural control into self-efficacy and facilitating conditions – and thereby imports the innovation attributes of Rogers (2003). The diffusion of innovations approach uses those attributes – relative advantage, compatibility, complexity, trialability and observability – directly as predictors of adoption. The unified theory of acceptance and use of technology (Venkatesh et al., 2003) is occasionally invoked but rarely applied to takaful. Islamic finance studies extend all three with religiosity, awareness or knowledge, and trust; the debate is whether religiosity acts directly on intention or indirectly through attitude and trust, and whether awareness matters once knowledge is controlled for.

Four reviews precede this one. Md Husin and Haron (2020) reviewed takaful-demand articles published between January 2009 and June 2019 and found that little had appeared in quality journals, that coverage expanded only from 2017 and that corporate demand was under-researched. Herawati, Beik and Sari (2024) compared Indonesia, Malaysia, Pakistan and Turkey and attributed Malaysia's lead to a stronger regulatory framework and greater financial literacy. Muhammad Zuki, Abdul Rahim and Md Noor (2025) synthesised 23 empirical studies of family takaful participation into five themes – behavioural predictors, religiosity, products and services, trust, reputation and image, and antecedents of intention – and nineteen sub-themes. El Boudaly, Marnouch and El Khamlichi (2025) identified the theory of reasoned action, the theory of planned behaviour, its decomposed variant, the diffusion of innovations and the theory of interpersonal behaviour as the dominant frameworks, with religiosity, awareness and trust as the most frequent extensions. These reviews are thematic and narrative. None quantifies how consistently each determinant is supported across countries and market stages, and none addresses the pre-market case in which the product itself is hypothetical.

Table 3 summarises the indicators that shape a demand-side study in Uzbekistan. Three of them matter most for design. First, awareness is near its floor: 28% in 2020 (UNDP, 2020), and no nationwide measurement has been taken since; family takaful has not been offered, and only one general takaful line has since been launched (Gross Insurance Company, 2025). Beliefs about family takaful therefore cannot be measured without first describing the product. Second, formal financial habits are shallow: about 60% of adults hold an account, fewer than one in ten saved formally in the past year, while about seven in ten own a smartphone (Klapper et al., 2025). Affordability and access are likely to matter as much as belief. Third, the institutions on which trust would rest – a takaful law, a regulator with takaful competence, Islamic finance supervisory boards – do not yet exist, although the Islamic banking law of 2026 provides for an Islamic Finance Council at the Central Bank (Republic of Uzbekistan, 2026). Trust must therefore be measured with respect to described rather than experienced institutions. Ishak, Aliyu and Musthafa (2025) show, for an established market, that social capital and financial inclusion raise trust in takaful, which suggests that mahalla-level social capital may be an asset in Uzbekistan; and Shari et al. (2026) document consumers' preferences among microtakaful distribution channels, a question that is open for a market where digital channels are widespread but insurance agents are not.

The gap is twofold. Substantively, no study has examined the intention to participate in family takaful in a jurisdiction where the product is not yet offered, in Central Asia or in a post-Soviet Muslim-majority society. Methodologically, the literature has not been synthesised in a way that separates determinants that travel across contexts from those that do not, and it offers no design template for measuring intention towards a hypothetical product. This paper addresses both.

RESEARCH METHODOLOGY

The review follows the principles of transparency and replicability set out by Tranfield, Denyer and Smart (2003) and uses the concept-centric matrix of Webster and Watson (2002). Studies were identified in three steps: (i) searches of Crossref and OpenAlex metadata, Emerald Insight, Taylor & Francis Online, SpringerLink, DOAJ, IDEAS/RePEc and Google Scholar for the terms “takaful” or “Islamic insurance” combined with “intention”, “adoption”, “acceptance”, “participation” or “purchase”, for January 2015 to July 2026; (ii) backward snowballing from the four prior reviews; and (iii) forward snowballing from the most-cited included studies. Inclusion required a peer-reviewed article in English reporting primary survey data on the intention, acceptance, adoption or purchase of takaful or family takaful (or of Islamic relative to conventional life insurance) by individuals, households or micro-enterprise decision-makers, analysed with inferential statistics. Conceptual

papers – for example the model paper of Md Husin and Ab Rahman (2016a) – firm-level performance studies, macro-level demand studies, theses and working papers were excluded. One mixed-methods study without a path model (Wofuma et al., 2026) was retained for its evidence on a Muslim-minority market but is not counted in the quantitative synthesis. The bibliographic details of every included study – authors, title, journal, volume, issue, pages, DOI and issue year – were verified against Crossref, OpenAlex or publisher records; where a study is published online before its issue, the issue year is used.

Each study was coded for country and market setting, sample size and analytical method, theoretical base, dependent variable and, for fifteen determinants, whether the determinant was tested and whether it was found significant in the theorised direction (+ or – as hypothesised), not significant (0), or not tested. Indirect effects that were significant (for example knowledge acting on attitude) are counted as support. The support ratio is the number of studies finding a significant effect in the theorised direction divided by the number of studies testing the determinant.

Three rules governed the framework. A determinant was retained as a hypothesised path if it was tested in at least five studies with a support ratio of at least 0.75, or if the Uzbek context made it theoretically necessary despite a thin evidence base (knowledge and affordability). Determinants with context-dependent evidence – subjective norm, awareness, religiosity – or unstable evidence – complexity – were not dropped but specified as testable hypotheses, and where the literature disagrees about the mechanism, competing paths were included (religiosity acting directly on intention and indirectly through attitude and trust). Constructs were then adapted to Uzbek institutions: subjective norm refers to family, the mahalla and religious leaders; trust is disaggregated into trust in the operator, the regulator and the Islamic finance governance body; awareness, which is near its floor, is folded into a knowledge construct that includes objective items.

The protocol was designed against three requirements: that the product be described before beliefs are measured, that the sample allow both a pooled model and multi-group comparisons, and that the analysis follow current reporting standards for variance-based structural equation modelling (Hair et al., 2019). The minimum sample size was derived with the inverse square root method of Kock and Hadaya (2018): for a minimum path coefficient of 0.11 at the 5% level with 80% power, $n \geq (2.486/0.11)^2 \approx 511$; for two-group comparisons at a minimum path of 0.15, each group requires $n \geq (2.486/0.15)^2 \approx 275$. Measurement quality is to be assessed with the criteria of Fornell and Larcker (1981), Henseler, Ringle and Sarstedt (2015) and Hair et al. (2019); measurement invariance across groups with the MICOM procedure (Henseler, Ringle and Sarstedt, 2016), predictive relevance with PLSpredict (Shmueli et al., 2019) and policy priorities with the importance–performance map (Ringle and Sarstedt, 2016); common method bias with the procedural remedies of Podsakoff et al. (2003) and the full-collinearity test of Kock (2015); and hypothetical bias – the tendency to overstate intentions towards a product that cannot yet be bought – with a cheap-talk script (Cummings and Taylor, 1999) and behavioural proxies, given the well-documented intention–behaviour gap (Sheeran, 2002).

ANALYSIS AND RESULTS

Table 1 lists the 21 included studies. They cover twelve named countries – Malaysia (three studies), Pakistan (five), Indonesia (two), Somalia (two), and one each in Yemen, the United Arab Emirates, Nigeria, Bangladesh, Sri Lanka, South Africa, Morocco and Uganda – plus one study that does not name its country. Thirteen studies come from long-established takaful markets (Malaysia, Pakistan, the UAE, Indonesia, Bangladesh, Sri Lanka) and eight from small, nascent or Muslim-minority markets (Yemen, Nigeria, South Africa, Morocco, Somalia, Uganda and the unnamed country). Seven studies concern family takaful specifically, one microtakaful, one health takaful, one takaful for micro, small and medium-sized enterprises, and the remainder takaful or Islamic insurance in general. Sample sizes range from 123 to 432 with a median of 303 (nineteen studies reporting; Ali et al. (2019) report questionnaires distributed). Structural equation modelling – partial least squares in nine studies, covariance-based or unspecified in six – dominates, with regression in three and the technique not reported in two; theory of planned behaviour models, including the decomposed variant, are used in eleven studies and diffusion of innovations models in seven, two studies combining the two, and eclectic models in four. Nearly all studies use convenience or purposive samples, all are cross-sectional and single-country, and only Maduku and Mbeya (2024) measure behaviour as well as intention. Publication has accelerated: eight of the 21 studies appeared in 2024–2026 (Table 1).

Table 1. Empirical studies of takaful and family takaful adoption intention, 2015–2026: study matrix¹

Study	Country (setting)	Sample; method	Theory; dependent variable	Significant determinants (direction)	Non-significant
Echchabi and Ayedh (2015)	Yemen (small market)	123; SEM	IDT; intention to adopt takaful	Compatibility (+)	Relative advantage, social influence, awareness, uncertainty
Souiden and Jabeur (2015)	Muslim-majority country, unnamed	207; ANOVA, SEM	Attitude–intention model; purchase intention, conventional vs Islamic life insurance	Islamic beliefs → attitude to Islamic insurance (+), to conventional insurance (–); attitude → intention (+); beliefs moderate	—
Md Husin and Ab Rahman (2016b)	Malaysia (mature)	384; PLS-SEM	DTPB; intention to participate in family takaful	Attitude (+), PBC (+), knowledge (+), exposure (+)	Subjective norm, awareness, religiosity
Md Husin, Ismail and Ab Rahman (2016)	Malaysia (mature)	384; SEM	TPB; family takaful purchase intention	Mass media and word of mouth → subjective norm (+); subjective norm → intention (+)	—
Ali et al. (2019)	Pakistan (mature)	365 questionnaires; SEM	DOI + awareness + religiosity; takaful acceptance	Relative advantage, compatibility, trialability, observability, religiosity, awareness (+); complexity (–)	—
Aziz et al. (2019)	Pakistan (mature)	224; PLS-SEM	Attitude model + religiosity + trust; family takaful purchase intention	Knowledge and perceived usefulness → attitude (+); attitude → intention (+); trust fully mediates religiosity → attitude	Religiosity → attitude (direct)
Kazaure (2019)	Nigeria, micro-enterprises	n.r.; survey	TPB + awareness as moderator; health-takaful acceptance intention	Attitude, social influence, PBC (+); awareness moderates social influence and PBC	Awareness (direct)
Hassan and Abbas (2020)	Pakistan (mature)	345; regression	TPB/DOI-type; intention to adopt takaful	Relative advantage, compatibility, social influence, awareness, religiosity (+)	—
Bhatti and Md Husin (2020)	UAE (mature)	175; regression	TPB; intention to participate in family takaful	Attitude, subjective norm, PBC (+)	—
Raza et al. (2020)	Pakistan (mature)	305; PLS-SEM	Extended TPB; Islamic insurance adoption intention	Attitude, subjective norm, PBC, compatibility, relative advantage, awareness (+)	Perceived risk
Shaikh et al. (2020)	Pakistan (mature)	282 non-users; n.r.	Extended DOI; family takaful adoption	Relative advantage, compatibility, awareness, religiosity (+)	Complexity; gender, age, education (moderation)
Sultana and Moonmoon (2022)	Bangladesh (mature)	392; PLS-SEM	Eclectic; takaful purchase intention	Compatibility, religiosity, awareness, trust and reliability (+)	Complexity
Rapi and Kassim (2023)	Indonesia, low-income households (mature; microtakaful)	303; regression	Extended TPB without PBC; microtakaful acceptance	Knowledge (0.330), subjective norm (0.329), attitude (0.208), price (0.134) (+); $R^2 = 0.590$	—

¹ Source: author's compilation. n.r. – not reported; PBC – perceived behavioural control; DOI – diffusion of innovations; IDT – innovation diffusion theory; TPB (DTPB) – (decomposed) theory of planned behaviour; standardised coefficients in parentheses where reported. Country for Aziz et al. (2019) as reported in citing studies; the abstract does not name the country. Market setting classified by the author.

Study	Country (setting)	Sample; method	Theory; dependent variable	Significant determinants (direction)	Non-significant
Maduku and Mbeya (2024)	South Africa (Muslim minority)	235; CB-SEM	TPB + religious obligation; family takaful intention and behaviour	Attitude, subjective norm → intention (+); intention, PBC → behaviour (+); gender moderates	Religious obligation
Chetioui et al. (2024)	Morocco (takaful launched 2022)	204; PLS-SEM	TPB + DOI + religiosity; takaful adoption intention	Relative advantage, religiosity, attitude (+); complexity (-)	n.r.
Mukhtar and Barre (2024)	Somalia (nascent)	427; PLS-SEM	Modified DOI; takaful adoption	Relative advantage, compatibility, awareness, culture, trust (+)	Complexity
Rifas et al. (2024)	Sri Lanka, MSMEs (mature)	432; PLS-SEM	TPB; takaful participation intention	Attitude, subjective norm, PBC (+)	—
Ahnaf and Mardian (2025)	Indonesia, Greater Jakarta (mature)	149; SEM	Eclectic; takaful purchase intention	Islamic financial literacy, religiosity, social media (+)	—
Mukhtar and Jallow (2025)	Somalia (nascent)	414; PLS-SEM	Extended DOI; takaful adoption intention	Relative advantage, compatibility, trialability, observability, awareness, culture, religiosity, trust (+)	Complexity
Muhammad Zuki, Ishak and Hassan (2026)	Malaysia, academics (mature)	272; PLS-SEM	TPB + institutional trust; family takaful participation intention	Attitude (0.380), PBC (0.342), subjective norm (0.162) (+); institutional trust partially mediates; $R^2 = 0.577$	—
Wofuma et al. (2026)	Uganda (Muslim minority)	n.r.; mixed methods, no path model	Exploratory; uptake of takaful	Informational, individual-personality and demographic factors (qualitative and descriptive)	n.a.

Table 2 and Figure 1 summarise the coding. Six determinants are consistent across settings. Attitude is significant in all eleven studies that test it, perceived behavioural control in all six, compatibility in all eight, trust in all five, knowledge in all four and relative advantage in eight of nine, the only exception being the earliest study (Echchabi and Ayedh, 2015). Where coefficients are reported, attitude and perceived behavioural control are the largest predictors – 0.380 and 0.342 in Muhammad Zuki, Ishak and Hassan (2026), with subjective norm at 0.162 and R^2 of 0.577 – whereas among low-income Indonesian households knowledge (0.330) and subjective norm (0.329) exceed attitude (0.208) and price (0.134), with R^2 of 0.590 (Rapi and Kassim, 2023).

Three determinants are context-dependent. Subjective norm is significant in nine of eleven studies; the two null results come from two of the three earliest studies, in Yemen (Echchabi and Ayedh, 2015) and Malaysia (Md Husin and Ab Rahman, 2016b), and every study since 2019 – in Pakistan, Nigeria, the UAE, Indonesia, South Africa, Sri Lanka and Malaysia – finds it significant. Awareness is significant in seven of ten; it fails as a direct predictor in Yemen, in Malaysia in 2016 and among Nigerian micro-enterprises, where it instead moderates the effects of social influence and perceived behavioural control (Kazaure, 2019), but is significant in the four Pakistani studies, in Bangladesh and in both Somali studies. Religiosity has a significant effect – direct, or on attitude – in eight of eleven studies; it is not significant in Malaysia (Md Husin and Ab Rahman, 2016b), its effect on attitude is fully mediated by trust in the Pakistani study of Aziz et al. (2019), and religious obligation does not predict intention or behaviour among South African Muslims (Maduku and Mbeya, 2024). Perceived complexity is the weakest of the innovation attributes: it is negative and significant in only two of six studies (Ali et al., 2019; Chetioui et al., 2024) and not significant in Pakistan, Bangladesh and Somalia (Shaikh et al., 2020; Sultana and Moonmoon, 2022; Mukhtar and Barre, 2024; Mukhtar and Jallow, 2025). Perceived risk or uncertainty was not significant in either study that tested it (Echchabi and Ayedh, 2015; Raza et al., 2020). Price or affordability, culture, trialability and observability, and media exposure were tested in only one to three studies each, always with significant results.

Two patterns stand out. Null results for subjective norm and awareness cluster in the earliest studies (2015–2016), and the recent studies in nascent or Muslim-minority markets – Morocco (Chetioui et al., 2024), Somalia (Mukhtar and Barre, 2024; Mukhtar and Jallow, 2025) and South Africa (Maduku and Mbeya, 2024) – find relative advantage, compatibility, trust and social influence significant, although complexity is

not significant in either Somali study and the number of such studies is small. And the determinants that a regulator or operator can act upon – knowledge, trust, compatibility, complexity and affordability – are precisely those with the strongest or thinnest evidence: knowledge and trust are significant in every study that tests them but are rarely tested, affordability has been tested once, and complexity is unstable (Table 2; Figure 1).

Table 2. Evidence map: frequency of testing and support for fifteen determinants in 20 quantitative studies, 2015–2026²

Determinant	Studies testing	Significant in the theorised direction	Support ratio	Null or contrary results (study, setting)	Role in the proposed framework
Attitude towards (family) takaful	11	11	1.00	—	H1: direct predictor of intention
Subjective norm / social influence	11	9	0.82	Yemen (2015); Malaysia (2016b)	H2: direct predictor; measured with reference to family, mahalla and religious leaders
Religiosity / Islamic beliefs	11	8	0.73	Malaysia (2016b); Pakistan (2019, direct effect on attitude, fully mediated by trust); South Africa (2024, religious obligation)	H6a via attitude; H7a via trust; H6b direct effect tested as a competing path
Awareness of takaful	10	7	0.70	Yemen (2015); Malaysia (2016b); Nigeria (2019, direct effect)	Merged with knowledge (H8): awareness is near its floor in a pre-market setting
Relative advantage / usefulness	9	8	0.89	Yemen (2015)	H4: antecedent of attitude
Compatibility	8	8	1.00	—	H4: antecedent of attitude
Perceived behavioural control	6	6	1.00	—	H3: direct predictor of intention
Perceived complexity	6	2	0.33	Not significant in Pakistan (2020), Bangladesh (2022), Somalia (2024, 2025); negative in Pakistan (2019) and Morocco (2024)	H5: negative antecedent of attitude, retained because contract terms are unfamiliar in a pre-market setting
Trust (institutional, reliability)	5	5	1.00	—	H7b: direct predictor; mediator of religiosity
Knowledge / Islamic financial literacy	4	4	1.00	—	H8: direct predictor
Media exposure / word of mouth / social media	3	3	1.00	—	Channel questions and covariates (not hypothesised)
Triability and observability	2	2	1.00	—	Excluded: no product exists to try or observe
Culture	2	2	1.00	—	Captured through subjective-norm items (mahalla, family)
Perceived risk / uncertainty	2	0	0.00	Yemen (2015); Pakistan (2020)	Excluded
Price / affordability	1	1	1.00	—	H9: direct predictor, given low formal saving and middle-income status

² Source: author's coding of the studies in Table 1 (the mixed-methods study of Wofuma et al. (2026) is excluded from the counts). Support ratio = studies significant in the theorised direction / studies testing. Indirect effects that are significant are counted as support; year labels refer to the studies in Table 1.

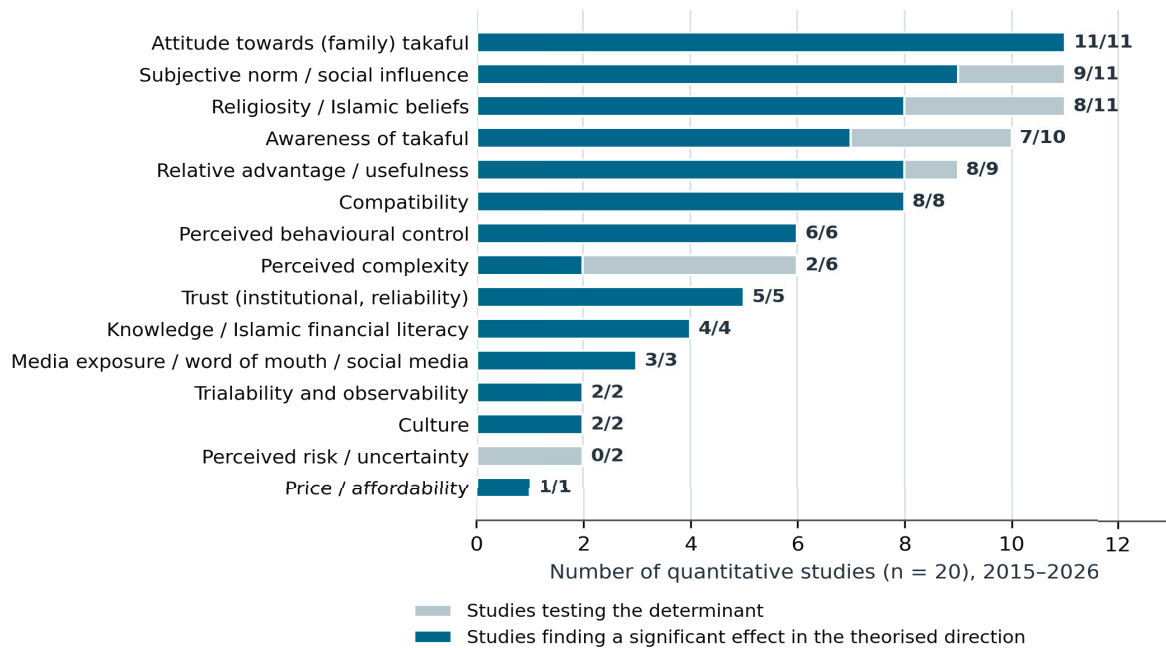


Figure 1. Evidence map: number of quantitative studies testing each determinant and number finding a significant effect in the theorised direction, 2015–2026³

Six gaps follow from Tables 1 and 2. First, no study has been conducted where the product is absent: the closest are Morocco two years after licensing (Chetioui et al., 2024), Somalia's nascent market (Mukhtar and Barre, 2024; Mukhtar and Jallow, 2025) and Uganda (Wofuma et al., 2026). Second, awareness in existing studies varies within the sample because a product exists; in Uzbekistan it is near its floor, so awareness has little variance to explain and knowledge must be induced and then measured. Third, trialability and observability – significant wherever tested – are meaningless before launch. Fourth, trust has been measured as trust in existing operators or institutions; in a pre-market setting it must be measured with respect to described institutions, and disaggregated, because the regulator, the operator and the Islamic finance governance body are different objects. Fifth, price has been tested once (Rapi and Kassim, 2023), although affordability is central for a middle-income population with shallow saving habits and is, according to expert interviews in the neighbouring Kazakh market, the primary driver of demand (Nagimova, 2023). Sixth, the literature relies on convenience samples and stated intention; only one study measures behaviour (Maduku and Mbeya, 2024), and none addresses the hypothetical bias that arises when respondents evaluate a product they cannot buy. Table 3 sets these gaps against the Uzbek indicators that shape the design (Table 3).

Table 3. Uzbekistan: contextual indicators and their implications for a demand-side study⁴

Indicator	Value	Source	Implication for the demand-side study
Population, 1 January 2026	38.2 million	UzDaily (2026)	Large potential market; regional stratification needed
Share of Muslims in the population	about 96%	UNDP (2024)	Religiosity varies in intensity rather than affiliation; measure religious commitment, not affiliation
Gross insurance premiums, 2025	UZS 13,463.5 billion (about USD 1.07 billion); life insurance 4.4% of premiums	NAPP (2026)	Conventional life insurance is marginal; few respondents have life-insurance experience
Adults with an account at a financial institution or mobile-money provider	about 60%	Klapper et al. (2025)	Access constraints enter perceived behavioural control

³ Source: author's coding of the studies in Table 1.

⁴ Source: author's compilation from UzDaily (2026), UNDP (2020, 2024), NAPP (2026), Klapper et al. (2025), Republic of Uzbekistan (2026), Asadov and Turaboev (2023) and Gross Insurance Company (2025). USD equivalent at the approximate 2025 average rate of UZS 12,600 per USD.

Indicator	Value	Source	Implication for the demand-side study
Adults who saved formally in the past year	below 10%	Klapper et al. (2025)	Affordability and saving habits matter; test price / affordability (H9)
Adults owning a smartphone	about seven in ten	Klapper et al. (2025)	Digital distribution is feasible; channel preferences to be measured
Awareness of takaful (survey of 4,937 individuals, 2020)	28% aware; 74% of those aware willing to use takaful	UNDP (2020)	Awareness near its floor: an information stimulus is required before measuring beliefs; knowledge as a continuous construct
Legal status of Islamic finance	Islamic banking law adopted 27 March 2026 (in force 29 June 2026); no takaful legislation	Republic of Uzbekistan (2026); Asadov and Turaboev (2023)	Trust in regulator and Islamic finance governance is hypothetical; measured with respect to described institutions
Market signals	One insurer offers a general takaful line on a wakalah model; no family takaful product; UNDP-supported round table on takaful, December 2024	Gross Insurance Company (2025); UNDP (2024)	Survey should precede the first family takaful launches to obtain a pre-market baseline

Figure 2 presents the framework and Table 4 the hypotheses with their evidence base and rationale. The core is the theory of planned behaviour: attitude (H1), subjective norm (H2) and perceived behavioural control (H3) predict the intention to participate in family takaful. Following the decomposed variant (Taylor and Todd, 1995), relative advantage and compatibility (H4) – supported in eight of nine and eight of eight studies, mostly as direct predictors of adoption – and perceived complexity (H5) are here modelled as antecedents of attitude rather than as direct predictors, so that the unstable complexity effect can be tested without loading the structural model. Religiosity enters in three ways: through attitude (H6a), through trust (H7a) and, as a competing direct path whose evidence is mixed, directly on intention (H6b); trust in the operator, the regulator and the Islamic finance governance body predicts intention (H7b) and mediates religiosity, as in Aziz et al. (2019); Muhammad Zuki, Ishak and Hassan (2026) show that institutional trust also mediates the core TPB paths. Knowledge (H8) and perceived affordability (H9) are direct predictors, the former because it is the construct that discriminates among respondents when awareness is uniformly low, the latter because of Uzbekistan's income level and saving habits and the Kazakh evidence on affordability. Gender, age, income, urban or rural residence and prior use of conventional insurance are treated as moderators to be examined by multi-group analysis after measurement invariance has been established, following the mixed evidence of Maduku and Mbeya (2024) and Shaikh et al. (2020). Media exposure and channel preferences are measured as covariates and design inputs rather than hypothesised, and trialability, observability and perceived risk are excluded for the reasons given in Table 2 (Figure 2; Table 4).

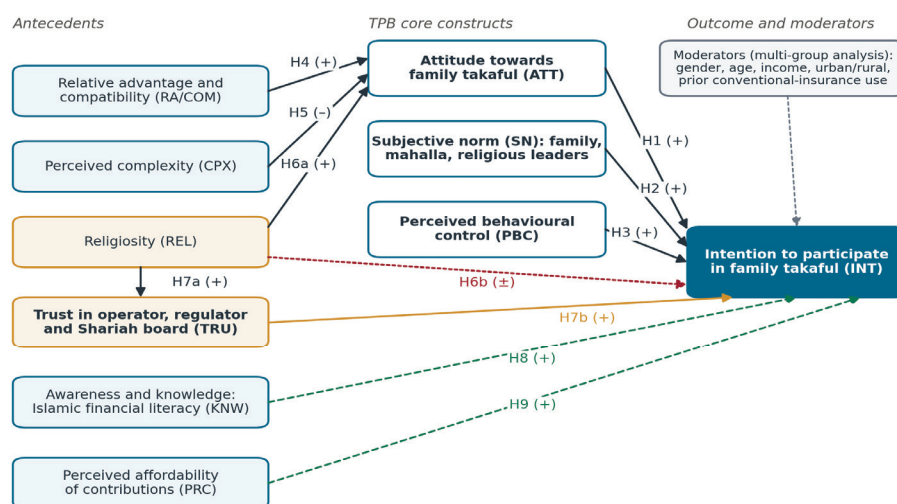


Figure 2. Conceptual framework of the intention to participate in family takaful in a pre-market setting⁵

5 Source: author. Solid arrows: hypothesised structural paths (H1–H5, H6a, H7a, H7b); dashed: paths added for the pre-market context on thin but consistent evidence (H8, H9); dotted red: competing direct path with mixed evidence (H6b); grey dotted: moderation.

Table 4. Hypotheses, evidence base and rationale for Uzbekistan⁶

No.	Hypothesised path	Evidence from the review	Rationale for Uzbekistan
H1	Attitude → intention (+)	11 of 11 studies; largest coefficient in Muhammad Zuki, Ishak and Hassan (2026) ($\beta = 0.380$)	Core TPB path; attitude measured after an information stimulus
H2	Subjective norm → intention (+)	9 of 11; null results only in two of the three earliest studies (Yemen 2015, Malaysia 2016b)	Collectivist decision-making; mahalla and extended family influence household finance; religious leaders as referents
H3	Perceived behavioural control → intention (+)	6 of 6	Access, documentation and digital channels are uncertain in a pre-market setting
H4	Relative advantage and compatibility → attitude (+)	Relative advantage 8 of 9; compatibility 8 of 8	Compatibility with religious values and with existing practices (informal rotating savings, family support); advantage relative to conventional life insurance
H5	Perceived complexity → attitude (-)	2 of 6 significant (negative)	Weak but retained: contribution, tabarru', surplus and fee terms are unfamiliar to Uzbek households
H6a / H6b	Religiosity → attitude (+); religiosity → intention (+, competing direct path)	Significant (direct, or on attitude) in 8 of 11; effect on attitude fully mediated by trust in Aziz et al. (2019)	Religiously motivated demand reported for Uzbekistan (Abdullaev, Juliana and Bekimbetova, 2023) versus affordability-driven demand in Kazakhstan according to expert interviews (Nagimova, 2023): the two paths are tested against each other
H7a / H7b	Religiosity → trust (+); trust → intention (+)	Trust 5 of 5; trust mediates religiosity in Aziz et al. (2019); institutional trust mediates the TPB paths in Muhammad Zuki, Ishak and Hassan (2026)	No Islamic finance governance body or takaful regulation yet exists; trust in operator, regulator and Islamic finance governance body measured separately
H8	Knowledge / Islamic financial literacy → intention (+)	Knowledge 4 of 4; awareness 7 of 10	Awareness at 28% in 2020; knowledge is the discriminating construct
H9	Perceived affordability → intention (+)	Rapi and Kassim (2023): $\beta = 0.134$	Formal saving below 10% of adults; contribution levels anchored to household income
M	Moderators: gender, age, income, urban/rural, prior conventional-insurance use	Gender moderates in Maduku and Mbeya (2024); no moderation by gender, age or education in Shaikh et al. (2020)	Multi-group analysis after measurement-invariance testing

Table 5 sets out the measurement plan. All constructs are reflective and measured on seven-point Likert scales with items adapted from the validated instruments of the reviewed studies; knowledge combines self-assessed items with five objective true-or-false statements on tabarru', surplus and the operator's fee, so that respondents' actual understanding after the information stimulus can be separated from their confidence. Trust is measured with two items each for the operator, the regulator and the Islamic finance governance body, allowing the three to be modelled separately or as a higher-order construct. Perceived affordability anchors the contribution to a share of average monthly income rather than to an absolute amount, so that the item is meaningful across income groups. Table 6 sets out the sampling and analysis plan. The stratified quota design by region, urban or rural residence, gender and age band, with face-to-face interviews organised through mahalla committees and an online questionnaire, is a deliberate departure from the convenience samples of the literature; the minimum of 511 valid responses and the target of about 700 follow from Research methodology. The information stimulus – a neutral 150-word description of family takaful followed by two comprehension checks – is the element without which a pre-market study cannot be interpreted, and the cheap-talk script and behavioural proxies address hypothetical bias. The analysis follows the reporting standards for PLS-SEM, including measurement-invariance testing before multi-group comparisons and an importance–performance map to translate coefficients into priorities for the regulator and operators (Table 5, 6).

⁶ Source: author, based on Tables 1–3.

Table 5. Measurement plan: constructs, items and sources⁷

Construct	Items	Example item (to be adapted and translated)	Adapted from
Intention (INT)	3	I intend to participate in a family takaful plan within two years of its becoming available.	Ajzen (1991); Md Husin and Ab Rahman (2016b)
Attitude (ATT)	4	Participating in family takaful would be a wise decision for my family.	Ajzen (1991); Bhatti and Md Husin (2020)
Subjective norm (SN)	4	People who are important to me – my family, my mahalla, religious leaders I respect – would approve of my participating in family takaful.	Md Husin, Ismail and Ab Rahman (2016); Muhammad Zuki, Ishak and Hassan (2026)
Perceived behavioural control (PBC)	4	If family takaful were offered, I would have the means, information and access needed to participate.	Ajzen (1991); Rifas et al. (2024)
Knowledge / Islamic financial literacy (KNW)	5 + 5 objective items	I understand how contributions to a takaful fund differ from insurance premiums. (Objective items: true/false statements on tabarru', surplus and the operator's fee.)	Md Husin and Ab Rahman (2016b); Ahnaf and Mardian (2025)
Religiosity (REL)	5	I try to follow the requirements of Islam in my financial decisions.	Souiden and Jabeur (2015); Aziz et al. (2019)
Trust (TRU): operator, regulator, Islamic finance governance body	6 (2 per object)	I would trust a takaful operator whose products are approved by an independent Islamic finance governance body.	Aziz et al. (2019); Sultana and Moonmoon (2022); Muhammad Zuki, Ishak and Hassan (2026)
Relative advantage (RA)	4	Family takaful would protect my family better than the means I currently use (savings, relatives' support).	Rogers (2003); Ali et al. (2019)
Compatibility (COM)	4	Family takaful is compatible with my religious values and with the way my family saves.	Rogers (2003); Mukhtar and Barre (2024)
Perceived complexity (CPX)	3	The terms of a family takaful contract (contribution, tabarru', surplus) seem difficult to understand.	Rogers (2003); Chetioui et al. (2024)
Perceived affordability (PRC)	3	I could afford a regular family takaful contribution of about [amount anchored to 1–3% of average monthly income].	Rapi and Kassim (2023)
Moderators and covariates	single items	Gender, age, income band, urban/rural, region, education, prior conventional-insurance use, preferred channel (bank, agent, mobile application, mahalla), survey mode.	—

Table 6. Sampling, fieldwork and analysis plan for the Uzbek survey⁸

Design element	Specification	Justification
Target population	Residents of Uzbekistan aged 18–60 who take part in household financial decisions	Family takaful targets working-age adults with dependants
Sampling design	Stratified quota sample by region (Tashkent city and the five macro-regions), urban/rural residence, gender and age band, in proportion to official population shares; mixed mode – face-to-face interviews organised through mahalla committees and an online questionnaire distributed via messenger channels; mode recorded as a covariate	Convenience samples dominate the literature; stratification improves representativeness at feasible cost
Sample size	Minimum 511 valid responses for the pooled model (inverse square root method, minimum path 0.11, $\alpha = 0.05$, power 0.80); target about 700 to permit two-group comparisons at a minimum path of 0.15 (275 per group)	Kock and Hadaya (2018)

⁷ Source: author. All multi-item constructs measured on seven-point Likert scales (1 = strongly disagree, 7 = strongly agree) after the information stimulus; items to be translated into Uzbek and Russian with back-translation.

⁸ Source: author. AVE – average variance extracted; HTMT – heterotrait–monotrait ratio; MICOM – measurement invariance of composite models; VIF – variance inflation factor.

Design element	Specification	Justification
Information stimulus	Neutral 150-word description of family takaful (contribution, tabarru', risk and savings accounts, surplus, Islamic finance governance body, operator fee) in Uzbek and Russian, followed by two comprehension checks; respondents failing both checks are excluded	Awareness of takaful was 28% in 2020 (UNDP, 2020); beliefs about an unfamiliar product cannot be measured without a stimulus
Instrument development	Adaptation of validated items (Table 5); review by an expert panel (Islamic finance scholars, insurers, sociologist); back-translation English → Uzbek/Russian → English; cognitive pre-test with 15 respondents; pilot with 100 respondents	Standard practice for cross-cultural adaptation
Hypothetical-bias controls	Cheap-talk script before intention items; behavioural proxy – willingness to leave contact details for pre-registration; willingness-to-pay question with anchored amounts	Cummings and Taylor (1999); Sheeran (2002)
Analysis	PLS-SEM: reflective measurement (loadings ≥ 0.708 , composite reliability ≥ 0.70 , AVE ≥ 0.50 , HTMT < 0.85); structural model (VIF < 3 , 10,000 bootstrap subsamples, R^2 , f^2 , PLSpredict); bootstrapped indirect effects for mediation; MICOM and multi-group analysis for moderators; importance–performance map for policy priorities	Hair et al. (2019); Fornell and Larcker (1981); Henseler, Ringle and Sarstedt (2015, 2016); Shmueli et al. (2019); Ringle and Sarstedt (2016)
Common method bias	Procedural remedies (anonymity, separation of predictor and criterion blocks, reverse-coded items) and full-collinearity VIF < 3.3	Podsakoff et al. (2003); Kock (2015)
Ethics and timing	Informed consent, anonymity, no personal identifiers; fieldwork planned for 2027, before the first product launches	A pre-market baseline cannot be recovered after launch

The review supports a clear division. Attitude, perceived behavioural control, compatibility, relative advantage, trust and knowledge are supported in all or nearly all studies that test them, from Malaysia to Somalia; a framework for Uzbekistan can build on them with confidence. Subjective norm, awareness and religiosity are not universal, and the pattern of their null results is informative. Subjective norm failed only in two of the three earliest studies, and has been significant in every study since 2019, including collectivist and Muslim-minority settings; the Uzbek context – household decisions taken within extended families and mahallas, and religious leaders as respected referents – points to a strong effect, but the earlier null results caution that the referents must be specified concretely rather than generically. The awareness results suggest that awareness matters as a threshold rather than as a continuous predictor: once a product is known, what varies is knowledge, which is why the framework folds awareness into a knowledge construct. Religiosity is the most contested determinant. Its effect is significant in most studies, but the one study that models the mechanism finds that its effect on attitude works entirely through trust (Aziz et al., 2019), institutional trust partially mediates the core TPB paths in the most recent Malaysian study (Muhammad Zuki, Ishak and Hassan, 2026), and the Kazakh expert evidence (Nagimova, 2023) and the Uzbek survey evidence (Abdullaev, Juliana and Bekimbetova, 2023) point in different directions. Testing the direct and the mediated paths against each other, as the framework proposes, will show whether religiosity is a driver of participation in Uzbekistan or a condition that operates only when trust in Islamic finance compliance is present.

Studying the intention to adopt a product that does not exist raises problems that the takaful literature has not had to face. Three design choices follow. First, the product must be described before beliefs are measured, and comprehension must be checked; otherwise attitude, compatibility and complexity items measure reactions to a label rather than to a product. Second, stated intentions towards a hypothetical product are inflated; a cheap-talk script that warns respondents of this tendency reduces the inflation (Cummings and Taylor, 1999), and behavioural proxies – willingness to leave contact details for pre-registration, willingness to pay at anchored amounts – give the study an outcome closer to behaviour than intention alone, which is important given the intention–behaviour gap (Sheeran, 2002) and the finding that intention and perceived behavioural control, not religious obligation, predict actual family takaful purchase in South Africa (Maduku and Mbeya, 2024). Third, because the population is heterogeneous in region, residence and religiosity, and

because convenience samples have limited the external validity of the literature, a stratified quota design and measurement-invariance testing before any group comparison are needed. A pre-market survey also has a value that later surveys cannot recover: it provides a baseline against which the effect of launch, regulation and awareness campaigns on beliefs and intentions can be measured.

Even before the survey is run, the review carries implications for the actors preparing the Uzbek market. For the regulator, the consistent effect of trust and the Herawati, Beik and Sari (2024) finding that regulatory strength and financial literacy explain cross-country differences in adoption imply that a takaful law with visible Islamic finance governance – an independent Islamic finance governance body and a supervisory framework – is a demand-side as well as a prudential measure. For prospective operators, compatibility and relative advantage are the levers of attitude: products should be positioned relative to the informal instruments households currently use, and their compatibility with religious values and family saving practices should be explicit and certified. Knowledge, like trust and compatibility, is significant in every study that tests it; the 2020 awareness figure of 28% (UNDP, 2020) means that education, delivered through mahalla structures, religious leaders and digital channels – seven in ten adults own a smartphone (Klapper et al., 2025) – precedes sales. Affordability, finally, argues for entry products with small, income-anchored contributions, in line with the microtakaful evidence (Rapi and Kassim, 2023) and with the channel preferences documented by Shari et al. (2026). The importance–performance map planned in the protocol will rank these levers empirically.

The review is a vote count: it records whether an effect was significant, not its size, and it cannot separate genuine context effects from differences in measurement, sampling and estimation. It covers English-language, peer-reviewed studies only, relies on database searches and snowballing rather than an exhaustive multi-database protocol, and does not apply a formal risk-of-bias instrument; sample sizes and coefficients were taken from abstracts and full texts where accessible and could not be verified for every study. The classification of markets as mature or nascent is the author's. The framework and protocol are proposals: their value will be established by the survey they specify, and the hypotheses may fail. These limitations are the reason the paper is presented as a review-and-protocol study rather than as an empirical test.

CONCLUSIONS AND SUGGESTIONS

This paper has synthesised 21 empirical studies of takaful and family takaful adoption intention published between 2015 and 2026, derived a conceptual framework for a pre-market setting and specified a survey protocol for Uzbekistan. Three conclusions follow. First, the evidence base is now large enough to distinguish determinants that travel – attitude, perceived behavioural control, compatibility, relative advantage, trust and knowledge – from those that are context-dependent – subjective norm, awareness and religiosity – and from those that are unstable, unsupported or rarely tested – complexity, perceived risk and affordability. Second, no study has yet been conducted where the product is absent, and the existing designs cannot simply be transplanted: awareness is at its floor, trialability and observability are meaningless, trust attaches to institutions that do not yet exist, and stated intentions towards a hypothetical product are inflated. Third, a design that copes with these conditions is feasible: an information stimulus with comprehension checks, a knowledge construct with objective items, disaggregated trust, an income-anchored affordability construct, a stratified quota sample of at least 511 respondents, hypothetical-bias controls and PLS-SEM with mediation and multi-group analysis.

The next step is to field the survey in 2027, before the first family takaful products are launched, and to report the test of the nine hypotheses. Two extensions would strengthen the programme: a follow-up wave after launch, which would turn the pre-market baseline into a panel and allow the effect of regulation, awareness campaigns and product experience on beliefs and intentions to be estimated; and a replication of the protocol in Kazakhstan and Kyrgyzstan, where takaful is at a similar or slightly more advanced stage, which would show how far the Uzbek results generalise across Central Asia.

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