



ORIGINAL ARTICLE

Preferences of Overseas Filipino Workers for Remittance Centers in the United Arab Emirates: A Conjoint Analysis

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Received: October 11, 2024; *Revised:* January 18, 2025

Accepted: June 7, 2025; *Published:* June 15, 2025

ABSTRACT

Remittances from Overseas Filipino Workers (OFWs) constitute a critical pillar of the Philippine economy, yet the service attributes that most powerfully shape OFWs' choice of remittance centers remain poorly understood in the extant literature, which has concentrated on macroeconomic remittance impacts rather than consumer-level provider selection. This study applies conjoint analysis to identify the relative importance of five service attributes—transaction speed, charges, location, exchange rate, and promotional offerings—in the remittance center preferences of OFWs in the United Arab Emirates (UAE). A quantitative, non-experimental cross-sectional design was employed. A researcher-developed conjoint instrument comprising 20 fractional-factorial plancards was administered to 202 OFW respondents across all seven UAE emirates. Part-worth utility estimates were derived using IBM SPSS conjoint analysis. Findings indicate that transaction speed holds the highest relative importance (25.167%), followed by exchange rate (20.450%), charges (16.392%), promotions (16.220%), and location (15.927%). Counterintuitively, utility estimates favor delayed over immediate receipt (after 24 hours: .029; after 48 hours: .047), reflecting OFW prioritization of transaction security over speed. Exchange rates above prevailing reported levels carry positive utility (.143), consistent with the interpretation of premium pricing as a quality signal in financial services. Location near shopping centers (.017) yields the highest locational utility, while promotional strategies anchored in lottery draws (.062) are preferred over transactional discounts. Simulation modelling revealed that the most-preferred remittance center profile achieved 65.6% market share under the Maximum Utility model, substantially outperforming the least-preferred alternative (34.4%). These findings provide an empirically grounded framework for remittance service providers, market entrants, and policymakers seeking to align service design with the demonstrated preferences of a large and commercially significant migrant worker population.

Keywords: conjoint analysis; overseas Filipino workers; remittance service attributes; United Arab Emirates; consumer preferences; financial services marketing; part-worth utility



INTRODUCTION

Remittances from overseas migrant workers constitute one of the most economically significant financial flows in the developing world. For the Philippines, they represent the single largest source of foreign exchange earnings and a critical determinant of household welfare for millions of recipient families. As of January 2020, the Department of Foreign Affairs (DFA, 2020) estimated that approximately 2.22 million Filipinos resided across the Middle East region, of whom some 648,929—or roughly 29%—were located in the United Arab Emirates. This population sustains a substantial and competitive remittance market: the Central Bank of the UAE registered more than 130 licensed money exchange companies operating within its territory (Deepak, 2021), reflecting the commercial scale of demand for cross-border fund transfer services among the UAE's large migrant workforce.

The economic significance of OFW remittances is thoroughly documented. Ang, Sugiyarto, and Jha (2009) established that remittances positively influence economic growth at the national level and provide direct income support to recipient households in the Philippines. Capistrano and Sta. Maria (2010) confirmed that international labor migration and associated remittance flows reduce poverty incidence, depth, and intensity among recipient families, while Adams (2007) demonstrated that remittance-receiving households direct proportionately more resources toward investment goods—education, housing, and health care—relative to consumption. The macroeconomic literature, though rich in its characterization of remittance magnitudes and destination uses, has devoted comparatively limited attention to a question of equal commercial importance: how do remitting migrants actually choose between competing service providers, and which attributes of remittance centers most powerfully shape those choices?

This question has practical urgency that extends beyond academic interest. The intermediary role of remittance service providers means that their fee structures, exchange rate policies, location decisions, and service design choices directly affect the volume of funds that ultimately reach recipient families. High transaction costs—a recurrent concern in the remittance literature—have been shown to reduce both the frequency and the volume of remittance transfers (Ahmed, Mughal, & Martínez-Zarzoso, 2021; Orozco, 2004), with the consequence that service provider decisions impose costs not only on senders but on entire recipient households. Understanding the attribute preferences of OFWs as consumers of remittance services is therefore directly consequential for providers seeking to compete effectively, for policymakers designing regulatory frameworks that promote affordable and accessible remittance channels, and for investors considering market entry in the UAE money transfer sector.

This study addresses this gap by applying conjoint analysis—a multivariate statistical technique specifically designed to decompose consumer preferences across product or service attributes—to the remittance center preferences of OFWs in the UAE. Conjoint analysis is particularly well-suited to this problem because it forces respondents to make realistic trade-offs among attribute combinations, mirroring the actual structure of remittance service choice rather than eliciting isolated attribute ratings that may not reflect genuine decision-making priorities (Malhotra, Hair, & Nunan, 2020). The study examines five attributes identified



through focus group discussions with OFWs as most salient to their service center selection: time/speed of receipt, transaction charges, center location, exchange rate relative to competitors, and promotional offerings. The research objectives are threefold: to estimate the relative importance of each attribute in the OFW preference structure; to identify the best and worst combinations of attribute levels in terms of their utility contribution to overall preference; and to simulate the market share implications of optimally designed versus poorly designed remittance service profiles.

The study is anchored in three complementary theoretical frameworks. Glasser's (1998) Choice Theory provides the motivational foundation, positing that individual decision-making is shaped by accumulated experiential preferences that vary across persons even when objective needs are similar. McFadden's (1974) Random Utility Theory formalizes the probabilistic structure of choice, proposing that individuals select the alternative that maximizes their perceived utility given their preferences and the available options—the theoretical bedrock of conjoint analysis. Fishbein's (1963) Multi-Attribute Attitude Model provides the measurement framework, conceptualizing consumer attitudes toward service alternatives as a function of beliefs about and evaluations of their defining attributes. Together, these frameworks position the study's conjoint design as theoretically coherent and its utility estimates as theoretically interpretable measures of OFW preference.

LITERATURE REVIEW

This review synthesizes the relevant literature across four thematic domains: OFW remittances and their macroeconomic significance; the cost and structural determinants of remittance service quality; remittance provider selection factors and consumer behavior; and the application of conjoint analysis in financial service preference research.

OFW Remittances and Their Macroeconomic Role

The Philippines has developed one of the world's most institutionally sophisticated overseas labor export programs, producing a migrant workforce whose remittances constitute a structural component of the national balance of payments. Ang, Sugiyarto, and Jha (2009) documented that remittances positively influence national economic growth, largely through the demand stimulus created by increased household consumption and investment capacity. The beneficial effect at the household level operates through multiple channels: Cattaneo (2005) demonstrated that remittance-receiving households invest disproportionately in physical assets and human capital, while Capistrano and Sta. Maria (2010) confirmed poverty-reducing effects at household level.

The macroeconomic relationship is, however, not uniformly positive. Chami, Fullenkamp, and Jahjah (2003), in a cross-national study of 113 countries, found a negative relationship between remittances and economic growth, attributing it to the counter-cyclical character of remittance flows and the potential reduction in labor market participation incentives among recipient households. Burgess and Haksar (2005) similarly noted that while remittances partially compensate for the economic losses associated with the emigration of skilled workers, the relationship between remittance flow growth and aggregate economic



growth can be negative if the flow is primarily sustenance-oriented rather than investment-directed. Serićo (2012) examined the long-run effects of OFW remittances on Philippine GDP, concluding that positive long-run effects are contingent on productive reinvestment of remittance receipts in education, land, and household enterprise.

These findings collectively establish why the cost and accessibility of remittance transmission matter for development outcomes: a percentage point reduction in transaction fees directly increases the share of the migrant's earnings that reaches the recipient household with productive potential. The World Bank's sustained advocacy for reducing global remittance costs below 3% of transaction value reflects precisely this logic, positioning remittance service provider efficiency as a development policy concern rather than merely a commercial one.

Cost, Structure, and Barriers in Remittance Service Provision

Transaction costs have emerged as the most consistently debated policy concern in the remittance literature. Singh (2014) demonstrated that the microstructure of remittance transfer systems—the configuration of distribution modes, market competition, and payment instrument availability—is intimately linked to fee and reliability outcomes in cross-border transfers. Riedberg and Ratha (2005) established that high fees charged by financial transfer service providers represent a primary policy challenge in the management of international remittance flows to developing countries, and that the potential welfare gains from cost reduction are substantial.

The mechanism through which costs affect behavior is well-established: Ahmed and Martínez-Zarzoso (2016) found that higher operational costs have a significant negative effect on remittance volume, with migrants either reducing transfer frequency or diverting flows through informal channels to minimize costs. This cost-evasion behavior sustains what Passas, Maimbo, and Aggarwal (2017) characterize as informal value transfer systems—unregulated monetary mechanisms that offer lower costs but sacrifice the legal protections and accountability structures of formal channels. Malit, Al Awad, and Naufal (2017) documented this dynamic specifically in the UAE context, finding that low-income migrants actively utilized informal remittance networks to maximize the net transfer value reaching their families.

Andreassen (2007) examined the operational structure of formal remittance service providers, identifying that the most significant institutional barriers to business development arise from licensing requirements, bonding obligations, and scale-dependent processing costs—structural features that tend to entrench incumbents and limit competition in local remittance markets. Mannan (2019), studying the Bangladeshi context, demonstrated that technology-enabled business models offer the most promising pathway to simultaneously reducing remittance costs and maintaining regulatory compliance, a finding that anticipates the rapid expansion of digital remittance platforms that has reshaped the competitive landscape in markets including the UAE. Maimbo (2004) provided a comprehensive regulatory analysis of informal remittance systems, arguing that effective policy must engage with the regulatory challenges—particularly the absence of consistent audit trails—that make informal channel activity difficult to monitor and control.



Consumer Behavior and Service Provider Selection in Remittances

Despite the extensive macroeconomic and policy-level literature on remittances, the consumer behavior dimension of remittance service selection has received comparatively limited scholarly attention. The available evidence suggests that OFW and migrant worker decision-making about remittance channels is shaped by a multi-attribute evaluation process in which transaction cost is important but not exclusively determinative. Reside (2009) documented the wide variety of motivations that drive Filipino migrant remittance behavior—spanning altruistic, self-interested, and investment-oriented objectives—and established that the heterogeneity of remittance motivations corresponds to heterogeneity in the service attributes that different remitters prioritize.

Orozco (2004) identified accessibility and trust as foundational service attributes for migrant remitters, arguing that both the physical proximity of remittance outlets and the perceived security and reliability of fund transmission materially affect provider selection. The physical accessibility dimension connects directly to the location analysis in the present study: Riedberg and Ratha (2005) noted that location costs—the expenses associated with maintaining the physical points at which remittances are submitted—are structurally significant for money exchange operators, who typically rely on co-location with other businesses such as supermarkets to distribute these costs. This agent-based distribution model aligns with the preference for shopping center proximity documented in the present study's utility estimates.

The role of transaction charges in provider selection is theoretically clear but empirically nuanced. While cost sensitivity among migrants is well-documented (Ahmed et al., 2021), Allred, Valentin, and Chakraborty (2010) and Andreassen (2007) demonstrate that pricing can serve as a quality signal in financial services—a mechanism through which consumers infer service reliability and security from fee levels, creating the counterintuitive result that higher fees are associated with positive utility under certain conditions. Goldbach and Schlüter (2018) and Narang (2020) similarly document trust-based mechanisms in formal remittance channel adoption, suggesting that OFWs' willingness to pay for secure and reliable transactions reflects a rational response to the documented risks of informal transfer systems rather than mere price insensitivity.

Promotional strategies as a driver of remittance center selection have received limited independent investigation but feature in broader analyses of financial service consumer behavior. Liu et al. (2022) and Maity (2022) established that promotional mechanisms involving potential supplementary gains—including lottery-type incentives—are particularly effective in motivating engagement among consumers whose regular transactions offer limited discretionary value. Stange et al. (2021) and Tan (2023) demonstrated similar effects in retail financial services contexts, suggesting that the appeal of promotional differentiation identified in the present study is consistent with established consumer psychology.

Conjoint Analysis in Financial Service Research

Conjoint analysis has been established as one of the most methodologically rigorous approaches to consumer preference decomposition in marketing research, providing utility estimates that directly capture the trade-offs consumers make between product or service



attributes in a manner that reflects realistic choice contexts (Malhotra et al., 2020). Its application in financial services research has expanded considerably over the past two decades, demonstrating particular value in contexts where consumer preferences are shaped by the simultaneous evaluation of multiple competing attributes—precisely the structure of remittance service selection. Cheng, Gaur, and Rezuhan (2020) applied conjoint methods to financial service preferences in Southeast Asian markets, finding that attributes related to cost transparency and service reliability consistently dominated provider selection. Ei (2023) and Mahama et al. (2024) extended this work to mobile remittance platforms, establishing that digital channel adoption preferences similarly reflect multi-attribute evaluations in which security and reliability considerations moderate the typically dominant role of cost. Li et al. (2023) demonstrated that conjoint analysis could effectively identify preference heterogeneity across migrant worker subgroups, making it particularly well-suited to the characterization of individual and aggregate models of the kind developed in the present study.

In the Philippine OFW context specifically, published conjoint analyses of remittance service preferences are scarce. Reside (2009) and Macaraeg (2017) provide descriptive analyses of OFW remittance behavior that identify relevant attribute dimensions but do not apply formal preference decomposition methods. The present study is positioned to fill this gap by providing the first formally estimated conjoint model of remittance center attribute preferences among OFWs in the UAE, offering utility estimates and market share simulations that advance beyond descriptive characterization to produce actionable quantitative guidance for service design and competitive positioning.

METHODS

Research Design

This study employed a quantitative, non-experimental cross-sectional design using conjoint analysis as the primary analytical method. A non-experimental quantitative approach is appropriate given the study's objective of estimating consumer preference structures across naturally occurring attribute levels without manipulating the conditions of OFW remittance activity (Almalki, 2016). Conjoint analysis was selected as the analytical technique because it is specifically designed to decompose the relative contributions of multiple attributes to overall consumer preference through the evaluation of realistic multi-attribute profiles, reflecting the actual multi-criterion character of remittance service selection (Malhotra et al., 2020). The method's capacity to generate both individual-level and aggregate part-worth utility estimates enables the characterization of preference heterogeneity across respondents alongside the derivation of market share simulations for optimally and sub-optimally configured service profiles.

Study Setting

The study was conducted across all seven emirates of the United Arab Emirates—Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al-Quwain, Fujairah, and Ras Al Khaimah—targeting OFWs who were actively remitting funds to the Philippines at the time of data collection. The UAE was selected as the research locale because it hosts the largest concentration of OFWs in



the Middle East region and operates one of the world's most competitive money exchange markets, with more than 130 licensed money exchange companies registered with the Central Bank of UAE (Deepak, 2021).

Participants and Sampling

The study population comprised all Overseas Filipino Workers legally employed in the UAE as of the survey period, estimated at 648,929 individuals (DFA, 2020). A target sample size of 384 was initially calculated using the Raosoft (2009) online sample size calculator, corresponding to the standard minimum for population-proportionate sampling at a 95% confidence level with a 5% margin of error for a known population of this size. After 30 days of data collection, 202 OFWs completed valid responses. This sample size meets the threshold of 200 respondents that Hair et al. (2013) identify as a sufficient minimum for business and consumer research applications, and satisfies the practical requirements of conjoint analysis for the five-attribute fractional factorial design employed.

Respondents were included if they were legally employed OFWs in the UAE who had personally remitted money to the Philippines within the 12 months preceding the survey. Participation was fully voluntary; respondents who chose to withdraw at any stage were replaced with eligible alternatives to maintain representative coverage across emirates. The distribution of respondents was stratified across emirates in proportion to the estimated OFW population in each emirate.

Instrument Development

Instrument development proceeded through three sequential stages. In the first stage, a focus group discussion (FGD) involving ten purposively selected OFWs was conducted to identify the service attributes most relevant to remittance center selection from the consumer's perspective. The FGD protocol asked participants to describe their typical remittance center selection process, the factors they considered most carefully, and any frustrations or satisfactions with the services they had used. Analysis of FGD transcripts identified five dominant attribute themes: transaction speed, service charges, center location, exchange rate, and promotional offerings.

In the second stage, each attribute was operationalized into three specific levels reflecting the realistic range of service variations available in the UAE remittance market: Time (immediately; after 24 hours; after 48 hours); Charges (fixed amount per transaction; depends on the amount sent; depends on the receiver); Location (near shopping centers; near metro stations; near residential areas); Rate (lower than reported rates; equal to the reported rates; higher than reported rates); Promotions (no promotional offerings; no charge on every fifth remittance; chance to win in raffle draws). A fractional factorial design was applied to generate 20 plancard profiles from the full factorial design, reducing respondent burden while maintaining the statistical information content required for part-worth estimation.

In the third stage, the 20-plancard instrument was subjected to face validity assessment by a panel of five experts in marketing research and remittance services, who reviewed the plancards for clarity, realism, and relevance to the UAE OFW context. Each plancard presented a hypothetical remittance center profile with a specific combination of attribute levels, and



respondents were asked to rate their likelihood of using the described center on a five-point scale from 1 (very unlikely) to 5 (very likely).

Data Collection and Analysis

The survey instrument was administered electronically via Google Forms, with the informed consent form (ICF) embedded on the landing page to ensure participants understood the study purpose before proceeding. The data collection period was set at 30 days. Upon completion of data collection, plancard responses were extracted from Google Forms and imported into IBM SPSS as a data file. The SPSS conjoint procedure was executed using a syntax file that incorporated both the plancard response data file and the plan file specifying the experimental design structure. This procedure generated part-worth utility estimates for each attribute level for individual respondents as well as aggregate utility estimates representing the full sample's preference structure.

Model fit was evaluated using Pearson's R and Kendall's tau, which measure the correlation between observed preference ratings and the values predicted by the conjoint model. Holdout profile correlation (Kendall's tau for holdouts) was also computed to assess the model's predictive validity on profiles excluded from the estimation stage. Market share simulations were generated for the most- and least-preferred remittance center profiles using three estimation approaches: Maximum Utility, Bradley-Terry-Luce, and Logit models.

Ethical Considerations

Ethical approval was obtained from the UM Ethics Review Committee prior to data collection. Participation was voluntary, anonymous, and subject to full informed consent. Data were handled in compliance with UAE Federal Decree Law No. 45 of 2021 on the Protection of Personal Data and the Philippines' Data Privacy Act of 2012 (Republic Act No. 10173). Respondent identities were protected through numerical coding; personally identifiable records were retained securely for two years following study completion and subsequently permanently deleted. The study presents low risk to participants given the non-sensitive nature of the survey content. No personal financial or identifying information was collected.



RESULTS AND DISCUSSION

Relative Importance and Part-Worth Utility Estimates

Table 1 presents the relative importance values and part-worth utility estimates for each of the five attributes and their respective levels. The relative importance values reflect the proportional contribution of each attribute to the overall variance in respondents' preference ratings; higher values indicate attributes that drive more differentiated preference responses across their range of levels. The utility estimates indicate the direction and magnitude of preference for each specific attribute level relative to the others within the same attribute.

Table 1. *Relative Importance Values and Part-Worth Utility Estimates for Remittance Center Attributes (N = 202)*

Attribute	Importance Value (%)	Attribute Level	Utility Estimate	Std. Error
Time	25.167	Immediately	-.076	.021
		After 24 hours	.029	.024
		After 48 hours	.047	.024
Rate	20.450	Lower than reported rates	-.191	.021
		Equal to reported rates	.048	.024
		Higher than reported rates	.143	.024
Charges	16.392	Fixed amount per transaction	.006	.021
		Depends on the amount sent	.032	.024
		Depends on the receiver	-.038	.024
Promotion	16.220	No promotional offerings	-.036	.021
		No charge on every fifth remittance	-.026	.024
		Chance to win in raffle draws	.062	.024
Location	15.927	Near shopping centers	.017	.021
		Near metro stations	-.012	.024
		Near residential areas	-.004	.024
(Constant)			.317	.019

Transaction speed emerges as the most important attribute overall, accounting for 25.167% of the variance in preference ratings—a finding that reflects OFWs' acute sensitivity to the temporal dimension of financial support provision to their families. Given the income support and emergency-response functions that remittances frequently serve for recipient



households, the expectation that immediate transfer would carry the highest utility is intuitive. The actual utility estimates, however, reveal a more nuanced preference structure: immediate transfer carries a negative utility ($-.076$), while receipt after 24 hours ($.029$) and after 48 hours ($.047$) both carry positive utilities. Receipt after 48 hours is, in fact, the most preferred time option.

This counterintuitive finding—that OFWs prefer delayed over immediate receipt—is interpretable through the lens of transaction security and trust in formal financial channels. Khiaonarong (2014), Lamberte (2001), and Metzger, Riedler, and Pédussel-Wu (2019) collectively document that in cross-border remittance contexts, immediate transfer can signal informal or inadequately verified routing that raises security and accuracy concerns for senders. OFWs who have experienced or heard of failed immediate transfers may associate processing time with the validation procedures that protect against fraud and misdirection. Goldbach and Schlüter (2018) and Narang (2020) provide direct empirical support for this interpretation, demonstrating that trust in formal remittance institutions—operationalized as confidence in the institution's validation and verification processes—is a primary driver of channel selection, and that this trust is strengthened rather than undermined by evidence of deliberate processing. The practical implication is that remittance centers seeking to compete on the time dimension should frame their value proposition not as fastest but as reliably verified—emphasizing the procedural foundations of their service delivery rather than competing on raw speed alone.

The exchange rate attribute accounts for 20.450% of preference variance—the second-highest importance value—reflecting OFWs' significant sensitivity to the effective cost of fund conversion. The utility pattern is theoretically provocative: rates lower than reported market rates carry a strong negative utility ($-.191$), while rates equal to reported rates ($.048$) and rates higher than reported rates ($.143$) both carry positive utilities, with higher rates yielding the largest positive utility within this attribute. This positive gradient from lower to higher rates is the inverse of what standard price sensitivity theory predicts.

This pattern is coherently interpreted as a quality signalling mechanism operating within a market characterized by information asymmetry. Allred, Valentin, and Chakraborty (2010) and Medberg and Grönroos (2020) demonstrate that in financial service contexts where quality is difficult to observe directly, pricing serves as a credible signal of service reliability: consumers reasonably infer that providers able to sustain premium pricing must be delivering superior value, security, or reliability to retain customers. For OFWs, who typically lack the institutional knowledge to evaluate the technical quality of different money exchange operators, the offered exchange rate becomes a heuristic—a market signal that carries quality information. Sub-market rates trigger skepticism about service reliability or hidden fee structures, consistent with Chauke (2020) and Refat (2023). Imam and Kpodar (2022) and Kpodar and Imam (2024) add the complementary point that predictability and standardization in pricing carry independent positive utility for remitters—a finding reflected in the positive utility for rates equal to reported market rates. Together, these findings suggest that remittance operators competing on rate transparency and market alignment may achieve stronger customer preference than those pursuing below-market rate positioning strategies.



The charges attribute (16.392% importance) reveals a preference for charges that depend on the amount sent (.032) over fixed per-transaction fees (.006), while receiver-dependent charges carry negative utility (-.038). The preference for volume-proportionate over flat charges reflects OFWs' implicit equity preference: charges that scale with the amount sent are perceived as fairer and more transparent than fees whose basis is opaque to the sender (Ratha & Riedberg, 2005; Siegel & Lücke, 2009). Receiver-dependent charges—which are less predictable from the sender's perspective because they vary with the recipient's location or institutional access—carry negative utility, consistent with the finding on exchange rate uncertainty that unpredictability generates negative utility independently of actual cost level.

Location (15.927% importance) shows a subtle but theoretically coherent preference pattern: shopping center proximity carries the only positive utility (.017), while metro station proximity (-.012) and residential area proximity (-.004) both carry negative utilities. The positive utility for shopping center co-location reflects the convenience of integrating remittance transactions with regular retail and errand activities—an efficiency logic documented by Bouteraa et al. (2023) in their analysis of UAE financial service accessibility. The negative utilities for metro station and residential area locations may reflect concerns about congestion and privacy respectively: metro station environments are frequently crowded and time-pressured, potentially creating conditions perceived as unsuitable for financial transactions requiring care and accuracy, while residential-area locations may be associated with lower transaction volumes and therefore less robust service infrastructure (Riedberg & Ratha, 2005).

The promotional attribute (16.220% importance) reveals that raffle draw incentives carry the highest utility (.062) among promotional options, while both transactional discounts (no charge on every fifth remittance: -.026) and the complete absence of promotions (-.036) carry negative utilities. The preference for lottery-type incentives over transactional discounts is consistent with Liu et al. (2022), Maity (2022), and Stange et al. (2021), who establish that the psychological appeal of potential supplementary gains—even when their expected monetary value is modest—activates engagement and preference more effectively than equivalent-value transactional discounts whose appeal is more mundane. For OFWs who make regular remittances, the possibility of occasional extraordinary returns from a raffle draw may provide a qualitative differentiation of the service experience that routine discounts cannot replicate.

Individual and Aggregate Models of Preference

Table 2 presents the part-worth utility estimates for three individual respondents—OFW 24, OFW 112, and OFW 151—alongside the aggregate model representing the full sample. The diversity of individual profiles illustrates the heterogeneity of OFW preferences that the aggregate model smooths over, while the importance value comparisons reveal where individual priorities diverge most sharply from the sample norm.

The constant terms across individual models establish the baseline disposition toward remittance services before specific attributes are evaluated. OFW 24's strongly negative constant (-3.091) indicates considerable initial skepticism about the services presented, in



Table 2. Individual and Aggregate Part-Worth Utility Estimates for Remittance Center Attributes

Attribute and Levels	OFW 24	OFW 112	OFW 151	Aggregate
(Constant)	-3.091	.402	-.523	.317
Time				
Immediately	1.159	.068	-.023	-.076
After 24 hours	2.318	.136	-.045	.029
After 48 hours	3.477	.205	-.068	.047
Charges				
Fixed amount per transaction	.583	.250	.250	.006
Depends on amount sent	-.042	-.375	-.125	.032
Depends on the receiver	-.542	.125	-.125	-.038
Location				
Near shopping centers	.417	-.083	-.250	.017
Near metro stations	-.083	-.208	-.250	-.012
Near residential areas	-.333	.292	.500	-.004
Rate				
Lower than reported rates	.417	-.417	-.083	-.191
Equal to reported rates	-.083	.208	.042	.048
Higher than reported rates	-.333	.208	.042	.143
Promotion				
No promotional offerings	-.417	-.083	.083	-.036
No charge on every fifth remittance	.208	.042	.083	-.026
Chance to win in raffle draws	.208	.042	-.167	.062
Importance Values (%)				
Time	41.633	6.780	2.941	25.167
Charges	20.204	31.073	24.265	16.392
Location	13.469	24.859	48.529	15.927
Rate	13.469	31.073	8.088	20.450
Promotion	11.224	6.215	16.176	16.220



contrast to OFW 112's positive constant (.402). The aggregate model's positive constant (.317) confirms a generally favorable baseline orientation toward the evaluated service profiles across the sample.

OFW 24's time importance value of 41.633%—far exceeding the aggregate value of 25.167%—identifies speed as this respondent's overwhelmingly dominant evaluation criterion. Strikingly, OFW 24's utilities run in the direction opposite to the aggregate: immediate receipt (.1159 for immediate, 2.318 for 24 hours, 3.477 for 48 hours) indicates a strong and monotonically increasing preference for delay, a pattern that likely reflects this respondent's particular concern for verification security. This individual-level pattern is entirely consistent with the transaction security interpretation offered for the aggregate findings, but demonstrates it operating in an unusually concentrated form. OFW 24 also strongly prefers fixed charges (.583) and shopping center location (.417), but exhibits the minority preference for below-market rates (.417)—suggesting a cost-minimizing orientation that diverges from the aggregate's quality-signaling pattern.

OFW 112's profile presents a more balanced attribute structure, with charges (31.073%) and rates (31.073%) jointly dominant over time (6.780%) and promotions (6.215%). This respondent places the highest priority on the financial terms of the transaction, preferring fixed charges (.250) and above- or at-market rates (.208 for both). OFW 151 stands out for the extraordinary dominance of location (48.529%)—nearly three times its aggregate importance—and a strong preference for residential proximity (.500). This profile reflects a respondent for whom physical accessibility from home is the overriding service consideration, irrespective of time or rate characteristics. These three individual profiles collectively illustrate the business case for segmented remittance service positioning: the attribute that most powerfully differentiates providers differs substantially across consumer segments, suggesting that a single service configuration optimized for the aggregate may systematically underserve identifiable minority preference clusters.

Consumer behavior research by Cheng, Gaur, and Rezuan (2020) and Li et al. (2023) confirms the practical value of this segmentation insight for financial service markets, demonstrating that providers who differentiate their service offerings across identified preference segments consistently outperform those that optimize for aggregate mean preferences in competitive environments. For the UAE remittance market, this implies viable strategic positioning for centers that explicitly target time-sensitive senders (OFW 24 profile), cost-optimizing senders (OFW 112 profile), or accessibility-prioritizing senders (OFW 151 profile) respectively—alongside the aggregate-optimized generalist positioning implied by Table 1.

Model Fit

Table 3 presents the model fit statistics. Pearson's $R = .979$ ($p < .001$) and Kendall's tau = .929 ($p < .001$) indicate an extremely strong correlation between observed preference ratings and the values estimated by the conjoint model, confirming that the five-attribute model provides an excellent fit to the sample's preference data. These fit values are substantially



above the conventional thresholds for adequate conjoint model performance and validate the utility estimates as reliable representations of the observed preference structure.

Table 3. *Correlation Between Observed and Estimated Preferences (Model Fit Statistics)*

Fit Statistic	Value	Sig.
Pearson's R	.979	.000
Kendall's tau	.929	.000
Kendall's tau for Holdouts	.000	.500

The holdout profile correlation, however, reveals a notable limitation: Kendall's tau for holdout profiles is .000 ($p = .500$), indicating that the model does not successfully predict responses to profiles withheld from the estimation stage. This result is diagnostically important and suggests potential overfitting—the model describes the estimation sample with high fidelity but does not generalize to unseen profile combinations with comparable accuracy (Turan, 2006). This pattern is common in conjoint analyses conducted with relatively small samples ($n = 202$) where the ratio of model parameters to respondents is moderately low, and it limits the confidence with which the specific utility estimates should be extrapolated to remittance center configurations that differ substantially from those included in the plancard set. The findings presented here should accordingly be interpreted as well-fitting descriptions of preferences within the design space of the 20 plancards rather than as generalizable predictions across the full range of possible service configurations. Future research employing larger samples and incorporating holdout profiles in model calibration would strengthen the external validity of the utility estimates.

Market Share Simulations for Hypothetical Remittance Center Profiles

Table 4 presents the market share predictions for two hypothetical remittance center profiles—the most-preferred and the least-preferred configurations—derived from the conjoint model. The most-preferred profile combines the attribute levels with the highest aggregate utility contributions: receipt after 48 hours (reflecting the security preference), charges that depend on the amount sent (transparency and fairness), location near a shopping center (convenience), exchange rates higher than reported market rates (quality signaling), and promotional raffle draw incentives (supplementary reward potential). This profile achieves a score of .634 and commands 65.6% of simulated market share under the Maximum Utility model, 53.5% under the Bradley-Terry-Luce model, and 53.7% under the Logit model.

The least-preferred profile—combining immediate receipt, receiver-dependent charges, metro station proximity, below-market exchange rates, and no promotional offerings—achieves a score of $-.029$ and captures only 34.4% of market share under Maximum Utility. This combination is commercially self-defeating in a specific way: each of its constituent attribute levels individually carries negative utility, and their combination amplifies that disadvantage. The below-market rate—which carries the largest negative utility in the attribute set ($-.191$)—functions as a particularly damaging signal, undermining the credibility of the service profile in ways that offset the potential appeal of immediate transfer speed.



Transparency concerns over receiver-dependent charges compound this negative impression, while the absence of promotional incentives removes the last mechanism through which the profile might generate differentiated engagement.

Table 4. *Simulated Market Share for Most- and Least-Preferred Remittance Center Profiles*

Profile	Score	Maximum Utility (%)	Bradley-Terry-Luce (%)	Logit (%)
Most-preferred	.634	65.6	53.5	53.7
Least-preferred	-.029	34.4	43.7	46.3

Note. Most-preferred profile: receipt after 48 hours; charges depend on amount sent; near shopping centers; higher than reported rates; chance to win in raffle draws. Least-preferred profile: immediate receipt; unexpected charges; near metro stations; lower than reported rates; no promotional offerings.

The distribution of market share predictions across the three estimation methods—Maximum Utility (65.6% vs. 34.4%), Bradley-Terry-Luce (53.5% vs. 43.7%), and Logit (53.7% vs. 46.3%)—is analytically instructive. Maximum Utility produces the widest gap because it assumes that all consumers select the profile with the highest utility score; Bradley-Terry-Luce and Logit models introduce probabilistic choice assumptions that moderate this gap by allowing for the possibility that some consumers will choose the inferior profile due to preference heterogeneity not captured by the aggregate utility function. The Bradley-Terry-Luce and Logit predictions are therefore more conservative and arguably more realistic for a market in which individual preference profiles (as illustrated in Table 2) differ substantially from the aggregate. The convergence of Bradley-Terry-Luce and Logit predictions (.2 percentage point difference) provides reassurance that the probabilistic market share estimates are robust across alternative choice model specifications.

The theoretical frameworks employed in this study find confirmation in the simulation results. Glasser's (1998) Choice Theory predicts that individual decision-making varies across persons even when objective circumstances are similar—a proposition directly supported by the individual model heterogeneity in Table 2, where the same attribute combinations yield substantially different utilities across OFW 24, OFW 112, and OFW 151. McFadden's (1974) Random Utility Theory predicts that consumers select the highest-utility option from available alternatives—the direct theoretical basis for the market share simulation—and is confirmed by the aggregate model's coherent utility structure. Fishbein's (1963) Multi-Attribute Attitude Model predicts that consumer attitudes are formed through weighted evaluations of key service attributes—a proposition formalized in the conjoint utility function and confirmed by the predictive validity of the five-attribute model.

CONCLUSION

This study has applied conjoint analysis to produce the first formally estimated attribute preference model for remittance center selection among Overseas Filipino Workers in the



United Arab Emirates. Across a sample of 202 OFWs, five attributes—transaction speed, exchange rate, charges, promotions, and location—were evaluated through a 20-plancard fractional factorial conjoint instrument, yielding part-worth utility estimates and market share simulations that provide empirically grounded guidance for service design and competitive positioning in the UAE remittance market.

The study's principal findings challenge several intuitive assumptions about OFW remittance service preferences. First, immediate transfer—while widely assumed to be the dominant preference among migrants who send money for urgent household support—carries negative utility in the aggregate model, with 48-hour delayed receipt preferred. This finding reflects the primacy of transaction security and verification confidence over raw speed, consistent with the documented role of institutional trust in formal channel adoption. Second, below-market exchange rates carry strongly negative utility, while above-market rates carry positive utility—an inverse price-quality signal relationship that reflects information asymmetry in the money exchange market and the use of rate levels as credibility heuristics by consumers who cannot directly evaluate service quality. Third, lottery-type promotional incentives outperform transactional discounts, reflecting the motivational asymmetry between potential extraordinary gains and equivalent routine savings. These three findings are collectively non-obvious and carry direct implications for how remittance service providers should frame their competitive positioning.

The market share simulation findings reinforce these implications quantitatively: a service profile that optimizes across all five attributes in accordance with the aggregate utility estimates achieves more than 65% of simulated market share under Maximum Utility and approximately 54% under the more conservative probabilistic models, compared with 34% and 44–46% respectively for the attribute-minimizing alternative. The magnitude of this simulated competitive advantage—approximately 10 to 31 percentage points, depending on the model—establishes that service attribute design is not a marginal competitive consideration but a primary determinant of market share in this context.

For remittance service operators in the UAE, the practical implications are straightforward: invest in the verification and security infrastructure that supports and communicates process quality; price at or above market rates and communicate the basis for those rates transparently; locate near shopping centers or other high-frequency destination points; and design promotional programs around lottery-type incentives rather than routine transactional discounts. For market entrants, the individual model heterogeneity in Table 2 identifies three viable segmentation strategies—targeting time-sensitive, cost-focused, or proximity-prioritizing senders respectively—each of which corresponds to an identifiable OFW preference cluster whose needs are not optimally served by the aggregate-optimised profile. For policymakers, the negative utility of receiver-dependent charges and below-market rates together suggest that regulatory requirements for fee transparency and rate disclosure may enhance rather than merely constrain market functioning by providing consumers with the information necessary to make quality-differentiated choices.

Several limitations temper these conclusions. The sample of 202 OFWs, while meeting conventional thresholds for conjoint analysis, produces a model that overfits the estimation data as evidenced by the near-zero holdout correlation. Future research employing samples of



400 or more respondents would substantially improve the generalisability of the utility estimates. The cross-sectional design captures preferences at a single point in time, and longitudinal research would reveal how OFW remittance preferences evolve as the UAE money exchange market continues to develop. The study examines OFWs as a unified population; segmentation analyses comparing preference structures across occupation, income level, emirate of residence, and remittance frequency would provide the disaggregated guidance that customized service positioning requires. Finally, as digital and mobile remittance platforms continue to gain market share in the UAE and globally, extending the conjoint attribute set to include channel type, app interface quality, and digital security features would make the preference model more applicable to the rapidly evolving remittance landscape.

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How to cite this article:

Bongar, L., & Murcia, J.V. (2025). Preferences of overseas Filipino workers for remittance centers in the United Arab Emirates: a conjoint analysis. *International Journal of Multidisciplinary Studies* 6(2), 13-33. <https://jmcfiournals.com/index.php/ijms/article/view/193>.