ESAF Program
Expanded and Sustained
Access to Financial Services

ASSESSING THE OPPORTUNITIES FOR INCREASING THE ACCEPTANCE OF ELECTRONIC MONEY IN PALESTINE

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TABLE OF CONTENTS

ACRONYMS

ABP	Association of Banks in Palestine
AML	Anti Money Laundering
ATM	Automated Teller Machine
BoP	Bank of Palestine
BSC	Banking Services Company
ESAF	Expanded and Sustained Access to Financial Services
G2P	Government to People (payments)
GPRS	General Packet Radio Service
MFI	Microfinance Institution
MENA	Middle East & North Africa
MNO	Mobile Network Operator
MSEs	Micro and Small Enterprises
PCBS	Palestinian Central Bureau for Statistics
PIBF	Palestine International Business Forum
PMA	Palestine Monetary Authority
PoS	Point of Sale
P2P	Person to Person (payments)
RTGS	Real Time Gross Settlement
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

This paper addresses the issue of the apparent reluctance of both merchants and consumers in Palestine to replace the use of cash with electronic payment instruments. The emphasis in this paper is on payment instruments which can be used in the physical world such as card and mobile although a growth in internet payments would of course also reduce the national dependence on cash.

Current Landscape of Electronic Payments in Palestine

As the ESAF study on electronic banking and financial inclusion written by the Oxford Policy Management group[1] indicates, increases in the use of electronic payments will lead to greater efficiencies and should encourage a large percentage of the population to utilize financial services in general. However, current infrastructure of the financial sector in Palestine remains rather traditional, with banks continuing to rely heavily on their branch networks although the first Point of Sales (PoS) were fielded in 1999. PMA guidelines and regulations have encouraged a growth in the deployment of Automated Teller Machines (ATMs) and one bank has committed significant resources to the roll out of a network of PoS devices as well as the related software.

Although access to bank accounts is widespread compared to countries of similar wealth and development, significant numbers of people in Palestine continue to rely on cash for savings and transactions. The long term benefits to the country of reducing the dependence on cash encourage an interest by the authorities and the banks in understanding what it would take to increase the usage of electronic alternatives. Universal access to mobile phones may also provide an opportunity for the future.

Observations

The paper notes the motivations for the banks which issue cards as well as the banks which provide the infrastructure for using cards (transaction acquiring); both in terms of fees and indirect business and relationship benefits with consumers and merchants. However there appears to be a real challenge as a result of the embedded behaviors of many merchants and consumers who currently do not see a meaningful value proposition in switching from cash to electronic. Various pricing, process and product design issues within the banks further entrench this so-called “culture of cash”by either failing to reward a switch to electronic transactions or erecting barriers to the access of electronic options.

[1] ‘The future of financial inclusion through electronic banking models in Palestine and the resulting regulatory implications’, Oxford Policy Management Ltd., (OPM), January 2011

Approaches and Solutions

As a result of an analysis of the realities of the environment in Palestine and the recognition that a significant and rapid change in payments behavior will not take place; the recommendations in this paper follow two different but compatible approaches.

Approach 1: Optimizing Cash Transactions

The first, optimizing cash, is a focused drive to minimize the need to transfer bulk cash by the banks in order to reduce the costs and risks of doing so. The core of the initiative is cash recycling within communities, reducing their dependence on cash transferred from and to the major centers. This will be achieved by using the current bank cash handling capability (ATMs and branches) augmented as required by agency banking. These cash management strategies will increase the deployment of infrastructure with electronic capabilities as well as encourage the growth of card issuing and acquiring. This section examines methods of providing customers with local and reliable access to cash. This will not necessarily reduce the number of cash transactions in the economy, but can reduce the cost of the transactions, as well as the physical barriers to accessing cash.

Approach 2: Reducing Cash Transactions

The second approach emphasizes the strategies for reducing the number of cash transactions. The increased access to cash and the resulting confidence from the cash optimization approach will further enhance this. Marketing and incentives can subsequently be used to highlight the value proposition of replacing cash payments with electronic payments.

Recommendations and Next Steps

In short, our recommendation is that Palestine should initially focus on building a trusted and robust network of rails (the electronic payment system for customers and merchants) and then move to developing the different vehicles that will travel on them (the electronic payment products). In the short-term, this can be achieved by building an integrated payments industry, optimizing cash transactions, and working to reduce cash transactions.

Recommendation 1: Build an Integrated ayments Industry

Develop a Steering Committee: The building of the payments industry will be best achieved by all banks and the regulator working together so that limited resources are optimized and common standards are agreed. This paper recommends that the banks and the PMA firstly develop a national interbank payment steering group to the lead the industry.

The industry steering group should be owned and staffed by all banks and any other third party processors who have a balance sheet risk in the payments environment. These are collectively referred to in this report as ‘the industry suppliers’.

The steering group would, at least initially, be chaired by the PMA. It should be noted that the extent of the success of these steering groups tends to be directly proportional to the sense of ownership felt by the suppliers in the industry. The role of the steering group will be to set the norms and standards of the industry and to agree the parts of the value chain where co-operation is in the interest of the consumer and the country and those where competition is appropriate.

Establish a Banking Services Company:A Banking Services company should be established within Palestine, owned and influenced equally by the industry suppliers. The company would house the national switch which processes all national clearing transactions between banks in Palestine and operates the gateway to the international networks. This would provide a competition neutral service to all players in the industry ensuring that access costs to the various acquiring infrastructures (PoS and ATMs) are set in the common interest.

Conduct a Feasibility Study:In addition to the national switch, it is recommended that a feasibility study is conducted to assess the viability, desirability, roles and format of a "national acquirer" which would take responsibility for the management and possibly the ownership of the acquiring infrastructure such as ATMs and PoS. This would optimize economies of scale and ensure fair access.

Recommendation 2: Optimize Cash Management

Optimizing cash management in Palestine requires the widespread availability of electronic payment instruments in the hands of consumers and the pervasive acceptance of these instruments in establishments all over the country. Recommendations therefore include:

- The enablement of a basic bank account linked to an electronic payment instrument (card and/or mobile) using appropriate AML standards.
- Linking existing accounts to a range of electronic payments instruments
- Expanding the base of card accepting merchants cost effectively through adding card acquiring software on merchants phones if non registered merchants are permitted to acquire card.
- Ensuring full interoperability so that all customers are able to transact with all merchants on the device held by the merchant whichever bank issued the card or the acquiring device.
- Expand cash management points through the deployment of agents where ATMs and PoS are not economically viable. An agent is a non banking outlet (either a retailer or a money changer) using its own people and cash to perform cash out on behalf of registered banks.
- Expanding the merchant base either through allowing informal/non registered businesses to become acquiring merchants or by introducing a mobile payments network through which consumers can purchase goods and services or request withdrawals by transferring funds from their account to the account of the retailer.
- Creating industry-wide marketing campaigns based on education and usage targeted at Merchants as well as consumers which focus on building trust and understanding

Recommendation 3: Reduce Cash Transactions

With the ultimate goal of reducing cash transactions in the financial system, the following are recommendations to be implemented in the medium-term:

1. Pilot agency banking with large retailers and money lenders using PoS devices
2. Pilot cash withdrawals at agents using mobile payments

1. Introduction

1.1 Outline

ESAF, the Expanded and Sustained Access to Financial Services project of the United States Agency for International Development (USAID), is directed at building "a more inclusive financial sector that increases the sustainable access to financial services for Palestinian households and . . . enterprises . . . addressing weaknesses in the financial system at all levels, from banking to the financial industry to regulatory environment."[2]

This paper begins with an overview of the current state of electronic banking in Palestine, including delivery channels, PoS terminals and card infrastructure, and the market and regulatory environment. Where data has been made available the paper looks at the recent trends in usage as well as a snapshot of the position at the end of 2010. The paper will outline the payment options which exist, the levels of usage, and the geographic distribution. It is acknowledged that significant elements of the OPM paper were used in this section in order to avoid duplication of effort, although this has been supplemented by additional data specific to the needs of this paper.

The second section undertakesa comparative analysis of the status of electronic banking in Palestine against a variety of regional and international comparisons, including developed and emerging markets. The comparison examines the extent of cash in the economy and the growth of debit and credit card distribution and usage. This is done in order to give some indication of whether the current situation and trends in Palestine are in line with international experience of changes in behavior.

The third section provides an overview of the challenges in establishing a strong electronic payments industry; covering the industry structure, the culture of cash and environmental issues such as population density, income levels, telecommunication networks, government policy and the banking sector development and culture.

The fourth section examinesPalestine-specific barriers and constraints tothe development of the payments industry. This includes issues which relate to legislation, cost structures, building behavior and trust ofthe customer base in the system and the risk management approaches by the banks.

The fifth section provides examples of existing government and banking initiatives which have laid the ground for the increased adoption of electronic banking and explores how elements from these experiences can be derived to build a successful initiative.

The sixth section lays out recommendations for initiatives which could be implemented relatively easily and which would provide a significant impact on the development of the

[2] http://www.aed.org/Projects/ESAF.cfm.

payments industry. These recommendations will cover the themes of optimizing cash usage and the reduction in cash usage as well as overall industry building.

Finally the last section sets out proposed next steps for achieving the recommended objectives.

1.2 Methodology

The team interviewed a variety of stakeholders including banks, the PMA, and merchants. See Annex 1 for a list of interviewees. The team was able to interview bank management from a variety of departments, including operations, acquiring, issuing, marketing and IT, to discuss their perceptions of barriers to growth and potential solutions, as well as their respective institutions' electronic banking strategies.on the consumer side, the team interviewed a sample of merchants from both large and small businesses in Gaza and the West Bank, and obtained their perceptions of the opportunities and challenges of accepting electronic payments and their willingness to offer additional electronic services such as cash back and bill payments.Statistical data was obtained largely from the CGAP, World Bank, PMA and PCSB websites and documents although some banks were also generous with their information.

2. The Status of Electronic Banking in Palestine

2.1 Infrastructure

2.1.1 Traditional Infrastructure

Banks continue to rely heavily on branch networks. As of the end of 2010, there were 213 bank branches in Palestine, a slight increase from the 209 branches at the end of 2009[3]; however, there remains significant variation in access to branches. For example, in 2008, there were approximately seven times more branches per capita in Ramallah and Jericho than in Deir Al-Balah or Rafah.[4]Table 1 below indicates that the number of branches per 100,000 people is in line with that of Algeria, which has a much higher GDP per capita than Palestine. Given this, it appears that the PMA's strategy to encourage banks to open more branches is working. Nevertheless, the banks have commented that increased outreach through branch networks is extremely expensive and the need to move cash between branches around the countryremains a burden. Both of these issues can be addressed through the use of electronic infrastructure.

2.1.2 Electronic Infrastructure

Automated Teller Machines (ATMs) are becoming more widespread but are not fully interoperable. As of the end of 2010, there were 333 ATMs in Palestine,[5] an increase of nearly 38% since mid-2008[6];however, the lack of a national switch has led to significant duplication of

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[3]PMA statistics.

[4]Bruynse& Grossman, Mobile Money Study: West Bank & Gaza, Table 3 (2008).

[5]PMA statistics.

[6]Bruynse& Grossman, Mobile Money Study: West Bank & Gaza, Table 4 (2008).

infrastructure, with multiple banks installing proprietary ATMs in a single location. Furthermore, ATMs are largely concentrated in a limited number of governorates,[7]forcing customers in other governorates to rely heavily on branches. Furthermore, because few ATMs accept deposits customers still need to visit branches for these transactions.

Point of Sale (PoS) infrastructure continues to grow, but is still very limited. From mid-2008 to late 2010, the number of PoS devices has nearly doubled, from 1,300[8] to approximately 2,314, with Bank of Palestine (BoP) planning further expansion of its PoS network to 4,000 devicesby Q2 2011. PoS devices, like ATMs, however, are concentrated mostly in a few governorates, and BoP is the only bank currently developing a network.Initially, the acquiring bank is targeting merchants servicing tourists[9], multi-branched retailers and businesses selling high value items such as jewelry and appliances.

Table 1 belowcompares the penetration of branches, ATMs and PoS devices relative to GDP per capita for countries in the region. CGAP research into financial inclusion has shown that the penetration of electronic banking infrastructure is closely correlated to the wealth of the country as measured by GDP per capita.[10]While Palestine aspires to be in line with the levels in Lebanon and Israel, given its GDP per capita, it is not unreasonable that the penetration levels of ATMs and PoS devices in Palestine more closely resemble those in Morocco. Despite a lower GDP per capita, Palestine's other close neighbor, Jordan, appears to have succeeded in deploying a relatively high number of points of presence for electronic banking points.

Table 1: Regional bank infrastructure comparisons ranked by Branches per 100,000 adults.

2009	Branches per 100,000 adults	ATMs per 100,000 adults	POS per 100,000 adults	GDP per capita
Yemen		2.80	17.00	1,061
Egypt, Arab Rep		8.70	59.71	2,450
Syrian Arab Republic	2.42	2.67	2.22	2,579
Algeria	5.30	5.75		4,027
Palestine	**5.36**	**19.12**	**109.40**	1,340
Morocco	9.92	18.63	89.93	2,865
Tunisia	14.40			8,284
Jordan	17.79	26.27		3,829
Israel	19.85	104.33		28,365
Lebanon	28.83	39.32	1,382.77	8,707

Sources: CGAP Access to Finance 2010 and PMA; IMF GDP estimates (2009) and PMA (2008)

[7]In particular, Ramallah/Al-Bireh, Nablus, Hebron, Bethlehem, and Gaza.*See*Bruynse& Grossman, Mobile Money Study: West Bank & Gaza, Table 4 (2008).

[8]Bruynse& Grossman, Mobile Money Study: West Bank & Gaza, Table 4 (2008).

[9]According to the PCBS there were more than 1200 establishments which serviced the tourism industry in 2009

[10]CGAP Financial inclusion survey 2010, Market Demand for electronic banking in Palestine Survey etc.

Access to mobile phones is becoming universal. There are approximately 2.7 million mobile phone accounts in Palestine, of which about 90% are prepaid.[11]Given that the population of Palestine is just over 4 million and the productive-age population (ages 15-64) is only about 2.1 million, this suggests that virtually all households have access to at least one mobile phone account.[12] While mobile phones are not currently used extensively in the provision of financial services, some limited SMS banking services are available (generally, confirmation of account transactions, balance inquiry, etc.).

2.2 Use of Banking Services

2.2.1 Deposit Accounts

Most Palestinian adults have access to a deposit account. As of the end of 2009, over 1.2 million Palestinians held bank accounts, nearly all of which were savings, current, or time deposit accounts. Many clients held more than one account. Assuming that only a few of these accounts were held by children,[13]over half of working-age Palestinians (ages 15-64) had at least one bank account in 2009.

2.2.2 Transactions Outside of the Banking System

Significant numbers of people continue to save outside of the formal financial sector. Minimum deposit requirements and a lack of nearby branches may discourage uptake of formal banking services, particularly in villages less-served by branches.[14] Even where formal services are readily available, however, use of cash is more prevalent than would normally be expected. Some of the reasons for this will be discussed in detail below.

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[11]Statistics from Jawwal.

[12] Even if some individuals have more than one mobile phone and these figures include some inactive accounts, there should be at least one phone per household, given that there were an average of 5.8 people per household in Palestine in 2008. *See* Bruynse& Grossman, Mobile Money Study: West Bank & Gaza, p7 (2008)

[13] The population aged 65 or older only constitutes approximately 3% of the total population in Palestine. *See*CIA World Factbook, West Bank (2010); CIA World Factbook, Gaza Strip (2010).

[14]*See*Bruynse& Grossman, Mobile Money Study: West Bank & Gaza, pp19-21 (2008).

Table 2: Regional comparisons of banked populations

Regional access Indicators: Bank deposit accounts (2009)

	Per 1,000 adults	% of adult population
Yemen	102.9	10.3%
Syrian Arab Republic	191.5	19.2%
Morocco	265.3	26.5%
Egypt, Arab Rep	439.4	43.9%
Palestine	**584.27**	**58%**
Tunisia	639.7	64.0%
Algeria	736.6	73.7%
Jordan	898.8	89.9%
Oman	1042.6	104.3%
Israel	1055.71	105.6%
Lebanon	1372	137.2%
UAE	1750.6	175.1%

Table 2 above shows that the percentage of the population in Palestine that is banked is relatively high compared to many of its peers when GDP per capita is considered. (It is assumed that the banked levels of more than 100% are in countries with a high number of expatriates who are banked but not included in the population count).

2.2.3 Fund Transfers

Available data on fund transfers are limited to domestic transfers that go through the PMA clearinghouse. In 2009, there were 111,837 such transfers with a total value of over USD 4.3 billion.[15] Significant numbers of Palestinians live outside of the country[16] and it is assumed that many of them remit finances back to their families in Palestine. In 2008 the value of international remittances sent to Palestine amounted to 23% of GDP (this fell to 16% in 2009)[17].

2.3 Use of Electronic Banking Services

2.3.1 ATM, Debit, and Credit Cards

Of the more than twomillion bank accounts in Palestine, less than 20% are connected to electronic channels. As of the end of 2009, there were just over 285,000 debit/VISA Electron cards, 68,000 ATM (non-debit) cards, and about 29,000 credit cards.[18]

Use of ATMs is growing rapidly. In 2009, over 4.6 million transactions valued at USD 867 million were conducted at ATMs and in 2010 the number of cash withdrawals at ATMs had

[15]PMA statistics.

[16]PCBS figures show that in 2009 of 10.7 million Palestinians only 3.9 live in WBG.

[17]PCBS

[18]PMA statistics.

grown to 11.3 million transactions valued at USD 1.295 billion – a growth of 146% and 49% respectively.

Use of PoS networks remains low. While each of the 305 ATMs in Palestine processed an average of 34,000 transactions in 2010 (15,000 in 2009), the corresponding figure for the 2,314 PoS devices was 164 (170 in 2009). Of the number of transactions conducted at the PoS, about 90% were credit card transactions and only about 10% were debit/VISA Electron cards.[19]

2.4 Demand for Electronic Banking Services

Rapid adoption of mobile phones and ATMs suggests that high potential demand exists for e-banking services. While the Palestinian banking sector is still in the early stages of development,[20] the Palestinian population is young (median age of 21 years in West Bank, 18 in Gaza), literate (92% of adults), and well-educated (average of 14 years of education).[21] Furthermore, there appears to be growing comfort with – and demand for – electronic technologies, as evidenced by quick growth of mobile phone accounts and ATM usage. While challenges to the development of e-banking services exist (see section 4 below), a recent market demand study has indicated that greater demand for e-banking services is chiefly limited by the availability and user-friendliness of the technologies.[22]

A consumer survey[23] of electronic payments users in Palestine was conducted in 2009 and provides some interesting insights into the perceptions and behaviors of the Palestinian market. Highlights of the findings of this analysis are attached in Annex 2.

3. Benchmarking Palestine against the world

3.1 Dependency on cash

The following table shows the level of cash in the economy as a percentage of the national Gross Domestic Product. This confirms that Palestine does have a relatively high level of cash in the economy.

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[19]PMA statistics.

[20] Occupation and conflict have hampered the development of a strong indigenous banking sector. For more information, see Bruynse& Grossman, Mobile Money Study: West Bank & Gaza,Box 1 (2008).

[21]*See*CIA World Factbook, West Bank (2010); CIA World Factbook, Gaza Strip (2010).

[22]Al Markaz for Development and Marketing Consultancies, Market Demand Assessment for E-Banking Services in Palestine (2009).

[23]Al Markaz for Development and Marketing Consultancies, Market Demand Assessment for E-Banking Services in Palestine (2009).

Table 3: Significance of cash in the economy – country comparisons

Value of cash as a % of real GDP

	2005	2006	2007	2008	2009
UK	3.38	3.36	3.37	3.40	3.81
Turkey	3.11	3.63	3.34	3.42	4.12
Brazil	3.26	3.62	3.87	3.85	4.20
Mexico	4.11	4.33	4.41	4.76	5.34
India	11.59	11.77	11.94	12.4	12.83
Palestine*					**19.43**

*Based on PMA estimate

3.2 ATM and PoS Infrastructure

Table 4 and Table 5 below show the level of ATM and PoS infrastructure in a variety of developed and developing countries, the rate of growth over 2002 to 2006, as well as the absolute numbers of machines. The level of growth is of course partially dependent on the stage of the maturity of the industry in each country as well as the bank and regulatory strategies. The comparison of the numbers for Palestine, a relatively late comerto the electronics payment industry, for 2007 and 2009 shows the position and the growth over two years. The rate of growth of PoS devices in Palestine is in line with the growth achieved by Brazil and Colombia after they changed their banking regulations to encourage agency banking using PoS devices; the success of which can be seen from the high ratio of PoS devices in the population. Georgia, still in the early stage of electronic banking, for example is a country with a similar level of wealth and a comparable number and ratio of PoS devices,. The rate of growth of ATMs and the relative number to the size of the population seems to be in line with other countries of similar wealth and development (in 2006).

Table 4: International comparisons of rate of growth in ATM infrastructure

ATM Infrastructure

	2002	Growth	2004	Per 1m pop 2006	2006	Growth
Bolivia	418	18%	507	60	562	10%
Brazil	129,913	7%	139,457	903	170,311	18%
Bulgaria	829	53%	1,753	307	2,360	26%
Colombia	5,431	8%	5,888	149	6,766	13%
Czech republic	2,254	18%	2,744	309	3,156	13%
Estonia	719	8%	779	685	918	15%
Georgia	24	66%	70	105	468	85%
India				18	20,000	100%
Latvia	842	4%	875	416	952	8%
Lebanon	686	22%	881	248	1,006	12%
Mexico	17,011	17%	20,416	246	25,655	20%
Morocco	1,179	32%	1,727	91	2,761	37%
Serbia			450	181	1,348	67%
Slovenia	1,095	21%	1,389	762	1,522	9%
Thailand	7,885	26%	10,602	340	21,988	52%
Turkey	12,069	11%	13,544	226	16,511	18%
Palestine (2010)				**81**	**333**	**9%**
Palestine (2009)				**78**	**305**	**43%**
Palestine (2007)				**57**	**214**	

Table 5: International comparisons in rate of growth of PoS infrastructure

Number of POS

	2002	Growth	2004	Per 1m pop 2006	2006	Growth
Bolivia	2,218	-41%	1,570	163	1,520	-3%
Brazil	628,000	47%	1,187,000	10,154	1,916,000	38%
Bulgaria	2,554	63%	6,837	2,715	20,906	67%
Colombia	54,000	2%	55,000	1,696	77,256	29%
Czech republic	25,358	43%	44,404	6,050	61,820	28%
Estonia	7,353	34%	11,113	10,936	14,665	24%
Georgia		100%	200	428	1,898	89%
Latvia	8,326	30%	11,893	7,109	16,256	27%
Lebanon	6,606	32%	9,723	2,975	12,062	19%
Mexico	129,971	19%	160,289	2,751	286,691	44%
Morocco				492	15,000	100%
Serbia		100%	16,266	6,479	48,194	66%
Slovenia	29,452	15%	34,770	14,635	29,234	-19%
Thailand	17,824	79%	84,000	3,228	208,942	60%
Turkey	500,000	44%	900,000	17,824	1,300,000	31%
Palestine (2010)				**564**	**2,314**	**33%**
Palestine (2009)				**443**	**1,745**	**34%**
Palestine (2007)				**346**	**1,300**	

Source: CGAP Financial Inclusion Survey 2010

4. CHALLENGES IN ESTABLISHING A PAYMENTS INDUSTRY

4.1 Developing a two-sided market (or the chicken and the egg)

Payment industries need to be developed by balancing the number of payment instruments issued (card or mobile) and the number of points at which they can be used.

The value to both the merchant and the consumer is increased as the size increases for both bases.

If the balance is tipped in favor of the acceptance infrastructure, the merchants with PoS deviceswill experience a poor rate of return on their invested funds and ongoing operational costs; if the balance is tipped towards the distribution of the payments instrument, the customer may find it difficult to locate a merchant who will accept a payment from their card or phone. This may lead to a precautionary need to carry cash.

Balancing these aspects requires industry wide coordination as the payment industry is established.

4.2 Culture of cash

There is an entrenched culture of transacting in cash in Palestine.

Palestine has a 'cash to GDP' ratio of approximately 5 times that of the UK and approximately 4.7 times that of Turkey (See Table 3).

Within that portion of the Palestinian banked community which has electronic access to their accounts, cash withdrawals from ATMs outnumbered PoS transactions by 3.6 to 1 in 2010. This is despite the fact that most cash withdrawal transactions would normally result in multiple subsequent cash purchase transactions with the cash withdrawn. Therefore the actual number of purchases by electronic instruments as opposed to cash is an even higher multiple.In the same period, NIS 4.31 was drawn as cash for every NIS 1 spent on card based purchases in store.

Despite the fact that credit card purchases are free, but users are charged bank fees and interest for credit card withdrawals, at month end, even consumers with credit cards are reported to use them for cash withdrawals. This is an extreme example of the very challenge which needs to be addressed, and should be resolved as confidence in and understanding of the electronic payments world evolves in Palestine.

Changing it will be hard and take some time

Debit cards were introduced to South Africa, then a predominately cash payment society, more than eleven years ago. There are now approximately 30 million debit cards in South Africa, where the population is more than 40 million. Indeed cash transactions are still a major payment tool in South Africa; however, thecombined marketing efforts of the issuing banks, as well as the associations(MasterCard and Visa) during the past tenyears, have made a significant dent inthe extent of cash transactions. The payments industry members used a "push/pull" strategy model employing the following:

- To build critical mass of cards, issuing banks "pushed" Maestro[24]cards to their account holders and providedthem with educational materials explaining what the card could do and how it worked.
- Maestro usage was stimulated at the merchants through communications aimed at demonstrating point of sale functionality to Maestro cardholders.
- As usage demand was created, more merchants were acquired thus keeping the balance.
- The campaigns were built on education and usage drives. The success of debit card usage was achieved through the continuous marketing of the benefits for consumers as well as merchants ofusing debit over cash.[25]

Cash is not necessarily good for the economy

The high proportion of GDP held in the economy as cash tends to limit the Palestinian banking sector's ability to intermediate and gear the economy to stimulate growth.

The unique political and social challenges in Palestine also mean that a high dependence on physical cash makes the country more vulnerable to the effect of disruptions and insecurity which will also have an effect on economic growth. A coordinated, industry wide initiative is required to reduce this culture of cash.

4.3 Socio-economic and political environment

International research[26] shows that there is a relationship between the level of GDP per capita and the usage of electronic banking. Several banks have expressed the view that the low level of income, particularly amongst the population in Gaza, means that there is little excess cash kept in a bank account and a low demand for credit.

It has also been noted that the history of political instability in the region has led to a conservative and risk averse approach to managing one's financial affairs. This affects both the use of technology and the willingness to grow a business or make large purchases using credit.

4.4 Issues of trust

System instability

System stability is critical to growing transaction volumes and the number of usersbutthere are reports of a lack of stability in the current acquiring system

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[24] Maestro is a MasterCard product which was adopted by the MasterCard issuing South African banks as their standard debit card

[25]See Annex 4 for examples of marketing campaign messages and methods in South Africa and elsewhere

[26]CGAP Financial inclusion survey 2010, Market Demand for electronic banking in Palestine Survey etc.

During the consultant's various meetings, it was reported that on a regular basis approximately 5% of transactions fail for reasons unrelated to insufficient funds in the account of the customer. It was further reported by one institution that this level of failure of PoS transactions rose to approximately 40% in a few months during 2009. This leads to a lack of trust by merchants, consumers and issuing banks that they can rely on the payments system.

Predictability of performance is one of the core pillars of consumer and merchant trust in a payment system. At the above levels of unpredictability, a consumer may feel the need to carry cash with him/herself as a precaution against an unexpected failure and indeed many will simply stop trying to use their cards.

Carrying cash reduces the ability to pay electronically byreducing the levelof fundsin one's bank account,

In a country with an average GDP per capita of $2,900 it is unlikely that the average consumer will be able to hold funds both in a bank account and in cash; therefore, once the cash is withdrawn in order to counteract the potential problems of using the electronic infrastructure, that customer will no longer have sufficient funds in their account to use with their card or phone regardless of their views on the merits of electronic banking.

Therefore the system instability is likely to be adversely affecting customer capacity to use electronic money at PoS devices.

Process challenges

There are reports that the transaction reversal and repudiation processes are cumbersome and lengthy

Anecdotal evidence was given to the consultants during their interviews that card transaction repudiation processes can take months to be processed and are not always seen by the consumer to be resolved satisfactorily.

The combination of systems unreliability and poor grievance processes make using cards at PoS devices an uncomfortable choice for the consumer to make.

4.5 Islamic banking principles

There appears to be a level of confusion in the market regarding*advalorem*-based transaction fees and interest

In meetings, anecdotal evidence was given by more than one source that some merchants have reported that they consider the *advalorem*-based merchant fees to be a form of interest on the monies collected during the transaction and that on religious grounds this prevents them from adopting the system. We do not have a sufficient grounding in Islamic banking to comment on this interpretation; however,because the fee does not in reality relate to an interest charge, the explanation for refusing a merchant relationship appears unfounded.

Thought should be given to extensive educationof merchants on the difference between these charges and interest.Alternatively one could explore the possibility of a scale of fixed fees per transactions in order to circumvent the merchant concerns which appear to be linked to the fact that the fees are percentage based.

Banks in the region have developed various Islamic compliant credit card products. These products are based on variable monthly management fees and might be more acceptable in some of the markets in Palestine.

4.6 Merchants recycling cash to pay suppliers

In interviews some merchants indicated that they prefer to be paid in cash as this equips them with a ready means of payment for their suppliers. This is entrenched by the fact that many deliveries are in small amounts and are 'cash on delivery' based.

Electronic payments could be deployed in this environment, by issuing the merchants with purchasing cards and the delivery vehicles with PoS infrastructure. Bank of Palestine indicated that they experimented with this previously, but it seems that it was not popular with the wholesalers.

5. BARRIERS AND CONSTRAINTS TO THE GROWTH OF ELECTRONIC BANKING IN PALESTINE

5.1 Pricing messages

The prices relative to the value of the transaction and to substitute methods of transacting affect merchant and consumer behavior.

5.1.1 Merchants

Charges to merchants: Pure, transaction related charging

Merchants are charged a commission by the acquiring bank of between 1.5% and 2.5% of the face value of any VISA / MasterCard debit or credit card transactionfor cards issued by banks other than the acquirer, and at a rate of 1% for cards issued by the acquirer. (See 5.3)

In addition to the above, the merchant also pays fixed costs consisting of terminal rental fees and connectivity costs for the terminals. The terminal rental costs vary between $5 and$15 per month, depending on whether the device connects to the banking system using dial up lines or GPRS.

Loan interest transfer from the customer to the merchant

If a customer wishes to use a BoP installment card (called the EasyLife Card), the merchant will pay a fee based on the value and duration of the loan initiated by the sales transaction. In this one specific instance, the merchant is effectively paying the interest on the loan on behalf of the customer, and the collection method from the merchant is via the 'merchant acquiring commission'.

None of the above costs are borne by the merchant when he/she is paid in cash.

Why merchants may consider paying these additional costs – what is their value proposition?

- **Pure transaction fees and related fixed charges**

The motivation for a merchant to pay these costs is related to offsetting the following:

1) The risk of handling cash
    a. In Palestine, it is reported that theft of cash is limited and is not a big driver of the need to switch to electronic funds.
2) The cost of handling cash in his business
    a. In larger, multi store merchants, handling of cash in transit between branches and head office is perceived as a burden on the merchant, and is one which the merchants appear willing to pay to reduce.
    b. In all merchants, the day's takings need to be stored securely overnight, and until required to meet the cash flow requirements of the business.
    c. For many merchants – this implies needing to bank funds periodically.
    d. Electronic receipts reduce this burden on the merchant.
3) The timing differences between receiving cash from a consumer and the merchants paying his suppliers
    a. A merchant with significant stock levels or slower moving stock is unable to lay off a significant portion of his/her sales revenue to his/her suppliers instead of banking it
4) The possibility that the customer may purchase additional products in the shop if he is not limited to the amount of cash he is carrying in his wallet. This benefit is increased if the customer has access to a credit line either through a credit card or an overdraft on his bank account.

- **Loan interest paid by the merchant (Installment credit cards)**

Merchants who are likely to see a benefit in paying the above loan interest on behalf of their consumer clients are those with large ticket items, where customer affordability of the product may be an issue, and where sale profitability levels are able to support this additional cost. Examples of such merchants would include those selling jewelry and household appliances.

5.1.2 Customers

Transaction charges

If a customer withdraws cash from the ATMs or branches of his own bank using an ATM or debit card then there is no charge for this cash withdrawal.

ATM cash withdrawals from other bank's ATMs do incur fees which are based upon a fixed cost of $2.50 plus an *ad valorem* fee.

In the case of a Jordanian bank card being presented at another Jordanian bank ATM, the transaction fee is set at JD 0.50.

Notwithstanding that it is possible to transact on the ATM network for free, the customer survey conducted in 2009[27] showed that more than 50% of customers believed that they were charged a fee whenever they used an ATM. Therefore there is a need to communicate more clearly to customers about both the actual pricing and the benefits of card use as opposed to cash.

There are no bank initiated charges to the customer for using either a debit or a credit card at PoSterminals in Palestine; however there have been reported instances of the merchants passing their acquiring charges onto the customers at the moment of transacting. This practice is probably a breach of their agreements with the acquiring bank, BoP.

Fixed annual costs

Consumers pay an annual fee of between $25 and $140 for a credit card, depending on the bank and the status of the card.

In summary – as with cash, a debit card used either at point of sale or for cash withdrawals on the customer's own bank's infrastructure will cost the customer nothing. All other transaction types have some form of charge attached to them.

What this indicates is that, provided that the customer uses his/her card judiciously, the transaction pricing model neither disincentivizes nor incentivizes consumers to use their card.In other words it is unlikely to have an impact on consumer behavior.

5.2 Legislation and regulation

All participants need a framework which gives certainty and clarity

The lack of e-commerce law means that the banks are unsure of their ability to enforce their rights in transactions authorized by electronic signatures and this makes them less enthusiastic about encouraging electronic transactions.

The AML regulations and internal bank interpretation of these regulations do seem to make it difficult for many account holders to hold current accounts which are linked to a card. The AML requirements appear to conflate the need to collect information required to manage money laundering risk and that required to manage credit risk. It is probably for this reason that it is less onerous to open a savings account as opposed to a current account for which the account holder is required to be either formally employed or the owner of a registered business. This is because

[27] Al Markaz for Development and Marketing Consultancies, Market Demand Assessment for E-Banking Services in Palestine (2009).

it is assumed that all current accounts will be linked to an effective form of credit such as cheques.

5.3 Lack of industry co-ordination

There is a need for common standards and agreed areas of co-operation and competition

The payments industry in Palestine appears to be fragmented and there is conflict between the different players. The PMA has recently established a Payments Council consisting of all the banks but it is still in its infancy, having only met twice at the time of writing this report. There are therefore no central controls in place yet.

Many challenges arise from or are exacerbated by this lack of coordination. There appears to be competition where there should be cooperation. For example the acquirer gives different merchant acquiring rates based on which bank issued the card and promotions for merchants are also reported to be linked to the card of a particular bank.

There is a lack of rules, common standards and norms. If the payments industry is to develop, there urgently needs to be a universally acceptedagreement on which areas should be the basis of competition and which should, in the interest of fostering an industry, be areas of cooperation. There needs to be an industry wide discussion over what is competitive and what is common and who services what and with whom?

The overall principles would relate to the level of investment required (and therefore the potential for achieving economies of scale), the need to avoid conflicts of interest, the need for consumer protection and the encouragement of fair competition and inclusiveness.

A recent World Bank paper[28] noted that *'the extent to which efficiency and other important policy objectives are attained in retail payments systems is partly determined by a complex interplay of competition and cooperation among market players. It is necessary to understand the relative importance and drivers of costs, risks and market power in the provision of various types of payments services'*.

For example acquiring relationships with merchants could be competitive since the investment required is relatively low.However this could be separated from an investment in the hardware infrastructure which could be held and managed by a neutral company. All PoSterminals should accept the cards of all issuers in order to ensure that the investment was fully leveraged. Some suggested areas for discussion have been listed in Annex 3.

5.4 Costs of infrastructure provision

Local infrastructure and co-operation to reduce costs

[28]Balancing cooperation and competition in the retail payments systems (2010) Guadamillas, m, Constantinos s, and Gorjon S

5.4.1 Switching

All interbank ATM transactions are switched through one of several international switches such as Visanet and JoNet, each with its own set of transaction and fee rules. Access to some of the switches is based upon the nationality of the bank branch's holding company.

This leads to differing input costs to the various banks, and therefore holds the potential for more complicated charging models to be presented to the customers.

Fragmentation of the market in this manner also holds the risk that there is insufficient aggregated demand to support a local switch.

At present, all PoS transactions are switched between banks by Bank of Palestine, as the sole PoS acquirer in the country.

It is recommended that a single switching company be formed in Palestine which will switch all local ATM and PoS traffic and that all banks are mandated to use the local switch. This would create an environment in which all banks operate on a level playing field with regard to input costs, and are then able to compete fairly on the value propositions which they provide to their clients.

5.4.2 Duplication of hardware

There is ATM duplication at popular sites due to customer reaction to the current high level of "off us" fees for ATM cash withdrawals as well as the need to support proprietary ATM cards, which can only be used on the infrastructure of the issuing bank.

Given that the purchase price of an ATM is approximately $40,000, it is felt that sharing infrastructure within the banking sector in a more inclusive manner would help to drive down service delivery costs, which could, in turn drive down customer service fees.

At present the extent of a bank's ATM infrastructure is seen as a competitive differentiator. There needs to be a debate on market readiness to share infrastructure at a cost which truly reflects underlying costs so that existing and future infrastructure is optimized or else this continuing approach will hamper development of the industry.

The switching costs will also be mitigated by the existence of a locally controlled and operated switch and possibly by the management of the hardware by a neutral company which operates on a cost plus agreed margin basis and benefits from economies of scale and specialization.

5.4.3 Economies of scope at PoS

The costs of acquiring network ownership and operation can be partially offset by the deployment of additional revenue earning applications over the terminal infrastructure. This could be achieved by enabling merchants to, for example, sell prepaid airtime, make bill payments, offer cash-back, pay out pensions or remittances.

The technology company, Palpay, is already exploring diversification into third party content and their software is capable of offering these options although none of them are currently in place. It now needs to be decided how the revenue from these applications should be shared betweenthe merchants, the acquiring banks and if applicable, the PoSmanagement company in order to best grow the payments industry.

If a single infrastructure company were to offer the sales elements as a superdealer[29], it could then be self funding from commissions earned.This could be used to subsidize the cost of providing the acquiring infrastructure for the whole industry as well as to incentivize the merchants. An example of where a fully managed PoSterminal network is funded purely on prepaid airtime distribution is *YQ?*in Bahrain.[30]

5.4.4 Cash management

Each of the banks interviewed expressed a concern at the current high costs of cash management and that this is an opportunity to encourage the acceptance of electronic banking in Palestine. The costs include security, transport, insurance, surplus and lack of liquidity particularly in Gaza as a result of the lead time in ordering and returning excess specie to Israeli banks. However it has been said that although the pain of these costs is felt by the banks, it is less of a concern for merchants and customers who are comfortable keeping a stock of cash on hand. However several merchants interviewed, particularly the larger ones, expressed an interest in offering cash back as a service to their customers.

5.5 System reliability

The need for confidence that the system will be available is critical to the willingness to use it.

This subject is covered in 4.4 under issues that affect the trust of users in the system and therefore their willingness to use it. It appears to affect both ATM and PoS. There are reports of telephony instability specifically affecting the GPRS network. In the Survey[31], 32% of customers believed that ATMs were not reliable; this perception of unreliability of electronic infrastructure leads to cash hoarding as a way to manage this perceived risk. It is also known that some merchants will tell their customers that the PoSis not working, when the reality is that they do not wish to use it.

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[29] A superdealer is the entity which contracts with the primary service provide and may then use subdealer relationships to distribute the service to consumers

[30] http://www.enn.ie/s/9903335; http://investing.businessweek.com/businessweek/research/stocks/private/snapshot.asp?privcapId=32609560

[31] Al Markaz for Development and Marketing Consultancies, Market Demand Assessment for E-Banking Services in Palestine (2009).

5.6 Merchant entry standards

The need for the acquiring infrastructure to be widely available

It appears that in order to be a PoS merchant there is a requirement for the business to be formally registered with the appropriate business and municipal licenses. It has been said that of the 90,000 potential establishments[32] approximately 10% are formally registered and this means that less than 10,000 businesses are eligible to become PoS merchants. It is known that there is currently a government drive to get businesses to register, but there may be a case for looking at two other alternatives:

1. Allowing non-registered merchants to become merchants
    a. This implies a departure from the legislated requirement that only registered trading entities may register as card acceptance merchants.
    b. Altering this requirement may add risks associated with card fraud[33] and therefore other ways of managing these risks would have to be developed.[34]
2. Implementing a pervasive person to person (P2P) mobile payments system
    a. This implies issuing a critical mass of people with a peer to peer payment system, which is not linked to their legal status.
    b. Using mobile phones for this payment system is advantageous as most Palestinians already have mobile phones, which are easily adapted to becoming fully powered, connected terminals.
    c. This would allow Palestinians to transfer electronic money between themselves without necessarily using card infrastructure.
    d. Transferring money in this way would allow unregistered entities to receive funds from customers into what would be a basic current account which could be used as either a business or personal account. (See 5.7).

5.7 Customer access to card

The need for electronic payment instruments to be an option for all – this is the starting point

There are currently two classes of a personal bank account in Palestine, current accounts, and savings accounts. Savings accounts are not linked to any transactional tools as doing so is deemed to be at odds with their stated objective. Bank and AML restrictions make it relatively difficult to open a current account (and we are told that this is particularly the case in Gaza).

The reason for having higher barriers to accessing a current account is probably linked to the implicit credit risk in giving a check book and it seems to be assumed that all current accounts will be able to use check. It seems therefore that there is a need for basic current account with no

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[32]Market Demand report

[33] This may also complicate repudiation management if it is harder to pursue an individual than a corporate entity in the Palestinian legal system

[34]Though this restriction may also relate to Visa and MasterCard rules that a merchant is a registered legal entity

credit facility – a transmission account with electronic and branch access only, on which only real time transactions can be made; and therefore which can be made more widely available.

5.8 Marketing: the need for widespread awareness and understanding

The apparent lack of understanding of the pricing of ATMs and PoS as shown in the Market Demand Survey[35], implies that the customer base requires additional fact-based marketing and financial education. Since the use of electronic banking is a relatively new concept in Palestine, the marketing messages need to be focused on education and benefits as well as incentives for customers and merchants. There currently appears to be no generic (that is not related to a particular bank) marketing to raise the level of consciousness about the ability to use electronic payment alternatives.

Merchants are mainly owner run and consumer interaction is key in the way that business is conducted. The merchant therefore plays an important role in influencing consumer behavior and provides acentral element of the marketing mix. In interviews with a sample of merchants it is encouraging to note that they are receptive to marketing programs and happy to participate. Given the prevalent culture of negotiating discounts at point of sale, a marketing campaign linked to discounting through use of the card may prove problematic for the merchant. It is for this reason that merchants prefer campaigns based upon lotteries, with prizes funded by the banks' transaction revenues.

6. EXISTING INITIATIVES TO BE SUPPORTED

6.1 Drive to increase access to accounts

Bringing the population into the banking sector

The government authorities have been encouraging government employees to open accounts for their salaries and this has helped to achieve a relatively high level of banked population as compared to other emerging markets (See 2.2). This could be extended to include all salary / wage earners in the private sector as well as social welfare beneficiaries.

This has been implemented in many other Arab countries, such as the UAE and Bahrain, where the government mandated that all salary payments be made electronically. In Bahrain, this initiative was driven by a need to ensure traceability of salary payment and to drive down the costs of salary management by the employers.

In Palestine more than 80% of the existing account holders do not have electronic access (See 2.3), we believe that all people should have an account which has electronic access, and propose at the end of this document that a basic, electronic account type be added to the Palestinian banking product range.

[35]Op. Cit.

6.2 Marketing and financial education:

Selling the benefits of electronic banking and integration into bank strategy

Electronic banking seems to be an important focus particularly for the stronger banks in Palestine. Their marketing strategies are geared towards migrating their existing customer base to e-banking and, in so doing, minimizing cash payments.Some of the banks have started introducing new card products in the payments arena such as a Visa/Mobile co-branded card[36]and loyalty linked cards (Easy Life), and there are negotiations around cause-related cards such as the BoPUnicef card which will enable access to welfare payments.

The most common marketing programs are lottery type competitions with the main prizes being cars, cash for weddings and education. Most consumers respond well to these competitions but post campaign performance tends to decrease creating peaks and troughs in product performance.

Marketing campaigns can be driven by individual banks and by the industry as a whole. The Card Associations are often willing to assist in the design and even fundingof such campaigns. There can be significant impact on usage when campaigns are well designed. In South Africa a celebrity-driven shopping mall promotion which ran for two days atmonth-end for threemonths led to an increase in debit card usage by185% for a sustained period. A campaign to encourage the use of cards at fuel stations (See Annex 4) migrated $57 million turnover fromcash to Maestro[37] debit.

Examples of merchant campaign results in South Africa

- 990% Increase in Maestro transactions – Spar (national grocery retailer)
- 220% Increase in Maestro transactions – Rebel Bottle Stores (national liquor retailer)
- 215% Increase in Maestro transactions – Cross Trainer Stores (national sportswear retailer)

These campaigns ran for two months each and the increases were measured over a three month period. The campaign consisted of in-store and merchant marketing materials. The particular success of the campaign in Spar was due to the addition of radio which is a particularly successful medium in South Africa. These campaigns were followed up by generic debit card campaigns over a range of channels to sustain usage.

6.3 Credit bureau

Facilitating credit risk and industry co-operation

In other markets, the credit card has traditionally been a driver of card based transacting by attracting both card holders and merchants. It enables an increase in propensity to spend and

[36]The card is issued by Arab Bank, under the Jawwal brand

[37] Maestro Debit is a magnetic strip and pin based debit card product in the MasterCard stable of products – similar to Visa Electron.

makes it easier for the consumer to access a line of credit. Indeed we have been told that in Palestine it is easier to obtain a credit card than an overdraft in some cases. The establishment of the credit bureau has given banks an enhanced ability to assess the credit risk of a broader potential market and the regulatory requirements to increase the banking capital levels have both enabled and motivated banks to revisit their willingness to lend to the retail market; however, we have been told that many customers who would be qualified to access credit do not wish to do so. Moreover, although credit cards are used for purchases outside of Palestine, many customers only use them to withdraw cash when they are in Palestine. This is still a form of credit though and probably reflects the relatively low level of acquiring infrastructure available within the territory.

6.4 Competitive banking sector

Competition drives innovation and growth but sometimes there is a case for cooperation

There has been an increase in competition in the retail banking sector, partly due, we are told, to the increased capital requirements imposed by the PMA, which leads to higher levels of non-productive liquidity, as well as the recognition of the opportunities for profitability in this segment. The mergers which are coming out of this will create fewer, bigger banks, which are potentially better placed to fund the technology investments required for electronic banking, and to provide the number of customers required to justify these investments.

There are strong local and regional banks that are competing effectively on service and product, but there is a need to re-look at some of the areas where they compete, such as the ability to deploy acquiring infrastructure. Competition is destructive when the country is trying to build an industry, where the optimal position is based on the need to share high fixed costs and maximize cost effective access to customers through interoperability.

7. RECOMMENDATIONS

7.1 Building an integrated payments industry in Palestine

A payments industry typically has many players, which are split into three categories:

1) Regulators
    a. Legislative bodies
        i. Central bank (typically through its payments department)
        ii. Department of finance
        iii. Competition commission
    b. Industry bodies
        i. Payments associations (VISA / MasterCard)
        ii. National Interbank payments steering groups
2) Suppliers
    a. Issuers
        i. Banks
        ii. Microfinance banks

        iii. Agents (Such as retailers)
    b. Acquirers
        i. Banks
        ii. Industry body mandated acquirers
    c. Processors
        i. Entities who process on behalf of issuers and or acquirers
        ii. Industry body mandated processors
        iii. Cash in and cash out agents
3) Clients
    a. Consumers
        i. People or juristic persons who use the payments system to buy goods or services
            1. The man in the street
            2. Incorporated entities
    b. Merchants
        i. People or juristic persons who use the payments system to sell products or services
            1. The man in the street
            2. Sole traders
            3. Incorporated entities
    c. The reader will note that a given person or juristic person can be both a consumer and a merchant at different times.

Of the list of participants above, we were able to discern well functioning examples of most of the required participants; however, the roles of a national interbank payment steering group and processor were not found to be functioning at a level which adequately supports an industry as diverse as a payments industry.

This is of concern because these are the two groups which serve to integrate the industry and maximize its performance for the economy.

It is therefore recommendedthat these two classes of industry players either be formed or strengthened to deliver the key roles which are required.

7.1.1 Interbank payment steering group

Of primary concern at present is the absence of a fully mandated interbank payment steering group for the industry, as this is essential to define and oversee matters such as:

1) Areas of industry wide cooperation
2) Operating standards and norms
3) Authorized industry services and their role in the payments industry
4) Sanctions for breaches of industry standards and norms
5) Areas of industry competition

An industry steering group, owned and staffed by the risk carrying members of the industry, chaired by the PMA is required to establish and steer the development of the Palestinian payments industry. This may or may not be an evolution of the recent Payments Council or it could be a separate entity which reports to the Payments Council.

This steering group would typically consist of all banks and third party processors, who have a balance sheet risk in the payments environment.

7.1.2 Banking Services Company

In addition to this it is recommended that a single processor, or 'Banking Services Company' be established within Palestine, which is owned and influenced equally by all suppliers in the industry, and which will operate in close concert with the payment steering group to drive the growth of the industry.

At a minimum, this company should house a national switch which switches all national clearing transactions between banks in Palestine and operates the gateway to the international payments networks such as VISA and MasterCard. Settlement of these transactions would be affected through the RTGS which was launched in October 2010.

Implementing this minimum would provide a competition neutral service to all players in the industry, which would allow for the normalization of access costs to the various terminal infrastructures in country.

Given the size of the Palestinian market, thought could also be given to extending the role of this company to include that of national acquirer, thus freeing the issuing side of the business to open competition. It is proposed that a feasibility study of such an outsourced acquirer be conducted.

7.2 Optimizing cash management in Palestine

What is it?

Palestine is a cash-based economy, and, while it would be advantageous to migrate it directly towards being a cashless society, there is an option to focus on the optimization of the use of cash, while gradually migrating the Palestinian economy towards being a cashless society.

The rationale for beginning with this approach is that it enables the existing behavior of businesses and consumers and brings initial benefits to all right from launch. It supports the current trends in increased use of electronic banking infrastructure to handle cash as noted above. Simultaneously, the infrastructure for electronic payments will be laid down so that everyone will have the opportunity to participate in electronic banking as their experience of the benefits evolves over time and impacts their behavior. The optimization of cash can therefore be seen as a gateway initiative to cash substitution by electronic transactions.

Optimizing cash is a focused drive to minimize the need to transfer bulk cash by the Palestinian banks in order to reduce the costs and risks. The core of the initiative is cash recycling within communities, thus reducing their dependence on cash transferred from and to the major centers.

This could be achieved by using the current bank cash handling capability (ATMs and branches), augmented as required by agency banking.

This initiative is critically dependent upon the widespread availability of both electronic payment instruments in the hands of consumers and the pervasive acceptance of these instruments in establishments in as many parts of the country as is possible.

This dependence arises because, in a cash-optimized environment, electronic transactions would be used to provide the value counter flow to the cash withdrawals in the market. In other words the cash transactions would all be reflected in the movements on the bank accounts of consumers and merchants. Every cash withdrawal and deposit transaction at an agent would be simultaneously recorded in the account of the merchant.

The industry processes proposed in this section are able to be supported by integrated card and mobile phone management software which is already in production in other parts of the world; therefore, what is proposed in this section is eminently implementable from a technical perspective. Change management in the industry will be the major challenge in any implementation of this recommendation.

7.2.1 Increasing payment instruments (expanding penetration of electronic access into the consumer market)

Achieving pervasive electronic transaction capability will require issuing many more customers with the ability to access their accounts electronically. The easiest markets to expand into initially would probably be the remaining ~80% of customers who already have bank accounts, but do not have electronic payment access to those accounts.

Basic bank account

Enabling this involves overcoming the core challenge which exists to the pervasive issuance of current accounts to all customers. As mentioned earlier, this seems to relate to the conflation of credit and AML risk.

An account to which access is only given via online electronic payment tools would remove any credit risk, and could therefore be issued to all Palestinians.

To assist in the emergence of this account type, a declaration by the PMA regarding the AML requirements, divorced of any credit related aspects would be helpful.

Payment instruments

Many electronic payment options are available to the banks in Palestine. These include: different kinds of cards such as debit cards, credit cards, salary cards and prepaid cards, as well as mobile phones and internet based banking.

Any or all of these instruments could be deployed to the consumer market in combinations based upon the specific needs of the consumers and the capabilities of the merchants in the area of deployment.

This deployment could take the form of either a single, centralized platform which is integrated into the banks' existing accounts and accounting infrastructure or it could be implemented on a bank by bank basis.

There are benefits in the form of economies of scale, more rapid consumer education and centralized rule enforcement which would be exploited by implementing all services in a centralized manner.

Industry standards

Implementing an industry wide payments capability on the scale described above will require that the banking and payments industries in Palestine agree which payment instrumentmechanisms they will allow and for which purposes those mechanisms will be used.

Once these have been agreedupon a single, industry wide set of norms and operating standards can be adopted to support the deployment of the payment mechanisms. This is a level of co-operation which does not seem to have been achieved today in Palestine.

Customer value proposition

The consumer benefits from this approach are:

1) there is no change in transactional behavior required – the consumer is able to continue to use cash for purchases should they wish to do so
2) all customers are able to access and manage their accounts without necessarily accessing a bank's own infrastructure such as ATMs and branches
3) all customers are able to withdraw and (in some cases) deposit cash in their community irrespective of the physical location of their bank
4) since cash is recycled within the community, the stock levels of cash will, over time, balance to the levels required in the community i.e. no cash stock outs or excess cash stock
5) the payment instruments thus deployed could ultimately be used to facilitate cashless purchase transactions, once the customer has developed an adequate level of confidence in the system

7.2.2 Increasing payment instruments acceptance infrastructure (Expanding the merchant base and enabling agent branches)

In concert with the expansion of consumer access, merchant access should be expanded.This could take the form of issuing PoS devices to the trade registered merchants and mobile phone based payments acceptance to the non trade registered outlets.

The PoS devices need to be programmed to accept payments from all card products and from the customer mobile phones, while the phone would accept payments from customer phones. The decision as to whether to include card acquiring software on the merchant phones would need to follow from a decision on whether or not non registered retailers are allowed to accept card payments.

Interoperability

The intention is to allow full interoperability, i.e. all customers are able to transact with all merchants on one device held per merchant, and irrespective of the bank which issued the customer payment instrument or which bank issued the merchant payment acceptance device.

Agents

An agent is a non banking outlet (either a retailer or a money changer), deploying its own personnel and cash to perform cash out on behalf of registered banks.

The use of agents is proposed to extend and deepen access especially where demand is sub scale for automated equipment (such as PoS or ATM) or as a method of delaying the introduction of new ATM hardware.

In low volume settings, this is more cost effective than deploying either an ATM or a bank branch to perform this function.Thus it is possible to extend services to areas which were formerly uneconomic to service.

Merchant value proposition

The advantages to the merchant are as follows:

- This option is linked to anexisting consumer mindset and behavior and so does not affecton the value of sales.
- Pervasive cash withdrawal means that consumers have more access to cash and are therefore able to spend more.
- Merchants acting as agents have access to additional revenue streams
    a. Cash out is also a driver of feet through the door.
    b. Merchants derive status by being selected as banking agents.
    c. Fees and commissions earned from offering electronic purchases.

7.3 Reducing cash transactions

7.3.1 What is it?

This is the process of gradually replacing cash as the core transactive mechanism in the retail payments space.

Given the entrenchedbehavior, developed over the past severalhundred years, of paying in cash for goods and services, this transition is expected to be a slow one initially, which gains speed on an exponential rate and eventually replaces a significant portion of the retail transactions in the economy.

To put the timescales into perspective, in the UK, where debit cards were initially introduced into the market in the mid 1980's[38],the number of transactions made by cash is forecast to be outstripped by non-cash payments by 2015[39], some 30 years later.

Table. Top ten places in the UK where people used debit cards, 2007

Location	Purchases (mill)	Value (£ billions)	Average Transaction Value (£)
Supermarkets	1,532	47	30.34
Service stations	507	12	24.00
Department stores	236	7	30.27
Restaurants	204	5	26.89
Family clothing	201	6	28.40
Chemists	165	3	15.83
DIY stores	150	6	42.40
Financial services	106	26	246.09
Telecoms	104	2	19.70
Railways	100	2	23.28
Source: Apacs			

7.3.2 Marketing

Focused marketing initiatives can be used to speed up electronic payment adoption by highlighting the benefits to the merchants and the consumers, educating the market on the methods of use and the convenience of electronic payments. Marketing is also a key way of addressing merchant and consumer concerns by providing information which enables these groups to either understand why things are as they are or to dispel myths. These campaigns benefit from being arranged in a series over a sustained period of time, building on each other.

Campaigns can be conducted by the banks individually when the focus is competitive or by the industry as a whole, in the case of more educational campaigns.

Annex 4 provides examples of marketing campaigns to both merchants and consumers which successfully combine these different elements.

7.3.3 Prioritization

Substituting cash requires exactly the same infrastructure as was required for the optimization of cash, with the optional exclusion of agency banking.

Given the time required to achieve a major conversion from cash to electronic payment methods, it is recommended that this option is evolved as an extension of and in conjunction with cash optimization, rather than being a direct target in and of itself.

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[38]Source Wikipedia. : http://en.wikipedia.org/wiki/Debit_card#United_Kingdom

[39] Source: BBC Business. : http://news.bbc.co.uk/1/hi/business/7833991.stm

8. NEXT STEPS

8.1 Implement the two remaining industry components

(Ideally by the end of Q2 2011)

An industry steering group, owned and staffed by the risk carrying suppliers of the industry and chaired by the PMA, is required to establish and steer the development of the Palestinian payments industry. This may or may not be an evolution of the recent Payments Council.

In the final constitution of this group, it should be borne in mind that the extent of success of these steering groups tends to be directly proportional to the sense of ownership felt by the suppliers in the industry.

A banking services company should be established, which houses a national payments clearing switch for all PoS, ATM and mobile transactions in Palestine.

8.2 Choose a strategic route into payments

(Ideally by the end of Q3 2011)

We recommend the route of cash optimization as a route to market for the development of a payments industry.

Our reasoning behind this recommendation is that it most closely suits the current behavior of the consumers in the market, and therefore will better serve the immediate needs of the industry, while still laying the foundations required for future industry developments.

8.3 Conduct pilots of the chosen route

While in country we identified the following potential pilots for the chosen strategy:

1) Establish one or two large supermarket chains as the agent of a bank to test the concept of offering cash back and selling services through an agent in a well established and managed retailer. (This pilot could be started immediately)
2) Establish a small sample of money lenders as agents to test the agency concept in a different context.(This pilot could be started immediately)
3) Establish cash withdrawals at an agent, using mobile phones as the payment instrument. (This pilot would follow either of the previous 2 pilots as a follow-up project)

ANNEX 1: LIST OF PEOPLE INTERVIEWED

NAME	ORGANIZATION
Atari, Hamdi	Cairo Amman Bank
Awwad, Riyad	PMA Payment System Department
Bleidi, Assaf	AlRafah Microfinance Bank
Budeiri, Ragheb	PMA, Development Projects Management Unit
Farmawi, Bassam	PMA, Payment Systems Department
Faroun, Ali	PMA Supervision & Inspection Department
Horani, Jamal	Arab Bank
Habbab, Hussein	Quds Bank
Hijjazi, Aram	Arab Palestinian Shopping Centre
Jouda, Fekri	Bank of Palestine, Acquiring Department
Khamalan, Wadah	CairoAmman Bank
Muzher, Marwan	Al-Rafah Microfinance Bank
Qumsieh, Iyad	PCNC
Naser, Hani	Bank of Palestine, Operations, West Bank
Sesalem, Ashraf	Bank of Palestine, Cards Department, Gaza Strip
Skaik, Samir	Al Deira Hotel
Titi, Alaa	Quds Bank

ANNEX 2: HIGHLIGHTS OF CONSUMER SURVEY 2009

Highlights of survey
Cost differences between transactions handled: on counter ($1.5-2.00), ATM ($0.20), and Internet ($0.02-0.05).
55% of those employed in Palestine generate their income from salaries
Approximately 90,000 businesses
Those using Visa Electron tend to have an income of NIS1,501-2,500, aged 30-39, have at a minimum a secondary school education, and are employed by the government
Users of internet banking tend to have an income of NIS 2,501-3,500, and are employees in private companies
56.2% of customers use ATM machines, 6.3% credit cards, 9% bill payments and 5.6% internet banking
100% of ATM card holders use them for cash withdrawals, 75.4% do balance enquiries, 11% make inter-account transfers, 13.2% make deposits
At least 30% of survey consumers use the ATM machine at least once a week.
51.1% of consumers think that their banks charge commission on ATM usage although it is free.
Consumersatisfaction is high with ATM security for withdrawals but not for deposits, and 43% believe they are not reliable.Only 56% believe that ATMs are well spread and easily accessed.
The priority for ATM usage is that they should be usable (52%) and available (40%). Low fees charged was only the fifth rated priority.
6% of survey customers had credit cards of which 51% had one for more than two years and of those 33.3% rarely use it. 58.8% use it when travelling outside Palestine. 63.6% use it for cash withdrawals.
14.7% use the credit card more than once a week and 35% use it at least once a month.
Credit card transactions within Palestine are mainly cash withdrawals whereas internationally they are used for purchases.
Commissions charged for issuing credit cards vary from $25 to $70 for a classic card and $50 to $140 for a Gold card.
For credit card cash withdrawals the commissionvaried from 3.8% to 4% and the monthly interest from 1.2% - 1.67%
Launch of e points has over 100 participating merchants in West Bank.
65.4% of visa electron consumers use it for cash withdrawals, 7.4% use it for shopping and 14.3% use it for both. 13% ofcard owners rarely use it. 84% use it at least once a month of which 42% use it more than once a month.
Only 21% of visa electron card holders use it in the ATMs of other banks and 22% did not know that one could. The cost of cash withdrawals at the ATM of another bank is 0.05% interest and a $2.75 commission fee.

ANNEX 3: SUGGESTED TOPICS FOR DISCUSSION BY THE NATIONAL INTERBANK PAYMENT STEERING GROUP

Suggested topics for discussion by theNational Interbank Payment Steering Group include the following:

1. Areas of competition and areas of co-operation, such as:

    a. Terminal hardware
    b. ATM hardware
    c. Hardware maintenance: Who supports the terminals and the ATMs
    d. Network maintenance
    e. Switch maintenance
    f. Cash management
    g. Merchant relationships
    h. Value-added service selling
    i. Payment product – card, mobile – level of generic and features
    j. Who controls the software on the terminal?
    k. Who finances the terminals?
    l. Whose cash is used to cash the ATMs?

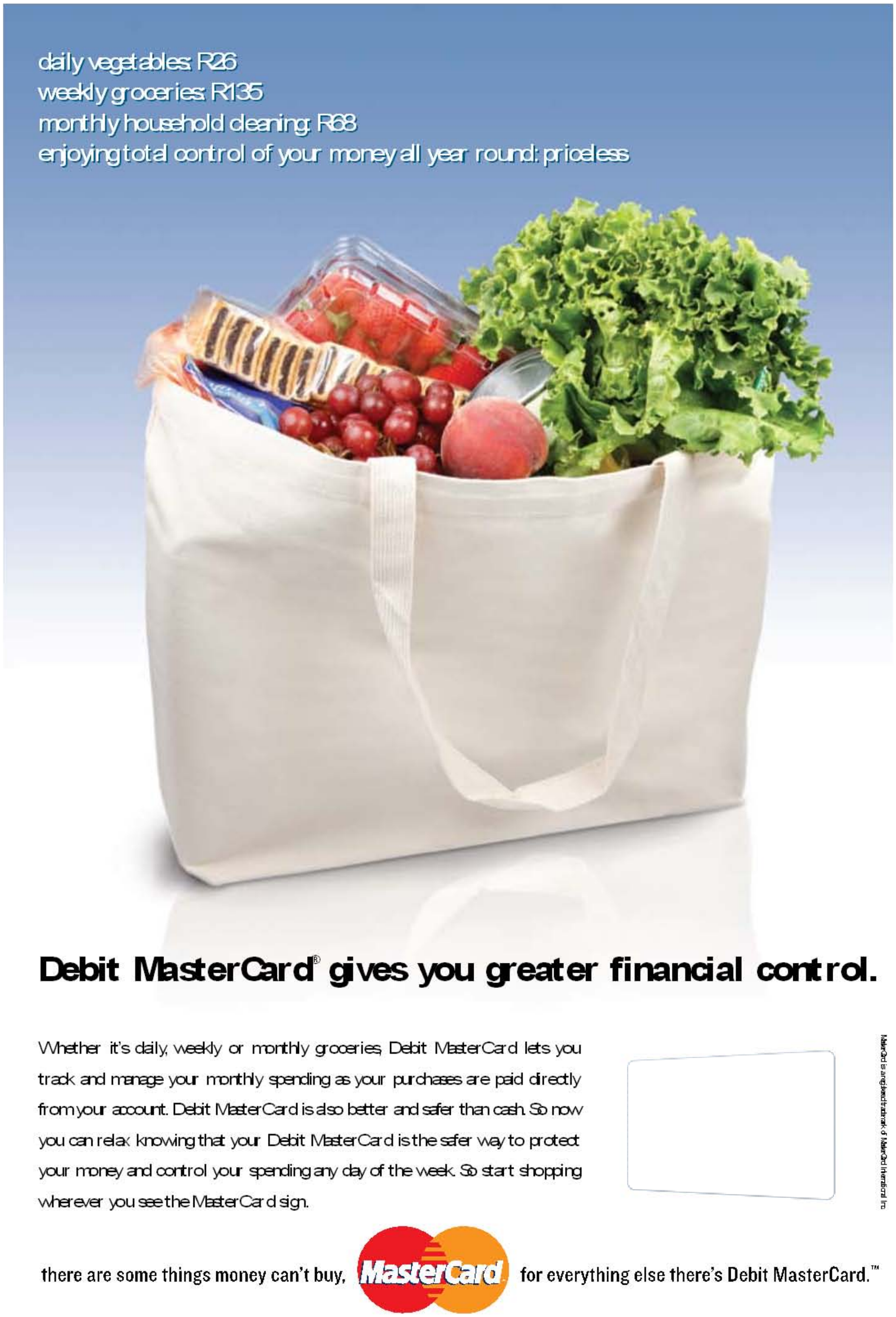
2. Entry requirements to the switch
3. Entry requirements as Acquirer or as Issuer
4. Preferential tariffing
5. Ownership of centralized switch infrastructure
6. Role of PMA: participant, write rules, enforce rules, etc.
7. How the industry will manage itself

ANNEX 4: MARKETING CAMPAIGN EXAMPLES


Ask for your Absa Maestro card
when you apply for a cheque or savings account!
Fast, safe, convenient payment in store!
Accepted at 80 000 outlets in South Africa!
Local and international ATM capability!
ABSA
Maestro
WIN
a Staff Party with Maestro worth
R10 000!
Issue Maestro cards during November and December and win!
CHAMPAGNE
Maestro
ABSA
WIN
a staff party with Maestro worth
R10 000!
Cheers to fast, safe, convenient payments!
The party's never over with Maestro!
WIN
a Staff Party!
Maestro


How
to pay the Maestro way!
1
The cashier or teller identifies the Maestro logo
2
Swipe your Maestro ATM Card through the electronic device
3
Key in your secret PIN code
4
Wait for authorisation from the bank
5
Be sure that the cashier or teller hands you back your Maestro ATM Card as well as your card slip and till slip
Maestro
By MasterCard
Why
pay the Maestro way?
Safety ...
Because your customers don't have to carry cash!
Speed ...
Because your customers simply swipe it at the cashier, key in their PIN and go!
Convenience ...
Because your customers don't have to draw money from an ATM - they can pay in store!
Security ...
Because only your customers know their PIN number!
Control ...
Because the funds are drawn directly from your customer's bank account so they can't overspend!
Good For You
SUPERSPAR
Your store could score
R10 000
with Maestro!
Maestro
By MasterCard
Good For You
SUPERSPAR
Maestro
By MasterCard

takkies R200
tracksuit pants R150
water bottle R20
not getting into a sweat about your finances priceless
Debit MasterCard® gives you greater financial control.
Debit MasterCard lets you track and manage your monthly spending as your purchases are paid directly from your account. It is also better and safer than cash. So now you can stay cool knowing that your Debit MasterCard is the safer way to protect your money and control all your spending. So start shopping wherever you see the MasterCard sign.
there are some things money can't buy,
MasterCard
for everything else there's Debit MasterCard.



daily vegetables: R26
weekly groceries: R135
monthly household cleaning: R68
enjoying total control of your money all year round: priceless
Debit MasterCard® gives you greater financial control.
Whether it's daily, weekly or monthly groceries, Debit MasterCard lets you track and manage your monthly spending as your purchases are paid directly from your account. Debit MasterCard is also better and safer than cash. So now you can relax knowing that your Debit MasterCard is the safer way to protect your money and control your spending any day of the week. So start shopping wherever you see the MasterCard sign.
MasterCard is a registered trademark of MasterCard International Inc.
there are some things money can't buy,
MasterCard
for everything else there's Debit MasterCard.™