

Cross-border remittance pricing

Does market structure drive the prices for cross-border remittances in South Africa?

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EXECUTIVE SUMMARY

This report was commissioned by FinMark Trust and carried out through Genesis to assess the **cost of cross-border remittances** in South Africa. Using a new approach based on conducting actual cross-border transactions, the report verifies the pricing offered to customers in the market and compares this cost to other studies conducted by the World Bank and Eighty20.

The majority of remittance flows from South Africa (90% of all transfers) are destined for neighbouring Zimbabwe, Mozambique and Lesotho, with 85% of all migrants originating from these countries. Estimates by the FinMark Trust suggest that the bulk (almost 70%) of transfers to these countries are conducted informally and that the high cost of formal money transfers is a major barrier to accessing formal remittance bank and non-bank channels.

According to the World Bank, as at the end of the second quarter of 2016, the global average cost of USD200 remittances was 7.43% of the amount sent by remitting customers. For remittances sent from South Africa, the average cost was 16.71%; more than double the global average. Contrary to World Bank estimates, Genesis found that the total cost of remitting USD200 from South Africa to Zimbabwe, Mozambique and Lesotho is lower than the global average, with an average cost of 6.7% of the amount sent. Previous research has shown that the median value of cross-border remittances from South Africa is USD55, for which Genesis estimated the average cost to be 13.6% of the amount sent, as opposed to previous estimates of 13.3%. Genesis results generally support previous findings that the World Bank statistics over-estimate the average cost of transfers across these corridors.

There are primarily **three types of cross-border remittance services providers** (RSPs) in the South African market, namely: retail banks, Money Transfer Operators (MTOs) and authorised dealers with limited authority (ADLAs). There are 19 retail banks providing retail forex and transfer services. There are currently two MTOs operating in the market (Western Union and MoneyGram). Of the 16 licensed ADLAs, 14 provide remittance services, bringing the total provider pool for cross-border remittances to 35.

ADLAs are authorised to operate as one of three types of businesses: (i) as bureaus of exchange, or (ii) to operate as a bureau of exchange and offer remittance services in partnership with an external MTO, or lastly (iii) as independent RSPs that trade through authorised dealers. MTOs such as MoneyGram and Western Union do not acquire licences independently, but rather partner with banks and other licensed institutions to facilitate foreign exchange transactions.

ADLAs, which deal with lower transaction values, most often provide a cash solution to customers using agent networks. MTOs similarly provide both online means of sending money by facilitating deposits into accounts held by partner banks and cash alternatives through their agent networks. Banks provide online platforms and cash solutions for sending money using their branch channels. Banks have made an effort to introduce innovative products such as mobile-app/cellphone banking based products for existing bank customers in an attempt to remain competitive in the face of more innovative entrants.

There are currently **four distinctive business models** operating in the market: i) the ADLA model; ii) the MTO model; iii) the Bank model; and iv), a Bank-Retailer partnership model. Providers operating each of these models all participate differently in the value chain of a

remittance transaction: origination, sending money, clearing and settlement, and distribution. Furthermore the reliance on different channels and how each provider accesses other parts of the value chain, whether internally, or through third-party relationships, determines that model's profitability.

- The **origination** layer is the “first mile” of a cross-border remittance transaction. The role of origination is to facilitate the disclosure and movement of the required information to enable a consumer to remit funds.
- The **sending and distribution** layers of the remittance value chain entails the collection of funds from sending customers and the sending of funds to receivers. It also includes the processing of associated information to/from various other providers and platforms operating between the sending and receiving channel.
- The third layer of the value chain involves the **clearing and settlement** of funds from the sending to the receiving market. Clearing, in the context of cross-border remittances, refers to the process of transmitting, reconciling and, in some cases, confirming payment orders prior to settlement, possibly including the netting of instructions and the establishment of final positions for settlement. Settlement, refers to the transfer of funds between settlement banks in the sending and receiving countries. This layer also includes the foreign exchange component of the transaction that is required to transfer funds from one currency to another, which takes place prior to clearing and settlement.

Each layer of the value chain for remittances adds costs to the provider. In order to understand the extent of these costs, this study disaggregates the cost of payments between the process of onboarding and managing accounts, the cost of cash-in and cash-out access as well as the cost of transacting as a basis for estimation.

In terms of pricing, the ADLA, bank-retailer partnership and bank digital models are the most competitive. In terms of operating costs, these models also appear to be the most cost-effective. The bank traditional model is both the most costly to operate, together with the MTO model, and the least competitive in terms of pricing. MTOs appear to compete more effectively with ADLAs for higher value transfers, given their relatively fixed pricing compared to ADLAs' variable pricing models. More specifically:

- Agent management costs are the primary driver of incremental operational costs for **ADLAs**. These account for around 50% of total transaction costs, followed by the cost of cash which accounts for approximately 40%. A high-level review of the business models of ADLAs suggests that ADLAs are profitable for both low, and higher, value transfers once a minimum scale has been achieved to recover fixed costs. In terms of profitability Genesis' estimates indicate that, once scale is achieved, the ADLA model is highly profitable at the same time as being competitive in the market and affordable to lower income customers.
- For **MTOs**, the primary driver of costs is a reliance on bank branch networks for origination and cash-in/cash-out access. Branch costs account for nearly all (98%) of all incremental transaction costs. As a result of this cost structure and the relatively fixed nature of fees, the profitability of MTOs is linked to higher value transfers. Hence, MTOs charge significantly higher foreign exchange margins on transfers than ADLAs as a way to improve average profitability.

- The various **bank** models on offer in the market illustrate both the benefits of innovation in a bank context and the relative inefficiency of the traditional bank model. In the traditional, branch-driven model, the drivers of incremental transaction costs for banks are identical to those of MTOs. The bank digital model, which only uses branches for origination, is less than half as costly as the traditional model per transaction. The digital model also eliminates the need for cash-in and cash-out as it is limited to existing bank customers who typically transact using their existing accounts. Overall, the bank traditional model is highly profitable, at the expense of being highly uncompetitive – particularly for low value transactions. The digital model, meanwhile, retains profitability while improving pricing competitiveness, and is thus offers compelling value to existing bank customers that would otherwise have used other means to transfer funds.
- The **bank-retailer partnership model** is the most cost effective according to Genesis' estimates. The primary driver of cost in this model is the cost of origination, which accounts for 60% of incremental transaction costs. In terms of profitability, the model appears to be a loss-leader across all transaction values, given the fixed fee structure. This is likely due to the fact that this service is viewed as a value-added service to encourage remitters to shop at the retailer. In terms of the bank, this model enables banks to effectively participate in the market for low value payments.

The **key findings** from this report are categorised below into five areas: market structure, access, pricing, KYC and operating costs. Market structure relates to issues identified in terms of the structure of various elements of the remittance value chain (as described in section 4.1) which may influence the competitiveness of RSPs. Access relates to issues surrounding the accessibility of the various RSPs to customers as well as participation along the remittance value-chain and how this impacts their competitiveness. Pricing relates to issues of the various customer facing pricing practices and disclosures of RSPs. Operating costs relates to issues identified within each RSP business model. KYC relates to issues identified within the “first-mile” of remittance transfers where remitters are on-boarded by the various RSPs.

Market structure

- The structure of the foreign exchange market is dominated by authorised dealers, which have significant pricing power. This study was unable to access any data that shows the rate at which spreads change according to the size of the dealers' business customers. However this study surfaced anecdotal evidence from the mystery shopping exercise which suggests that ADLAs' spreads are relatively narrow relative to the interbank rate.
- The structure of the formal cross-border remittance market is dominated by two business models (branch-based and agent-led). This is due to the requirements for KYC, which necessitate that the initial on-boarding of customers be done through face-to-face interaction, and the predominance of cash-based transfers. As a result, there is a limited market for purely digital models which have been shown to significantly lower the cost associated with transfers in other markets.

Access

- With respect to access to customers, ADLAs, despite achieving strong growth in scale, have limited networks compared to banks and MTOs in order to contain their cost

structures. ADLAs seek to compete through establishing agent networks to keep their cost structures under control and remain attractive in terms of pricing.

- With respect to market participation, as mentioned above, banks that are authorised dealers in the foreign exchange market have direct access to the interbank market, whereas ADLAs and MTOs have secondary access to the market through these dealers. In addition to these, non-bank RSPs cited their limited access to clearing and settlement as a driver of up-front costs as they are required to establish partnerships with licensed payment providers which incurs costs that are less scalable than those of direct access would be.

Pricing

- The mystery shopping analysis revealed that the average pricing of remittances of USD200 is lower than has been reported by the World Bank, with average prices of 6.4%, as opposed to 14%, of the amount sent. For remittances of USD55, which are not reported by the World Bank, the mystery shopping results were mixed when compared to previous studies.
- ADLAs pricing was estimated as being cheaper than previously reported. Banks and MTOs were found to be materially more expensive for low-value transfers, with bank pricing particularly higher than previous estimates (32.2%, as opposed to 19.3%, of the amount sent).
- Contrary to initial expectations, fees are the primary component of pricing, accounting for between 90% and 95% of the total price, with the exception of MTOs whose all-in price reflected much higher implied foreign exchange margins.
- The pricing analysis of the various providers also indicates that bank pricing suggests a deliberate strategy to discriminate against low-value transfers - which is probably due to the higher operational cost of processing a transfer through their physical network. Meanwhile the ADLAs included in the study were not found to discriminate against low-value transfers, which is their primary source of revenues. Given their distribution model, MTOs price their offerings to be more attractive than their closest competitors - banks.
- The analysis highlighted pricing disclosure as an important issue for improving the competitiveness of the market. In particular, pricing disclosure differs significantly across providers. Some providers only partially disclose fees by aggregating these whereas others provide more clarity regarding the types of fees levied.

Operating costs

- The analysis of the primary operating cost drivers for RSPs identified origination and cash management as the primary cost drivers. Using the ACTA framework it was estimated that these two components accounted for 90% of the total operating cost for providers.
- Interviews with industry stakeholders confirmed that the "first mile" of cross-border remittance transactions is their primary cost driver. Providers also cited expensive cash management infrastructure (either internally for banks and MTOs or agent networks for ADLAs) as an important driver of costs.

KYC

- In analysing the various providers' KYC processes, it was found that ADLAs are the only providers who utilise the FICA exemption for KYC, while MTOs (who could benefit from the exemption) opt to enforce rigid KYC on each new transfer, likely due to a conservative interpretation of current FIC requirements. Banks interviewed for the study indicated some confusion as to the interpretation of the exemption and therefore have chosen not to make use of this dispensation.
- Although beyond the scope of this report, it should also be noted that South African rules as to when a migrant can open a bank account are generally considered to be more restrictive than in other markets limiting their ability to leverage low-cost digital channels. This reality explains the predominance of cash-based remittances in the market.

1. INTRODUCTION

The cost of cross-border remittances from South Africa is argued as being among the highest in the world. According to the World Bank, as at the end of the second quarter of 2016, the global average cost of remittances was 7.43% of the amount sent by remitting customers.¹ For remittances sent from South Africa, the average cost was 16.71%; more than double the global average. The high all-in cost of remittances also reflected high foreign exchange margins. Over the same period the average foreign exchange margin on cross-border remittances from South Africa was 4.36% of the amount sent; also well above the global average of 1.83%.

The high overall cost of remittances and the exchange rate margin charged by providers is typically attributed to several features of the local market, including limited competition in foreign exchange services, a restrictive licensing regime for money transfer operators, and the adoption of complex and opaque pricing structures by providers. The high cost of remittances is a particular burden on low-value payments and migrant workers in particular.

Given this context, this report was commissioned by the FinMark Trust to confirm whether South Africa is indeed an outlier by international standards. Using a new approach based on conducting actual cross-border transactions, the report verifies the pricing offered to customers in the market. Having identified this pricing and the way it is disclosed to customers, the report provides a supply-side perspective of what drives providers to price money transfers the way they do. Here the report tries to understand the cost and revenue drivers that contribute to the fees and margins charged to remittance customers.

This report is structured as follows. Section 2 identifies the largest corridors for cross-border remittances from South Africa. Section 3 describes the cost of remittances in three corridors based on a mystery shopping conducted by Genesis; the results of which are compared to previous findings by the World Bank and by Eighty 20. Section 4 presents a supply-side view of the market, decomposition the value chain for remittances and unpacking the business and profit model of four types of remittance service providers: banks, authorised dealers with limited authority (ADLAs), money transfer operators (MTOs) and retailer/bank partnerships. Section 5 draws together the findings from the study and addresses the initial hypothesis around the level of pricing and the drivers of pricing of remittances in the South African market.

2. CROSS-BORDER REMITTANCE FLOWS

The South African market for remittances into SADC is largely driven by the large number of migrants working in the country. According to the 2011 Census, roughly 3.2 million people living in South Africa were born outside of the country. This excludes 1.5 million people who did not respond to the Census, as well as asylum seekers (464,000) and refugees (112,000). Research by the FinMark Trust suggests that these migrants face a number of barriers when accessing formal transfer services, including affordability and access to enabling documentation such as proof of address or identification.

The majority of remittance flows from South Africa (that is 90% of all money transfers) are destined for neighbouring Zimbabwe, Mozambique and Lesotho (Table 1 below). Estimates by the FinMark Trust suggest that the bulk (almost 70%)² of transfers to these countries are

¹ World Bank, Remittance Prices Worldwide database. Cost obtained for a USD 200 remittance.

² The South Africa-SADC remittance channel, FinMark Trust, 2012

conducted informally and that the high cost of formal money transfers is a major barrier to accessing formal remittance bank and non-bank channels.³

Table 1: Remittance flows from South Africa

Origin country	Share of total SADC immigrants by country	Total remittances to origin country (USD mill)
Zimbabwe	59%	788.7
Mozambique	15%	187.2
Lesotho	12%	206.7
Swaziland	4%	46.1
DRC	3%	14.8
Malawi	2%	14.6
Zambia	2%	14.7
Botswana	2%	21.5
Mauritius	1%	9.8
Namibia	1%	6.2
Angola	0.3%	2.9
Tanzania	0.2%	1.2
Total	3 255 406 migrants	1 314.2

Note: Conversion to dollar using R1 = USD 0.11782

Source: The South Africa-SADC Remittance Channel, 2012

3. COST OF REMITTANCES – SURVEY EVIDENCE

Studies by the World Bank⁴ and by Eighty20⁵ have previously estimated the cost of remittances from South Africa into Lesotho, Mozambique and Zimbabwe. Both have confirmed that the cost of remittances from South Africa is high by international standards. Where they differ is in the magnitude of fees and exchange rate margins charged by providers in the market. This Section seeks to reconcile these differences by presenting the findings of a third study conducted by Genesis which used a mystery shopping exercise as a way of obtaining the true cost of remittances charged to customers.

3.1. PREVIOUS ESTIMATES OF THE PRICE OF REMITTANCES

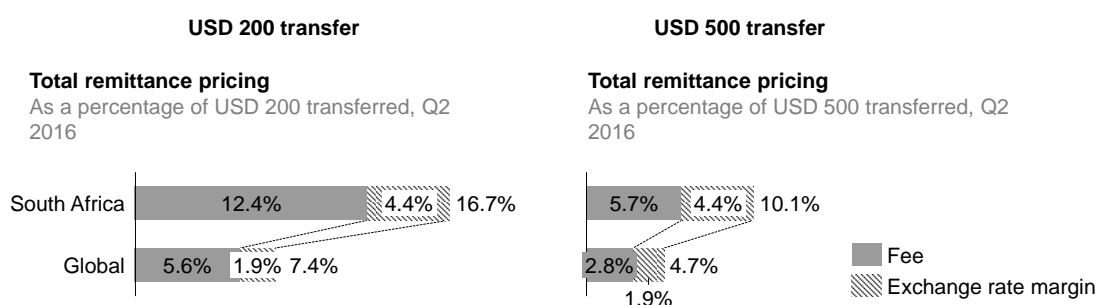
The average cost of a transfer from South Africa according to the World Bank is shown below in Figure 1. It shows that remittances from South Africa are around 2.25 times more costly than the global average for a USD 200 transfer and 2.14 times more for a USD 500 transfer.

³ It is estimated that 50%, 52% and 62% of total payment flow volumes using SWIFT came from South Africa into Zimbabwe, Mozambique and Lesotho respectively in 2015.

⁴ World Remittance Prices Worldwide, World Bank, 2016

⁵ Cross border remittances, Eighty20, 2016

Figure 1: South African remittance pricing compared to global averages



Source: World Bank Remittance Prices Worldwide, 2016

To calculate the average price of remittances the World Bank considers the **fees** charged by providers to customers (which are typically fixed but sometimes also set on a sliding scale) as well as an **exchange rate margin**; both of which are expressed as a percentage of the funds sent by the sender.

The fee represents the charge the sender pays and does not include any costs incurred by the receiver at the destination, which are not included in the calculation of this fee. The foreign exchange margin meanwhile is calculated as the difference between the rate quoted to the sender and the prevailing interbank rate.⁶ In cases where the receiver receives money in local currency there will need to be a similar foreign exchange transaction to convert the (typically) US Dollars (USD) into local currency. In such cases the foreign exchange margin is said to be calculated 'on both sides of the transfer'; an approach which the World Bank *seems* to have adopted for most corridors.⁷

Information about the fee and exchange rate margin was collected by World Bank researchers who contacted service providers by telephone to inquire about the costs of a USD 200 and USD 500 transfer. To calculate costs for MTOs, the World Bank used the International MTO Index.

A review of the World Bank's data in the three corridors of interest to this study reveals:

- The average total cost of sending USD 200 to Zimbabwe was the lowest at 11.7%. This compares to a **total cost** of 14.4% when sending to Lesotho and 17% when sending to Mozambique. Given the different composition of providers in each of these three countries, however, drawing conclusions based on comparisons across countries is difficult. However for the purposes of comparison the World Bank's estimate is of an average cost of 14%.

⁶ For example when buying USD a sender will be offered an exchange rate which is equivalent to the interbank rate plus a margin.

⁷ An excerpt of the World Bank's methodology is worthwhile reflecting here: "An important portion of the remittance cost is the exchange rate spread, which is not quoted in the transfer fee. Even though remittances can be paid in US dollars in some countries, the majority of remittance transactions are paid in local currencies, and, thus, an exchange operation is required. In this database, where remittances are paid in dollars, or where exchange rate information was not provided, this information may not be available. In these cases, the actual total costs might be higher than indicated in the database" (<https://remittanceprices.worldbank.org/en/methodology>).

- Banks are the most expensive **remittance providers** in the market with an average total cost of sending USD 200 across the three countries of 20.7%. This compares to a cost of 12.7% for MTOs and 6% for other providers⁸.
- This ranking of providers by cost is the same for the **fee-only** component of the cost of a USD 200 transfer. The fee is highest for banks at 17.6% compared to 11.2% for MTOs and 1.3% for other providers.
- Finally the average **exchange rate margin** charged by each provider is more closely aligned. The exchange rate margin charged by banks is the highest at 3.2%, followed this time by other providers at 2.4%, and then MTOs at 1.5%.

In February 2016 Eighty20 was commissioned by the FinMark Trust to generate a second set of estimates of the cost of remittances. The approach taken in the Eighty20 study to collect data on the cost of remittances to Lesotho, Mozambique and Zimbabwe used a combination of telephone communication, desk research, live chat functions offered by service providers and branch visits. Unlike the World Bank, Eighty20 did not estimate the cost of a USD 500 transfer but rather considered the cost of a USD 55 transfer, which it determined was the median value for cross-border remittances from South Africa, as well as the same USD 200 transfer. Eighty20's findings are therefore only comparable to the World Bank's for a USD 200 transfer. The Eighty20 study also adopted the same approach as the World Bank to determine the fee component. To calculate the exchange rate margin, the study measured the difference between the prevailing interbank rate and the quoted rate given by the providers surveyed.

The Eighty20 survey found that it was much more expensive to send a lower value transfer. The average **cost** of a USD 55 transfer was 13%, compared to their estimate of 8.5% for a USD 200 transfer. The high level of pricing on lower value transactions is primarily attributed to the fixed-fee pricing structure in the banking channel as well as a lack of non-bank providers in two of the corridors.

The Table below provides a complete breakdown of the cost of sending USD 55 and USD 200 transfer according to the World Bank, Eighty20 as well as Genesis Analytics. The Table shows that Eighty20's estimates of the fee are about half of those of the World Bank. Likewise Eighty20's estimates of the average exchange rate margin is also lower than the World Bank's, and that MTOs, not banks are the most expensive.

⁸ For the purposes of this calculation 'Other Providers' include both Authorised Dealers with Limited Authority (ADLAs) and bank/retailer partnerships. These two types of providers are later distinguished to identify particular aspects of their business model.

Table 2: Comparison table of results from World Bank, Eighty20 and Genesis Analytics

			World Bank			Eighty20			Genesis Analytics		
			Zimbabwe	Mozambique	Lesotho	Zimbabwe	Mozambique	Lesotho	Zimbabwe	Mozambique	Lesotho
USD 55	Total price	Mama Money				5%	NA	NA	2.5%	NA	NA
		Mukuru				10%	10%	10%	9.7%	NA	9.1%
		Exchange4Free				5%	5%	NA	6.6%	NA	NA
		FNB Money Transfer				5%	5%	NA	5.9%	5.9%	NA
		Western Union		NA		12%	15%	NA	10.9%	13%	NA
		MoneyGram				9%	17%	NA	18.1%	13%	12.9%
		Standard Bank				32%	32%	2%	NA	34.9%	13.8%
		ABSA				38%	38%	2%	NA	NA	47.8%
		Shoprite				NA	NA	2%	NA	NA	1.4%
USD 200	Fee	Mama Money	5.0%	NA	NA	5.5%	NA	NA	2.4%	NA	NA
		Mukuru	0%	NA	NA	0.2%	NA	NA	9.1%	NA	9.1%
		Exchange4Free	0%	0%	NA	0.1%	5.3%	NA	0.0%	NA	NA
		FNB Money Transfer	NA	NA	NA	NA	NA	NA	3.8%	3.8%	NA
		Western Union	11.1%	11.1%	11.1%	4.0%	5.0%	NA	3.8%	4.3%	NA
		MoneyGram	11.3%	11.3%	11.3%	5.5%	7.7%	NA	4.3%	6.1%	6.6%
		Standard Bank	19.0%	19.0%	19.0%	8.5%	8.5%	0.3%	NA	9.6%	3.9%
		ABSA	16.1%	16.1%	16.1%	11.3%	11.3%	24.0%	NA	13.2%	NA
		Shoprite	NA	NA	NA	NA	NA	0.3%	NA	NA	0.4%
	Foreign exchange margin	Mama Money	0.1%	NA	0.0%	0.5%	NA	0%	0.4%	NA	0%
		Mukuru	10.2%	NA	0.0%	9.7%	NA	0%	0.2%	NA	0%
		Exchange4Free	2.0%	6.7%	0.0%	4.2%	0.6%	0%	5.9%	NA	0%
		FNB Money Transfer	NA	NA	0.0%	NA	NA	0%	0.0%	0.0%	0%
		Western Union	1.6%	1.3%	0.0%	5.7%	3.5%	0%	2.2%	2.2%	0%
		MoneyGram	2.3%	3.7%	0.0%	3.7%	3.7%	0%	3.9%	3.9%	0%
		Standard Bank	1.5%	7.9%	0.0%	0.8%	0.8%	0%	NA	1.2%	0%
		ABSA	1.5%	8.0%	0.0%	0.9%	0.9%	0%	NA	2.1%	0%
		Shoprite	NA	NA	0.0%	NA	NA	0%	NA	NA	0%
	Total price	Mama Money	5.1%	NA	NA	5.8%	NA	NA	2.8%	NA	NA
		Mukuru	10.2%	NA	NA	9.5%	NA	NA	9.3%	NA	9.1%
		Exchange4Free	2.0%	6.7%	NA	4.3%	5.9%	NA	5.9%	NA	NA
		FNB Money Transfer	NA	NA	NA	NA	NA	NA	3.8%	3.8%	NA
		Western Union	12.7%	12.4%	11.1%	5.7%	8.5%	NA	5.9%	6.3%	NA
		MoneyGram	13.6%	15.0%	11.3%	9.0%	11.4%	NA	7.8%	9.5%	6.6%
		Standard Bank	20.5%	26.9%	19.0%	9.3%	9.3%	0.3%	NA	10.8%	3.9%
		ABSA	17.6%	24.1%	16.1%	12.2%	12.2%	24.0%	NA	15.2%	NA
		Shoprite	NA	NA	NA	NA	NA	0.3%	NA	NA	0.4%

3.2. RESULTS OF GENESIS' MYSTERY SHOPPING

Genesis conducted a mystery shopping exercise between 27 October 2016 and 4 November 2016 to verify the pricing observed in previous studies. Unlike these studies, however, Genesis' approach was to conduct actual transactions to confirm the costs that would be incurred by remitting customers. To do so Genesis completed 30 transactions to Zimbabwe, Mozambique and Lesotho. The transfers were made through three banks (Standard Bank, FNB and ABSA), two MTOs (Western Union and MoneyGram), three non-bank providers (Mama Money, Mukuru and Exchange4Free) and a retailer/bank partnership (Shoprite/Capitec Bank).

Genesis adopted the same approach as the World Bank and Eighty20 to calculate the fee component of each transfer – i.e. including the fee charged to the sender and excluding any costs charged to the receiver. Like Eighty20, the exchange rate margin was calculated by finding the percentage difference between the interbank rate at the point the transaction was made and the rate given to the sender by the service provider. The total 'all-in' price is the sum of the above two.

This physical transfer exercise provided valuable information, not just on pricing, but on processes and the associated documentation requirements imposed in the branches of each respective provider. In a number of cases these prevented Genesis from conducting the transfers and provide evidence of the real challenges facing remitting customers. One large bank, for example, declined to process multiple transfers to a single counterparty outside of South Africa – seeing this as evidence of suspicious cross-border transaction. As a further example none of the bank transfers to Zimbabwe could be completed as sanctions imposed on correspondent banks meant the "remittances would be confiscated by US authorities". Transfer to Mozambique using Mukuru and Exchange4free could also not be completed as the mKesh mobile wallet service that receives funds from these providers was down for the duration of the mystery shopping. Finally, while the World Bank and Eighty20 telephonic interviews identified the possibility of a Western Union transfer to Lesotho, feedback from Western Union agents in branch indicated that this corridor was no longer available on their platforms.

Some further observations about the different process of each provider are also useful:

- The **banks** in the survey would only conduct money transfers for their own customers and in these cases the sender is only required to provide an ID document.⁹ Bank-to-bank transfers however proved the most time consuming due to the complexity of the end-to-end forex process in a branch. On average the process required to complete a two-page application for each transfer, queue for an available foreign exchange teller, wait while the teller enters the application into the bank's system and await the bank's verification and confirmation of the transactions took between 45 minutes and 1 hour.
- The process of sending money through **MTOs** (Western Union and MoneyGram) was similar to the banks' but faster, taking between 30 and 45 minutes for a transaction. The sender is however required to produce more documentation, including an official ID document (or passport), proof of residence and proof of income.¹⁰

⁹ Under FICA, no proof of address is necessary for existing bank customers.

¹⁰ Although transfers below R 3000 do not require proof of address under the recent FIC Amendment, MTOs seemed to still believe they were required to gather this information.

- **ADLAs** in comparison offered the most efficient process to initiate and send a transfer: once registered a customer can complete a transaction in about 15 minutes at a retailer (Pep, Shoprite, Boxer or the ALDA’s own agents). Registration in particular can be done either at the ADLA branch or an authorised agent of the ADLA using only an official ID document for transfers less than R3 000 and proof of residence for transfers greater than R3 000, up to R5 000. The ADLA process however does have its drawbacks. The registration processes for Mukuru, Mama Money and Exchange4Free, for example, took between 30 and 45 minutes to complete. On many occasions the registration systems in the retail branches visited by Genesis were offline. In some cases the retail branches advertised by the ADLA as offering the service did not in fact offer the service. These complexities required multiple trips across a couple of days to register for the service.

With respect to pricing the key findings from the mystery shopping are as follows.

- Genesis’ estimate of the **total average cost** of a USD 200 transfer across the three corridors is 6.7%. This compares to an average of 8.5% for Eighty20 and 14% for the World Bank. Genesis estimates the average total cost of a USD 55 were in line with Eighty20’s.
- Genesis’ findings confirm previous evidence that the banks are the most expensive providers in the market. Banks are followed by MTOs and then other providers. As shown in the Table below Genesis is broadly aligned to Eighty20’s findings for a USD 200 transfer and closely aligned to Eighty20’s for a USD 55 transfer with the exception of the total cost associated with banks.

Table 3: Average total cost across all corridors

Provider	USD 200			USD 55		
	World Bank	Eighty20	Genesis	World Bank	Eighty20	Genesis
Bank	20.7%	11.2%	10%	-	24%	32.2%
MTO	12.7%	8.7%	7.2%	-	13%	13.6%
Other provider	6%	6.4%	5%	-	6%	5.9%

Source: World Bank, Eighty20, Genesis Analytics

- Genesis’ estimates of the average **fee** of a USD 200 transfer are also broadly aligned to those of Eighty20. Likewise Genesis and Egihty20 are aligned in their estimates of the **exchange rate margin**. Where the two studies differ is the way each has disaggregated other providers cost.¹¹ In general both Genesis and Eighty20 are well below the World Bank’s findings both for fees and exchange rate margins as per the table below.

¹¹ Mukuru is a good example of the different approach taken in the two studies where Genesis has allocated the bulk of the cost in the fee while Eighty20 has done this in the exchange rate margin.

Table 4: Comparison of average fees and exchange rate margins for a USD 200 transfer

Provider	Fee			Exchange rate margin		
	World Bank	Eighty20	Genesis	World Bank	Eighty20	Genesis
Bank	17.6%	10.6%	8.9%	3.2%	0.6%	0.8%
MTO	11.2%	5.5%	5%	1.5%	2.8%	2%
Other provider	1.3%	2.3%	4.1%	2.4%	2%	1.1%

Source: World Bank, Eighty20, Genesis Analytics

Some additional findings / observations are relevant.

- Genesis data showed no difference in the forex margin on a USD 55 and USD 200 transfer.
- Comparing costs across corridors is complicated by differences in the type of providers and the number of “currency pairs” involved.
- For instance there are no ADLAs serving the Lesotho corridor in the study, and in our data set we have no results for the banks servicing Zimbabwe (due to sanctions) and could not collect data on ADLAs serving Mozambique due to their systems not functioning during the field work period.
- With respect to “currency pairs” there is no exchange rate margin estimated for any of the **Lesotho** transfers, as the transfers are all Rand based. As the **Zimbabwe** economy is dollarised, the foreign exchange margin on a transaction is one-sided; and is the margin as it applies to the purchase of US Dollars on the sending side. The data from Zimbabwe however is somewhat inconclusive. Whereas Genesis data shows Mukuru to have a low foreign exchange margin and high fees, other sources have captured its pricing model as having high foreign exchange margins and low fees. This may account for some of the misalignments in comparing the datasets. For bank transfers Eighty20 calculated the foreign exchange margin as half the World Bank’s whereas we were unable to complete a transfer as the correspondent bank in question was under sanctions. In general Genesis shows lower rates than Eighty20 but higher rates for MTOs. Given these discrepancies an average figure is not particularly meaningful.
- A foreign exchange transfer to **Mozambique** requires first the purchase of US Dollars and then the purchase of MZN, which requires two foreign exchange transactions. The World Bank does not clarify whether their calculation always includes both legs of the transactions, but we assume this to be the case. Genesis and Eighty20 have calculated the margin using the first leg of the transaction which could explain why we show the half the margin estimated by the World Bank. To correct for the Table in Appendix 2 measures the exchange rate margin associated with the conversion into local currency – the ‘second leg’. Doing so using data provided by Standard Bank and Western Union suggests a higher exchange rate margin for both USD55 and USD200 transfers. These margins however are well above those calculated by the World Bank, suggesting that differences between Genesis and the World Bank’s estimates may be unrelated to the second leg of the foreign exchange transfer.

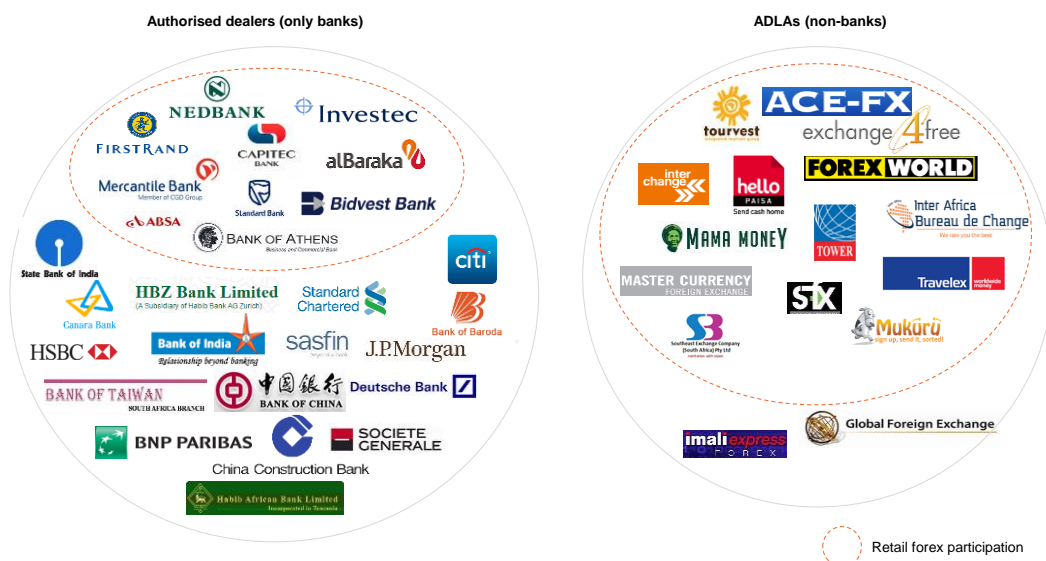
The conclusions from this analysis are therefore somewhat tentative. Genesis results generally support the Eighty20 findings that the World Bank has over-estimated the average cost of transfers across these corridors. However the data does show significant differences in the cost per channel, and that the costs in at least the banking channel are even higher than the average suggested by the World Bank.

In the next section we explore whether such differences in cost are the result of the different operating models of the market participants and whether consumers have real choices when it comes to their service provider. In order to better understand these different approaches, the next Section provides a decomposition of the value chain for remittances and maps the business models of the various providers.

4. SUPPLY-SIDE CONSIDERATIONS

There are primarily three types of cross-border remittance services providers (RSPs) in the South African market, namely: retail banks, Money Transfer Operators (MTOs) and authorized dealers with limited authority (ADLAs). There are 19 retail banks providing retail forex and transfer services. There are currently two MTOs operating in the market (Western Union and MoneyGram). Of the 16 licensed ADLAs, 14 provide remittance services, bringing the total provider pool for cross-border remittances to 35 (Figure 2).

Figure 2: Licensed institutions that provide remittance services



Source: Individual websites, Genesis Analytics team analysis

Banks are the only authorised dealers in foreign exchange and are appointed by the South African Reserve Bank (SARB) to buy and sell foreign currency on behalf of customers and to act as market makers in the local foreign exchange market.

ADLAs are authorised to operate as one of three types of businesses: (i) as bureaus of exchange, or (ii) to operate as a bureau of exchange and offer remittance services in partnership with an external MTO, or lastly (iii) as independent RSPs that trade through authorised dealers.¹² MTOs such as MoneyGram and Western Union do not acquire licences independently, but rather partner with banks and other licensed institutions to facilitate foreign exchange transactions. MoneyGram, for example, partners with Standard Bank in South

¹² South African Reserve Bank, 2016

Africa, with agents including Vodacom Mpesa, Ecocash, Safaricom in receiving countries. Western Union meanwhile has partnered with ABSA, and counts as its agents bureaus of exchange such as American Express Foreign Exchange and EuroDollar Foreign Exchange.

It is also useful to differentiate between those providers where remittances is a core business as opposed to a value added services, as this may affect their pricing model.

- **Core RSPs** are providers whose primary operation is the provision of remittances. Examples of these providers in South Africa include ADLAs such as Mukuru and Mama Money as well as MTOs Western Union and MoneyGram. To attract volume, these providers typically price their offerings more competitively in the market and rely on efficient on-boarding to reach scale at the lower-end of the market.
- **Value-added RSPs** are providers whose remittance offering is part of a broader customer value proposition. The major banks (ABSA, Standard Bank, FNB and Nedbank) and large retailers such as Shoprite are examples of such providers. These businesses are able to spread the fixed cost of existing infrastructure across a variety of other products and services and hence are less reliant on the scale of remittances to cover distribution costs. These providers typically price their offerings to retain existing customers and to improve the value of their overall offering rather than to compete head on with ADLAs or MTOs.

RSPs provide customers with access to a wide array of channels depending on their business model (Table 5). ADLAs, which deal with lower transaction values, most often provide a cash solution using agent networks. MTOs similarly provide both online means of sending money by facilitating deposits into accounts held by partner banks and cash alternatives through their agent networks. Banks provide online platforms and cash solutions for sending money using their branch channels. Banks have made an effort to introduce innovative products such as mobile-app/cellphone banking based products (FNB's Pay2Cell and Standard Bank's Instant Money International) for existing bank customers in an attempt to remain competitive in the face of more innovative entrants.

Table 5: Product matrix per provider

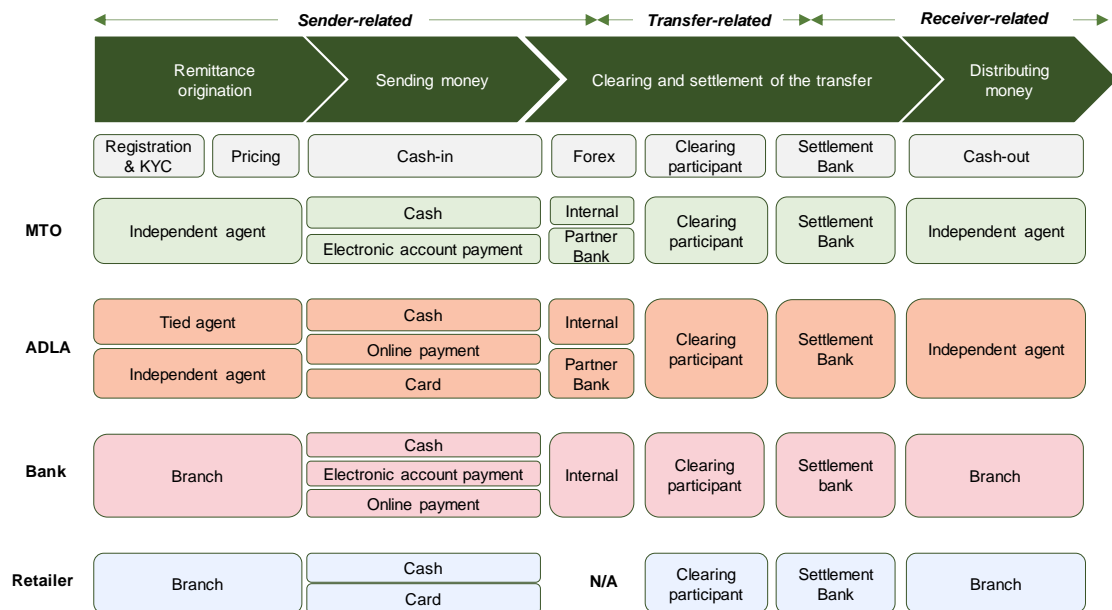
	TT SWIFT Transfer	Through an MTO	Mobile offering	Cash alternative at branch
Mukuru	x	x	✓	✓
Mama Money	✓	x	x	✓
Exchange4Free	✓	x	x	✓
Shoprite	x	x	x	✓
FNB	✓	✓	✓	✓
Standard Bank	✓	✓	✓	✓
ABSA	✓	✓	x	✓
Nedbank	✓	x	x	✓
Western Union	x	✓	x	✓
MoneyGram	x	✓	x	✓

Source: Providers' websites

4.1. VALUE CHAIN FOR CROSS-BORDER REMITTANCES

There are currently four distinctive business models operating in the market: i) the **ADLA** model; ii) the **MTO** model; iii) the **Bank** model; and iv), a **Bank-Retailer partnership** model. Figure 3 presents the value chain and/or process required to send a remittance: origination, sending money, clearing and settlement, and distribution. Whereas each provider has to complete each step in the value chain, the reliance on different channels and how each provider accesses other parts of the value chain – whether internally, or through third-party relationships impacts the profitability of their business.

Figure 3: Generalised RSP operating models across the value chain



Source: Genesis Analytics team analysis 2016

The following section consider how the four types of providers face different costs at each stage of the value chain.

4.1.1. Remittance origination

The origination layer is the “first mile” of a cross-border remittance transaction. The role of origination is to facilitate the disclosure and movement of the required information to enable a consumer to remit funds. This includes collecting personal information of senders and receivers as well as providing the sender with all the relevant information regarding the transfer (including pricing, documentary requirements, transaction identification details and information about the collection process).

Given the risks of money laundering and terrorist finance activity that may arise during cross-border transfers, specific KYC regulations are in place under the Financial Intelligence Centre (FIC) Act 38 of 2001 requiring face-to-face contact between RSPs and customers, and governing the monitoring of remittance transactions. These costs at this stage primarily include staff, systems and physical infrastructure to ensure that all documentation is correctly captured and stored. Exchange Control regulation adds to the burden of authorised dealers (the banks) as they are required to report every foreign exchange transaction to the SARB through the

Cross Border Foreign Exchange Transaction Reporting System which is costly to install and maintain.¹³

Recently, the KYC requirements for low valued cross-border transactions through other service providers in the market (*applicable only to non-banks*) of less than R3,000 per day or R10,000 per month have been relaxed, requiring only a valid ID upon registration. This has enabled migrants with no official residence to send money through formal channels. However, full KYC documentation of a valid ID and proof of address is still required when sending amounts higher than R3,000 per day.¹⁴ The FIC Act has also been amended to focus on a more risk-based approach to transaction monitoring and customer verification. This amendment however has not yet been signed into law and RSPs have not yet benefitted from these enhancements. For banks in particular monitoring and reporting costs associated with the lack of differentiation between high value and low value payments remain high.

Regulatory requirements for customer identification thus place a high, and fixed cost on banks and non-banks alike – which require significant staff, systems and physical infrastructure to originate remittances. For core providers (ADLAs and MTOs) that rely on accessible, face-to-face agents to originate transactions this operating cost is particularly significant.¹⁵ Banks, meanwhile, originate remittances through their existing branch network and other channels, and, in theory, can spread origination costs across other products and services provided to existing customers. In both cases, these costs are recovered incrementally through scale and comprise a proportion of the fees charged to customers.

ADLAs face a number of costs associated with establishing and maintaining agent networks, namely: training and support; financial remuneration; branding and marketing; and commissions. RSPs that rely solely on agent networks have higher variable costs (approximately 50% of total operating expenses)¹⁶ and lower fixed costs associated with staff salaries, IT and compliance. MTOs, on the other hand, have partnered with banks to act as their agents to reduce their costs. The primary costs to MTOs are marketing, which are fixed, and revenue sharing with partner banks, which are variable.

While the bank origination model appears to be less costly in terms of variable costs¹⁷, there are significant fixed costs associated with existing infrastructure and compliance requirements which must be shared across all of their product offerings. Stakeholder interviews revealed that the cost of compliance is the primary driver of cross-border remittance costs for bank RSPs.

4.1.2. Sending and receiving money

The sending and distribution layers of the remittance value chain entails the collection of funds from sending customers and the sending of funds to receivers. It also includes the processing of associated information to/from various other providers and platforms operating between the sending and receiving channel. This can be done through various channels (branches, agents, online or mobile platforms) and in various forms (cash, account transfer, online or mobile payments) depending on the choice of business model. Because of this complexity there are a number of per-transaction payment processing costs incurred by RSPs which directly impact the fees charged to customers.

¹³ FinMark Trust and Eight20, 2016

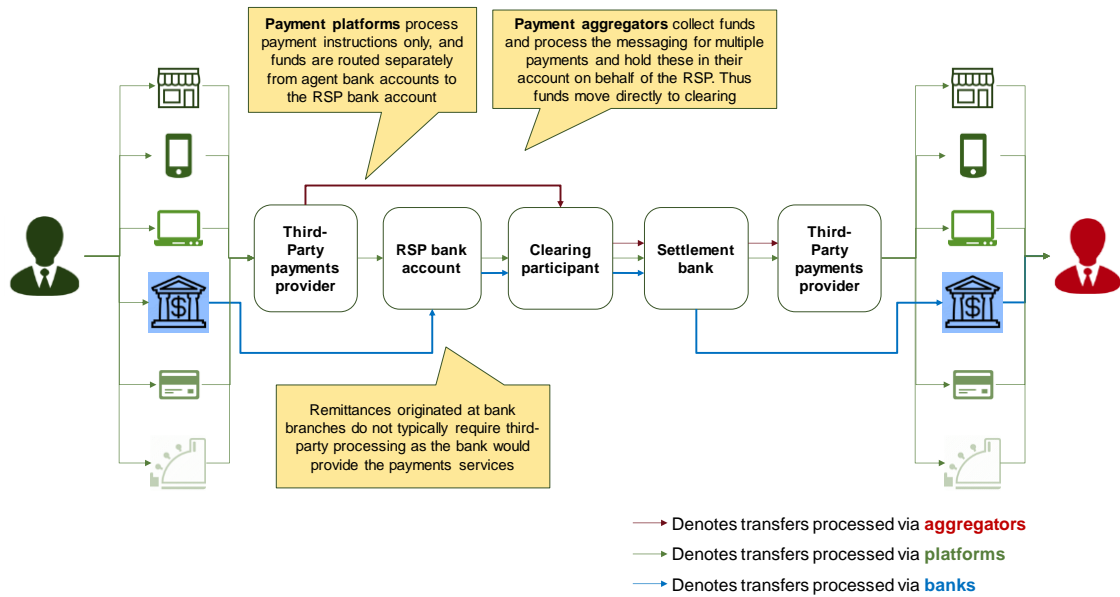
¹⁴ Various service providers' websites

¹⁵ Genesis Analytics stakeholder interviews, 2016

¹⁶ Supply Side Constraints for Remittance Service Providers in the UK, Developing Markets Associates, March 2010.

¹⁷ *ibid*

Figure 4: End-to-end decomposition of remittance transfer



Source: Genesis Analytics team analysis, 2016

Technological advances have opened up access to the payments element of the value chain. Third-Party Payment Providers (TPPPs) now link RSPs and their customers and provide multiple options for sending and distributing remittance transfers across a number of alternative channels (Figure 4 above). Payment platforms, or gateways, provide systems that integrate agents' interfaces with that of the RSP, processing the payment instruction originated at the agent. These TPPPs do not process funds, which move separately between the agents' and RSPs' respective bank accounts. Payment aggregators, in contrast, process funds as well as payment instructions. Aggregators are TPPPs that collect funds in their own accounts on behalf of RSPs and these do not need to be sent to the RSP's account – improving the efficiency of the transfer. Platforms and aggregators in turn can be used by both bank and non-bank RSPs who choose to use agent networks.

Given their established payment capabilities, banks have a competitive advantage over other RSPs as they are also able to provide TPPP services in addition to acting as a RSP in their own capacity. As a result banks can earn revenues directly as RSPs or indirectly by providing payments services to other RSPs – by providing access to various remittance products and channels as is the case with MTO-bank partnerships. Non-bank RSPs that have internal payments capabilities can also adopt this model, allowing them to operate at various levels of the value chain.

The costs involved in sending and distributing money include fixed set-up, or initiation, costs; per-transaction fees and withdrawal fees. For RSPs with existing payments capabilities, the costs involved are restricted to per-transaction costs such as messaging and switching fees. For RSPs without internal payments capabilities there are significant fixed costs of integration in addition to variable costs. Variable costs are largely passed on directly to customers, while fixed costs are recovered incrementally through scale.

4.1.3. Clearing and settlement of the transfer

The third layer of the value chain involves the clearing and settlement of funds from the sending to the receiving market. Clearing, in the context of cross-border remittances, refers to

the process of transmitting, reconciling and, in some cases, confirming payment orders prior to settlement, possibly including the netting of instructions and the establishment of final positions for settlement. Settlement, refers to the transfer of funds between settlement banks in the sending and receiving countries. This layer also includes the **foreign exchange component** of the transaction that is required to transfer funds from one currency to another, which takes place prior to clearing and settlement. This layer therefore influences both the fee and the foreign exchange margin charged by RSPs.

In order for a transaction to be cleared and settled, a cross-border transfer requires the purchase of the foreign currency used in the transaction through the foreign exchange market. The foreign exchange margin is determined in this part of the value chain. As the mystery shopping has described, Genesis defines this margin as the difference between the interbank bid or offer and the quoted bid or offer on an executed trade. A recipient in Lesotho receiving money from South Africa will receive payment in Rand and thus not incur any foreign exchange margin. A recipient in Zimbabwe (which is largely dollar based) will pay only the retail spread on the purchase of dollars. A recipient in Mozambique will pay a retail margin on both the acquisition of dollars (outbound) and on the purchase of Metical on the inbound transaction.

The data analysis showed that ADLAs charge the lowest forex margins followed by banks and MTOs charging margins (recall Figure 7). These variances imply that there are varying levels of pricing discrimination amongst RSPs in the market, suggesting that the greatest market power is held by banks. Box 1 below discusses the structure of the foreign exchange market in greater detail.

Box 1: The market for foreign exchange in South Africa

The market for foreign exchange is historically viewed as a two-tier market: made up of an interbank, or wholesale market, and a retail market. Interbank markets historically held the largest pool of liquidity in terms of volume and the number of trades. The increasing role of aggregators in the market has however resulted in the narrowing of retail and wholesale margins.¹⁸

The wholesale market is restricted to authorised participants (dealers), while the retail market includes financial and non-financial corporates and retail customers. In South Africa the spot foreign exchange market is highly concentrated, with over 75% of turnover accounted for by 5 banks.¹⁹ In 2013 the interbank market accounted for 36% of total turnover, while non-bank financial institutions' transactions accounted for 55% of total turnover, driven by non-reporting banks (29% of total turnover). Institutional investors, including hedge funds, accounted for 21% of total turnover between them while other non-financial corporates accounted for 4%. Prime brokerage accounted for 32% of total turnover and pure retail trades accounted for only 3% or 105 billion USD of the market.²⁰

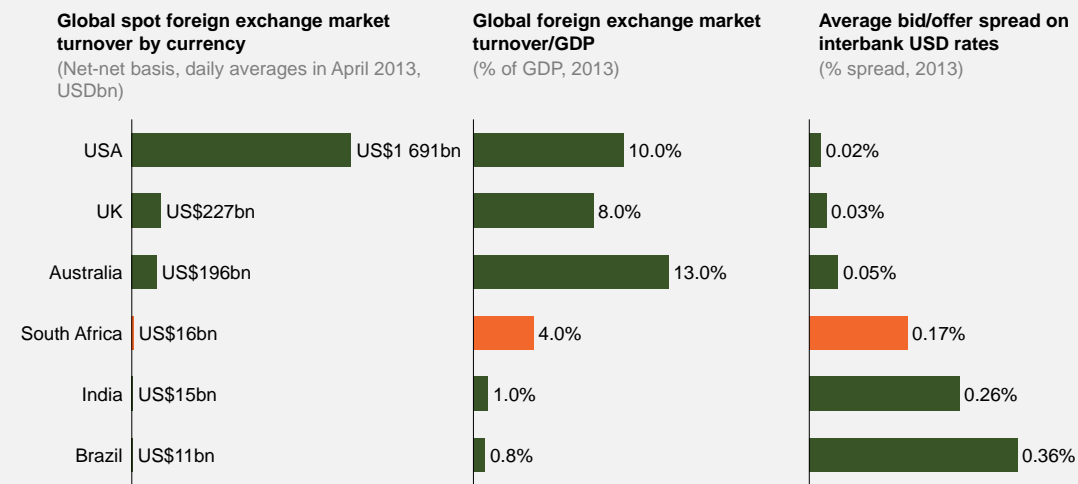
Figure 5 below compares the volumes of spot transactions to GDP and the margins charged in similar markets to South Africa on the basis of financial sector development and regional economic status. The graph shows that foreign exchange turnover for South Africa is a tenth of that in Australia, and the interbank spread is 4 times as large. Assuming margin to be associated with turnover would suggest that foreign exchange margins in South Africa are consistent with the size of the market. This analysis holds for similar markets like Brazil and India that have a similar volume of turnover to South Africa and much higher margins (2 and 1.5 times as large as South Africa, respectively).

¹⁸ The anatomy of the global FX market through the lens of the 2013 Triennial Survey, BIS, 2014

¹⁹ 2013 Triennial Survey of central banks, BIS, 2014

²⁰ 2013 Triennial Survey of central banks, BIS, 2014

Figure 5: Foreign exchange turnover compared to margins



Source: BIS Triennial Central Bank Survey 2014, Oanda database 2016, World Bank 2016

Pricing in the retail market is determined by mainly two factors: by the extent to which there is competition in the market; and whether non-bank competitors that serve the retail market have sufficient scale and volume to secure attractive wholesale prices to compete effectively (and these rates are passed on to their customers). The turnover structure in the South African spot foreign exchange market means that authorised dealer banks have the most significant pricing power, followed by non-reporting banks and institutional investors – which translates into narrower spreads for transactions between these participants. Direct retail transactions, in contrast, attract wider spreads due to their low contribution to total market turnover. Between these extremes, institutions such as MTOs and ADLAs can act as prime brokers for retail foreign exchange transactions, to the extent that they participate in the market independently, aggregating smaller transactions into batches to attain some benefit in terms of realised spreads.

As depicted in the value chain, **clearing and settlement** is restricted to licensed clearing participants and settlement banks, respectively. There are currently 27 clearing banks, 6 non-bank clearing participants and 26 settlement banks licensed by the SARB^{21,22}.

Banks have a clear competitive advantage over other RSPs for clearing and settlement, to the extent that they are licensed participants, and because they do not incur significant additional costs to clear and settle remittance transfers, which are only a small proportion of the payments they process. Non-bank RSPs need to clear and settle transfers via these participants for which they incur costs as and when these instructions are issued. Typically, RSPs opt to bulk-up payments to reduce their per-transaction costs of clearing and settlement by reducing the number of instructions issued as these costs are levied at a fixed rate per instruction.

Banks use the **SWIFT** network to send and receive information about financial transactions in a secure, standardised and reliable environment. The network transports financial messages between banks in one location to those in another, but does not hold accounts for its members and does not perform any form of clearing and settlement. A scan of the pricing schedules of a sample of SWIFT member banks²³ reveals that there is considerable variance in the SWIFT

²¹ Clearing and settlement participants – South African Reserve Bank, 2016

²² Payments Association of South Africa website, 2016

²³ ABSA Bank, FirstRand Bank, Standard Bank, Capitec Bank, Nedbank, Citibank, Investec, Bidvest

fees charged, between R80 and R180 per transfer,²⁴ which may suggest limited competition in this part of the value-chain. SWIFT fees are passed on directly to customers, although not always disclosed, who wish to remit from one bank account to another and are incurred by non-member RSPs for transfers through other channels.

Once the payment information has been sent via the SWIFT network, the settlement of foreign exchange transactions between the Rand and other currencies is settled through the Continuous Linked Settlement (CLS) network linked to the SAMOS system to reduce the settlement risk associated with foreign exchange transaction. This is achieved through the operation of the CLS Payment-versus-Payment (PvP) settlement service where both sides of the payment instruction for a foreign currency transaction are settled simultaneously.²⁵

A key benefit of the cross-border CLS system, is the liquidity and operational efficiencies delivered through multilateral payment netting. CLS calculates the funding required of each member, allowing the member to transfer only the net amount of its payment obligations, rather than the total amount of each trade settled. This reduces the amount of cash required by CLS thus resulting in greater efficiencies.

In summary, the fixed-costs incurred by RSPs to clear and settle cross-border remittances are passed on to their customers incrementally as a consequence of batching, which reduces their variable costs by reducing the number of instructions that are processed. Foreign exchange margins, meanwhile, are largely determined through pricing discrimination as a result of the market structure within the foreign exchange market and are passed on to customers on an individual transaction basis.

4.1.4. Cost implications across the value chain

Each layer of the value chain for remittances adds costs to the provider. In order to understand the extent of these costs, this study uses the ACTA framework²⁶, which disaggregates the cost of payments between the process of onboarding and managing accounts, the cost of cash-in and cash-out access as well as the cost of transacting as a basis for estimation.

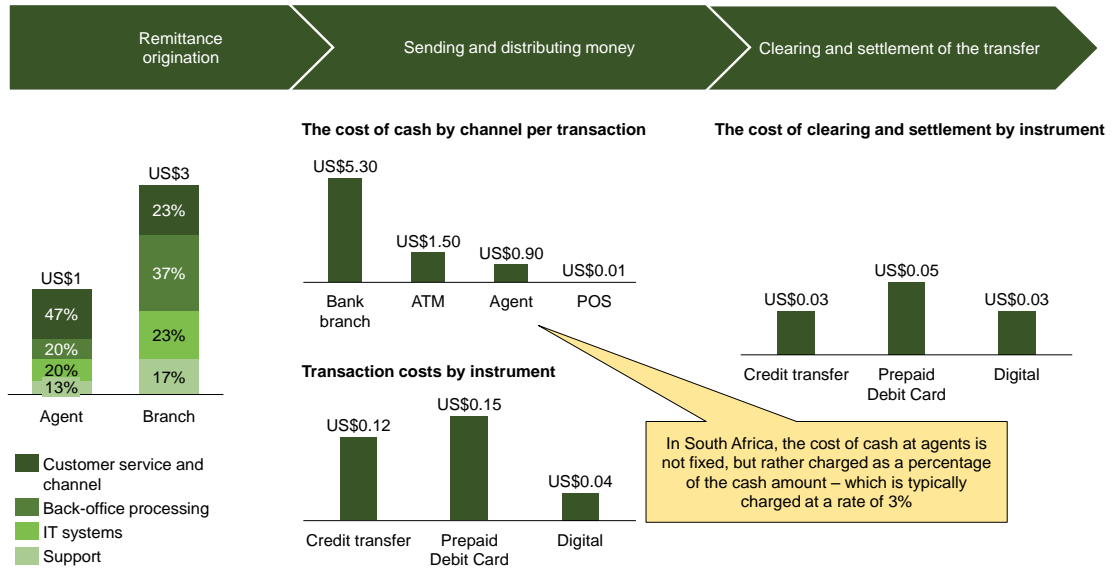
As Figure 6 below illustrates, the cost to provide payments services, per transaction, varies considerably depending on providers' operating choices. For example, the cost of a cash transfer using a bank branch for origination (USD8.45, which is calculated by summing the branch origination, branch cash, credit transfer and clearing costs) is over four times as high as a digital transfer using agents for origination (USD1.97). This has a significant implication for pricing across various business models.

²⁴ SWIFT member pricing schedules, 2016

²⁵ Essential Guide to Payments, 2013

²⁶ Fighting poverty, profitably. Bill and Melinda Gates Foundation, 2013

Figure 6: Operating costs across the value chain for remittances



Source: *Fighting poverty profitably*, Bill and Melinda Gates Foundation 2013, Genesis Analytics team analysis, 2016

Using the ACTA framework, the cost of origination through bank branches is primarily driven by the high fixed costs associated with customer service and back-office processing which is due to staff and administrative costs. Origination through agents is 66% less costly than bank branches, owing to lower infrastructure costs. Bank branches also incur the highest cost for handling cash, due to the high fixed costs of maintenance, while cash-in and cash-out via POS terminals incur the lowest incremental cost as these transactions are conducted at retailers which handle cash as part of their normal business operations. Finally the costs for clearing and settlement do not differ across the payment instruments under consideration.

The ACTA framework is useful to estimate operational costs across the value-chain for cross-border remittances, on a per transaction basis. These costs can then be compared to each provider’s pricing for remittance transfers (as proxied by the average all-in cost to send funds identified in Section 3.2) to provide an indication of each provider’s profitability, and hence competitiveness, for US55 and USD200 transfers. Before discussing these results the next Section first describes the various business models in more detail.

4.2. SUMMARY BUSINESS AND PRICING MODELS

This Section builds on the decomposition of the value chain provided in Section 4.1 and summarises the business models and resulting pricing models of each RSP. These findings are based on an assessment of two ADLA models (Mukuru and Mama Money), two MTO models (Western Union and MoneyGram), two traditional bank models (ABSA and Standard Bank), one digital bank model (FNB Send Money) and one bank-retailer partnership model (Capitec and Shoprite, defined as ‘other providers’ in the preceding sections).

4.2.1. ADLA business model

Mukuru and Mama Money both use agents to originate, send and distribute remittance transfers. Unlike Mama Money, Mukuru also has 31 branches of its own, which it uses to register customers. Mukuru’s originating agents include 20 Inter Africa branches, 1,655 PEP stores and a host of individual consultants. Mama Money’s originating agent network includes

the same number of PEP stores as well as 92 individual agents. Given its reliance on agent networks, Mama Money incurs significant variable costs to originate remittances. Mukuru's originating costs meanwhile are split between fixed costs to operate their branch network and variable costs from their agent network, with the former being their primary origination channel.

Both ADLAs also offer similar channels for executing transfers, relying on partnerships to collect and distribute funds. For cash payments, which represents the bulk of transactions²⁷, both ADLAs use a combination of partners. Mukuru has partnered with eight retailers, two Bureau de Change providers and one terminal service provider²⁸, while Mama Money has partnered with eight retailers and one terminal service provider. There is some differentiation between Mama Money and Mukuru for non-cash payments, with the former offering electronic payments to existing Standard Bank, FNB and Nedbank customers via the banks' digital channels and the latter offering electronic payments to existing FNB customers through its own digital channels and to Mukuru prepaid cardholders. Both ADLAs also rely on partnerships with a combination of banks, mobile money operators and retailers to distribute funds in receiving countries.

Both ADLAs generate the majority of their cross-border remittance income from fees, which are set to recover operating costs and plus a margin. To keep their pricing competitive and accessible to a wider range of (typically lower-income) customers neither provider charges a significant foreign exchange margin (unlike MTOs and banks that typically add a margin between 1% and 3%). Discussions with ADLAs revealed that their primary operating expenses are derived from managing agent networks, managing customer service centres (call centres), together with the cost of accepting and distributing cash, which can be as much as 4% of the amount sent.²⁹

As a result of the largely variable nature of ADLA's operating cost structure, their pricing is also variable and does not significantly discriminate on the basis of value. This, coupled with the low foreign exchange margins, means that the total all-in price charged to customers are close to the explicit costs (fees) that are disclosed to them.

4.2.2. MTO business model

Both of the traditional MTOs operating in South Africa have partnered with banks for the distribution and processing of remittances (Western Union with ABSA and MoneyGram with Standard Bank). MTOs do not incur the same agent and cash handling costs as ADLAs, due to their reliance on bank branches to collect funds and process their transactions. MTOs therefore incur a higher proportion of fixed costs relative to ADLAs. As a result, MTOs charge higher levels of fees and foreign exchange margins. In terms of payment options, MTOs only offer cash payments and account transfers for partner bank customers.

Given their chosen distribution model, MTOs price their offerings as alternatives to traditional bank transfers, enabling them to charge greater foreign exchange margins, which are implicit costs, while charging competitive fees. Thus, the all-in price customers pay to remit funds are significantly greater than the explicit costs that are disclosed to them (i.e. to send USD200

²⁷ Stakeholder interviews, 2016

²⁸ Terminal service providers are payments processors that provide point-of-sale terminals to allow businesses to provide a range of payment services to customers

²⁹ Stakeholder interviews, 2016

(R2,736)³⁰ the explicit price is R164.16 and the all-in price is R248.98 when taking into account the explicit exchange rate margin).

4.2.3. Bank business model

Unlike other models, the bank model is primarily aimed at banked customers. Traditionally a bank customers only had access to branches, which they would have to visit to instruct an international payment. More recently, however, the choice of available channels has broadened, first with access to partner MTOs – many of which are in-branch – and most recently with digital remittance channels available via online and mobile banking platforms.

Discussions with bank stakeholders suggest that banks have traditionally not been particularly focused on competing with other RSPs, outside of other banks, but offer the service to support a broader product range for their customers. Given the operational complexity of banks, and their chosen remittance business model, bank service fee pricing is discriminatory against low-value transfers.

In particular, because banks' explicit fees have a minimum value of R140 and maximum of R850, the price a customer pays increases in significance as the value being transferred decreases (i.e. for a transfer of USD55 (R752.40)³¹ the bank service fee is R240, including the SWIFT fee, which is 31.89% of the transferred amount, whereas this drops to 8.77% of the transferred amount when sending USD200 (R2,736)³². There is a similar level of discrimination for foreign exchange margins, which are value driven and reflect the captive nature of their remittance customer base.

4.2.4. Bank/retail partnership model

The bank-retailer partnership model is an example of how banks are innovating in the cross-border remittance market. This model is currently in the pilot phase, with transfers restricted to Lesotho, and is currently only available from Shoprite in partnership with Standard Bank. A key feature of this model is that it dramatically reduces the cost structure underpinning the offering and enables banks to capture a portion of the low-value remittance market.

As a result of the lower compliance requirements, and hence operating costs, this model enables the retailer to price the offering in a way that attracts volume, while the bank is able to capture revenues from low-value remittances at a significantly lower operational burden. In practice, any transfer of up to R5,000 to Lesotho can be completed for a fixed fee of R9,99, which is, both, the explicit, as well as the all-in, price of the transaction.

4.2.5. Estimated profitability per business model

Now that each of the business models operating in the market have been described, Figure 6 on the next page provides an estimation³³ of the profitability of each model. While these findings are not based on primary research they do confirm the distribution of relevant costs presented in the previous Section.

³⁰ Using the exchange rate of ZAR/USD = R13,68

³¹ Using the exchange rate of ZAR/USD = R13,68

³² *ibid*

³³ These estimates are based on average cost estimates along the value chain, across a sample of developed and developing countries, and hence the true costs may differ for South Africa

In terms of pricing, the ADLA, bank-retailer partnership and bank digital models are the most competitive. In terms of operating costs, these models also appear to be the most cost-effective. The bank traditional model is both the most costly to operate, together with the MTO model, and the least competitive in terms of pricing. MTOs appear to compete more effectively with ADLAs for higher value transfers, given their relatively fixed pricing compared to ADLAs' variable pricing models. More detail on these findings is presented below.

- The primary driver of incremental operational costs for **ADLAs** appears to be their agent management costs, which account for 50% of total transaction costs, followed by the cost of cash which accounts for approximately 40%. Overall, ADLAs appear to be highly profitable for both low, and higher, value transfers once they achieve minimum scale to recover fixed costs. In terms of profitability these estimates show that, once scale is achieved, the ADLA model is highly profitable while remaining competitive in the market and affordable to customers.
- For **MTOs**, the primary driver of costs is a reliance on bank branch networks for origination and cash-in/cash-out access. Branch costs account for nearly all (98%) of all incremental transaction costs. As a result of this cost structure and the relatively fixed nature of fees, MTOs profitability is linked to higher value transfers. Hence, MTOs charge significantly high foreign exchange margins on transfers as a way to improve average profitability.
- The various **bank** models on offer in the market illustrate the benefits of innovation and the relative inefficiency of the traditional bank model. In the traditional model, the drivers of incremental transaction costs for banks are identical to those of MTOs. The bank digital model, which only uses branches for origination, is less than half as costly as the traditional model per transaction. The digital model also eliminates the need for cash-in and cash-out as it is limited to existing bank customers who typically transact using their existing accounts. Overall, the bank traditional model is highly profitable, at the expense of being highly uncompetitive – particularly for low value transactions. The digital model, meanwhile, retains profitability while improving pricing competitiveness, and is thus offers compelling value to existing bank customers that would otherwise have used other means to transfer funds.
- The **bank-retailer partnership** model is the most cost effective according to Genesis' estimates. The primary driver of cost in this model is the cost of origination, which accounts for 60% of incremental transaction costs. In terms of profitability, the model appears to be a loss-leader across all transaction values, given the fixed fee structure. This is likely due to the fact that this service is viewed as a value-added service to encourage remitters to shop at the retailer. In terms of the bank, this model enables banks to effectively participate in the market for low value payments.

What these estimates show is that there is room for providers to improve their pricing while still remaining profitable, provided they are able to streamline their operations in certain parts of the value chain. The key challenges, in terms of costs along the value chain, appear to be in line with earlier expectations: origination remains costly for all RSPs, as does the cost of cash through bank branches and agents.

Figure 7: Estimated profitability per transaction by business model

Model	Origination	Cash-in/ Cash-out	Instrument	Clearing & settlement	Operational cost US\$55	Operational cost US\$200	Fee Revenue US\$55	Fee Revenue US\$200	Op. profit margin % US\$55	Op. profit margin % US\$200
ADLAs	Agent	Agent	Prepaid card	Prepaid card	US\$2.10	US\$7.20	US\$5.15	US\$18.19	59%	60%
			Credit transfer	Credit transfer	US\$2.05	US\$7.15	US\$3.95	US\$14.09	48%	49%
			Digital	Digital	US\$1.97	US\$5.07	US\$2.75	US\$10.00	28%	49%
MTO	Branch	Branch	Credit transfer	Credit transfer	US\$8.45	US\$8.45	US\$7.33	US\$9.69	-15%	13%
Bank (traditional)	Branch	Branch	Credit transfer	Credit transfer	US\$8.45	US\$8.45	US\$19.84	US\$19.94	57%	58%
Bank (digital)	Branch	N/A	Digital	Digital	US\$3.07	US\$3.07	US\$3.23	US\$7.62	5%	60%
Bank-Retail	Agent	Agent POS	Credit transfer	Credit transfer	US\$0.66	US\$0.66	US\$0.75	US\$0.75	12%	12%

Source: Genesis Analytics team analysis, 2016

5. CONCLUSIONS AND RECOMMENDATIONS

This section collates Genesis' findings from the mystery shopping exercise, desktop research and stakeholder interviews to conclude on what drives the pricing of cross-border remittances from South Africa into three neighboring SADC countries. These conclusions inform a set of recommendations to improve the competitiveness of the market.

The findings from this report are categorised into five areas: market structure, access, pricing, KYC and operating costs. Market structure relates to issues identified in terms of the structure of various elements of the remittance value chain (as described in section 4.1) which may influence the competitiveness of RSPs. Access relates to issues surrounding the accessibility of the various RSPs to customers as well as participation along the remittance value-chain and how this impacts their competitiveness. Pricing relates to issues of the various customer facing pricing practices and disclosures of RSPs. Operating costs relates to issues identified within each RSP business model. KYC relates to issues identified within the "first-mile" of remittance transfers where remitters are on-boarded by the various RSPs.

5.1. MARKET STRUCTURE

The market structure analysis conducted included an analysis of the foreign exchange market as well as the structure of the cross-border remittance market.

The structure of the foreign exchange market is dominated by authorised dealers, which have significant pricing power. Since this report was completed the Competition Commission of South Africa referred a case of collusion in the foreign exchange market to the Competition Tribunal, whereby 17 banks are to be prosecuted for manipulating spreads on spot trades in relation to trading of the US Dollar/South African rand currency pair. This action serves as proof of the pricing power held by authorised dealers.

This study was unable to access any data that shows the rate at which spreads change according to the size of the dealers' business customers. What this means is that there is no data to show the difference that an ADLA would be charged relative to a large corporate. However this study surfaced anecdotal evidence from the mystery shopping exercise which suggests that ADLAs' spreads are relatively narrow relative to the interbank rate.

The structure of the formal cross-border remittance market is dominated by two business models (branch-based and agent-led). This is due to the requirements for KYC, which necessitate that the initial on-boarding of customers be done through face-to-face interaction, and the predominance of cash-based transfers. In other markets, the scale of agency banking and the availability of secondary KYC (whereby institutions can leverage the initial onboarding of a customer) has enabled the proliferation of low-cost digital remittance models.

As a result, there is a limited market for purely digital models which have been shown to significantly lower the cost associated with transfers in other markets. To address this, the market needs to develop effective solutions to manage KYC and cash more efficiently. Currently, despite enabling regulation to reduce barriers to entry, the high set-up costs associated with managing physical distribution networks are a major barrier to new entrants and increased levels of competition.

5.2. ACCESS

With respect to access to customers, ADLAs, despite achieving strong growth in scale, have limited networks compared to banks and MTOs in order to contain their cost structures. ADLAs seek to compete through establishing agent networks to keep their cost structures under control and remain attractive in terms of pricing.

With respect to market participation this study confirmed that banks that are authorised dealers in the foreign exchange market have direct access to the interbank market, whereas ADLAs and MTOs have secondary access to the market through these dealers. Secondly non-bank RSPs cited limited access to clearing and settlement as a driver of up-front costs. This is because they are required to establish partnerships with licensed payment providers which incurs costs that are less scalable than the costs associated with direct access.

Recommendations

- Support the development of ADLAs to increase scale and therefore competitiveness. This can be achieved through technical assistance and funding programmes aimed at scaling up and deepening agent networks by improving training and supporting their ability to increase agent coverage.
- Help ADLAs improve awareness of their product and services, due to the brand power of traditional RSPs, to promote the usage of affordable, formal cross-border remittance channels. In other markets, this has been achieved by the central bank publishing prices, calculated on a consistent basis, to which customers can refer. This will help raise awareness amongst remitters and enable them to make more informed decisions around their usage of RSPs.

5.3. PRICING

This report has made a number of findings regarding the pricing of cross-border remittances – a key consideration for analysing the market's competitiveness. The mystery shopping analysis revealed that the average pricing of remittances of USD200 is lower than has been reported by the World Bank, with average prices of 6.4%, as opposed to 14%, of the amount sent. For remittances of USD55, which are not reported by the World Bank, the mystery shopping results were mixed when compared to previous studies. ADLAs pricing was estimated as being cheaper than previously reported. Banks and MTOs were found to be materially more expensive for low-value transfers, with bank pricing particularly higher than previous estimates (32.2%, as opposed to 19.3%, of the amount sent).

Contrary to initial expectations, fees are the primary component of pricing, accounting for between 90% and 95% of the total price, with the exception of MTOs whose all-in price reflected much higher implied foreign exchange margins (20% of total all-in price). The pricing analysis of the various providers also indicates that bank pricing suggests a deliberate strategy to discriminate against low-value transfers - which is probably due to the higher operational cost of processing a transfer through their physical network. Meanwhile the ADLAs included in the study were not found to discriminate against low-value transfers, which is their primary source of revenues. Given their distribution model, MTOs price their offerings to be more attractive than their closest competitors - banks.

The analysis highlights pricing disclosure as an important issue for improving the competitiveness of the market. In particular, pricing disclosure differs significantly across

providers. Some providers only partially disclose fees by aggregating these whereas others provide more clarity regarding the types of fees levied. A prime example of this is bank disclosure of SWIFT fees. As shown earlier, SWIFT fees charged in the market vary between R80 and R180 per transaction. Interviews with industry stakeholders, meanwhile, confirmed that per transaction cost to banks for using SWIFT messaging are R2.50 per transaction. The SWIFT fee banks charge to customers includes additional fees related to cross-border payment infrastructure. Although banks undoubtedly have associated processing costs, the way the fees are disclosed makes it appear as if the banks are passing on third-party fees, over which they have no control. Customers are thus persuaded that there is no reason to shop around as they assume that these fees are standard across providers.

Another example of pricing opacity is the lack of clarity about the all-in price given that foreign exchange margins are not disclosed at the moment a transaction is executed. In order for a customer to calculate this cost, they would need to compare the rate given by the provider to the interbank rate quoted publically on various platforms. Poor disclosure of pricing hinders consumers' ability to make informed decisions while also undermining their trust in formal providers.

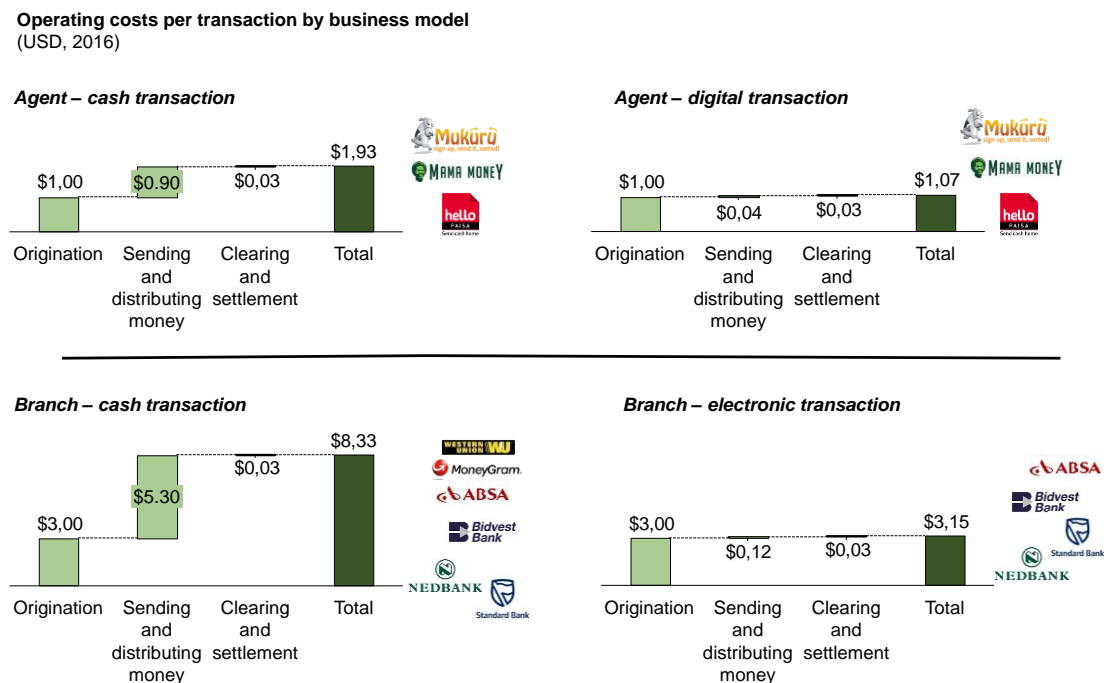
Recommendations

- Develop a standardised framework for pricing disclosure across providers, particularly aimed at increased transparency of fees and foreign exchange margins. Specifically, this framework should stipulate that;
 - Fees should be accurately disclosed rather than aggregated as is currently the case for the SWIFT fee levied by banks as an example.
 - Fees should be quoted in the sending currency and as a percentage of the amount sent.
 - The foreign exchange rate given to the customer should be quoted and referenced with a determined base rate to allow customer to calculate and compare margins across providers should they wish.
 - The total price, including fees and foreign exchange margin, should be disclosed to provide customers with the true understanding of the cost of sending money via different means.
- Support the standard adoption of sender/beneficiary pays model for fees (the shared model increases opacity of pricing) through engagement with relevant stakeholders within the clearing and settlement system. This will help to provide greater clarity on the true price of cross-border remittances, as the lack of a standardised approach doesn't allow for full comparisons between various formal alternatives.
- In theory, publishing centralised pricing information should impact consumer behaviour and hence drive down pricing. However, there is little practical evidence to suggest that consumers actively access centralised information to inform their purchasing decisions. Despite this, the collection of information may be useful to regulators to assist in monitoring market conduct.

5.4. OPERATING COSTS

The analysis of the primary operating cost drivers for RSPs identified origination and cash management as the primary cost drivers. Using the ACTA framework, introduced in the previous section, it was estimated that these two components accounted for 90% of the total operating cost for providers (**Error! Reference source not found.**). Interviews with industry stakeholders confirmed that the "first mile" of cross-border remittance transactions is their primary cost driver. Providers also cited expensive cash management infrastructure (either internally for banks and MTOs or agent networks for ADLAs) as an important driver of costs. Therefore lowering the cost of origination and cash management can be achieved through the promotion of digital channels and secondary KYC. Although risks need to be managed, improving the authority to participate in the foreign exchange market for ADLAs and access to SIRESS should reduce the cost of clearing and settlement.

Figure 7: Operating costs per transaction by business model



Source: *Fighting poverty profitably*, Bill and Melinda Gates Foundation 2013, Genesis Analytics team analysis, 2016

Recommendations

- In order to promote the use of low-cost digital channels, KYC needs to be digitised. Therefore work should be done with industry stakeholders to promote the adoption of low-cost solutions to KYC process – such as acceptance of digital KYC documentation. Currently KYC documentation is required to be collected in hard-copy via a physical interaction. This is both costly and cumbersome as these records need to be maintained and customers are in some cases required to provide this documentation for each transaction (as was discovered in the mystery shopping analysis for MTOs). Allowing for digitised KYC documentation with real-time verification will reduce the cost of collecting and maintaining records, a key cost-driver for RSPs.

- Depositing cash into a bank account in South Africa is a much more costly and complex process than in other markets where agency banking has taken off. One consequence of this may be that customers find it easier to use a cash remittance channel than the combination of a bank deposit and a low-cost digital provider. This is a broader issue than the remittance market.

5.5. KYC

In analysing the various providers' KYC processes, it was found that ADLAs are the only providers who utilise the FICA exemption for KYC, while MTOs (who could benefit from the exemption) opt to enforce rigid KYC on each new transfer, likely due to a conservative interpretation of current FIC requirements. Banks interviewed for the study indicated some confusion as to the applicability of the exemption and therefore have chosen not to make use of this dispensation. Additionally, their current systems are not able to distinguish between low value transfers, which could qualify for the exemption, and higher value transfers. It is understood that the SARB is working on issuing clarification on the interpretation of the FIC amendment may unlock adoption by banks and MTOs.

Although beyond the scope of this report, it should also be noted that South African rules as to when a migrant can open a bank account are generally considered to be more restrictive than in other markets limiting their ability to leverage low-cost digital channels. This reality explains the predominance of cash-based remittances in the market.

Recommendations

- Work with regulators to clarify legislation to enable banks to implement FICA exemption for low-value payments. Additionally, work should be done to evaluate whether the current legislation meets the needs of RSPs in the market. This evaluation could then be used to develop appropriate guidelines or regulations governing the appropriate application of KYC regulations by RSPs.
- Develop a business case for bank adoption of FICA exemption for low-value payments. This business case will assist banks to develop appropriate plans to adjust their systems to accommodate different KYC processes for low-value payments while remaining compliant for other products.
- Commission a study on whether migrants face greater hurdles in opening a bank account than in other markets. The aim of this study would be to diagnose whether there are any adjustments that could be made to legislation that would enable migrants to deposit their money into the formal financial system and leverage low-cost digital remittance channels.

APPENDIX

Appendix 1: Genesis Analytics results for mystery shopping exercise

USD 55								USD 200							
	Fee to send (ZAR)	Fee to send (%)	Amount sent (ZAR)	Implicit exchange rate margin (ZAR)	Implicit exchange rate margin (%)	All-in cost (ZAR) – Fee to send + Implicit exchange rate margin	All-in cost (%)	Fee to send (ZAR)	Fee to send (%)	Amount sent (ZAR)	Implicit exchange rate margin (ZAR)	Implicit exchange rate margin (%)	All-in cost (ZAR) – Fee to send + Implicit exchange rate margin	All-in cost (%)	
Zimbabwe															
Mama Money	R 18.63	2.5%	R 760	R 0.748	0.1%	R 19.38	2.6%	R67.17	2.4%	R 2750	R 10.60	0.4%	R 77.77	2.8%	
Mukuru	R 70	9.2%	R 765	R 3.85	0.5%	R 73.85	9.7%	R 252	9.1%	R 2771	R 6.00	0.2%	R 258	9.3%	
Exchange4Free	R 0	0%	R 763.18	R 50.43	6.6%	R 50.43	6.6%	0	0%	R 2772.38	R 164.48	5.9%	R 164.48	5.9%	
FNB Money Transfer	R 45	5.8%	R 765.17	R 0	0%	R 45	5.9%	R 105	3.7%	R 2772.60	R 0	0%	R 105	3.7%	
Western Union	R 76.16	9%	R 848.40	R 16.55	2.2%	R 92.71	10.9%	R 110.78	3.8%	R 2895.67	R 60.18	2.2%	R 170.96	6%	
MoneyGram	R 140.90	15.1%	R 935.59	R 28.73	3.9%	R 169.63	18.1%	R 126.81	4.3%	R 2962.58	R 104.48	3.9%	R 231.29	7.8%	
Mozambique															
FNB Money Transfer	R 45	5.9%	R 765.17	R 0	0%	R 45	5.9%	R 105	3.8%	R 2741.70	R 0	0%	R 105	3.8%	
Western Union	R 96.93	11.1%	R 872.08	R 16.55	2.2%	R 113.48	13.1%	R 124.62	4.3%	R 2911.45	R 60.18	2.2%	R 184.80	6.3%	
MoneyGram	R 84.54	9.7%	R 871.34	R 28.73	3.9%	R 113.27	12.9%	R 183.17	6.1%	R 3026.83	R 104.48	3.9%	R 287.65	9.9%	
Standard Bank	R 270	33.75%	R 800	R 9.08	1.2%	R 279.08	34.9%	R 270	9.6%	R 2800	R 33	1.1%	R 303	10.8%	
ABSA			NA					R 360	13.2%	R 2736.12	R 55.32	2.1%	R 415.32	15.2%	
Lesotho															
Mukuru	R 69	9.1%	R 759	R 0	0%	R 69	9.1%	R 252	9.1%	R 2772	R 0	0%	R 252	9.1%	
MoneyGram	R 98.63	12.9%	R 765.38	R 0	0%	R 98.63	12.9%	R 183.17	6.5%	R 2783.21	R 0	0%	R 183.17	6.5%	
Standard Bank	R 110	13.8%	R 800	R 0	0%	R 110	13.8%	R 110	3.9%	R 2800	R 0	0%	R 110	3.9%	
ABSA	R 360	47.8%	R 752.43	R 0	0%	R 360	47.8%	NA							
Shoprite Money Transfer	R 9.99	1.35%	R 739.99	R 0	0%	R 9.99	1.35%	R 9.99	0.37%	R 2679.99	R 0	0%	R 9.99	0.37%	

Appendix 2: Genesis Analytics' full exchange rate margin accounting for the sender's and receiver's margins

	Amount sent	Exchange rate quoted by provider	Interbank rate	Exchange rate margin (second leg)	Exchange rate margin (first leg)	Full exchange rate margin
Western Union	55	75.3046	76.53	1.60%	2.2%	3.8%
	200	75.3046	76.53	1.60%	2.2%	3.8%
Standard Bank	37.86	75.3	76.98	2.18%	1.2%	3.38%
	180.92	76.63	76.98	0.45%	1.2%	1.65%