

Remittance Transparency: Strengthening Business, Building Community

*Pilot Results from the "Fair Exchange" Effort
to Improve Pricing and Service Disclosures for International Remittance Transactions*



ACKNOWLEDGEMENTS

This report is generously supported by grants from the Annie E. Casey Foundation and the Levi Strauss Foundation. We would also like to thank the Fair Exchange Pilot Partners: Sandra Reilly, Citi Microfinance; Silvia Arias, GroupEx; James Maloney, Mitchell Bank; Paul Dwyer, Viamericas; and Daniel Ayala, Wells Fargo. Without their partnership and the resources they invested in this initiative, the pilot and study would not have been possible. Finally, we would like to thank Justen Ghwee of KPMG, who devoted many pro bono hours to the data analysis in this study.

The findings and conclusions of this report are those of Appleseed alone and do not necessarily reflect the opinions of the Fair Exchange Pilot partners, Fair Exchange Committee members, interviewees or other outside contributors, or of the project advisors or funders.

Appleseed Project Staff

Executive Director:

Betsy Cavendish

Report Contributors:

Ann Baddour, Senior Policy Analyst, Texas Appleseed *

Shay Farley, Legal Director, Alabama Appleseed

Eric Gutiérrez, Immigration Policy Director, Appleseed

Sharon Hill, Executive Director, Georgia Appleseed

Annette LoVoi, Field Director, Appleseed

Jacqueline Matthews, Legal Fellow, Appleseed

José W. Meléndez, Policy & Research Associate, Chicago Appleseed Fund for Justice

Darcy Tromanhauser, Director, Immigrant Integration and Civic Participation Program, Nebraska Appleseed

Gloria Sarmiento, Community Organizer, Nebraska Appleseed

Jordan Vexler, Deputy Field Director, Appleseed

* Primary author

Project Advisor:

Michael S. Barr, Professor, University of Michigan School of Law

Pro Bono Support:

KPMG

Appleseed, a nonprofit network of 16 public interest justice centers in the United States and Mexico, uncovers and corrects social injustices through legal, legislative and market-based structural reform. Appleseed and Appleseed Centers bring together volunteers from the law, business and academic professions to devise long-term solutions to problems affecting the underprivileged and underrepresented in such areas as education and financial access. For more information, visit: www.appleseednetwork.org.

TABLE OF CONTENTS

Executive Summary.....	iii
Introduction.....	1
Background: The Fair Exchange.....	2
The Fair Exchange Disclosure Pilot.....	3
Remitter Profiles.....	5
Consumer Preferences.....	7
Who Chooses to Check the Disclosure?.....	11
Regression Analysis: Summary Findings.....	12
Checking the Disclosure.....	12
Finding the Disclosure Information Helpful.....	13
Prioritizing Low Cost and Competitive Exchange Rates.....	13
Shopping around for Pricing before Deciding on a Remittance Service.....	14
Challenges and Opportunities.....	15
Implementation Costs and Logistics of Posting the Disclosure.....	16
Value of the Disclosure.....	16
Conclusion.....	17
Appendix A.....	19
Appendix B.....	20
Appendix C.....	22
References.....	28

CHARTS AND TABLES

Fair Exchange Pilot Sample Disclosure Template.....	4
Income of Survey Participants.....	5
Overview of Survey Participants.....	6
Reasons for Sending Money.....	6
Consumer Response to Remittance Disclosure Information.....	8
Customer Priorities in Selecting a Remittance Provider.....	9
Comparison Shopping.....	10
Most Helpful Disclosure Information.....	11

EXECUTIVE SUMMARY

International remittances to families in the developing world are a central consideration in global development policies. Along with efforts to improve security in sending and receiving remittances and reduce transaction costs, there has been a move to increase pricing transparency. Appleseed partnered with five remittance providers to promote improved market transparency. Collaboratively, we developed and piloted remittance cost and service disclosure. This study presents findings from 742 remitter surveys and remittance provider interviews assessing the pilot. It asserts that improved disclosures benefit both consumers and the businesses that serve them.

The surveys document a preference for disclosure among customers:

- 37 percent of all survey respondents checked the disclosure.
- 78 percent of those who checked the disclosure found it helpful.
- 84 percent wanted to see the disclosure in all store locations.

The logistic regression method was used to assess factors contributing to consumers checking the disclosure, finding the disclosure helpful, prioritizing low cost and shopping around before choosing a remittance service:

- Business type was statistically significant in all the models, with bank customers more likely than money service business (MSB) customers to check the disclosure, find it helpful, prioritize low cost and shop around for a remittance service.
- The 35 to 54 age group was less likely than younger customers, 18 to 34, to find the disclosure helpful; in contrast, younger customers were less likely to shop around for remittance services.
- Those sending money frequently were more likely to prioritize pricing.
- Men were more likely than women to engage in comparison shopping.

The piloting businesses saw merits in establishing disclosure standards. Costs to implement the pilot were manageable. The major barrier was verifying disclosure posting over a broad network of locations or agents. Nine of the 15 front-line service providers interviewed found the disclosure information helpful, citing benefits of building trust and saving time by having fewer customer questions.

The findings provide compelling evidence that disclosures make good business sense. Though bank customers showed the strongest preference for the disclosure, key MSB customer groups including men, young remitters and those sending money frequently also had either disclosure preferences or a distinct sensitivity to pricing. Offering improved pre-transaction remittance disclosures meets a consumer need, supports competition and benefits positive market players. The challenge ahead is to determine a practical approach to move from pilot to scale.



Remittance Transparency: Strengthening Business, Building Community

Pilot Results from the “Fair Exchange” Effort to Improve Pricing and Service Transparency for International Remittance Transactions

International consumer remittances, money sent by family members working abroad to relatives in the developing world, reached an estimated \$283 billion in 2008.¹ Remittances have surpassed foreign aid to many countries.² Despite recent reports of volume decreases in certain remittance corridors due to economic and political issues, remittances continue to be a major global economic development force, lifting families out of poverty. Along with the push for leveraging the economic development impact of remittances is a push to reduce costs and improve market efficiencies so that consumers can benefit from improved technology through lower costs and more secure service.

In January of 2007, the World Bank Committee on Payment and Settlement Systems released a report titled, “General Principles for International Remittance Services.” The first General Principle of the report is improved transparency: “Transparency of prices and service features is crucial to the ability of consumers to make informed choices between different services and to the creation of a competitive market.”³

In line with the 2007 World Bank standards, Appleseed launched the “Fair Exchange”, a market-based initiative to improve transparency in international remittance services. Herein are the results of a pilot testing the principles of Fair Exchange, with an emphasis on pre-transaction disclosures. Detailed post-transaction disclosures, though not addressed in the study, are also essential for adequate transparency.

¹ Dilip Ratha, Sanket Mohapatra, Zhimei Xu. “Outlook for Remittance Flows 2008-2010: Growth Expected to Moderate Significantly, but Flows to Remain Resilient.” Development Prospects Group. Migration and Remittances Team, Nov. 11, 2008.

² *Sending Money Home: Worldwide Remittance Flows to Developing and Transition Countries*. IFAD, 2007. p.6.

³ *General Principles for International Remittance Services*. Committee on Payment and Settlement Systems. The World Bank. January 2007. p.21.

This study provides compelling information to support a market-based incentive for improved disclosures for remittance transactions. The pilot evaluates consumer response to the Fair Exchange disclosure, market-tested by five remittances service providers in 14 different store or branch locations.

Background: The Fair Exchange

The Fair Exchange initiative grew out of a 2005 Appleseed study documenting barriers consumers face in comparison shopping for international remittance services.⁴ The report revealed three key consumer challenges: inconsistent foreign exchange rates that made it cumbersome for consumers to compare prices and find the best deal; unpredictable pre-transaction pricing information, with some service providers refusing to provide cost and exchange rate information over the telephone and differing disclosure requirements from state to state.⁵

Clear and consistent disclosures create consumer and business advantages. Consumers benefit in multiple ways:

- ***Higher Market Expectations.*** Sending remittances is one of the first financial priorities for many new immigrants. Setting solid standards of pre- and post-transaction disclosure for remittance transactions could influence consumer expectations of other financial services, causing them to expect better information.
- ***Effective Comparison Shopping.*** Consistent disclosures are necessary to effectively compare market options. Making disclosures for international remittance transactions consistent with those required for other financial services will provide remittance senders with necessary tools to select products that offer the most value and best meet their needs.

International remittance providers, operating in an environment of increasing innovation, competition and regulatory scrutiny, benefit as well:

- ***Increased Market Share.*** Remittance service providers offering competitive services will benefit from improved pre-transaction disclosures. Disclosures provide an objective way to highlight low cost and desirable service options and engender trust.
- ***Proactive Disclosure.*** Proactive efforts to improve disclosures could give remittance service providers data and experience that would inform the development of future industry disclosure requirements.

⁴ See: *Creating a Fair Playing Field for Consumers: The Need for Transparency in the U.S.-Mexico Remittance Market.* Appleseed. December 2005.

⁵ *Creating a Fair Playing Field for Consumers, Summary Report.* Appleseed. 2006. p.6.

In 2006, Appleseed convened the Fair Exchange Committee to develop a market-based approach to offer consistent pre-transaction pricing and service disclosures for international remittance services. The Fair Exchange committee included industry, regulatory and nonprofit representatives.⁶ The committee worked with Appleseed to develop a disclosure template, which was focus group tested. The final disclosure, reflecting the preferences of the focus group participants, was then market tested.

Five members of the Fair Exchange Committee – Citi, GroupEx, Mitchell Bank, Viamericas and Wells Fargo – piloted the disclosure. The pilot group included three banks and two Money Service Businesses (MSBs) and covered remittance markets to Mexico, Guatemala and Ecuador. The disclosure for Ecuador focused primarily on fees because transfers are conducted in dollars.

A total of 14 store or branch locations in California, Georgia, New York, Utah and Wisconsin participated in the pilot. The following study describes the results of the pilot evaluation, which includes consumer and company surveys.

The Fair Exchange Disclosure Pilot

The emphasis of the Fair Exchange Pilot was on pre-transaction disclosures. The Fair Exchange Pilot Sample Disclosure was posted daily in each of the pilot locations, starting between July and September of 2007. The disclosure, which includes pricing, exchange rate, service and sample transaction information, was posted in a variety of locations at the discretion of the pilot business. Posting locations included bulletin boards, at the window where remittance transactions take place, in small stands near teller windows and in stacks where consumers could take a copy of the disclosure. The pilots lasted between three months and six months, with the final pilot ending in January of 2008. In the final month of each pilot, a sample of consumers was surveyed to gauge their response to the disclosure. The five businesses participating in the pilot collected a total of 742 consumer surveys.⁷

⁶ The Fair Exchange Committee member affiliations are valid for the time the Committee met, from April 2006-January 2007. Some individuals have since changed positions and some of the entities no longer exist or have new ownership. The Fair Exchange Committee includes representatives from Appleseed and its center affiliates; JoAnn Carlton and Paul Kramer, Bank of America; Arjan Schütte, Center for Financial Services Innovation; Sandra Reilly, Citi; Oscar Chacón and Amy Shannon, Enlaces América; Michael Frias, Federal Deposit Insurance Corporation; Elizabeth McQuerry and Elena Whistler, Federal Reserve Bank Retail Payments Office; Ben Knoll, GrupoExpress; Don Terry, Inter-American Development Bank; Manuel Orozco, Inter-American Dialogue; John Herrera, Latino Community Credit Union; James Maloney, Mitchell Bank; Dan O'Malley, MoneyGram; Beatriz Ibarra and Eric Rodriguez, National Council of La Raza; Edna Butts and Paco Felici, Texas Attorney General's Office; Stephanie Newberg, Texas Department of Banking; Scott Schmith, U.S. Department of Commerce; Ronald Schwartzman, Uniteller; Michael Barr, University of Michigan School of Law; Paul Dwyer, Viamericas; and Daniel Ayala, Wells Fargo.

⁷ See Appendix A for the data collection and survey methodology.

Fair Exchange Pilot Sample Disclosure Template

COUNTRY: **Mexico**

SERVICE: **Name of Remittance Service**

TELEPHONE: 1-800-736-3669

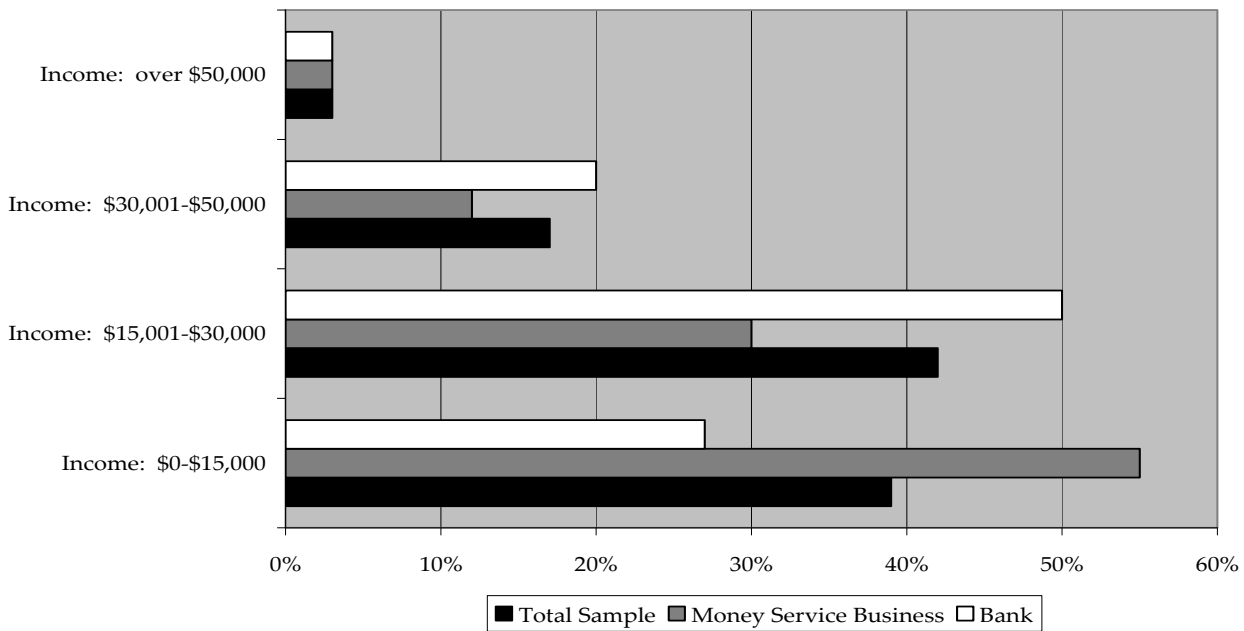
Description						Sending \$300 with fees included	Sending \$200 with fees included	Sending \$100 with fees included
Pick Up Location	Cost to Send \$1-\$300	Exchange Rate (pesos)	Available for Pick Up	Type of Transaction	Fee to Receive Money	Pesos Received	Pesos Received	Pesos Received
Pick Up Location 1	\$10	10.96	Same Day	Bank Account*	0	3178.40	2082.40	986.40
Pick Up Location 2	\$9	10.90	Next Business Day	Cash	0	3171.90	2081.90	991.90
Pick Up Location 3	\$8	10.95	One Hour	Cash	25.00 pesos	3172.40	2077.40	982.40

* **Note:** A monthly fee may apply. A United States bank account is required to use this service. A monthly fee of \$5.99 includes free checks, direct deposit bill-pay and a savings account.

Remitter Profiles

Consumers who used the remittance service during the pilot period and responded to the survey were 71 percent male and 29 percent female, with the majority in the 18 to 34 year old age range. Respondents generally reported low incomes, with over 80 percent reporting an annual income of \$30,000 or less. They most often sent remittances once per month, with a median amount sent of \$350.

Income of Survey Participants



Customers of Banks and MSBs reflected some demographic differences. Of those using an MSB, over half were in the lowest income bracket, \$15,000 or less, whereas those using banks tended to fall into higher income brackets. Bank customers were more likely to be older, with the modal age range of 35-54 years,⁸ and sent more money, with a median amount sent of \$700, compared to \$300 for the MSB customers.

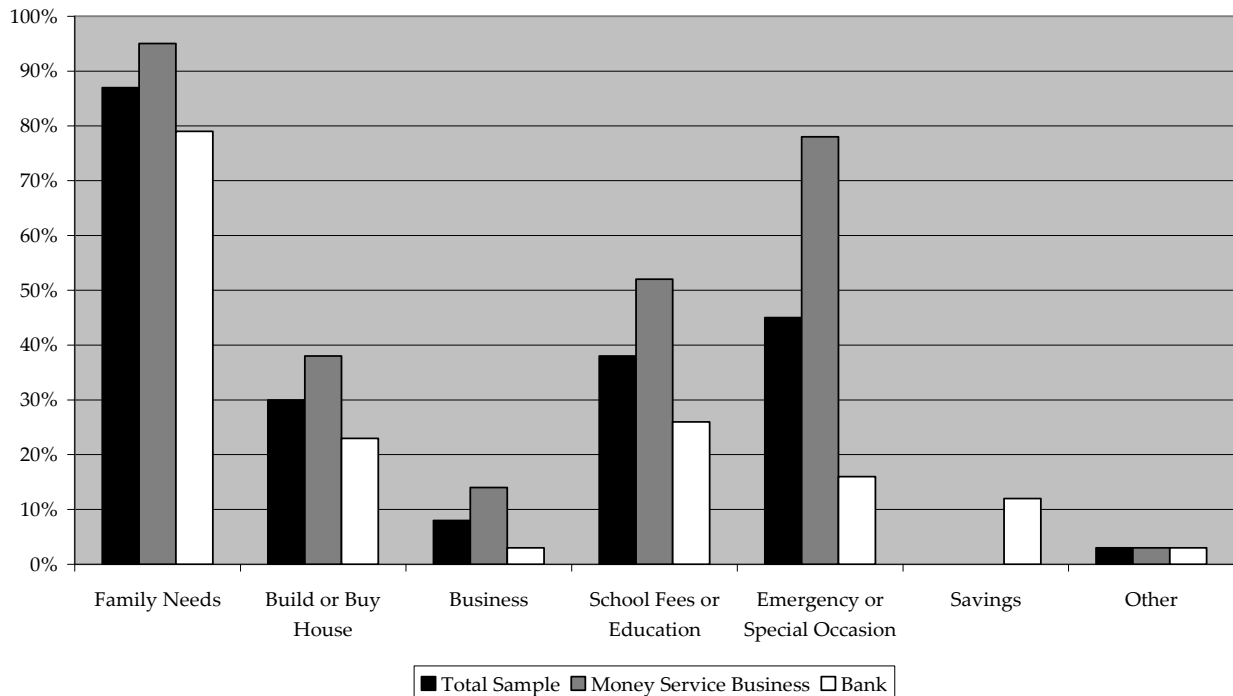
⁸ The modal age range represents an average calculated by determining the most frequent value in the sample.

Overview of Survey Participants

	Entire Sample	Money Service Business	Bank
Modal Age	18-54 years old	18-34 years old	35-54 years old
Sex: Male	71%	68%	73%
Sex: Female	29%	32%	27%
Modal Sending Frequency	Once per month	Once per month	Once per month
Median Amount Sent	\$350	\$300	\$700

Both those using MSBs and those using banks overwhelmingly reported sending money home for their family’s daily needs such as food, clothing and medical care--95 percent and 79 percent respectively. Other common purposes included school fees and education, building or buying a house and for those using MSBs, emergencies or special occasions.⁹

Reasons for Sending Money



⁹ Savings, as a reason for sending money home, was an option only on the survey provided to those sending money through a bank. For this reason, data is not available for MSB customers or for the total sample.

The age distribution and income of the respondents are similar to those of other recent surveys of Latin American remitters. There are, however, some important differences. Other surveys have found more equal male/female distributions. The average amounts sent tend to be somewhat lower, averaging between \$200 and \$300, though still following the trend of higher transaction amounts through banks as compared to MSBs.¹⁰ This study collected data from both banks and MSBs in relatively equal numbers, while banks make up only about 11 percent of the remittance market.¹¹ The higher proportion of bank responses would tend to increase the median amount sent in the overall sample. For that reason, among others, we separately report data for responses from MSBs and banks. In addition, this study is comprised solely of remitters to Ecuador, Guatemala and Mexico, who may differ from those sending to other Latin American countries.

Remittance Transaction Disclosures: Consumer Preferences

There is a strong body of literature demonstrating that improved transparency and disclosures increase market efficiency and benefit consumers, creating a win-win scenario for consumers and businesses that offer competitive services. Federal Reserve Board economist Thomas Durkin noted in a 2006 article assessing credit card disclosures:

Well-informed shoppers help keep markets competitive, which benefits buyers of products and services by minimizing the spread between producers' production cost and market price.¹²

Since the passage of the Truth in Lending Act in 1968, a number of studies have been conducted assessing consumer response to disclosures. Durkin's 2006 assessment of credit card statement, advertisement and privacy notice disclosures provides a helpful reference point to analyze the results of the consumer response to the piloted remittance disclosure. There are many important differences between sending remittances and choosing a credit card or monitoring its usage. Disclosing foreign exchange rates can be more challenging and involved than disclosing credit card rates, which do not vary with the same frequency. However, looking at consumer reactions to those disclosures provides context regarding general consumer perceptions and usage of disclosures. Some of the key differences, in addition to the basic product differences, include:

1. Credit card disclosures have been available for many years, and

¹⁰ See, for example, Manuel Orozco and Nancy Castillo. "Latino Migrants: A Profile on Remittances, Finances, and Health." *Inter-American Dialogue*, April 2008.

¹¹ Roberto Suro, *Remittance Senders and Receivers: Tracking the Transnational Channels*. Multilateral Investment Fund and Pew Hispanic Center. November 2003.

¹² Thomas Durkin. "Credit Card Disclosures, Solicitations, and Privacy Notices: Survey Results of Consumer Knowledge and Behavior." *Federal Reserve Bulletin*. 2006. p. A109.

2. Consumers are accustomed to seeing them in monthly statements and new card solicitations.

Posted disclosures for international remittances are inconsistent, with some locations posting no information, others posting exchange rates or fees for particular countries and others posting only the best rates offered.

Pricing disclosures are mandated by law and used by consumers elsewhere in the banking and credit worlds. Based on a 2005 survey of credit card users, 62 percent checked the annual percentage rate disclosures on their monthly statements and 34 percent read the more detailed descriptive disclosure information at least four or five times per year, the standard set in the study for frequent checking of the disclosure.¹³ Forty-two percent of respondents in a 2004 survey about credit card solicitations found the disclosures helpful.¹⁴

In the survey of remittance senders at locations where the pilot disclosure was posted, more than a third of both MSB customers and bank customers checked the posted disclosure concerning fee, exchange rate and service information before initiating a remittance transaction. Of those who checked the disclosure, an overwhelming majority found it helpful -- 91 percent of bank customers and 68 percent of MSB customers.

Consumer Response to Remittance Disclosure Information

	Total Sample Responding Yes	Money Service Business Customers Responding Yes	Bank Customers Responding Yes
Did you check the posted disclosure?	37%	36%	38%
Among those who checked the disclosure, was the disclosure helpful?	78%	68%	91%
Do you want to see the disclosure posted everywhere?			
--Among those who checked the disclosure.	86%	87%	84%
--Among all survey respondents.	N/A ¹⁵	N/A	70%
Are you satisfied with the disclosure?	92%	89%	95%
Are you satisfied with the business?	96%	95%	97%
Among those satisfied with the business, are they satisfied with the disclosure?	90%	84%	95%

¹³ *Id.*, p.A111.

¹⁴ *Id.*, p.A116.

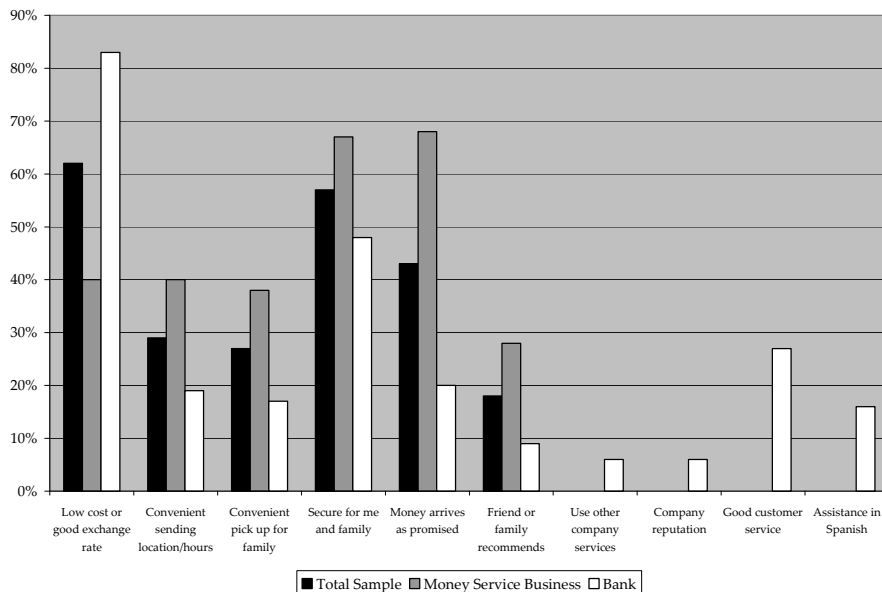
¹⁵ "N/A" is entered for questions that were not asked of the entire sample.

Most of those who checked the disclosure wanted to see similar disclosures at all locations—87 percent for MSBs and 84 percent for bank customers. Almost all customers were satisfied or very satisfied with the information presented on the disclosure table and satisfied or very satisfied with the remittance service they used.

Compared to the percentage of consumers checking the annual percentage rate disclosures for credit cards, the percentage who checked the remittance disclosure is lower—37 percent for the remittance disclosure as compared to 62 percent for the credit card disclosure. However, the remittance customers were not accustomed to the disclosure and may have not checked it simply because they did not know to look for it. The high rate of individuals who checked the disclosure and both found it helpful and wanted to see it posted at all business locations was more than double the rate of individuals who found the credit card solicitation disclosures helpful. This finding reflects a preference for the disclosure among those who checked it. Bank customers found the disclosure helpful at a higher rate than MSB customers, indicating an opportunity to revisit the disclosure to ensure it is accessible and includes all customer priorities.

A deeper look into consumer preferences supports demand for the posted disclosure and highlights differences between bank and MSB customers. MSB and bank customers chose different priorities in selecting a remittance service provider. The top priorities for MSB customers were “the money always arrives quickly and as promised” (68 percent) and “secure for me and my family” (67 percent); bank customers focused on “low cost or competitive exchange rate” (83 percent) and “secure for me and my family” (48 percent).

Customer Priorities in Selecting a Remittance Provider



When consumers were asked about comparison shopping, nearly two-thirds of those using banks, and forty percent of MSB customers, were likely to look into fees and exchange rates prior to initiating a remittance transaction. While bank customers were most likely to look only at transaction fees (47 percent) before selecting a service provider, a portion looked at both transaction fees and the exchange rate (22 percent).¹⁶ The lower percentage of individuals examining exchange rates could reflect difficulties in obtaining exchange rate information to compare, as was found in a 2005 market study by Appleseed, or a lack of awareness of the cost consumers pay through the foreign exchange rate.¹⁷

The results regarding consumer priorities and comparison shopping are in line with the finding that the disclosure was more helpful to bank customers, as those customers appear to be more sensitive to low cost and competitive exchange rates and are more likely to shop around. Consumers were more likely to prioritize low cost and shop around for a remittance service than to check the disclosure. This finding may indicate a latent demand for better disclosures among these customers, but further research will be required to determine whether increased disclosures would be linked to increased comparison shopping in this market. The emphasis on security and the predictability of money arriving as promised for MSB customers presents an opportunity to adjust the disclosure to capture these priorities and make it more helpful to remittance consumers.

Comparison Shopping

	Total Sample Responding Yes	Money Service Business Customers Responding Yes	Bank Customers Responding Yes
Did you look into fees and foreign exchange in other places before deciding to use this service?	52%	40%	64%
Did you look only at the fees? ¹⁸	N/A	N/A	47%
Did you look only at the exchange rate? ¹⁹	N/A	N/A	6%
Did you look at both fees and the exchange rate? ²⁰	N/A	N/A	22%

¹⁶ No data were available concerning which specific information MSB customers looked at.

¹⁷ See: *Creating a Fair Playing Field for Consumers: The Need for Transparency in the U.S.-Mexico Remittance Market*. Appleseed. December 2005.

¹⁸ This question and the three following it were asked only of bank customers.

¹⁹ Remitters to Ecuador were removed from this tabulation, because money is delivered in U.S. dollars.

²⁰ Remitters to Ecuador were removed from this tabulation, because money is delivered in U.S. dollars.

To further understand consumer preferences, a final set of questions was asked about the most helpful aspects of the disclosure. These questions were included only in the survey to bank customers. Bank customers found the “fee posting” to be most helpful (73 percent), followed by “foreign exchange posting” (49 percent) and “available for pick up in destination” (46 percent). The low percentage respondents finding the sample transaction helpful could reflect a lack of familiarity with that format, as it provides a new approach to disclosing total transaction costs.

Most Helpful Disclosure Information

	Bank Customers Responding Yes
Fee Posting	73%
Foreign Exchange Posting ¹	49%
Availability for Pick Up at Destination	46%
Type of transaction (cash, account, card etc.)	15%
Pick up fee charged	13%
Sample Transaction	11%

Who Chooses to Check the Disclosure?

To further understand consumer preferences in checking the disclosure and finding it helpful, the data was also broken down by gender, income, age and frequency of sending. For the most part, consumer behavior did not vary significantly among these different groupings.² A few findings stand out:

- The modal age range for those who checked the disclosure was 18 to 34 years old, as compared to 35 to 54 for those who did not.³
- Those who checked the disclosure were more likely to prioritize low cost and competitive exchange rates (68 percent, as compared to 56 percent for those who did not check the disclosure) and to engage in comparison shopping (75 percent, as compared to 37 percent for those who did not check the disclosure).

¹ Remitters to Ecuador were removed from this tabulation, because money is delivered in U.S. dollars.

² Please see Appendix B for the detailed cross-tabulation charts.

³ The modal age range represents an average calculated by determining the most frequent value in the sample.

- Males were more likely to check the disclosure tables before initiating a remittance transaction (55 percent of males and 42 percent of females).
- Among all groupings, a majority of those who checked the disclosure found it helpful (ranging between 68 and 83 percent) and wanted to see the information posted in all the remittance business locations (ranging between 84 and 90 percent).

Neither income nor amount sent appeared to be important factors contributing to consumers checking the disclosure or finding it helpful.

Regression Analysis: Summary Findings²⁴

In order to have a better understanding of the factors underlying consumer remittance behavior, a series of regression models were created using the logit model. Four models, estimated via logistic regression method, were used to test whether key findings of the study are statistically significant. Through the analysis process, an odds ratio was calculated indicating the likelihood of various consumer groupings to engage in four behaviors captured in the survey:

1. Checking the disclosure,
2. Finding the disclosure information helpful,
3. Prioritizing low cost and competitive exchange rates, and
4. Shopping around for pricing before deciding on a remittance service.

These four factors were selected because each relates directly to consumer priorities of pricing and disclosure information. A brief summary of the logistic regression model is given in Appendix A.

All of the aforementioned models used the same set of independent variables that could potentially explain the consumer behavior. These variables included: business type (whether the business is a bank or MSB), the most recent amount of fund remitted, frequency of sending, sex, age, income and three reasons for sending money—family needs, housing and school. Appendix B provides a more detailed description of each of the models summarized henceforth, the estimation results and the interpretation thereof.

1. Checking the Disclosure²⁵

The second regression model was designed to explain the consumer choice to check the disclosure. Apart from business type, which is significant at the 10 percent level, none of

²⁴ See Appendix C for details regarding the regression models and the results.

²⁵ This variable is referred to as “CHECKFEE” in the analysis. See Appendix C.2 for more details.

the independent variables mentioned above had a statistically verifiable impact on the consumer decision. Though the data indicate that just over one-third of the consumers surveyed checked the disclosure, the model did not support any specific consumer characteristics that made people more likely to do so.

2. Finding the Disclosure Information Helpful²⁶

The second model examined the group of respondents who checked the disclosure and found it helpful. Three of the independent variables have a statistically significant impact on a remitter finding the disclosure helpful: business type and age are significant at the five percent level and sending money for basic needs is significant at the 10 percent level:

- Business type has the strongest impact of the three variables, with bank customers more likely to find the disclosure helpful than MSB customers.²⁷
- Remitters between the age of 35 and 54 years old are less likely to find the disclosure helpful when compared with the youngest age group, 18-34 years old.
- Remitters who send money for family needs are more likely to find the fee disclosure helpful when compared with those who do not.

These findings indicate that though bank customers are more likely to find the disclosure helpful, those sending money for family needs also found the disclosure helpful.

3. Prioritizing Low Cost and Exchange Rates²⁸

The third and fourth models take a step back from the disclosure to examine the priority customers place on pricing. The third regression model looks at consumer priorities in selecting a remittance service provider, with a focus on those who prioritize low cost and/or a competitive exchange rate. Business type, frequency of transaction and sending money to build a home are all statistically significant at the five percent level of significance, while the most recent amount of fund sent is significant at the 10 percent level:

- Bank customers are more likely to prioritize low cost and/or competitive exchange rates than MSB customers.

²⁶ This variable is referred to as “FEEHELP” in the analysis. See Appendix C.1 for more details.

²⁷ More precisely, the “odds” of a bank customer finding the disclosure helpful is higher than that of a MSB customer. However, since the concept of “odds” is closely and proportionately related to the concept of “probability,” the latter concept which is equivalent to “more likely” is substituted for “odds” henceforth. Please refer to Appendix A for further discussion.

²⁸ This variable is referred to as “LCE” in the analysis. See Appendix C.3 for more details.

- The larger the most recent amount of fund sent, the more likely for the respondent to prioritize pricing.
- Those sending no more than once per month were less likely to prioritize pricing.
- Those sending money to build a home are more likely to prioritize pricing.

Although bank customers tend to prioritize cost more than MSB customers, the finding that those who send more frequently and/or send larger amounts of funds are more likely to prioritize cost indicates the importance of cost to a broader component of the market.

Sending money for family needs has no statistically significant effect on prioritizing pricing, while those sending money to build a home were more likely to prioritize pricing. This seems to imply that sending money for non-discretionary purpose such as family need is less sensitive to pricing vis-à-vis sending money for discretionary purposes such as building/buying a house. It is also interesting to juxtapose the finding that those sending money for family are less likely to prioritize cost with the finding of the previous model, that this same group is more likely to find the disclosure helpful. It could reflect a desire to see pricing disclosure information even among customers who have other priorities in choosing their remittance service.

4. *Shopping around for Pricing* ²⁹

The final regression model examines the characteristics of remittance customers who compare pricing before deciding to use a remittance service. At the five percent level of significance, the statistically significant variables in this model are business type, sex and age; sending money for family needs is significant at the 10 percent level:

- Bank customers are more likely than MSB customers to comparison shop for pricing.
- Men are more likely than women to shop around.
- Individuals in the two older age groups, 35-54 and 55 and older, are more likely to comparison shop than the younger group, with the oldest group being the most likely to shop around.
- Those who send money for family needs are less likely to shop around for pricing, reflecting the non-discretionary characteristic of such expenditures.

Again, bank customers prove to be more pricing sensitive and more proactive in their remittance choices than MSB customers. The finding that older remitters tend to shop around more than younger remitters is particularly interesting in the context of the earlier finding that younger remitters are more likely than older remitters to find the disclosure helpful. The findings that those most likely to prioritize pricing and

²⁹ This variable is referred to as “LOOKRATE” in the analysis See Appendix C.4.

comparison shop are not fully aligned with those most likely to find the disclosure helpful could indicate areas for improvement. They could also indicate that the disclosure is most helpful for the less savvy shoppers and those with a more inelastic demand for remittance services.

Challenges and Opportunities: The Experience of the Pilot Businesses

As the final analysis component, interviews were conducted with managers and front-line employees at participating locations of four of the five pilot businesses. The interviews were designed to understand the cost to the business of implementing the disclosure, the challenges and opportunities of providing the disclosure, and the front-line experience regarding the cost, effort and value of daily posting or distribution of the disclosure. A total of 20 front-line staff, managers, and remittance program directors were interviewed.

Implementation Costs and Logistics of Posting the Disclosure

The one-time start-up costs to implement the disclosure pilot ranged from “very little,” to an estimate of between \$2000 and \$3000. Once the template and transmission protocol were developed, limited staff time was devoted to monitoring its implementation and transmitting the daily disclosure sheets.

The main challenge articulated was ensuring that the correct information was posted daily, particularly for businesses with large store or agent networks. Posting of exchange rates is not a new concept for remittance markets. One program director noted that 40 to 50 percent of agents post the exchange rate information faxed to them daily or weekly, and about half of the customers consistently ask about exchange rates. However, there is currently no obligation to post information, to offer consistent information, or to verify the accuracy of any posted information.

Some suggestions for making the disclosure process more practical for larger remittance providers included electronic means of disclosure, such as a website with a printable form or text messages via cell phones to customers, and a toll free number to call for exchange rates.

These comments indicate that it would be feasible to create and transmit the disclosure on a broader basis. Similar systems are already in place, particularly among MSBs. It would entail a front-end investment to create an efficient process for updating and transmitting the disclosure to the store locations.

Value of the Disclosure

The program directors who were interviewed generally agreed that transparency is good for the market. Reflecting on the pilot there were different perspectives on the best way to achieve transparency:

- “I think the fact that we are putting [the disclosure] out there is of value. We also get a lot of favorable comments from customers and other people in the community...even if someone doesn’t look at it, they have more confidence and trust that we are transparent...It is an attitude that is appreciated.”
- “It is a good thing to have the foreign exchange rate available, but it is not a show stopper to make things churn. What is confirmed is that not having access to the rates before hand is an issue...”
- “The key issue for consumers is: Is there competition. If there is, they will do ok.”

Of the fifteen front-line staff interviewed, nine found it helpful to very helpful to have the disclosure. In some cases it was used as a sales tool by staff. In others, it was a time saving tool, “We always gave information on the exchange rate before because that is something people always ask about, but now it is so easy. People got used to coming into the store and looking at the bulletin board to see the disclosure. Really, it reduced the time that I spent with customers because they had all the information they wanted right there.”

Other front-line staff simply felt that displaying the information was the right thing to do, “We definitely plan to continue displaying the information. I think that the customers like that the exchange rate is displayed. They like the transparency...I think that having the display led to people choosing the least expensive option.” Another commented, “I think everybody needs to...publish the exchange rate they are given. It is the same when you go to the casa de cambio, you need to see what they have.”

The six individuals who did not find the disclosure helpful felt that customers did not understand the information or did not look at it. Many of the comments supported the need for the information but indicated that customers were accustomed to asking tellers for the information, “Customers did not use the rate sheet. They asked the [tellers] for the foreign exchange rates.” Another noted, “I did notice some clients looking at the table, but they never asked any further questions about it. To me this means they just didn’t understand the format.” There were also some comments about the information interests of customers, “Eighty-five percent of customers do not ask for the rate. [They are] more interested in the pesos their beneficiary would be receiving,” and a sense that the transaction receipt provided sufficient information.

These comments reflect a need for better education about the disclosure, both for consumers and front-line staff if a remittance disclosure is to be more broadly implemented. A company representative summarized, “This must go hand in hand with an education campaign that lets people see the value, asking consumers to look for this sign at agents.”

Those interviewed also suggested adjustments to the disclosure to maximize its accessibility and usefulness:

- Larger print,
- Utilize higher dollar amounts for the sample transactions,
- Add color,
- Fewer fields to simplify the table, and
- Create one table, from an independent source, that compares the information of multiple remittance providers.

Overall, the interviews suggested that the information in the disclosure was helpful and met a customer demand. There was less agreement on the best way to present the information to customers—whether verbally, through a standard posted disclosure or through electronic means.

Conclusion

The results of the Fair Exchange pilot provide compelling evidence that making remittance pricing and service information more readily available to customers is a good business move:

- Over one-third of the survey respondents checked the disclosure and most of them found it helpful and wanted to see it in all store locations.
- The disclosure was helpful to important customer segments for both MSBs and banks.
- Most of the front-line staff interviewed found the disclosure to be a helpful sales or time-saving tool.

A major barrier is in creating standard procedure to provide the information to customers. Daily disclosures exist in other business contexts, such as pricing disclosures of gasoline, which are posted and updated daily, and certificate of deposit rates at financial institutions. However, in the context of international remittances, many pilot participants expressed concerns about enforcing a disclosure posting throughout a large network of locations where remittances are often one of many products and services offered. The recent volatility of the Mexican Peso has brought to light the challenge of disclosing exchange rates that are fluctuating dramatically throughout a day. Currency

volatility makes accurate posting more difficult, but not impossible, given technology and the many options for reaching customers with accurate pricing information.

Parallel to the Fair Exchange process, the UK Remittance Task Force examined transparency in remittances and released a Remittance Customer Charter in January of 2008.³⁰ Many major remittance players in the United Kingdom have signed onto the Charter and many of the standards will become part of English law in November 2009 as part of the Payments Services Directive.³¹ This Charter provides an important step forward and could serve as one strategy for bringing the Fair Exchange principles to the broader U.S. market.

As the remittance industry moves forward in defining consistent disclosure standards to ensure continued competition and a fair marketplace for consumers, some additional questions should be considered:

- How can technology be utilized creatively to provide consumers with disclosure information before initiating a transaction?
- How can additional consumer priorities, such as security, and consumer remedies be incorporated into disclosures?
- How can a disclosure template accommodate evolving technology for international remittances, such as cards and cell phones?
- How can existing receipt standards be improved to ensure consumers have both pre- and post-transaction access to all relevant transaction information, including when the funds will be available for pick up and the foreign exchange spread.³²

Competition has been credited by remittance providers and analysts alike as a major factor in reducing the cost of remittance services. Accessible and effective disclosures are essential to competition. The Fair Exchange program, in conjunction with the Fair Exchange Committee and pilot partners, has laid the groundwork for appropriate pre-transaction disclosures for international remittances. The remaining challenge is to move to scale and institute consistent market standards.

³⁰ The Charter can be accessed at:

<http://paymentscouncil.org.uk/files/NPPresponse2008pubUKRemittancesTaskForce.pdf>

³¹ "Q&A with Leon Isaacs: Author of the Remittance Customer Charter." *International Association of Money Transfer Networks*. February 2008. <http://www.iamtn.org/content/qa-leon-isaacs-author-remittance-customer-charter>. ChequePoint, Coinstar, MoneyGram, the Post Office, the UK Money Transfer Association, and Ria Envía have signed onto the Remittance Customer Charter.

³² The foreign exchange spread is the difference between the exchange rate paid by the financial institution and the rate provided to the customer.

APPENDIX A – Pilot and Survey Methodology

The Fair Exchange pilot began in July of 2007 and concluded in January of 2008. Five businesses providing remittance services participated in the pilot—Citi, GroupEx, Mitchell Bank, Viamericas and Wells Fargo. Each business determined how the Fair Exchange disclosure would be presented to customers during the pilot, the number and place of pilot locations and the duration of the pilot. Pilot periods lasted between three and six months. There were a total of 14 pilot sites in Oxnard and San Fernando, California; Alpharetta and Norcross, Georgia; Milwaukee, Wisconsin; New York, New York and Salt Lake City, Utah.

The Fair Exchange disclosure was posted daily at the 14 pilot locations. It was posted in a variety of ways: on a stand in a prominent location, on the teller window and through making copies of the disclosure available at teller and other customer service locations in the store. The verification and monitoring of the daily posting was largely the responsibility of each piloting entity.

The customer survey implementation was also dictated by the piloting business. The surveys were collected in three ways: through telephone interviews, in-person interviews and through customers filling out the survey independently at the store locations. Incentives were provided to encourage customers to participate. Two different versions of the customer survey were implemented, one by MSBs and another by the banks. The bank survey had additional response options for two of the questions and included some additional questions. The analysis takes into account the differences in the surveys. A total of 742 customers completed the survey. The target survey numbers for each institution was set based on transaction volume; four of the five business partners met the target survey numbers.

APPENDIX B

This appendix provides a brief introduction to logistic regression model and the interpretation of odd ratios.

B.1. Ordinary (binary-outcome) Logistic Regression

Logistic regression is a model used for prediction of the probability of occurrence of an event by fitting data to a logistic curve. It makes use of several independent variables that may be either numerical or categorical.³³

The logistic regression or logit model is

$$\text{odds } (y \neq 0) = \exp(\mathbf{x}\boldsymbol{\beta} + \beta_0)$$

The *Stata* commands `logit` and `logistic` both report binary-outcome (ordinary) logistic regression estimates.³⁴ Exponentiated coefficients have the interpretation of odds ratios. `Logit` reports coefficients and `logistic` reports the exponentiated coefficients. For instance, `logit` might report a coefficient of 0.5 and `logistic` would correspondingly report $\exp(0.5) = 1.6487$, labeling that result an odds ratio.

B.2. Odds

Let p be the probability of an event. Then, $o = p/(1-p)$ is called the odds of the event. When probabilities are small, $p/(1-p)$ approximately equals p because $(1-p)$ is approximately 1.

³³ For example, the probability that a person has a heart attack within a specified time period might be predicted from knowledge of the person's age, sex and body mass index.

³⁴ *Stata*, an econometric software, was used to estimate the various logistic regression models described in Appendix C.

B.3. Odds Ratios

The exponentiated coefficient in an ordinary logistic regression has the interpretation

$$\frac{\text{odds (if the corresponding variable is incremented by 1)}}{\text{odds (if variable not incremented)}}$$

or, equivalently,

$$\frac{\text{Prob(event | } x + 1 \text{) / (1 - Prob(event | } x + 1 \text{))}}{\text{Prob(event | } x \text{) / (1 - Prob(event | } x \text{))}}$$

For instance, consider the model

$$\text{logit } y = x_1 + x_2$$

If the exponentiated coefficient on x_1 is 1.5, then the odds of the event are 50 percent greater when $x_1 = 1$ than when $x_1 = 0$.

If the exponentiated coefficient on x_2 is 0.5, then the odds of the event halve as age increases by 1 and they halve at every increment of x_2 .

B.4. Constancy of the Odds Ratios

It is a remarkable property of logistic regression that the odds ratio of an effect is constant regardless of the values of the covariates. For instance, say you estimate the following logistic regression model:

$$-13.70837 + 0.1685 x_1 + 0.0039 x_2$$

The effect on the odds of a 1-unit increase in x_1 is $\exp(0.1685) = 1.18$, meaning the odds increase by 18 percent. Incrementing x_1 increases the odds by 18 percent regardless of the value of x_2 —it does not matter whether $x_2 = 0$ or $x_2 = 1000$. For every observation in the dataset, incrementing x_1 has the same multiplicative effect on the odds.

APPENDIX C

This appendix examines the institutional effect of remittance service providers and the attributes of remitters on certain consumer behavior.

C.1. Finding the Disclosure Information Helpful (“FEEHELP”)

Logit Model

This subsection analyzes the effect of institutional remittance service providers and the attributes of remitters on the odds that the consumer finds the disclosure information helpful, *FEEHELP*. The logit model is given by

$$odds(FEEHELP \neq 0) = \exp \left(\begin{array}{l} \beta_{FH} + \beta_1(BUSTYPE) + \beta_2(SENDFREQ) + \beta_3(SEX) + \beta_4(AGE) \\ + \beta_5(NEEDS) + \beta_6(HOUSE) + \beta_7(SCHOOL) \\ + \beta_8(INCOME) + e \end{array} \right)$$

where:

- *odds* (*FEEHELP* ≠ 0) is the odds that the respondent finds the disclosure information helpful
- *BUSTYPE*=1 if business type is Bank, and 0 if Money Transfer Operator
- Frequency of sending money home,
 - SENDFREQ*=1 if a respondent sends money home more than once per month;
 - SENDFREQ*=2 if once per month; and
 - SENDFREQ*=3 if once in more than a month
- *SEX*=1 if a remitter is male, 0 if female
- Age of a respondent,
 - AGE18-34*=1 if the respondent is between 18 to 34 years old and 0 if otherwise;
 - AGE35-54*=1 if between 35 to 54 years old and 0 if otherwise; and
 - AGE55+*=1 if over 55-year old and 0 if otherwise
- *NEEDS*=1 if respondent remits money for family daily needs and 0 if otherwise
- *HOUSE*=1 if respondent remits money to build/buy house and 0 if otherwise
- *SCHOOL*=1 if respondent remits money for school fees/education and 0 if otherwise
- Income strata of a respondent,
 - INCOME*=1 if the respondent has income lower than \$15,000 and 0 if otherwise;
 - INCOME15-30*=1 if income between \$15,001 and \$30,000 and 0 if otherwise;

$INCOME_{30-50}=1$ if between \$30,001 and \$50,000 and 0 if otherwise; and

$INCOME_{50+}=1$ if income over \$50,000 and 0 if otherwise

- e is the error term and β_i 's are the odd-ratios to be estimated.

Logit Estimates

Using logit regression, the results from the estimated logit model are summarized in Table 1.

Table 1: FEEHELP

Number of obs = 222
 Wald chi2(12) = 42.68
 Prob > chi2 = 0.0000
 Pseudo R2 = 0.1583

FEEHELP	Odds Ratio	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
BUSTYPE	7.964311	3.998685	4.13	0.000	2.977014	21.30667
AMTSENT	.9999002	.0001658	-0.60	0.548	.9995752	1.000225
SENDFREQ	.9086853	.2240311	-0.39	0.698	.560473	1.473236
SEX	.9011812	.392033	-0.24	0.811	.3841681	2.11399
AGE35-54	.4045939	.1488026	-2.46	0.014	.1967716	.8319102
AGE54+	.4375391	.2864994	-1.26	0.207	.1212418	1.578997
NEEDS	3.502106	2.339293	1.88	0.061	.9457019	12.96893
HOUSE	1.84852	.7305408	1.55	0.120	.8519745	4.010713
SCHOOL	.5174764	.2137364	-1.59	0.111	.2303104	1.162699
INCOME15-30	.8781725	.3528445	-0.32	0.746	.3995509	1.930134
INCOME30-50	.8170977	.4619846	-0.36	0.721	.2697784	2.474804
INCOME50+	.6837737	.641654	-0.41	0.685	.1086786	4.302104

- A logit regression was used to predict the odds that a respondent finds the disclosure information helpful, *FEEHELP*.
- There are 222 observations used in the logistic regression analysis with 12 degrees of freedom. The model as a whole is statistically significant (i.e. $Prob > chi2 = 0$).
- The “Odds Ratio” column gives the amount of change expected in the odds ratio when there is a one unit change in the corresponding independent variable with all of the other variables in the logit model held constant. An odds ratio close to 1 suggests that there is no change in odds ratio for *FEEHELP* with respect to change in the corresponding independent variable.¹

¹ Odds ratio can be interpreted in two ways:

(i) for a one unit change in the independent variable, the odds of the dependent variable occurring increases by the odds ratio.

- The “z” column provides the z-statistic (i.e., Wald z-statistic).
- The “ $P > |z|$ ” column gives the two-tail p -value for the z-test which tests the null hypothesis that the odd ratio = 1, i.e.,

$$H_0: \beta_i = 1.$$

- The “Confidence Interval” column contains the 95 percent confidence intervals for the odds ratios. Significant effects are suggested when confidence intervals do not contain 1.0. Here the only 95 percent confidence intervals that would be considered significant at the 0.05 level of significance are those for *BUSTYPE* and *AGE35-54*. All of the other confidence intervals contain the value 1.0.

Interpretation

- The null hypotheses that the odds ratios for *BUSTYPE* and *AGE35-54* were rejected at the 5 percent level of significance, while that for *NEEDS* was rejected at the 10 percent level of significance.
- When the odds ratio for an independent variable is more than 1, an increase in that independent variable increases the odds of (*FEEHELP* ≠ 0). Hence, the odds that a respondent finds the disclosure information helpful, i.e., $odds(FEEHELP \neq 0)$, increases by a factor of 8 when the respondent uses Bank (*BUSTYPE*=1) vis-à-vis Money Transfer Operator (*BUSTYPE*=0).
- Likewise, $odds(FEEHELP \neq 0)$ increases by a factor of 3.5 when the respondent remits money for family daily needs (*NEEDS* =1) vis-à-vis when this is not the case (*NEEDS*=0).
- When the odds ratio for an independent variable is less than 1, an increase in that independent variable decreases the odds of (*FEEHELP* ≠ 0). Hence, $odds(FEEHELP \neq 0)$ decreases by a factor of 0.4 when the respondent is between the age of 35 to 54 (*AGE35-54*=1) vis-à-vis when this is not the case (*AGE35-54*=0).²
- The predicted probability of (*FEEHELP* ≠ 0) when the respondent remits via Bank (*BUSTYPE*=1) is given by

$$\begin{aligned} &= (\text{odds ratio}) / (1 + \text{odds ratio}) \\ &= (7.964311)/(1+7.964311) \\ &= 0.89. \end{aligned}$$

- Likewise, the predicted probability of (*FEEHELP* ≠ 0) when the respondent chooses to remit money due to family daily needs (*NEEDS* =1) is 0.78.
- Furthermore, the predicted probability of (*FEEHELP* ≠ 0) when the respondent is between the age of 35 to 54 (*AGE35-54*=1) is only 0.29.

(ii) for an x unit change in the independent variable, the odds of the dependent variable occurring increases by the odds ratio to the x power, $(odds-ratio)^x$.

² If the odds ratio for an independent variable is exactly 1, the odds of the dependent variable occurring would not change when the independent variable changes.

C.2. Checking the Disclosure (“CHECKFEE”)

The following logit model estimates the effect of institutional remittance service providers and the attributes of remitters on the odds that the consumer checks the disclosure information, *CHECKFEE*,

$$odds(CHECKFEE \neq 0) = \exp \left(\begin{array}{l} \beta_{FH} + \beta_1(BUSTYPE) + \beta_2(SENDFREQ) + \beta_3(SEX) + \beta_4(AGE) \\ + \beta_5(NEEDS) + \beta_6(HOUSE) + \beta_7(SCHOOL) \\ + \beta_8(INCOME) + e \end{array} \right)$$

where *CHECKFEE*=1 if the respondent checks the disclosure before deciding to use the remittance service provided by the business in the sample and 0 if otherwise. The resulting estimates of odd ratios are given in the following Table 2:

Table 2: CHECKFEE

Number of obs = 519
Wald chi2(12) = 12.81
Prob > chi2 = 0.3827
Pseudo R2 = 0.0156

CHECKFEE	Odds Ratio	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
BUSTYPE	1.462566	.3096751	1.80	0.073	.9657997	2.214848
AMTSENT	1.000058	.000094	0.62	0.534	.9998742	1.000243
SENDFREQ	.9106648	.1182329	-0.72	0.471	.7060668	1.174549
SEX	1.108213	.2420683	0.47	0.638	.7222613	1.700405
AGE35-54	.8435257	.1664853	-0.86	0.389	.5729254	1.241934
AGE54+	.7771673	.3051966	-0.64	0.521	.3599519	1.677972
NEEDS	.8009149	.1673463	-1.06	0.288	.5317811	1.206257
HOUSE	1.108248	.2004095	0.57	0.570	.7775177	1.57966
SCHOOL	1.105672	.2193582	0.51	0.613	.7494688	1.63117
INCOME15-30	.7704116	.1651602	-1.22	0.224	.5061077	1.172742
INCOME30-50	.6528795	.1907777	-1.46	0.145	.3682168	1.15761
INCOME50+	1.194217	.6532502	0.32	0.746	.4087584	3.488993

C.3. Prioritizing Low Cost and Exchange Rates (“LCE”)

The following logit model estimates the effect of institutional remittance service providers and the attributes of remitters on the odds that the consumer prioritizes low cost and exchange rates, *LCE*,

$$\text{odds}(LCE \neq 0) = \exp \left(\begin{array}{l} \beta_{FH} + \beta_1(BUSTYPE) + \beta_2(SENDFREQ) + \beta_3(SEX) + \beta_4(AGE) \\ + \beta_5(NEEDS) + \beta_6(HOUSE) + \beta_7(SCHOOL) \\ + \beta_8(INCOME) + e \end{array} \right)$$

where *LCE* =1 if the respondent prioritizes low cost and exchange rates, and 0 if otherwise. The resulting estimates of odd ratios are given in Table 3 below:

Table 3: LCE

Number of obs = 547
Wald chi2(12) = 133.92
Prob > chi2 = 0.0000
Pseudo R2 = 0.2305

LCE	Odds Ratio	Robust Std. Err.	z	P> z	[95% Conf. Interval]
<i>BUSTYPE</i>	7.712467	1.855189	8.49	0.000	4.813286 12.35791
<i>AMTSENT</i>	1.000254	.0001326	1.91	0.056	.9999937 1.000513
<i>SENDFREQ</i>	.5584341	.0826394	-3.94	0.000	.4178376 .7463393
<i>SEX</i>	.8864035	.2104621	-0.51	0.612	.5565798 1.411677
<i>AGE35-54</i>	.9353584	.2119282	-0.29	0.768	.5999536 1.458272
<i>AGE54+</i>	.8545352	.3350134	-0.40	0.688	.3962994 1.842623
<i>NEEDS</i>	.6490694	.1784543	-1.57	0.116	.3786717 1.11255
<i>HOUSE</i>	1.706087	.3609852	2.52	0.012	1.126933 2.582879
<i>SCHOOL</i>	.87832	.2015484	-0.57	0.572	.5601796 1.377141
<i>INCOME15-30</i>	1.280638	.3108289	1.02	0.308	.7958439 2.060749
<i>INCOME30-50</i>	.9216033	.2923535	-0.26	0.797	.4949069 1.716187
<i>INCOME50+</i>	.8095182	.3586278	-0.48	0.633	.339729 1.928949

C.4. Shopping around for Pricing (“LOOKRATE”)

The following logit model estimates the effect of institutional remittance service providers and the attributes of remitters on the odds that the consumer shops around for pricing, *LOOKRATE*,

$$odds(LOOKRATE \neq 0) = \exp \left(\begin{array}{l} \beta_{FH} + \beta_1(BUSTYPE) + \beta_2(SENDFREQ) + \beta_3(SEX) + \beta_4(AGE) \\ + \beta_5(NEEDS) + \beta_6(HOUSE) + \beta_7(SCHOOL) \\ + \beta_8(INCOME) + e \end{array} \right)$$

where *LOOKRATE* =1 if the respondent shops around for pricing, and 0 if otherwise. The resulting estimates of odd ratios are given in the following Table 4:

Table 4: LOOKRATE

Number of obs = 547
Wald chi2(12) = 66.58
Prob > chi2 = 0.0000
Pseudo R2 = 0.0947

LOOKRATE	Odds Ratio	Robust Std. Err.	z	P> z	[95% Conf. Interval]
<i>BUSTYPE</i>	3.141531	.6651541	5.41	0.000	2.074517 4.757356
<i>AMTSENT</i>	1.0001	.0001128	0.89	0.374	.9998793 1.000321
<i>SENDFREQ</i>	1.043559	.1296743	0.34	0.732	.8179854 1.331339
<i>SEX</i>	1.554008	.3154649	2.17	0.030	1.043899 2.313384
<i>AGE35-54</i>	1.639732	.3189686	2.54	0.011	1.119935 2.400782
<i>AGE54+</i>	2.692451	1.035775	2.57	0.010	1.266759 5.722709
<i>NEEDS</i>	.6869427	.1489825	-1.73	0.083	.4490699 1.050817
<i>HOUSE</i>	1.304929	.24356	1.43	0.154	.9051355 1.88131
<i>SCHOOL</i>	1.081906	.2056296	0.41	0.679	.7454323 1.570258
<i>INCOME15-30</i>	1.061196	.2209326	0.29	0.775	.705638 1.595912
<i>INCOME30-50</i>	1.222145	.3415989	0.72	0.473	.7066518 2.113684
<i>INCOME50+</i>	1.501614	.7476042	0.82	0.414	.5659438 3.984222

References

Appleseed. *Creating a Fair Playing Field for Consumers: The Need for Transparency in the U.S.-Mexico Remittance Market*. December 2005.

Appleseed. *Creating a Fair Playing Field for Consumers, Summary Report*. 2006.

Durkin, Thomas. "Credit Card Disclosures, Solicitations, and Privacy Notices: Survey Results of Consumer Knowledge and Behavior." *Federal Reserve Bulletin*. 2006.

IFAD. *Sending Money Home: Worldwide Remittance Flows to Developing and Transition Countries*. 2007.

International Association of Money Transfer Networks. "Q&A with Leon Isaacs: Author of the Remittance Customer Charter." February 2008. <http://www.iamtn.org/content/qa-leon-isaacs-author-remittance-customer-charter>.

Orozco, Manuel and Nancy Castillo, "Latino Migrants: A Profile on Remittances, Finances, and Health," *Inter-American Dialogue*, April 2008.

Dilip Ratha, Sanket Mohapatra, Zhimei Xu. "Outlook for Remittance Flows 2008-2010: Growth Expected to Moderate Significantly, but Flows to Remain Resilient." Development Prospects Group. Migration and Remittances Team, Nov. 11, 2008.

Suro, Roberto. *Remittance Senders and Receivers: Tracking the Transnational Channels*. Multilateral Investment Fund and Pew Hispanic Center, November 2003.

UK Remittance Task Force. "Remittance Customer Charter." January 2008.
<http://paymentscouncil.org.uk/files/NPPresponse2008pubUKRemittancesTaskForce.pdf>

World Bank. *General Principles for International Remittance Services*. Committee on Payment and Settlement Systems. January 2007.