FOUR

REMITTANCE MECHANISMS: REGULATORY POLICIES IN A GLOBALIZED FINANCIAL MARKET

Daniel M. Rothschild

Although annual migrant worker remittances have surpassed the quarter-trillion dollar mark and are a vital part of international economic development, developed country regulators remain unsure of if and how to regulate their transfers through informal networks. Informal money transfer services (IMTSs), most notably hawala, account for worldwide currency flows of between $100 and $300 billion annually and provide a low-cost and reliable method for transferring small sums of money internationally. Additionally, informal systems serve as a liberalized currency market and help mitigate the deleterious effects to developing country residents of tariffs and currency controls. This paper discusses how IMTSs operate, explains their comparative advantages, notes the disadvantages of formal systems, and weighs the costs and benefits of various forms and degrees of regulation by regulators in developed countries. The author concludes that, in order to promote international economic development and the free movement of migrant workers’ earnings, informal systems should be regulated gently with an eye to ease of compliance. The unintended consequences of zealous regulation of IMTSs are likely to create problems much worse than those that exist in the absence of regulation.

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I. INTRODUCTION

The role that remittances by international migrants play in global economic development has become a major source of academic discussion over the last five years. This increased attention is warranted, as international migrants now number some 175 million (Addy, et al. 2003) and remit between $232 billion and $350 billion annually (Ratha 2005, 42; Ratha 2003, 158, 172), a figure widely expected to grow for the foreseeable future (International Conference on Migrant Remittances 2003, 12). However, the actual mechanisms by which migrants move money home have received little scholarly attention. Informal money transfer services (IMTSs), of which the hawala system is the best known, carry a significant amount of international money transfers, leading to the large spread of remittance value estimates. In the wake of September 11, 2001, the U.S. Congress moved quickly to scrutinize the IMTS system, responding to concerns that it had served as a major transfer vehicle for al-Qaeda and other terrorist groups. Indeed, a provision of the USA PATRIOT Act called on the U.S. Treasury to investigate IMTS systems (USA PATRIOT Act, Section 359). However, there remains no consensus about if and how governments of developed countries, particularly the U.S., should regulate IMTSs.

While academia is beginning to look at remittance mechanisms and their accompanying regulatory framework, little has been achieved in the way of synthesis and even less has focused on the interplay between regulation and the IMTS sector. This paper will explore the shortcomings of formal money transfer institutions, the ways in which IMTSs operate, and the regulatory framework that governs these systems.

In understanding the role of IMTSs in international remittances, it is important to recognize that significant structural and economic problems prohibit many migrants from accessing formal private sector institutions. As a result, IMTS systems, which predate the commercial banking sector by centuries (Buencamino and Gorbunov 2002, 1), will continue to play a major part in migration and remittances for the foreseeable future. The challenge to the
policy community is twofold: increase participation in the formal financial sector while properly regulating IMTS brokers to prevent money laundering and terrorist finance.

All parties (save rent-seeking financial institutions) have a stake in reducing the costs of legitimate international funds transfers. Cost has important implications not only for efficiency, but for the total quantity and frequency of remittances as well. Dilip Ratha argues that reducing remittance costs by ten percent “implies an annual savings of $3.5 billion to overseas workers. No doubt a substantial portion of this savings would be remitted” (Ratha 2003, 165). The development ramifications of this are clear: remittances are a reliable form of foreign investment and represent a growth of capital stock in the recipient country (Yang and Choi 2005). Thus, increased remittances lead to increased investment in developing countries, which is one of the cornerstones of economic growth (Terry and Wilson 2005; Ratha 2005). Policymakers therefore have a duty not just to regulate for domestic security, but to consider the development implications of their policies.

II. INFORMAL MONEY TRANSFER SERVICES

IMTS systems typically consist of networks of geographically diverse agents with cultural and linguistic links between developing countries and their diaspora communities. They act solely transfer as agents; they do not take deposits or maintain current accounts like banks (Buencamino and Gorbunov 2002, 1), nor do they function as moneylenders, contrary to portrayals in the popular press (Ballard 2004, 5). IMTS systems carry between 15 and 80 percent of foreign remittances to Asian countries and between 28 and 46 percent of remittances to Mexico (Buencamino and Gorbunov 2002, 6), and for some countries, especially failed states, they are the only feasible means of importing or exporting money (“Cheap and Trusted” 2001; “African Families, African Money” 2003).
The most common form of IMTS system is the hawala or hundi system, which is similar to mechanisms known as fei qian (飛錢 or “flying money”) in China (“Cheap and Trusted” 2001), phei kwan in Thailand (El-Qorchi 2002), and chit or chop in some parts of the Indian subcontinent (Buencamino and Gorbunov 2002, 3). Hawala is reckoned by some to transmit between $100 and $300 billion annually, although intrastate transactions account for much of this (Ballard 2004, 2; Buencamino and Gorbunov 2002, 2). Hawala agents, or hawaladars, typically operate in the open but without the burden of government regulation, at least for small transfers; hawala is largely self-regulating (Buencamino and Gorbunov 2002, 6). Frequently, a hawaladar operates his agency as a side venture to a retail shop or other business. The principle of the hawala system is quite simple: a remitter takes cash to a hawaladar, who emails, faxes, or telephones the quantity remitted and information about the recipient to a partner in the country of destination. The receiving hawaladar usually arranges for the recipient to pick up the remittance in local currency, but frequently will arrange to have the money couriered to the recipient’s home or place of business. Hawaladars tend to collect their fees on the forex spread, or the difference between ask and buy prices in the foreign exchange market. Some hawaladars exempt expatriate remitters from these fees, instead raising commissions for those using hawala “to avoid exchange, capital, or administrative controls” (El-Qorchi 2002). While transaction vectors over time are close to zero, rendering little settlement necessary, hawaladars typically settle accounts through formal institutions or hand-delivering cash, securities, and other valuables on an annual or semi-annual basis (“Cheap and Trusted” 2001). While often a point of worry for regulators, this settlement practice resembles the way Rothschild banks settled accounts in the nineteenth century (Malkin and Elizur 2002) and multi-national corporations commonly use this method today (Buencamino and Gorbunov 2002, 2).

At the root of the hawala system lies trust based on social capital between hawaladars (Ballard 2004, 7). Buencamino and Gorbunov write that hawaladars seldom “defraud one
another or their clients. Cheating among hawaladars is punished by effective excommunication and ‘loss of honour,’ which is tantamount to an economic death sentence” (Buencamino and Gorbunov 2002, 6). Accustomed to the idea of financial institutions based on impersonal market exchange (despite advertising claims to the contrary), westerners tend to treat markets based on social capital with extreme skepticism. However, from a game theory perspective, hawala is highly rational. Each transaction represents another move in a repeated game. The receiving hawaladar has two options: he could deliver the remittance as promised (cooperate), or he could embezzle it (defect). If he takes the latter route, he gains the value of the transaction at the expense of an infinite future stream of earnings. Moreover, since hawala predominates in communities with a high level of personal economic exchange where social capital between economic actors serves as the key currency, embezzlement will mean not only economic exile but pariah status as well. Since most hawala transfers are relatively small, there is no situation in which embezzlement or cheating are dominant strategies. Honesty emerges as the optimizing choice in every situation.

International migrants sending remittances through hawala and other IMTS systems are motivated by a number of factors, the first and most obvious being their comparative advantage in transferring small amounts. Roger Ballard writes, “Scoring hugely in terms of speed, reliability, cost and convenience, informal systems such as hawala [occupy] a position of very substantial competitive advantage as compared with their rivals in the formal sector” (Ballard 2004, 3). Calling hawala “the poor man’s banking vehicle” (despite the lack of traditional banking services), the CEO of Jordinvest wrote in 2002 that hawala services developed “a cost-effective, door to door service, that the commercial banks could not quite match in terms of cost, service and expediency” (Azzam 2002). This key point has been lost in the limited policy debate about hawala since 2001: hawaladars simply offer the fastest, safest, and most cost-effective way for migrants to remit money.
An informal study of several means of remittance demonstrates that hawala networks offer massive cost savings over formal institutions. \(^1\) The study examined 11 ways to remit $100 from the U.S. to Mexico and eight ways to remit the same amount to the Philippines. In each of these cases, the recipients received an average amount, after fees and forex spreads, of about $88. For each scenario, hawala proved to be the most cost-effective way to transfer this small sum, with about $98 in local currency going into the recipient’s pocket. \(^2\) Some formal financial institutions charge effective fees as high as $29 for this transaction and none could match the service and personalization of hawala. In addition, because of the strength of social capital between hawaladars, the risk premium on hawala transactions appears to be almost as low as premiums for formal sector transfers, which are regulated instead by a complex system of laws and regulations. This study demonstrates that for small sum transfers, hawala is the least expensive choice.

Migrants have other reasons to utilize hawala or other informal means for international remittances. As previously noted, IMTSs provide the only mechanism to move money in and out of some countries or regions. In addition, hawala networks operate as truly liberalized currency exchanges; import tariffs, currency controls, exchange rates with a black market premium, and other macroeconomic manipulations all lead to an increase in hawala transfers (“Cheap and Trusted” 2001; Buencamino and Gorbunov 2002, 5). Poor financial sector institutions, whether caused by government incompetence, corruption, or simply market failure also contribute to the use of hawala, as do unstable macroeconomic policies (Buencamino and Gorbunov 2002, 5). Indeed, informal money transfers may “have stabilizing macro effects, given that they operate as a safety valve and provide liquidity in times of crisis” (Buencamino and Gorbunov 2002, 12). Ratha has found that remittances rise during crises, thus serving countercyclical stabilizing function (Ratha 2005, 44); Yang and Choi have found that remittances act as an insurance mechanism against exogenous shocks to household income (Yang and Choi 2005).
While hawala is the most commonly used ITMS throughout the Indian subcontinent, the Philippines, the Horn of Africa, and the Arabian Peninsula, other systems are available. In parts of sub-Saharan Africa including Tanzania (Sander, et al. 2001), Uganda (Sander, et al. 2001), Kenya (Kabbucho, et al. 2003), and South Africa (“African Families, African Money” 2003), taxi drivers and bus companies offer services to transfer cash from a sender, usually in a capital, to recipients in the provinces. However, these systems are mainly used for intrastate transfers and seldom cross national boundaries, except in between South Africa, Swaziland, and Lesotho (Bester, et al. 2003).

III. PROBLEMS WITH FORMAL SYSTEMS

Hawala’s advantages are comparative, not absolute. No endogenous factors prevent the formal sector from competing on price with hawaladars. However, the three main formal remittance mechanisms—commercial banks, wire transfer operators, and postal systems—impose fees and suffer under a regulatory burden that makes them uncompetitive in the remittance market.

Many American commercial banks are striving to compete in the remittance markets. Several banks have created specialty U.S.-Mexico remittance products and Wells Fargo recently rolled out services the for Indian and Filipino diaspora communities in the U.S. (Wells Fargo Bank). For Latin American migrants in the U.S., opening a bank account has been somewhat eased by matriculas consulares, photo identification cards now issued by Mexican, Guatemalan, Ecuadorian, and Brazilian consulates (Addy, et al. 2003; Bruno and Storrs 2005); other countries including Peru, Poland, and El Salvador are reputed to be considering or implementing similar programs (Bruno and Storrs 2005). Nonetheless, the challenge to establishing and maintaining a relationship with a bank remains pervasive in both developed and developing
countries. In many developed countries, especially after the September 11, 2001 terrorist attacks, even legal migrants frequently have a difficult time opening bank accounts (Addy, et al. 2003). Moreover, residents of developing countries frequently have few opportunities to open bank accounts. Uganda and Tanzania, for instance, have only one bank branch per 183,000 persons and 206,000 persons, respectively (Sander, et al. 2001, 13). Lack of access is especially pressing in the provinces; ten out of Uganda’s 52 districts do not have a single branch of a single bank (Sander, et al. 2001, 51-52). Hawala has found a profitable opportunity in a market that the traditional financial institutions have not been able to exploit.

Governments have compelling reasons to incentivize the increased use of banks for migrant remittances: use of the formal banking sector is associated with a variety of positive externalities (Truen, et al. 2005). Remitting to banks seems to be associated with increased savings (Addy, et al. 2003) and encourages a multiplier effect which increases loanable funds, reduces real interest rates, and thereby encourages growth through entrepreneurship. This alone has massive implications for long-term growth rates in developing countries (although little empirical evidence exists to judge if this theoretical model is borne out by reality). Additionally, institutional formalization allows governments to scrutinize bank transactions for evidence of money laundering, drug sales, and terrorist financing. Finally, increased banking presences on both ends of remittances increases the total flow of remittances (Karofalas 1998, 364).

While the formalization of informal systems should be an important policy goal, it will not be achieved by squelching the informal sector. A preferable policy intervention would bring the informal sector above-board and formalize it in tandem with institutional reforms that encourage entrepreneurship and growth-enhancing uses of remitted funds (Daley and Sautet 2005). That is, the de jure should be aligned with respect to public policy with the de facto. However, in the interim, regulators in developed countries must avoid the urge to overregulate or eliminate informal systems. The benefits of gentle regulation can only be achieved if banks learn
to compete with hawaladars in the open market; no amount of regulation or suppression of hawala will achieve these policy objectives. Regulators must avoid the urge to accrue benefits to governments and rent seekers that do not justify the increased costs imposed on the informal systems and their customers.

Wire transfer operators face similar problems as banks. Western Union is the world’s largest wire transfer company, enjoying a 24% market share worldwide ("African Families, African Money" 2003). Respondents in a survey conducted by the Nairobi-based financial non-profit Microsave told researchers that they perceive Western Union “to be a system for the rich” (Kabbucho, et al. 2003, 25), despite recent massive reductions in fees (Buencamino and Gorbunov 2002, 10). Western Union and its chief competitor, MoneyGram, typically charge fees of up to $20 plus a two to three percent forex spread, which make them uncompetitive with hawaladars, especially given that they are subject to many of the same regulations as commercial banks.

Postal systems in many countries offer formal remittance services as well, either in the form of postal giros (similar to money orders) or through wire transfers. Though frequently competitive with hawaladars on price, they suffer a host of idiosyncratic problems. First, postal remittances are not handled on a multinational basis through the Universal Postal Union, but through bilateral treaties; thus, international remittance options are frequently limited. Second, postal transfers are notoriously slow and inefficient ("African Families, African Money" 2003). Lack of branch offices, poor customer service—including theft by postal employees—and lack of liquidity plague many systems (Sander, et al. 2001, 31; Kabbucho, et al. 13). Third, as postal transfers are required to be sent at official exchange rates, remittances to countries like Jamaica and Zimbabwe face a massive loss over black market rates. In sum, low fees are the only positive
in a system racked with corruption, theft, lack of liquidity, poor exchange rates, and lack of international connections.

IV. REGULATORY POLICY IMPLICATIONS

Regulation of ITMSs became a hot-button political issue in the West, especially the United States, after the terrorist attacks of September 11, 2001. In November 2001, the U.S. Senate Banking Committee held hearings on hawala, and Congress passed the USA PATRIOT Act. Section 359 of the Act, entitled “Reporting of suspicious activities by underground banking systems,” explicitly put hawaladars under the aegis of financial regulations and required the Treasury Secretary to report on “the need for any additional legislation relating to persons who engage as a business in an informal money transfer system.” Prior to this, hawaladars were subject to limited regulation and recordkeeping requirements, largely limited to transfers of over $3000; “know your customer” regulations were not in place. There is no evidence, however, that this legislation has significantly disrupted terrorist networks or their financial flows (Ballard 2004, 1). The Secretary’s report, issued in November 2002, found no need for additional regulation of the informal banking sector (“A Report to the Congress…” 2002, 3). The report did indicate, however, that hawala is subject to the same banking and transfer laws as formal institutions, but that their compliance level, where regulated (31 CFR 103), was somewhat lower. Part of the problem likely stems from the fact that when and where hawaladars are subject to U.S. recordkeeping rules is a matter of significant confusion.

Imposing the same regulatory burdens on hawaladars as on commercial banks in the aftermath of September 11, 2001 was a coup for the banking sector, whose PACs contributed over $2.7 million to Banking Committee members over their 1995-2000 races (Center for Responsive Politics 2005). Notably absent from the Act and the Committee’s hearings were
more above-board methods of unregulated international funds transfer, such as the tendency of the Portuguese diaspora community to keep remittances in unregistered, offshore banks in the Madeira Islands (Karofalas 1998, 360-361). Additionally and tellingly, methods of funds transfer for non-Muslim terrorist groups like the Real IRA, ETA, and the Sudanese People’s Liberation Army went largely unexplored. Hawala came under attack in the United States and other countries in late 2001, but the scholarly consensus, tempered by time, is that initial reactions went too far (International Conference on Migrant Remittances 2003, 10).

It is important to bear in mind, that for all the real and potential abuse of hawala by money launderers, drug traffickers, and terrorists, expatriate “workers remitting earnings to their families” comprise the majority of hawala users (“Cheap and Trusted” 2001); even the U.S. Treasury admits that “the majority of [IMTS] activity is legitimate in purpose” (“A Report to the Congress…” 2002, 6). Laws that seek to ban hawala will likely result only in making terrorist financing even more difficult to detect by pushing it into further underground and hurting those who depend on the hawala system as a cost-effective and expedient way to remit to families abroad. Developed country regulators must keep their real objective—stopping money laundering and terrorism—firmly in their sight. The war on terror is not a war on migrant remittances.

American and European policymakers must also understand that the capital stock on which the hawala infrastructure is based—social capital—is no less a real asset for being intangible and difficult to quantify. The social capital that allows hawala to function is as real an agent in lowering transaction costs as the fiber optic networks linking banks or interstate highways that connect consumers to producers. As Emily Chamlee-Wright argues, “By lowering transactions costs in the diamond market, or organizing efforts to press for democratic reform, or cultivating a safer environment in which to raise one’s children, human relationships facilitate such activities and produce a stream of future benefits, and therefore represent a valuable form of
capital” (Chamlee-Wright 2006). Regulation that ignores the monetary value of the hawala network implicitly taxes the capital stock of the IMTS system and is effectively confiscatory of hawaladars’ property. That the social capital which allows the hawala system to function is “not something that can be aggregated into a homogenous mass” (Chamlee-Wright 2006) makes it no less real and no less valuable a business asset.

Extensively regulating international movement of small sums seems somewhat foolish when considering that costs will likely exceed benefits, especially in the context of migrant remittances. American customer identification and record-keeping regulations apply to transfers of over $3,000, including those made through hawala (31 CFR 103), and proposals to lower this level will do more harm than good (Malkin and Elizur 2002). Benford analysis would find repeated transfers of sub-threshold amounts, which should raise a red flag. Transfers at this level are of little use to terrorists anyway; terrorist finance networks are vast and complicated, and hawaladars that follow rules already in place run little chance of inadvertently moving dirty money. What is needed is better enforcement of existing laws requiring recordkeeping of large transfers, not new laws, lower thresholds, or “know your customer” laws that require government-issued identification. However, tensions between the federal government and Muslim communities in the US make cooperation between the Treasury and hawaladars unlikely. In the near future, though, the spread of information technology into hawala will allow recordkeeping to become more extensive without creating an undue burden on hawaladars. This will help create the records that government officials desire without passing costs onto legitimate hawala users.
V. Regulatory Policy Prescriptions

Developed countries must craft and promulgate clear and understandable regulations. At a minimum, western governments need to create clear, concise, and multilingual regulations that hawaladars can easily follow, lest hawala follow the formal sector into an overly defensive position that creates “a preference for saying no” in order to always stay “on the safe side” (Sander and Maimbo 2003). Separate regulations for hawaladars, who usually operate individually, and banks, which have extensive compliance and legal teams, may be the best option for developed countries, although they should be broadly consistent. It is especially important that low-volume hawaladars have compliance costs that are lower than expected penalties for non-compliance. As with all regulation, the damage done by the creation of unintended perverse consequences can easily make the cure more damaging than the disease.

Developing countries must enact gentle regulations based on empirical benefit-cost analysis. Developing countries in particular need to loosen restrictions on the financial sector, while tightening recordkeeping and reporting regulations for international funds transfers. The overregulation that occurs in many Asian countries damages the formal financial sector (El-Qorchi 2002), especially for the unbanked (“African Families, African Money” 2003), while competition lowers fees and forex spreads (Buencamino and Gorbunov 2002, 10; International Conference on Migrant Remittances 2003, 9; Sander and Maimbo 2003, 22). Countries that ban hawala outright should rescind their bans and opt for a well-regulated, structured hawala system. This is the only way in which developed and developing countries can foster a climate of financial services competition, fight terrorism and money laundering, increase remittances, and lower economic barriers to migration. Developed and developing countries should encourage microfinance institutions and credit unions to become more involved in providing formal financial services not just to entrepreneurs but to consumers (Kabbucho, et al. 2003; Sander, et al. 2001; Buencamino and Gorbunov 2002).
Financial markets should be liberalized across the board. Above all, liberalized financial markets, within the regulatory context outlined above, are the best way to serve the needs of migrants and their families while providing governments with the tools they need to fight crime. Liberalized markets, Sander and Maimbo argue, “will attract more remittances, and a larger share of those remittances will flow through formal channels. To what extent that happens depends in part on policies governing the licensing and regulation of money transfer services” (Sander and Maimbo 2003, 28). Excessive regulation of financial markets, currency controls (including by relatively developed economies such as South Africa) (Bester, et al. 2003, 19), black market exchange rates, and excessive import tariffs mitigate the positive effects of remittances and encourage the use of informal channels, much to the detriment of governments fighting crime. It also encourages non-liberalized countries to more aggressively control capital flows and artificial exchange rates. More sensible policies for small money transfers between countries, enacted on a worldwide scale and in the context of open markets, are the best way to achieve legitimate government objectives and promote the important role that migrant remittances play in global economic development.

VI. Conclusion

Informal money transfer services carry a significant amount of world remittance flows and have a significant and positive impact on world economic development. Their strength for remitters is in their low overhead, simple recordkeeping, and trust-based networks. Regulators make the erroneous assumption that, because a system they don’t fully understand is occasionally used by criminals, that criminality is inherent in the system. This is no more true than to say that holding companies are inherently criminal because of the Enron debacle or that
pilot training and licensing caused the attacks of September 11, 2001. The challenge to world financial regulators is to establish regulations that allow oversight of funds transfers without placing a burden on the institutions that are critical to remittances and development. There is nothing sacrosanct about IMTS systems per se; in many ways it would be better if the formal financial sector had the global reach of the informal sector, and good policies can be an effective tool to reaching this goal in the not-too-distant future. However, in developing countries, the informal sector currently provides the best funds transfer services at the lowest price. Regulatory compliance in the informal sector can and should be increased, but this will take good policies and better execution. In the short run, governments should tread lightly and encourage openness in the informal sector, rather than squelching it altogether, a politically tempting idea that will only cause greater problems for both regulators and migrants later on.
REFERENCES


USA PATRIOT Act, US Public Law 107-56 (effective 26 October 2001),

APPENDIX

Table 1 (page 21) presents the results from the study referenced on page 6. What follows is a methodological explanation of the study.

Fees as given in table 1 are based on total fees as given by the various transmission agents on November 28, 2004, based on a $100 transfer to Mexico City or Manila from Michigan. For services that do not have a Michigan nexus, New Jersey was used. Fees are total fixed and variable fees, plus any standing fees (such as annual membership or cardholding charges) prorated to one remittance based on 24 remittances per year, less any additional quantifiable benefits (such as a free international phone call after sending) that some services offer.

Payouts are the amount each $100 remittance pays out from the transmission agent in local currency. In the next column, this amount is translated back into US dollars, using the prevailing exchange rates printed in the international finance section of Wall Street Journal on November 26, 2004. The rates were US$ 1 = MXP 11.2672 and US$ 1 = PHP 5465.83. Finally, the amount of transfer remaining in the bucket was calculated by taking the recalculated US dollar equivalent of local payouts and dividing it by the original sum ($100) plus fees, as calculated above.

Some idiosyncratic assumptions and deviations were made. Briefly, they are as follows:

- **Paystone**: arbitrarily assume a two percent forex spread; Paystone would not release their exchange rate, only explaining that it was “competitive.”
- **iKobo P2P**: sender pays a flat $8 fee, but recipient must pay a $1.99 ATM withdrawal fee to receive remittance, plus a monthly $0.99 ATM card maintenance fee.
• **Bank of America:** Payment was recalculated twice due to necessity of selling only paper money; nominal value of the transfer was slightly over $100, and so fees were prorated against this. Fee is calculated based on Bank of America’s currency exchange fee ($10) plus the cost of sending a one-pound airmail envelope using cheapest under-eight-day delivery package to the recipient in Mexico City or Manila. When required, the address of the Canadian Embassy was used as an arbitrary destination point.

• **Citibank:** Payment was recalculated twice due to necessity of transferring money only in whole units (hundreds of Mexican and Filipino pesos); nominal value of the transfer was slightly over $100, and so fees were prorated against this.

• **MoneyGram at Walmart:** Fees are lower than at other MoneyGram locations, but the same forex spread is assumed. Fees are reduced by the value of the three-minute phone call to Mexico that comes with all US-to-Mexico remittances made at Walmart stores.

• **WellsFargo Philippine ATM Transfer:** Since the program is not yet in place, fees were assumed to be the same as InterCuerta Express, and forex spreads were based on Wells Fargo’s announced exchange rate as of approximately 5 PM on November 28, 2004.

Additional documentation and commentary is available from the author upon request.
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<th>Service</th>
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<td>WellsFargo InterCuenta Express</td>
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<td>MXN 1,098.00</td>
<td>$97.45</td>
<td>89.88%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WellsFargo Philippine ATM Transfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$8.00</td>
<td>PHP 5,630.00</td>
<td>$100.23</td>
<td>92.81%</td>
</tr>
<tr>
<td><strong>AVERAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>87.333%</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>86.158%</strong></td>
</tr>
</tbody>
</table>
ENDNOTES

1 The study methodology and table of results can be found in the appendix.

2 This is based on the assumption that hawaladars charge a 1% commission and take a 1% spread on forex rates. Given evidence from several researchers, this is likely a higher-than-average fee and commission; a real hawala transaction would likely result in slightly higher amounts of receipt.