



Facility for Euro-Mediterranean Investment and Partnership • Facility for Euro-Mediterranean Investment and Partnership



FEMIP

Final Report

Mobile financial services in
Mediterranean Partner Countries



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Mobile financial services in Mediterranean Partner Countries

TA2011029 R0 FTF

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“The authors take full responsibility for the contents of this report. The opinions expressed do not necessarily reflect the view of the European Investment Bank”.

FIR Advisors

(FIR)

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EXECUTIVE SUMMARY

1. Analysis of the country context and environment for mobile financial services in Mediterranean Partner Countries (MPCs)

1.1. Access to Finance and to Telecommunications services in in Mediterranean Partner Countries: Market potential for Mobile Financial Services

In the Mediterranean Partner Countries (MPCs) analyzed only 35,83 % of the population older than 15 have an account at a formal financial institution. Excluding Israel, whose access to finance ratio is much higher than the other countries studied (90,47%), the average of the remaining seven MPCs studied is 28,03%, lower than the average for the upper middle income group of countries where (Algeria, Tunisia, Jordan and Lebanon belong) and approximately the same as the average for the low middle income group of countries where Morocco, West Bank/Gaza and Egypt belong. Thus, MPCs studied face an important challenge in terms of access to finance that jeopardizes their economic development and equality.

In macroeconomic terms MPCs have better ratios in terms of deposits as a percentage of GDP than New Member States (NMS), and BRICs (Brazil, Russia, India and China) both in terms of deposits and loans as a percentage of GDP. However, MPCs ratios are much lower than the average for EU 15 countries both in terms of deposits and loans as a percentage of GDP.

Mobile Cellular Penetration Rates in the Mediterranean Partner countries studied are very high, almost 100% or above in some cases. Only in Lebanon, due to the more restrictive definition they use of active lines, mobile cellular penetration is only of 81% of the population. Thus the mobile penetration average rate for the countries studied is 105,63% while access to finance average for the countries studied is only of 35,83%.

Recent research in the region shows how mobile financial services should be offered first to young urban unbanked and then to banked customers less than 35 years old. In the Mediterranean Partner Countries analyzed, the population is very young and most of them live in urban areas. Very high literacy rates and openness to technology are also enabling factors.

The combination of high mobile penetration and low access to financial services means that there is an opportunity for transformational mobile financial services in all the countries of the region analyzed except Israel where there is no problem of access to finance. However, potential customers need to see the value proposition before using a new service. This suggests a need for extensive customer awareness campaigns for the uptake of mobile financial services. Potentially highly demanded “Killer” applications for the uptake of mobile financial services in the region could be:

- International remittances due not only to the importance they have for the economies of the region in terms of GDP, especially for lower income segments of

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their populations, but also because prices of remittances in the region are still high compared to other regions.

- Remote and bill payments in the context of policies of most of the central banks of the region analyzed to develop national switches for retail payments.
- Mobile financial services offered by microfinance institutions in the current context of the needed strengthening of the sector's technical and technological capacities of most MFI's of the region. Indeed, mobile financial services offered by the microfinance industry could not only become the killer application for the development of mobile financial services but also a critical tool for their sustainability in terms of improved efficiency and lesser delinquency ratios.

1.2. Review of the regulatory framework of Mobile Financial Services in Mediterranean Partner Countries

The regulatory framework in the Mediterranean Partner Countries studied promotes the development of bank led business models. It can be considered enabling in Egypt and Jordan and evolving towards enabling in Morocco; Restrictive in Lebanon and Tunisia; In Israel it is also enabling, although there is no interest in launching transformational business models. In the West Bank/Gaza and Algeria it does not exist.

Regulation is one of the main challenges for the deployment of mobile financial services, in particular e-money and agent regulation. All financial regulators of the region are looking into these issues, in order to better understand how mobile financial services can be used to increase access to financial services while maintaining the stability of the financial system.

Definitions of electronic money vary by jurisdiction, but a common definition is —monetary value stored on an electronic device which is issued on receipt of funds and accepted as a means of payment by parties other than the issuer. Most banks store money in this way (on their computers) and they are regulated in every country simply as bank institutions. A key question is whether non-bank organizations are permitted to issue e-money as well, and if so, under what conditions and subject to what prudential and non-prudential regulation.

The use of retail agents introduces new or enhanced risks policy makers and regulators should consider seriously. For example, agents present a variety of operational risks to the provider (particularly reputational risk, given that the agent is the public face of the provider) and to the consumer (particularly in terms of agent liability). Moreover, the use of agents adds a special dimension to the challenge of satisfying AML/CFT norms and to consumer protection — two other topics critical to mobile financial services.

2. Review of providers of low cost financial products: prepaid electronic methods of payments in Mediterranean Partner Countries

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Retail payments infrastructure is not yet widely developed throughout Mediterranean Partner Countries. Only Morocco, Algeria, Tunisia and Israel have fully operational retail payments and card switches. Egypt's retail payments and card switch is not fully operational yet for all payment services. Lebanon is currently implementing its retail payments switch, through which card systems will be interconnected. Jordan and the West Bank/Gaza are also willing to implement retail payment switches after successfully implementing RTGS systems. The Postal Service through its financial services unit is a major provider of retail payments in all the countries studied.

The card switches and processors of Tunisia (SMT), Morocco (CMI) and Egypt (EBC) are willing to lead the development of mobile financial services. Postal Systems throughout the MPCs studied are also able and willing to launch mobile financial services. Besides, payments service providers are also developing a mobile financial service offering in partnership with financial institutions and mobile operators.

3. Review of low cost financial intermediation networks in Mediterranean Partner Countries

Physical access to financial services in the Mediterranean Partner Countries (MPCs) analyzed, measured as the number of bank branches per 100.000 adults (15 or older) was in 2011 of 16,08. This ratio for OECD countries was in 2009 of 33,4 branches, while some individual countries with high ratios of physical access to finance like Spain had 38,3 branches in 2009 and the USA 35,74 in 2010.

Although Israel is the only MPC analyzed that has no access to finance problem, the ratio of bank branches per 100.000 adults does not change dramatically without taking it into account. Without Israel the ratio of bank branches per 100.000 adults in the remaining seven MPCs studied is of 15 bank branches per 100.000 adults, while with Israel it is 16,08. Both ratios are higher than the one for the MENA region as a whole (14,3), almost equal to the ratio for Latin America and the Caribbean (15,8) and slightly lower than the high income countries non OCDE ratio (19,8) in 2009.

A very distinctive characteristic of the majority of MPCs studied is that the Postal service has a dominant position in the distribution of retail financial services and payments. As a result, if we include the network of postal branches in order to obtain the ratio of branches per 100.000 adults including Banks and Postal Services, the result is 23,56 for all MPCs analyzed (22 without Israel). Money Exchanges, Payment Service Providers and Microfinance Institutions have also important networks in MPCs. However, the density of Mobile Network Operator networks franchises is by far the highest in the region, although the potential of these networks for cash in/cash out purposes remains to be exploited in the region.

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4. Review of providers of alternative risk analysis methodologies in Mediterranean Partner Countries**4.1. Review of the microfinance industry**

Although Microfinance in most Mediterranean Partner Countries is young compared to other areas of the world such as Asia or Latin America, it has developed extensively over the past years in some countries like Morocco, Egypt or Jordan. As a result the government institutions of Morocco, Tunisia, Egypt, West Bank and Gaza and Jordan are leading the development of new regulatory frameworks for microfinance that they expect to have ready by the end of 2012 or early 2013.

Most institutions interviewed consider that new technologies and capabilities such as mobile financial services could greatly favor the development of the microfinance sector. Also, in the future context of transformation of Microfinance Institutions (MFIs) in the region their performance and profitability ratios are likely to worsen due to the required operational investments and additional equity. As a result, the use of mobile financial services by MFIs can not only be useful in order to keep delinquency ratios at bay by improving microcredit payments mechanisms, but also by improving the efficiency of their operations and as a result their profitability and sustainability.

However, serving the microfinance industry will be successful when MFIs are allowed to offer not only microcredit payments through the electronic wallet but also the disbursement of the microcredit. Similar experiences in other countries probe that the receiver will keep approximately 15 to 20% of the microcredit balance in the e-wallet if they are offered useful payment services and trust in the system. The most important obstacle to widespread adoption of mobile financial services for microfinance is however MFI's lack of understanding of mobile payments. As a result, assistance in training MFIs on how to use and offer mobile financial services to their customers is needed.

4.2. Credit information infrastructure in Mediterranean Partner Countries

In the Mediterranean Partner Countries studied, while the quality of credit reporting has improved in recent years especially in Morocco, Egypt and the West Bank and Gaza due largely to the introduction of new credit bureaus, much remains to be done, both in terms of design and coverage. Six of the countries studied have Public Credit Registries (PCR) while only three have Private Credit Bureaus (PCB).

PCRs are administered by central banks or bank supervisors and basically collect information from supervised institutions. PCBs constantly seek to expand the scope of their information and thus develop a more complete picture of a borrower's financial dealings. Because participation in PCRs is mandatory, they can build a picture of the regulated financial system relatively quickly, and support the oversight functions of the regulators. As a result, if PCR's

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coverage was large enough, they could help nonbank mobile financial services operators enter the mobile financial services market.

5. Review of providers of remittances

International remittances could be one of the mobile financial services more demanded in Mediterranean Partner Countries due not only to the importance they have for the economies of the region in terms of GDP, especially for the lower income segments of the populations of MPCs, but also because prices of remittances in the region are still high compared to other regions. The uptake of mobile financial services in countries like the Philippines or Kenya is mostly explained by the success of operators such as M-Pesa, G-Cash, or Smart in providing remittances services, whether international (the Philippines) or domestic (Kenya).

In the Mediterranean Partner Countries studied, remittances inflows are important in terms of GDP in Morocco (7,04%), in Tunisia (4,45%), in Egypt (3,53%), in the West Bank and Gaza (15,39%), in Jordan (13,78%) and in Lebanon (19,38%). In Algeria and Israel remittances inflows are not relevant. In terms of prices, sending remittances to MPCs cost approximately the same as sending remittances to the other corridors followed by the World Bank's remittances database. The average cost of sending 500 USD to MPCs was in the first quarter of 2012 of 5,56%, while the worldwide average for all corridors was 5,57%. As a result there is room for incoming players such as in the case of the Philippines, using mobile financial services to offer international remittances at a lower price.

6. Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects in Mediterranean Partner Countries

The involvement of banks and telecom operators in the delivery of financial services by mobile phones creates four different mobile financial services ecosystems, where we can identify four critical roles played in each scenario by the bank or the telecom operator. The first role to consider is who is legally responsible for the deposits; the second role, is who bears the reputational risk which implies whose brand is more exposed to the public; third, whether deposits can be accessed through agents or only through bank branches or ATM's; and the fourth and final role considered is who carries the payment instruction.

In the Mediterranean Partner Countries analyzed most of the existing mobile financial services regulatory frameworks encourage the development of bank-centric models. Collaborative business models, where the mobile operator is the dominant brand, and where cash can be accessed in networks other than the bank's network are also emerging. Independent service providers such as cards associations are also launching mobile financial services in many MPCs studied.

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Finally, we have only found one MPC, Jordan, where mobile operators have been able to launch operator centric models, although many others in the region are willing but unable due to the existing or lack of regulatory framework. Indeed, although the regulation is currently being amended, as of now the mobile operator holds the accounts/deposits (the bank only provides the settlement account but does not have individual information of the customers). Besides, the business model of Orange and Zain also meet the other three conditions defined previously for being considered an operator centric model such as: the dominant brand, where cash can be accessed and who carries the payment instruction.

7. EIB suggested support for follow-up projects

The lack of an adapted regulatory framework has been mentioned by all the players during the field visit as one of the main problems for launching mobile financial services initiatives. However, we have also been able to identify other obstacles for the uptake of financial services in MPCs such as the lack of understanding of mobile financial business models by most of the stakeholders at large. As a result, many institutions including all Central Banks/Financial Supervisors have asked about potential EIB funded Technical Assistance for training and workshops dedicated to mobile financial services, and focused in particular on prepaid platforms and agent networks. The Central Bank of Tunisia and the Palestinian Monetary Authority emphasized their interest in receiving such support.

This training program could be followed by assisting one institution/partnership per country, identified in this project as developing or willing and able to implement a pilot of mobile financial services. Although the services to be offered at the initial stage would be limited, the experience will allow the financial and telecom regulator to understand better the benefits and risks of a mobile financial solution. Finally, once the results were properly analyzed and the potential risks and benefits understood, both the financial and telecom regulator would be better equipped to adapt the regulatory framework as required.

The pilots suggested per country are:

1. Morocco: Al Barid Bank/ M2M
2. Algeria: Algérie Poste
3. Tunisia: Mdinar-Via Mobile/ ENDA/ BIAT- Expression of interest letter attached in the country report
4. Egypt: EBC/NBE/Mastercard/Fawry
5. West Bank and Gaza: Jawal
6. Jordan: Orange Money
7. Lebanon: Pinpay/Al Majmoua/Bank Audi. Expression of interest letter of Al Majmoua attached in the country report
8. Israel: The country does not have an access to finance problem although the Postal Bank aims at launching an initiative for the underbanked/unbanked.

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1 Analysis of the country context and environment

1.1 Access to finance

In the Mediterranean Partner Countries (MPCs) analyzed only 35,83 % of the population older than 15 have an account at a formal financial institution. Excluding Israel, whose access to finance ratio is much higher than the other countries studied (90,47%), the average of the remaining seven MPCs studied is 28,03%, lower than the average for the upper middle income group of countries where (Algeria, Tunisia, Jordan and Lebanon belong) and approximately the same as the average for the low middle income group of countries where Morocco, West Bank/Gaza and Egypt belong¹. Thus, MPCs studied face an important challenge in terms of access to finance that jeopardizes economic development and equality.

Table 1: Percentage of population older than 15 with an account at a formal financial institution²

Country	2011
Israel	90,47%
Morocco	39,07%
Lebanon	37,03%
Algeria	33,29%
Tunisia	32,19%
Jordan	25,47%
Syrian Arab Republic	23,25%
West Bank and Gaza	19,43%
Egypt, Arab Rep.	9,72%
Average MPCs studied	35,83%
Average MPCs including Syria	34,44%
Average MPC's studied without Israel	28,03%
Average MENA	18,00%
High Income	89,00%
Upper Middle Income	57,00%
Lower Middle Income	28,00%
Low Income	24,00%

In macroeconomic terms MPCs have better ratios in terms of deposits as a percentage of GDP than New Member States (NMS), and BRICs (Brazil, Russia, India and China) both in terms of

¹ Asli Demircuguc-Kunt and Leora Klapper, 2012. "Measuring Financial Inclusion: The Global Index Database." World Bank Policy Research Working Paper 6025.

² <http://datatopics.worldbank.org/financialinclusion/region/middle-east-and-north-africa>

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deposits and loans as a percentage of GDP. However, MPCs ratios are much lower than the average for EU 15 countries as the following table shows.

Table 2: Deposits and Loans in % of GDP (2010)³

Region/Country	Deposits (%GDP)	Loans (%GDP)
Algeria	47	34
Egypt	74	38
Israel	107	96
Jordan	120	77
Lebanon	288	99
Morocco	81	80
Syria	55	48
Tunisia	53	68
WBG	98	38
MPC	87	63
NMS	50	69
EU 15	108	143
BRICS	59	56

1.1.1 Access to Finance in Morocco

In Morocco, according to the World Bank statistics presented above, 39,07% of the population older than 15 have an account at a formal financial institution. This ratio is higher than the average for the group of lower middle income countries, where Morocco belongs. The Central Bank of Morocco (BAM) estimated in April 2012 that 52% of the population of Morocco had access to one or more financial services. According to BAM, access to finance has increased almost 18% since 2010 (34%), mostly due to the inclusion of the accounts of the newly created Postal bank (Al Barid Bank) formerly La Poste Financial Services Unit.

The CGAP-World Bank⁴ published that Morocco’s number of deposit accounts per 1.000 adults was in 2009 one of the lowest of the region, without including Al Barid Bank’s accounts, only higher than that of Syria and Yemen. No data is available in terms of credit accounts. However, in macroeconomic terms, financial deepening in Morocco measured in terms of Deposits (81%) and Loans (80%) as a percentage of GDP was average in regional terms⁵.

Bank Al-Maghrib (BAM), Morocco’s Central Bank is the Prudential regulator and supervisor of financial institutions whose responsibilities include monitoring and ensuring the security of

³ “Banking in the Mediterranean: Challenges and Opportunities” EIB Economics Department, 2011.

⁴ Number of deposit accounts and bank loans per 1.000 adults, “Financial Inclusion in the Middle East and North Africa, Analysis and Roadmap Recommendations”, World Bank, 2011.

⁵ “Banking in the Mediterranean: Challenges and Opportunities” EIB Economics Department, 2011.

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payment systems and related standards. BAM also advises the government on financial issues. The Central Bank and the Ministry of Finance have identified financial inclusion as one of their policy priorities, marking the objective of banking 66% of the population of Morocco by 2014.

The importance of financial inclusion for Morocco's financial regulator is highlighted by the CGAP in its "Financial Access 2010 Middle East and North Africa Factsheet", stating that BAM is one of the financial regulators in the region with a stronger mandate to promote financial inclusion, having already produced a financial inclusion strategy document. In terms of consumer protection, the CGAP states that BAM is the financial regulator that implements the strongest enforcement mechanisms in the MENA region in terms of fair treatment, disclosure and recourse mechanisms.

In order to achieve the objectives set in its financial inclusion strategy document, the financial authorities of Morocco have made significant efforts to adapt both the regulatory environment and promotion of banking initiatives. Examples of these efforts are: the creation of Al Barid Bank (Formerly La Poste Services Financiers); the change in the regulatory context of the microfinance sector currently before Parliament, and the current banking law changes allowing institutions providing payment services to issue e-money. Additionally, BAM has made substantial efforts to raise awareness of the banking sector to promote service offers specially dedicated to the unbanked segment. In this regard it is important to note that the country's leading banks have launched initiatives and service offerings aimed at the base of the pyramid and the unbanked population, such as the ones described below:

1.1.1.1 Banque Centrale Populaire- LIB accounts

Banque Centrale Populaire (BCP), Morocco's leading retail bank, launched a form of a basic bank account (LIB Account) in 2009, with a cash withdrawal card, with a monthly maintenance fee of 5 dirhams (0,45 EUR). BCP uses its microfinance association (FBPMC) 308 branches and staff to originate new clients, in order to expand, outreach and lower costs through an IOB agreement (see IOB regulation in the agents section). BCP aims at outsourcing this service through additional intermediate networks. This will keep it from diverting its existing network away from its traditional customer population, from lowering its service performance or from damaging its image among its legacy customers, while being able to cut transaction costs for currently unbanked people.

LIB offering builds on the existing customers of the Foundation and non-customers whose income does not exceed 3.000 dirhams (271 EUR). LIB offers a package of banking products providing all basic services, namely, opening a LIB account, and issuing cards to allow withdrawals and payments at a fixed cost of 5 dirhams (0,45 EUR) a month.

Through automation of processes at the branches of the Foundation, officers will be exempt from laborious tasks associated with the release and payment standard that can be done, therefore, by simple operations or mass transfer direct debit customer accounts. This is why

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this offer is not only good for the beneficiaries but also for the Foundation, because it significantly increases the performance of its front office operations. To be consistent with this offer, an upgrade of the Fondation branches has required the installation of ATMs and a refit to get closer, eventually, to the standards of bank branches.

1.1.1.2 Attijariwafa Bank “Hssab Bikhir”

Attijariwafa Bank Morocco’s second largest retail bank, launched also in 2009 “Hssab Bikhir,” a new service aimed at low-income users. This service was launched in partnership with their subsidiary WafaCash, which is one of Morocco’s largest international remittance companies. Attijariwafa was authorized by the central bank to use the WafaCash network as agents (IOB). WafaCash, which operates a network of 350 franchised outlets and 1.200 access points offering cash transfer services, boasts 30% of the international remittance market and has an aggressive plan to extend the network to 1.000 outlets, including partnerships with MFIs. The Hssab Bikhir service is a free low cost bank account with a debit card that offers savings, payment services and consumer credit. Users can access Hssab Bikhir via WafaCash agents as well as mobile vehicles that will travel into remote areas.

1.1.1.3 Al Barid Bank

La Poste du Maroc (Al Barid al-Maghrib), decided to set up its own bank, called Al Barid Bank, specifically targeting low income customers. The move was part of an overall restructuring of the post office and included getting a banking license, which was granted in July 2009. Before that the post office was already offering financial services in the form of savings passbooks, checking accounts, payments and remittances, with over 4 million customers.

The new bank, officially set up in 2010 absorbed all the existing postal financial services customers, and offers a range of products and services beyond what they already receive, including transfers, payments, overdraft facilities, home-ownership savings plans and property loans. No initial deposits are required to open accounts, low user fees are charged and the bank accepts low level deposits on their savings bank accounts. The introductory package for new customers includes a saving account (CEN account) and a debit card for making payments and withdrawals.

Al Barid Bank plans to target individuals with a monthly income below 3.000 MAD with an objective of 6 million clients by 2013. In fact they’ve stated that their goal is to bring the percentage of banked people in Morocco up to 60%, in line with BAMs expectations. Al Barid Bank currently has more than 1.800 branches (36% of all bank branches of Morocco), two thirds of which are in remote and rural areas, and plans to introduce at least 50 more per year. In addition it has 589 ATMS and a plan to introduce 100 new ATMs per year. As of December 2011, Al Barid Bank had 5 million customers, out of the 15 million bank accounts of Morocco, increasing by 500.000 the number of customers with bank accounts per year since 2010.

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1.1.2 Access to Finance in Algeria

The World Bank estimated that only 33,29% of the population older than 15 have an account at a formal financial institution, which is lower than the average for Upper Middle Income group of countries where they belong⁶. Also according to the World Bank, the number of deposit accounts per 1.000 adults was in 2009 in Algeria of 736,6 a little lower than average for the MENA region that also includes Gulf countries (744). In terms of Mediterranean Partner Countries it was higher than that of the Syrian Arab Republic, Morocco, Egypt, and Tunisia, and lower than Jordan and Lebanon. No information is available in terms of bank loans per 1.000 adults⁷.

However, according to the Central Bank of Algeria (BA) as of December 2010, the ratio of accounts per 1.000 adults including postal accounts was of 2.500. The difference with the World Bank Statistics is explained by the inclusion of the postal checking accounts (CCP accounts) issued by Algérie Poste (AP), that according to BA totaled 15,1 million (9 million of which active). Indeed, AP is the most important provider of deposit and payment services to the population of Algeria as it will be presented later in this report.

In macroeconomic terms, financial deepening in Algeria measured in terms of Deposits and Loans as a percentage of GDP was the lowest among Mediterranean Partner with 47% deposits and 34% credits as a percentage of GDP. The non-inclusion of AP is less relevant in this case, since the total value of CCP accounts represents only 12% of total deposits⁸.

The Bank of Algeria (BA) is the prudential regulator and supervisor of credit institutions and payment systems. AP however is under the supervision of the Ministère de la Poste et des Technologies de l'Information et de la Communication (MPTIC). Due to the importance of the financial services unit of AP, several possibilities are being considered in order to have this institution being monitored by BA. One of the possibilities being currently considered is the transformation of AP into a bank as in the case of Morocco.

BA recognizes the importance of financial inclusion, although as in other MENA countries enforcement mechanisms are weaker than legislative requirements. As a result, according to the CGAP, the regulator's involvement in financial inclusion topics is average low in regional terms⁹. In terms of payments systems, BA aims at decreasing the amount of cash circulating in the Algerian economy. However, it argues that electronic payment systems must face customer's reluctance to traceability for tax control purposes given the importance of the

⁶ <http://datatopics.worldbank.org/financialinclusion/region/middle-east-and-north-africa>

⁷ "Financial Inclusion in the Middle East and North Africa, Analysis and Roadmap Recommendations", World Bank, 2011.

⁸ "Banking in the Mediterranean: Challenges and Opportunities" EIB Economics Department, 2011.

⁹ Financial access 2010, Middle East and North Africa (MENA). A regional snapshot.

<http://www.cgap.org/financialindicators>

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informal economy in Algeria. On the other hand, BA 's priorities regarding payment systems policy are the security of the payment system and AML/CFT regulations, which if too strict may jeopardize the development of mobile financial services.

EIB's evaluation of BA's performance as the prudential regulator and supervisor of credit institutions states that "The central bank has played a major role in promoting the modernization and liberalization of the banking system". However, the same report also argues that the extensive state ownership of banks undermines not only regulatory governance but also asset quality and innovation¹⁰.

BA has not begun looking at the issue of mobile payments regulation yet, but it is aware that it needs to adapt the regulatory framework in order to promote e-financial services and m-financial services. Most of the interest has come from the mobile operators specially the private ones that have presented mobile payment initiatives to both the telecom and financial regulator which have not been approved yet.

Algeria's financial sector is dominated by government banks. As of December 2011 according to BA, the banking sector accounted for 99% of the loans in the financial sector, with government banks holding 85% of the banking sector's loans and 88% of deposits. There are currently six government banks, which traditionally focus on financing for larger firms, government corporations and real estate (in the case of CNEP), fourteen private banks (mostly subsidiaries of international banks) and seven finance companies.

According to the EIB¹¹ although the Algerian banking system is well capitalized, profitable and extremely liquid thanks to the country's abundant hydrocarbon wealth, loan quality poses future risks. Indeed, nonperforming loans made by public banks to public enterprises are increasing in importance, result of the moral hazard problem the system suffers from. This problem undermines the credit culture and may lead to weak risk management by lenders, jeopardizing the implementation of downscaling strategies to serve the bottom of the pyramid (not yet implemented by Algerian Banks).

Algérie Poste (AP) is the leading financial network in Algeria, with 3.500 post offices, all of which distribute its financial products. AP was set up as a government corporation in January 2002 to provide both postal and financial services. AP offers an increasingly wide range of financial services, with 15.1 million postal checking accounts (CCP) accounts 9 million of which are active. It has the largest branch network in the country with 3.500 branches in all 48 willayas, larger the whole financial system with 1.425 branches in December 2011.

Algérie Post currently has a stock of 6 million cards, 4 million of which active, being by far the most important card issuer of Algeria. Algérie Post cards, as the other cards in Algeria are used

¹⁰ "Banking in the Mediterranean: Challenges and Opportunities" EIB Economics Department, 2011.

¹¹ "Banking in the Mediterranean: Challenges and Opportunities" EIB Economics Department, 2011.

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mostly for withdrawals in the approximately 1.500 ATMs available in the country (600 of which located in AP's network).

According to the World Bank, the financial arm of AP generates about 80% of the corporation's revenues¹². AP offers postal checking accounts (CCP), CNEP Banque savings accounts, payments and transfers. Total funds deposited with its 15,1 million CCP accounts represent a market share of approximately 12% of total deposits. The majority of Algerian payroll employees have their pay deposited directly to an account with AP.

1.1.3 Access to Finance in Tunisia

The World Bank estimates that only 32,19% of the population older than 15 have an account at a formal financial institution. Although higher than in countries such as Egypt, West Bank and Gaza or Jordan, access to finance in Tunisia is according to the World Bank lower than the average for Upper Middle Income group of countries where the country belongs¹³.

According to the Central Bank of Tunisia, approximately 50% of the economically active population of Tunisia has access to one or more financial services. Also according to a recent study commissioned by the European Commission presented in 2010¹⁴, between 800.000 and 1 million economically active unbanked individuals were willing to access microcredit services (out of a population of 10,6 million, 4 million of which economically active).

According to the CGAP¹⁵, Tunisia's number of deposit accounts per 1.000 adults was in 2009 lower than the average for the MENA region (which includes Gulf countries), but higher than countries such as Morocco and Egypt. In terms of bank loan accounts per 1.000 adults, Tunisia is also slightly below the average for the MENA region but with a higher ratio than Egypt.

However, in macroeconomic terms, financial deepening in Tunisia measured in terms of Deposits (53%) and Loans (68%) as a percentage of GDP was lower than average in regional terms for deposits, while slightly higher in terms of loans EIB¹⁶.

Banque Centrale de Tunisie (BCT) is the financial supervisor of the Tunisian financial system. BCT defines prudential regulation, exerts control on banks and financial establishments, Supervises lending institutions, and grants licenses for foreign currency operations. Microfinance is however regulated and supervised by the Ministry of Finance.

¹² Revenues from financial services mostly originate (64 %) from the interest earned on Treasury deposits. Other revenue sources are postal check fees (28%), money transfer fees (4%), and conducting CNEP operations (3%).

¹³ <http://datatopics.worldbank.org/financialinclusion/region/middle-east-and-north-africa>

¹⁴ « Etude sur le marché de la microfinance en Tunisie » ; IBM, 2010 . EUROPEAID/119860/C/SV/multi.

¹⁵ "Financial Access 2010 Middle East and North Africa Factsheet" published by the CGAP

¹⁶ "Banking in the Mediterranean: Challenges and Opportunities" EIB Economics Department, 2011.

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BCT is the primary regulator for mobile money and e-payments (issuing the circular on mobile payments in January 2011). BCT runs SIBTEL check clearing system while banked owned Societe Monétique Tunisie (SMT) provides switching and clearing for the card system.

Although BCT developed a financial inclusion strategy document, its mandate covers only consumer protection and financial literacy. Promoting microfinance, savings, SME and rural finance was not part of its mandate. This is why, according to the CGAP¹⁷, BCT is one of the financial regulators in the region with a weaker mandate to promote financial inclusion. In terms of consumer protection however, the CGAP states that BCT's enforcement mechanisms in terms of fair treatment, disclosure and recourse mechanisms exist but are implemented in a weaker way than countries such as Algeria and Morocco.

In order to achieve the objectives set in its financial inclusion strategy document, the financial authorities of Tunisia are prepared to make significant efforts to adapt both the regulatory environment and promotion of banking initiatives. Examples of these efforts are the new microfinance law passed in October 2010 (whose implantation decrees are currently being developed) and the new approach they are currently taking in terms of branchless banking. Other topics in the agenda of the financial authorities in terms of financial inclusion are the analysis of the role and organization of La Poste's financial services unit and Banque Tunisienne de la Solidarité (BTS).

The Tunisian financial sector is dominated by banks. Downscaling is not a priority for Tunisian commercial banks. Indeed, the current regulatory framework does not allow them to offer microcredit due to existing price caps based on usury rates, and even if the new microcredit law might allow them to enter the market through newly created subsidiaries or partnerships, the limited size of the market (1 million maximum according leading Tunisian MFI ENDA Interarab) and their lack of expertise might prevent them from implementing downscaling strategies.

In terms of microdeposits, the market is currently dominated by La Poste Tunisienne. However, some banks such as Banque Internationale Arabe de Tunisie (BIAT- the second largest Tunisian bank) and Attijari Bank (subsidiary of Morocco's Attijariwafa Bank are launching initiatives based on prepaid platforms (see below)). BIAT's initiative is especially relevant, since it is the biggest private bank and one of the three largest banks (including the state owned) with Société Tunisienne de Banque (STB) and Bank Nationale Agricole (BNA)) each having a market share slightly above 10% in terms of assets¹⁸. BIAT is the leader in deposit market share (15%), followed by three state owned banks: STB, BNA and Banque de l'Habitat (BH).

¹⁷ "Financial Access 2010 Middle East and North Africa Factsheet", CGAP

¹⁸ "Banking in the Mediterranean: Challenges and Opportunities" EIB Economics Department, 2011.

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The current banking sector priorities are improving their asset quality (in the wake of 2011's revolution) and increasing efficiency through consolidation. Indeed, the high fragmentation of the banking sector in Tunisia poses risks for the efficient functioning of the financial sector. As a result, plans to restructure the state-owned banking sector with the aim of generating cost and activity synergies are the sector's priorities.

1.1.4 Access to finance in Egypt

The World Bank estimates that only 9,72% of the population older than 15 have an account at a formal financial institution in Egypt. This is the lowest ratio among the MPCs studied, and it is also lower than the average for Lower Middle Income countries where Egypt belongs¹⁹. According to another World Bank study only 10 % of the population of Egypt (approximately 8,5 million people) is banked, of which 4,5 million with Principle Bank for Development and Agricultural Credit (PBDAC). In addition 21 million people have savings accounts with the Post Office and 2,3 million are served by Microfinance institutions. Finally, according to the CGAP, In Egypt the number of deposit accounts per 1.000 adults was in 2009 one of the lowest of the region (439.4), only higher than that of Yemen, Syria and Morocco. In terms of bank credit, the situation was similar with only 84.9 bank loans per 1.000 adults²⁰. In macroeconomic terms, financial deepening in Egypt measured in terms of Deposits (74%) and Loans (38%) as a percentage of GDP was also low both in regional and global terms.

The Central Bank of Egypt (CBE) is the prudential regulator and supervisor of financial institutions whose responsibilities include monitoring and ensuring the security of payment systems and related standards. The CBE recognizes the importance of financial inclusion and is actively trying to promote various low-income banking schemes, including the use of mobile phones to provide access. The CBE remains however conservative and wants prudentially regulated banks to be involved in any new schemes that may be offered to consumers.

The Central Bank of Egypt (CBE) began looking at the issue of mobile payments regulation in mid-2009. While the CBE is generally conservative, it recognizes the potential of mobile banking as well as the growing interest from Egypt's MNOs and decided to address the issue before any major initiatives were launched. In July 2009 the CBE established the Egyptian Financial Services Authority (EFSA), to look after non-bank financial products such as mobile money transfers and payments. In February 2010, the CBE Board passed new regulation on mobile phone payments and a month later issued a Circular to all banks, indicating its "preliminary approval" for banks to partner with MNOs on mobile money transfers.

¹⁹ <http://datatopics.worldbank.org/financialinclusion/region/middle-east-and-north-africa>

²⁰ "Financial Inclusion in the Middle East and North Africa, Analysis and Roadmap Recommendations", World Bank, 2011.

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Mobile payments regulations, in the context of the Payment Systems Strategic Framework, are as a result considered by the CBE very important tools to achieve its financial inclusion targets. Other pillars of CBE's strategy are:

- Promoting interoperability among payment channels relative to financial inclusion.
- Increasing pre-paid cards issuance as an easy and cheap way to access financial services.
- Expanding Egypt Post financial services to promote financial inclusion, by expanding payment services through Egypt Post's ATMs and POS.
- Studying the feasibility of introducing new cheap and efficient payment channels.
- Promoting awareness of payment services through building work groups and committees from the financial sector to serve such target.
- Inducing public policy objectives on financial inclusion to commercial banks.
- Bundling payment services with other banks' services relative to financial inclusion, to add value to those services.

Egyptian Banks have implemented downscaling strategies since 1987, when the National Bank for Development (now part of the Abu Dhabi Islamic banking group) started offering microfinance services. Since Egypt does not have Price Caps in terms of interest rates, other banks followed such as Banque du Caire (state owned bank, initiative launched in 2001) and Banque Misr (state owned bank, initiative launched in 2004) and Bank of Alexandria (Owned by Italian Group Intesa San Paolo). Together they represent 14% of the active borrowers and 26,5% of the total outstanding portfolio of microcredit in Egypt. National Bank of Egypt (state owned) also aims at implementing a downscaling strategy to deliver microfinance services. Once the National Bank of Egypt completes its downscaling strategy, all three state owned commercial banks which have very important market positions - 45% deposit market share and 34% market share of loans²¹- will have started delivering financial services to the base of the pyramid.

The National Postal Authority (Egypt Post) is the leader in terms of micro deposits, serving 21 million people with 18 million savings accounts valued at approximately EUR 3.000 Million. It also offers pensions (3,5 million customers) and insurance (1,3 million customers). As in Tunisia, it is currently embarking on a very ambitious plan to improve efficiency and of internal reorganization. Its current priority is to connect branches to allow for daily reconciliation. Of the existing offices 1.200 are already online, while the remainder should be connected to the system over the next 2 years. Given its very large network of 3.800 branches (60% of which offer financial services) and its 1.700 distribution centers that handle postal logistics its potential in mobile financial services either as a third-party agent network or offering directly mobile financial services to its customer base is very relevant.

²¹ "Banking in the Mediterranean – Challenges and Opportunities", EIB 2011.

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Other financial institutions that show the state's commitment to financial inclusion (although unfortunately with very limited results) are the Social Fund for Development (SFD) and the Principle Bank for Development and Agricultural Credit (PBDAC). The Social Fund for Development (SFD) is an institution focused on alleviating poverty and reducing unemployment through financing community development and micro and small enterprise development. It serves as APEX/wholesaler of capital funds to financial institutions and NGOs, and also provides direct lending through its direct lending outlets. It works through a network of regional offices (27); one in each governorate and one in Luxor City. Since its inception in 1991 it has disbursed almost 200.000 loans valued at over 50 USD million through NGO intermediaries. SFD also coordinates microfinance and MSME development policies funded by international donors. In terms of microfinance, one of its current priorities is helping MFIs transform whenever the new regulatory framework is approved.

The Principle Bank for Development and Agricultural Credit (PBDAC) serves nearly 4 million (farmers and rural customers) and has deep outreach into rural areas with 1.500 Branches (with 30.000 employees). As of March 2011, the bank had 3.748 Million EUR in assets and losses of 41 Million EUR²². Given that the agriculture sector receives only 1,7% of total lending²³, the importance of this specialized state owned institution in providing not only credit but also savings, payments and remittances to the agriculture sector is critical.

1.1.5 Access to finance in West Bank and Gaza

According to the Palestinian Monetary Authority 54 % of the population of West Bank and Gaza (WBG) in between 15-64 are banked. However, according to the World Bank²⁴, in the WBG the percentage of population older than 15 with an account at a formal financial institution is only of 19,43%, lower than the average for Mediterranean Partner Countries and only higher than Egypt.

In macroeconomic terms, financial deepening in WBG measured in terms of Deposits (98%) as a percentage of GDP was higher than the average for MPC countries. However, the ratio of loans as a percentage of GDP (38%) was the lowest of all MPC countries which clearly shows a problem in terms of financial intermediation.

The Palestine Monetary Authority (PMA) regulates and supervises credit institutions. PMA is the Prudential regulator and supervisor of financial institutions whose responsibilities also include monitoring and ensuring the security of payment systems and related standards, the credit bureau and also the microfinance sector. PMA recognizes the importance of financial inclusion and is actively trying to promote various credit (credit bureau), payments (RTGS and

²² http://www.pbdac.com.eg/eng/activity/bank_act_credit.htm accessed in April 2012

²³ "Banking in the Mediterranean – Challenges and Opportunities", EIB 2011.

²⁴ Asli Demircuc-Kunt and Leora Klapper, 2012. "Measuring Financial Inclusion: The Global Findex Database." World Bank Policy Research Working Paper 6025.

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ACH) and other low-income banking schemes, including the use of mobile phones to increase access to basic financial services in the WBG.

PMA began looking at the issue of mobile payments in March 2012, when they prepared a mobile payments concept note. After completing the RTGS implementation, mobile payments are now a priority for the PMA in the context of the ACH rollout. PMA recognizes they still need to better understand the potential of mobile banking, but they acknowledge the growing interest of Palestinian MNOs and other international organizations and donors. PMA is currently interested in understanding the existing regulatory frameworks and mobile financial services ecosystems, so they can decide which one to adopt.

PMA considers that mobile payments would bring great benefits to Palestinians living in Areas C (under Israeli control), refugee camps and the Gaza Strip. PMA estimates that 60% of the Palestinian population lives in areas where there is neither infrastructure nor access to financial services. As a result, the development of those areas is one of the main components of the Palestinian National Development Plan, being mobile payments one of its components.

However, PMA understands too that mobile payments are mostly demanded by young urban population. Indeed, the WBG economy is mostly cash based for savings and payments. Individuals and micro/small enterprises rely on cash for their daily transactions. As a result, there is vast unsatisfied demand for financial services also in urban areas that could be served by mobile financial services.

By the end of 2011 there were 18 banks operating in WBG, of which 8 are local banks, including two Islamic banks, while the remaining 10 are foreign banks – one Egyptian, HSBC and 8 Jordanian banks. The banking sector is on the threshold of the critical limit in terms of concentration²⁵, led by Arab bank with 33% assets market share in 2010, followed by Bank of Palestine 18% and Cairo Amman Bank 10%.

Although the banking sector is solid, its conservative approach to lending has prevented them from implementing downscaling strategies. The new credit bureau infrastructure is expected to help the banking industry serve low income customers and micro-entrepreneurs. However, up to now only microfinance institutions have served this segment, and MFIs are neither allowed to provide means of payments nor to collect deposits.

In the WBG the Postal Authority does not provide financial services like in other countries of the region. Besides, the bank's network is mostly located in the cities, leaving rural areas almost totally unserved. Also, despite almost half of the Palestinian population live in Gaza, the number of bank branches, ATMs and POS is much larger in the West Bank than in Gaza. Gaza is as result, like rural areas in the WBG, poorly served by the banking industry.

²⁵ PMA Financial Stability Report, 2010

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1.1.6 Access to finance in Jordan

According to the Financial Inclusion Data produced by Gallup Inc. for the World Bank ²⁶, in 2011 only 25,47 % of the population of Jordan older than 15 had a bank account. This percentage is higher than the average for the MENA region (17,7%), but lower than most Mediterranean Partner Countries studied.

According to the Central Bank of Jordan the number of deposit accounts as of December 2011 was of 2.922.802 while the number of loan accounts was of 747.475. In addition to bank loans, Microfinance institutions had 203.579 borrowers as of December 2010. Also the Jordan Postal Savings Bank has approximately 54.000 active savings accounts.

In macroeconomic terms, financial deepening in Jordan measured in terms of deposits as a percentage of GDP (120%) was higher than the average for MPC countries (87%). The ratio of loans as a percentage of GDP was also higher (77%) than the average for all MPC countries (63%). The comparison of these two ratios suggests rather weak banking intermediation ²⁷

The Central Bank of Jordan (CBJ) regulates and supervises banks. CBJ is the Prudential regulator and supervisor of financial institutions whose responsibilities also include establishing and monitoring the credit bureau and ensuring the security of payment systems (although the regulatory framework as we will see below is not clear enough). In terms of microfinance, the Ministry of Planning and International Cooperation (MPIC) is leading the development of the regulatory framework with German cooperation support. According to the interviews held at MPIC, they expect to have it ready by the end of 2012 or early 2013. MPIC plans to have CBJ as the main regulator and supervisor of the microfinance sector, although the analysis of the required additional capacities CBJ will need is currently being undertaken. MPIC considers that new technologies and capabilities such as mobile financial services could greatly benefit the development of the microfinance sector in Jordan, and this is why they want to leave that option available for willing MFIs in the new regulatory framework.

CBJ began looking at the issue of mobile payments in 2010, when they issued circular number 10/2/6492 regarding payments through mobile phones on the base of an electronic wallet. According to the interviews held with CBJ officials, mobile payments are now a priority in the context of the development of a retail payments switch. Indeed, some CBJ officials consider that under the existing regulatory framework they are unable to monitor the amount of electronic money managed by the two mobile operators that have launched mobile payments initiatives. As a result, CBJ aims at issuing new regulations and using the national retail payments switch to monitor mobile operator's electronic money.

²⁶ Asli Demirguc-Kunt and Leora Klapper, 2012. "Measuring Financial Inclusion: The Global Findex Database." World Bank Policy Research Working Paper 6025.

²⁷ "Banking in the Mediterranean: Challenges and Opportunities" EIB Economics Department, 2011.

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By the end of 2011 there were 26 banks operating in Jordan, 16 of which were Jordanian (out of which 3 are Islamic banks), and the remaining 10 were foreign owned mostly Arab. The banking sector is highly concentrated with the largest three banks (Arab Bank, The Housing Bank for Trade and Finance and Jordan Islamic Bank) accounting for about 46,78% of total banking sector assets and 49,51% of total banking sector deposits.

According to the EIB²⁸, the Jordanian banking sector is profitable and well capitalized. Total assets more than doubled in the period 2003 to 2010, growing by more than 11% on average per year. However, the rapid credit growth observed in recent years could affect underlying asset quality and with it the financial strength of commercial banks. In terms of funding, customer deposits are the most important funding source for banks. The deposit base in the economy has also more than doubled since 2003, mainly according to the EIB “on account of continuing economic stability, increased interest rate margins between the Jordanian Dinar and foreign currencies, the establishment of the Deposit Insurance Corporation as well as the government’s blanket guarantee of deposits of the banking system”.

Although the banking sector is solid, its conservative approach to lending has prevented them from implementing downscaling strategies. Only about 10% of total loans are extended to SMEs in Jordan, although banks are now starting to recognize the profitability of this segment. The implementation of a new credit bureau (not yet operational) and improved collateral laws aim at encouraging this development. In terms of Microfinance, the involvement of banks is very limited. Only Cairo Amman Bank with 1% market share (1.641 borrowers as of December 2010), and Al Ahli Microfinance Company with 3% (6.136 borrowers as of December 2010), for profit company subsidiary of Jordan Ahli Bank were active in the microfinance sector.

The new credit bureau regulatory framework is expected to help the banking industry serve low income customers and micro-entrepreneurs. However, up to now there has been no candidate applying to launch such a service. CBJ expects the banking association to apply for a license before the end of the year.

In Jordan, the Postal Service (Jordan Post) offers financial services such as deposits, bill payments, remittances and means of payments (prepaid cards). All Jordan Post operations are Shari’a compliant. Jordan Post is a state-owned company that is regulated by the Ministry of Telecommunications and Information Technology (MoICT). Postal savings accounts are managed by the Jordan Postal Savings Fund (JPSF), an independent subsidiary. The JPSF was established in 1966 to accept time deposits. The government guarantees 100% of such deposits and all JPSF transactions are tax exempted. JPSF conducts its operations through Post Offices pursuant to an agreement between the two parties according to which JPSF pays a

²⁸ “Banking in the Mediterranean: Challenges and Opportunities” EIB Economics Department, 2011.

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certain fee per each deposit or withdrawal transaction. As of 2010²⁹, Jordan Post had 350 Postal branches and approximately 54.000 active savings accounts.

1.1.7 Access to finance in Lebanon

According to the Financial Inclusion Data produced by Gallup Inc. for the World Bank³⁰, in 2011 only 37,03 % of the population of Lebanon an older than 15 had a bank account. This percentage is higher than the average for the MENA region (17,7%), and the third highest of the Mediterranean Partner Countries studied.

According to the IMF³¹ the number bank deposit accounts as of December 2010 was of 2.988 million while the number of loan accounts was of 1.012 Million. In addition to bank loans, Microfinance institutions have approximately 66.000 borrowers³².

In macroeconomic terms, financial deepening in Lebanon measured in terms of deposits as a percentage of GDP (288%) was highest of all MPCs and also higher than the average of EU 15 countries. Indeed, commercial banks in Lebanon fund themselves mainly through deposits. The ratio of loans as a percentage of GDP was also the highest of all MPCs (99%), but the composition on the asset side of the banking sector's balance sheet indicates a relatively weak intermediation³³.

The Central Bank du Liban (BDL) regulates and supervises the country's financial sector including: Commercial Banks (Local and Foreign); Investment Banks; Representative Offices of Foreign Banks; Financial Institutions; Leasing Companies; Brokerage Firms; Money Dealers and Mutual Investment Schemes (Mutual Funds and Investment Companies). Banque du Liban and its sister institution, the Banking Control Commission (BCC) which a is fully independent and legally autonomous from the central bank, implement a successful and strict regulatory and prudential supervisory approach whose main objective is to minimize the odds of systemic risk caused by the particular risks faced by the Lebanese economy. Financial inclusion is not however a priority for BDL according to the CGAP³⁴.

BDL's responsibilities also include establishing and monitoring the credit bureau and regulating and developing payment systems and money transfer systems. Lebanon has no law or regulation regarding mobile payments or mobile money issuance by non-banks. BDL's

²⁹ "Can Postal Networks Advance Financial Inclusion in the Arab World?" CGAP Brief April 2012.

³⁰ Asli Demirguc-Kunt and Leora Klapper, 2012. "Measuring Financial Inclusion: The Global Findex Database." World Bank Policy Research Working Paper 6025.

³¹ <http://elibrary-data.imf.org/DataReport.aspx?p=2529128>

³² <http://www.mixmarket.org/mfi/country/Lebanon>

³³ "Banking in the Mediterranean: Challenges and Opportunities" EIB Economics Department, 2011.

³⁴ "Financial Access 2010 Middle East and North Africa Factsheet", CGAP, World Bank.

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Payments and Technology units have looked at this issue, but their position is that they would only allow mobile money as long as it is issued by a licensed bank.

The banking sector in Lebanon is large, well developed and very powerful in contrast with capital markets that play only a minor role in the Lebanese economy. The Lebanese banking system is endowed with special characteristics that promote the role of Beirut as a regional financial center. By December 2011³⁵ there were 54 commercial banks operating in Lebanon, 12 of which were Foreign Banks. In addition there were 15 investment banks, 53 financial institutions, 14 financial intermediaries and 2 leasing companies under the supervision of BDL.

According to the EIB³⁶, the Lebanese banking system's soundness indicators have remained rather strong throughout the global financial crisis and are now displaying significant improvements. Performance and profitability indicators have also improved since 2005. Another main characteristic of the Lebanese banking sector's balance sheet is its high level of dollarization. However, even though asset quality has considerably improved, it might worsen again in the medium term depending on the outcome of the current political turmoil in the region.

In Lebanon, the Postal Service (Liban Post) offers financial services such as bill payments, and remittances but does not collect deposits nor issues means of payments. Although Liban Post does not currently issue any savings accounts, under decree law number 126 of 12/6/1959 they are entitled to do so upon the approval of the Central Bank. Liban Post is currently discussing this issue with the Central Bank, since they aim at expanding their financial services offering.

Liban Post was privatized in 1998 but it is still under the regulation of the Ministry of Telecommunications. Since 2011 it is owned by Mr. Sardar, the former Chairman of Bank Sardar which merged with Bank Audi. As a result and based on his background he aims at expanding financial services to the unbanked and underbanked following the Italian Post business model, where 77% of its income comes from financial services activities³⁷. Liban Post is currently working on the development of a prepaid card based service offering.

LibanPost operates today a growing network of 75 post offices, covering the entire Lebanese territory, and is present in high traffic areas such as shopping malls, with extended business hours, in universities and corporations. Technology has been a clear bet for the company's growth; automation has touched all aspects of LibanPost's business. LibanPost has so far developed applications for 150 services and 350 sub-services, including financial services.

In terms of financial services, Liban Post is the Lebanese leader in bill payments although it does not offer yet neither water nor electricity payments. It currently offers payments for:

³⁵ Statistical Annex; Fourth Quarter 2011, Banque du Liban.

³⁶ "Banking in the Mediterranean: Challenges and Opportunities" EIB Economics Department, 2011.

³⁷ Poste Italiane's figures – 2011. http://www.poste.it/en/azienda/chi_siamo/numeri.shtml

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Mobile operators; Traffic Fees (Mécanique); Lebanese University; Park Meter Fines; HSBC (Credit Cards, Personal Loans, Auto Loans); SCB (Credit Cards, Personal Loans, Auto Loans & Deposits); ADR (Microfinance Loans); Al Ameen (Microfinance Loans); Al Majmoua (Microfinance Loans), Ministry of Finance Taxes and Fees. In terms of transfers it offers international transfer as a Cash United agent (Moneygram), and by issuing domestic Money Orders.

1.1.8 Access to finance in Israel

According to the Financial Inclusion Data produced by Gallup Inc. for the World Bank 90,47 % of the population of Israel older than 15 had a bank account³⁸ in 2011. This percentage is not only the highest of the Mediterranean Partner Countries studied, but also higher than the average for high income countries. Indeed, Israel has not a problem in terms of access to finance; on the contrary it is one of the countries with a higher ratio.

According to the Central Bank, this high level of access to finance is partially explained the Banking Service to Customer Law, 5741-1981. Chapter 2 of this law sets the duty of a bank to provide certain services, stating that “a banking corporation shall not unreasonably refuse to provide services” such as ...” the acceptance of money deposits..” and “the opening of a current account..”. Besides, the role of the Postal Bank as the main provider of financial services to low income customers is also relevant when explaining the level of access to finance Israel enjoys.

Also, according to the IMF³⁹ in 2009 the number bank deposit accounts per 1000 adults was 1.035, the second highest of the MPCs studied after Lebanon. In terms of bank loan accounts per 1.000 adults, in 2009 Israel had 908 the highest of all MPCs and even higher than the average for high income countries.

In macroeconomic terms, financial deepening in Israel measured in terms of deposits as a percentage of GDP (107%) was the third highest of all MPCs, and almost equal to the average of EU 15 countries. The ratio of loans as a percentage of GDP was also the second highest of all MPCs (96%). The analysis of the system’s balance sheet reflects that the Israeli banking system undertakes classic banking activities of extending credit and raising deposits⁴⁰.

The Central Bank of Israel (CBI) regulates and supervises the country’s banking sector. The Ministry of Finance licenses and monitors Money Exchange Companies, Pension Funds and Long Term Savings Institutions. According to the EIB “the regulation and supervision of Israeli banks is relatively good and has contributed significantly to the resilience of the banking sector

³⁸ Asli Demirguc-Kunt and Leora Klapper, 2012. “Measuring Financial Inclusion: The Global Findex Database.” World Bank Policy Research Working Paper 6025.

³⁹ <http://elibrary-data.imf.org>

⁴⁰ “Banking in the Mediterranean: Challenges and Opportunities” EIB Economics Department, 2011.

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during the financial crisis". Achieving financial stability in the whole financial system, including the payment system, is the main priority of the CBI according to the 2010 Central's Bank Law. Financial inclusion is not a priority for CBI given that there is no access to finance problem in the Country. CBI is however responsible for consumer protection and financial literacy, with teams dedicated to these policies that are critical when promoting financial inclusion.

CBI emphasized during our field visit the importance of consumer protection issues for financial inclusion purposes. CBI has established a commission for enhancing competition due to the complaints received regarding the fees low income customers how to pay for retail banking services such as loans, overdrafts, deposits and remittances. CBI has the authority to impose price limits but for the time being, they focus on promoting greater simplification of fees through information disclosure; and defining specific consumer protection policies for certain population types such as Sudanese and Asian immigrants. CBI's responsibilities also include monitoring the central credit registry and regulating and developing payment systems.

Israeli banks are relatively well capitalized and liquid, but they face four important challenges according to the EIB: High levels of concentration, comparatively low levels of profitability/efficiency compared to its peers, lack of growth opportunities, and increased levels of risk during negative economic cycles.

- The Israeli Banking sector is highly concentrated, holding the five major banking groups in Israel, 93% of the total assets of the banking system. The high concentration in the banking system is directly linked to the concentrated structure of the Israeli economy, where a number of conglomerates (often family-owned) control leading positions in several industries. Israeli Holdings cannot however own both a bank and a telecommunications operator.
- Although Israeli's Banks' profitability has improved over the past two years, such profitability remains rather low compared to Israel's peers. Their profitability and efficiency are constrained by the heavy operating expenses.
- Contrary to neighboring countries, access to finance in Israel is very high and as a result growth opportunities are limited. Indeed, the domestic market is mature and as such does not provide significant business growth opportunities. Besides, Israeli banks are not significantly present abroad which limits their ability to expand.
- High corporate credit concentration and a large housing loans segment expose Israeli banks to increased risks of large losses during negative economic cycles.

Israel's Postal Company has a financial services subsidiary called Postal Bank. The Israeli Postal Company and the Postal Bank are state owned corporations under the supervision of the Ministry of Telecommunications. Israel's Postal Company is going through major financial difficulties related to the decline of postal services. As a result, the Postal Company aims at expanding to other business such as finance through the Postal Bank, and Telecommunications by asking for an MVNO license.

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The postal bank can collect deposits, issue means of payment, but cannot grant credits. It currently has 350.000 active postal bank accounts, and 700 post office branches mostly located in rural areas. They also serve the settlements in the West Bank through mobile branches.

The Postal Bank currently offers current account services without management commissions and at significantly lower costs than banks. Customers can perform transactions in the current account such as: deposits, withdrawals, standing orders and transfers from one account to another. In addition, customers can order a cobranded Visa debit card (issued by card company ICC-Cal) enabling purchasing in stores and withdrawal of cash from ATMs throughout the country. A Postal Bank account holder cannot be overdrawn. In addition, the Postal Bank does not pay interest on credit balances. Other services offered are:

- Payments: Credit card payments; welfare/social payments; billing using payments vouchers; collection via postdated checks; collection via billing services; paying salaries to receivers (mostly foreign workers) not having a postal bank account.
- Cash deposits at postal branches crediting commercial bank accounts: This service is especially relevant, since by offering it the postal bank acts like an agent of the banks. Only online postal units offer this service to a) business owners that have large sums of cash, b) people who wish to pay advances or execute remote purchases or c) private customers located far away from their bank branch, to deposit the cash money in a postal bank branch and request to transfer it into any bank account in Israel. The account into which the money is transferred can be the customer's account or a third party account. To execute the transfer, the customer is requested to present an ID card.
- Prepaid cards: Chip based cards issued either 1) for internet or foreign workers or 2) for International travel. The first type are anonymous (no AML requirements), not rechargeable, and topped at 1.000 NIS (200 EUR). The second type have a maximum value of 10.000 NIS and can be denominated in USD (2.500 USD) and Euros (2.000 EUR). This latter service is also relevant for international remittances purposes, since this is a smart card that allows users to spend a predetermined amount of foreign currency (EUR/USD), with no connection to a bank account. However its main purpose is to be used for travel expenses. It has a one-time fee of NIS 40 (8 EUR). The purchaser receives on the spot a code number that has to be memorized. A maximum of 1.000 USD can be spent or withdrawn from automated teller machines per day.
- Foreign Exchange services: Cashing Foreign Currency Checks; Purchasing Foreign Currency and Travelers' Checks; Converting Travelers' Checks.
- Money Transfers: Cash On Time – Money Transfer Service in Israel; EUROGIRO - Money transfers to bank accounts worldwide; Money Transfers to Romania; QuickPay - International Payment Service and Western Union - International Money Transfer Service.

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Currency services companies are also important nonbank providers of financial services. There are currently approximately 2.000 providers in Israel (most hotels and travel agencies have a license), with a network of approximately 3.000 branches. The industry is fragmented because the barriers of entry are very low. In order to register the most important requirements are to be an Israeli citizen above 18 without criminal records, or if it is an international company to have at least one Israeli Manager. Every currency service provider has to be incorporated as an Israeli company. They offer better prices than banks because costs (mainly related their supervision) are lower.

Although they are branded currency exchanges, their most important activity is not exchange services but discounting checks. They also cash travel checks, and offer remittances if they are linked with international Money Transmitting Operator. AML requirements are defined by order 5761-2001, and this is the area where the Department of Supervision of Money Exchanges of the Ministry of Finance focuses on.

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1.2 Analysis of the telecommunications sector

Mobile Cellular Penetration Rates in the Mediterranean Partner countries studied are very high, almost 100% or above in some cases. Only in Lebanon, due to the more restrictive definition they use of active lines, mobile cellular penetration is only of 81% of the population. In any case, mobile penetration rate’s average for the countries studied is 105,63% while access to finance average for the countries studied is only of 35,83%.

Table 3 : Mobile Cellular Penetration Rates for selected Mediterranean Partner Countries⁴¹

2011	Mobile Cellular Penetration Rate
Morocco	108,90%
Algeria	99,20%
Tunisia	116,30%
Egypt	96,60%
West Bank and Gaza	97,00%
Jordan	116%
Lebanon	81%
Israel	130%
Average MPCs	105,63%

Recent research in the region shows how mobile financial services should be offered first to young urban unbanked and then to banked customers less than 35 years old. In the Mediterranean Partner Countries analyzed, the population is very young and most of them live in urban areas. Very high literacy rates and openness to technology are also enabling factors.

The combination of high mobile penetration and low access to financial services means that there is an opportunity for transformational mobile financial services in all the countries of the region analyzed except Israel where there is no problem of access to finance. However, potential customers need to see the value proposition before using a new service. This suggests a need for extensive customer awareness campaigns for the uptake of mobile financial services.

Potentially highly demanded “Killer” applications for the uptake of mobile financial services in the region could be:

- International remittances due not only to the importance they have for the economies of the region in terms of GDP, especially for lower income segments of the populations, but also because prices of remittances in the region are still high compared to other regions.

⁴¹ Information provided by the National Telecommunications Regulators

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- Remote and bill payments in the context of the central bank’s policies of most of the countries analyzed to develop national switches for retail payments.
- Mobile financial services offered by microfinance institutions in the current context of the needed strengthening of the sector’s technical and technological capacities of most MFI’s of the region. Indeed, mobile financial services offered by the microfinance industry could not only become the killer application for the development of mobile financial services but also a critical tool for their sustainability in terms of improved efficiency and lesser delinquency ratios.

1.2.1 Analysis of the mobile telecommunications sector in Morocco

Maroc Telecom (IAM) was the only operational mobile-cellular operator until March 2000, when Médi Télécom (Méditel) started providing its services in the country. The third entrant – Wana – started offering mobile cellular voice services over its 3G network (based on its existing national CDMA2000 network) in July 2008. In February 2010, Wana commercially launched its 'Inwi' 2G-GSM brand in the Moroccan market. These three operators hold also licenses for fixed telephony and Internet. As of December 2011⁴², the market share of each mobile operator was as follows: IAM: 46,85%; Meditel 32,92%; Wana (Inwi): 20,23%.

Morocco’s mobile-cellular subscriptions increased by nearly three million in the first six months of 2011, reaching close to 35 million subscriptions by June 2011. This corresponds to a remarkable growth rate of 9,4 % in the six-month period. The mobile-cellular penetration rate thus reached 109 % by the end of June 2011.

Table 4: Morocco mobile-cellular subscriptions (December 2010 – June 2011)⁴³

Morocco	Q4 2010	Q2 2011
Mobile-cellular subscriptions (000s)	31'982	34'975
Added (000s)		2'993
Growth		9.4%
Mobile-cellular penetration rate	100.1%	108.9%

As of December 2011, the distribution of subscribers, the average prices per minute and the usage for postpaid and prepaid were as follows:

- Postpaid: 1.557 thousand subscribers, 0,62 DH / min (5,6 cts € / min) with average usage of 38 minutes/per month/per customer.
- Prepaid: 34.997 thousand subscribers, 0,81 DH / min (7,3 cts € / min) with average usage of 486 minutes/per month/per customer.

⁴² ANRT, 2012

⁴³ Source ITU, ANRT

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The average price of a text messaging (SMS) was DH 0,39 in December 2010 (0,0353 EUR). Many plans include free SMS although the face value of an SMS is 0,96 DH (0,087 EUR).

In terms of the regulatory framework of the telecommunications sector, the Agence Nationale de Réglementation des Télécommunications (ANRT) is responsible for regulating the telecommunications market, while the High Authority for Audiovisual Communication (HACA) regulates the digital media market. ANRT is the regulator and supervisor of the Post Office and Telecom sector whose responsibilities include promoting fair and healthy competition, and manage, on behalf of the State, public goods related to the sector.

Regulatory requirements of mobile operators are set by law n° 24-96 relating to post and telecommunications services and its application decrees. Also by the specifications of the operators (available at the ANRT site: www.anrt.ma). There are no restrictions for telecom licensees and suppliers of value-added services, registered with the ANRT. Relationships between operators and service providers are traded freely in accordance with current regulations. As a result, an operator can establish joint-ventures with a financial services provider freely as long as the regulatory framework is respected and they are not prohibited in the operator's specifications (cahier des charges). Indeed, specific aspects relating to the ownership of telecom operators and its evolution are governed by the specifications of those operators.

Number portability is offered by both fixed and mobile operators. Moreover, other than Law 2496 and its implementing decrees, this service is also ensured by a decision of the ANRT published on the Agency's website. Mobile operators are subject to annual audit by the ANRT to ensure the accuracy of their accounts and the accuracy of their books. This is not strictly speaking monitoring the financial solvency of telecom companies and mobile operators objects of regulation. The pricing of mobile services is free, except when those rates undermine fair competition.

1.2.1.1 Analysis of the Mobile Financial Services potential demand

According to recent market research demand for mobile financial services in Morocco is as follows:

- Moroccans are strong mobile phone users, but their consumption is still mostly voice on a prepaid basis
 - Only one out of 5 users is "techie", frequently renews his mobile, consults mail and accesses data
 - The overall use of prepaid (96%) makes Moroccan less dependent on their mobile operators
- Even if 52% of Moroccans have a bank account (including Al Barid Bank), their use is still basic and cash is the preferred instrument for payments

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- Remote channels (telephone, internet) are rarely used, the branch being the focal point of the banking relationship
- Cash remains the preferred means of payment for all transactions (including large amounts)
- The interest in mobile banking is generally strong but is more out of curiosity than use; its benefits remain to be properly presented and explained
 - Differences in interest among the Moroccan population, being the banked and unbanked youth the priority targets
 - Efforts remain to be made on presenting the expected benefits of mobile banking taking a very didactic approach such as speed and access 24/24
 - The two main obstacles for mobile financial services adoption are the perceived risk of fraud and theft of mobile. Offering Insurance attached to mobile financial services is a must
- Banks and the post office (Al Barid Bank) are seen as the most legitimate actors to offer mobile banking services
 - An opportunity for banks implementing a "bank-centric" business model
 - Other players such as (La Poste, Wafacash, ...) can also provide an offer adapted to their customers specific characteristics
 - However, mobile operators have less credibility, which will make "operator lead" business models less likely to succeed.
- Mobile financial services should be offered first to banked customers less than 35 years old, and young urban unbanked
 - Banked customers less than 35 years old, represent 2,4 million people of which 74% of them are interested in mobile financial services
 - The urban unbanked under 35 years, represents 3,8 million people of which 65% of them are interested in mobile financial services

1.2.2 Analysis of the mobile telecommunications sector in Algeria

There are three GSM operators (Djezzy, Mobilis and Nedjma) in the Algerian mobile-cellular market. Algérie Télécom Mobile (Mobilis), the first mobile-cellular operator, served the market as the monopolist cellular operator (and as a subsidiary of the incumbent Algérie Télécom) until 2001. Mobilis's monopoly ended in July 2001, when the ARPT granted Orascom Telecom Algérie SPA (Djezzy) a license to provide cellular services. The third GSM license was granted to Qatar's Wataniya Telecom Algérie (Nedjma) in December 2003. The operator announced the launch of its GSM network under the commercial name "Nedjma" in August 2004.

The following table presents Algeria's mobile-cellular subscriptions and penetration rates for December 2010 and 2011. By end 2010, the total market's mobile-cellular subscriptions totaled 32,78 million, translating into a penetration rate of 92,4 %. By the end of 2011,

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Algeria's total number of mobile-cellular subscriptions stood at an estimated 35,615 million lines, translating into a penetration rate of 99 %.

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Table 5: Algerian mobile-cellular subscriptions (December 2010 – June 2011)⁴⁴

Algeria	December 2010	December 2011
Mobile-cellular subscriptions (000s)	32.780	35.615
Added (000s)		2.835
Growth %		8,65%
Mobile-cellular subscriptions penetration rate	92.4%	99.2%

As of December 2011 the market leader was Orascom Telecom Algérie with 46,59% market share (16,6 million customers), followed by Algérie Télécom Mobile with 29,53% market share (10,5 million customers), and Wataniya Telecom Algérie 23,88% market share (8,5 million customers).

According to the Algeria's telecom regulator (ARPT) as of December 2011, 94,1% of mobile users in Algeria had prepaid accounts. The reasons for the preference of prepaid are as in other countries: the minimum duration of a postpaid contract (1 year), the guarantees required and the penalties for cancelling the subscription, and the higher price per minute. As the following table shows, the vast majority of the customers of the three mobile operators had prepaid accounts as of December 2011.

Table 6: Prepaid and Postpaid Algerian mobile-cellular subscriptions per operator⁴⁵

Mobile Operator	Post paid	% Postpaid	Prepaid	% Prepaid	Total
Algérie Télécom Mobile	847.827	8,06%	9.668.087	91,94%	10.515.914
Orascom Telecom Algérie	736.266	4,44%	15.858.967	95,56%	16.595.233
Wataniya Telecom Algérie	515.120	6,06%	7.989.659	93,94%	8.504.779
Total	2.099.213	5,89%	33.516.713	94,11%	35.615.926

There are three main entities in charge of regulation of the ICT sector in Algeria: Autorité de Régulation de la Poste et des Télécommunications (ARPT), Agence nationale des Fréquences (ANF) and Ministère de la Poste et des Technologies de l'Information et de la Communication (MPTIC).

ARPT is in charge of regulating both the post and telecommunication markets. It was established in 2000, and commenced its operations in August 2001. ARPT is the sole government entity to issue telecom licenses, approve new services, introduce access networks (through offering access network licenses), and impose obligations (such as quality of services obligations) on telecommunication service providers.

ARPT is aware that the regulatory framework is neither adapted for e-commerce not for m-commerce. Indeed, the commercial code does not define basic concepts such as e-commerce site or electronic signature required for undertaking remote transactions. As a result, remote

⁴⁴ ITU, ARPT

⁴⁵ ARPT, December 2011

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payments initiatives such as the one launched by cards switch SATIM (see section 2) had to be brought to halt given the current the lack of proper regulation.

In addition, another important obstacle for the uptake of mobile financial services in Algeria is that number portability when changing operator is not guaranteed. Although ARPT is currently working on this issue, they consider it less relevant than resolving the legal vacuum regarding remote transactions.

Currently none of the operators is authorized to offer mobile financial services, although the two private operators Orascom Telecom Algérie and Wataniya Telecom Algérie approached their regulator in the past. However, although none of the operators have authorization to offer financial services, they already offer credit transfer in between two persons. Credit transfer services could evolve into P2P payments by simply allowing the receiver to transform minute credit into cash. The service is available both for prepaid and postpaid, and it is limited to 100 DZD (0,98 EUR) per transfer. The platform used for this service is also used by each operator to electronically distribute credit as we will see in more detail in section 6.

- Orascom Telecom Algérie was the first one to launch the service in June 2005. It brands its service SOS Crédit and the amount sent can go from 50 DZD (0,49 EUR) to 100 DZD (0,98 EUR). The price of the service is 10 DZD (0,09 EUR) and each customer can send three transfers per day.
- Algérie Télécom Mobile launched the transfer service branded Sellekni in September 2006. The amount sent can go from 40 DZD (0,39 EUR) to 100 DZD (0,98 EUR). The price of the service is 10 DZD (0,09 EUR) and each customer can send two transfers per day.
- Wataniya Telecom Algérie launched the transfer service STORMILI in July 2008. The amount sent can go from 10 DZD (0,09 EUR) to 100 DZD (0,98 EUR). The price of the service is 10 DZD (0,09 EUR) and each customer can send three transfers per day.

1.2.2.1 Analysis of the Mobile Financial Services potential demand

Recent research shows how Mobile financial services should be offered first to young urban unbanked and then to banked customers less than 35 years old. In Algeria, according to the CIA World Fact Book⁴⁶, the Median age of its approximately 35 million people is 27,6 years being 24,2% (0-14 years), 70,6% (15-64 years) and 5,2% (over 65 years). The population is as a result mostly young and 66% of them live in urban areas.

High literacy rates (69,9% of the population are able to read and write) and openness to technology are enabling factors. The combination of high mobile penetration and low access to financial services means there is an opportunity for mobile financial services. Three potential “killer applications” could be demanded by potential customers in Algeria:

⁴⁶ <https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html>

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- Bill payments: As of now most utility payments are undertaken in the branches of the utility provider in order to make sure the payment is received. Only AP offers a reliable service used for bill payment (see section 6), but even this service is not regularly used by customers paying the electricity due to fears of being disconnected if the payment is not received on time. As a result, utility payments generate long standing queues and lots of wasted time that could be saved if a more convenient and secure system such as mobile payments was available.
- G2P payments: salaries. As mentioned before the majority of Algerian payroll employees have their pay deposited directly to an account with AP. The balances held in these accounts are usually low since most of the pay received is withdrawn at ATMs using the cards issued by AP. In some cases, the account is also used for bill and services payment using the services offered by the institution. AP as we will see in section 6 is currently planning issuing prepaid cards (virtual wallets) that could replace or complement these accounts for certain customers with low salaries. Indeed, the services offered would be similar but more efficiently offered through the prepaid platform accessible through the mobile channel. As we will see in section 6, these new accounts will be the base of the mobile financial services offering being currently developed by AP.
- International remittances: The relative high cost and the importance of remittances sent to Algeria through informal channels can make of remittances a service highly demanded by Algerians when adopting mobile financial services. However, the likely inability to receive remittances in foreign currency, and the fear of remittances receivers of being tracked by Algerian tax authorities might jeopardize the potential interest Algerians might have in this service.

1.2.3 Analysis of the mobile telecommunications sector in Tunisia

There are three GSM operators in Tunisia: Tunisie Telecom, Tunisiana and Orange Tunisie. According to the Instance Nationale des Télécommunications, the MNO regulator as of January 2012 Tunisie Télécom had a 37% market share, decreasing from 41,5% in January 2011; Tunisiana had 53,6% , up from 52,4% in January 2011; and Orange Tunisie 9,4% up from 6,1% in January 2011.

Tunisie Telecom is the incumbent in the Tunisian mobile-cellular market, and it was the first operator to deploy a GSM network in 1998. Tunisiana is the second mobile operator in Tunisia, launching its commercial operations in December 2002. The third entrant, Orange Tunisie, launched its 3G mobile-cellular services in May 2010. The operator was granted one-year of exclusivity for 3G services, starting from the date of license. Accordingly, Tunisie Telecom obtained a 3G license in September 2010, and launched 3G services in August 2011.

The three Tunisian mobile-cellular operators reported adding 1.210.828 mobile-cellular subscriptions between January 2011 and January 2012. By the end of January 2012, mobile-

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cellular subscriptions had reached 12.499.721, thus increasing the country’s mobile-cellular penetration to 116,30 %.

Table 7: Tunisia mobile-cellular subscriptions (December 2010 – December 2011)⁴⁷

Tunisia	December 2010	December 2011
Mobile-cellular subscriptions	11.288.893	12.499.721
Added		1.210.828
Growth		10,73%
Mobile-cellular penetration rate	106,20%	116,30%

In terms of the regulatory framework of the telecommunications sector, The Ministry of Industry and Technology along with the National Telecommunication Commission (Instance Nationale des Télécommunications -INT) and the National Agency for Frequencies (ANF) are responsible for the regulatory framework of the telecommunications market in Tunisia. Moreover, the Internet market is regulated through the Agence Tunisienne d’Internet (ATI), which was established in 1996.

The Ministry is mainly in charge of licensing. INT is responsible for arbitration and handling disputes between operators, as well as overseeing the interconnection framework. Lastly, ANF is responsible for controlling and managing the frequencies. While the three entities are independent, the Ministry of Industry and Technology remains the regulatory umbrella. In terms of digital media, the Tunisian market is regulated through the National Broadcasting Corporation.

1.2.3.1 Analysis of the Mobile Financial Services potential demand

Recent research shows how Mobile financial services should be offered first young urban unbanked and then to banked customers less than 35 years old. Two potential “killer applications” seem to be demanded by these potential customers in Tunisia:

- Disbursement and payment of microcredits
- International and domestic remittances and transfers

As a result, we argue that demand for mobile financial services exists in Tunisia, even if some macroeconomic indicators show otherwise:

- relatively high GDP per capita;
- rural population represents only 33% of total population
- significant amount of the population is banked, although microfinance has still potential to grow (1 million customers approximately)
- remittances are a relatively small 4,45 % of 2010 GDP

⁴⁷ INTT, « Tableau de Bord Mobile de la téléphonie mobile », January 2012.

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1.2.4 Analysis of the mobile telecommunications sector in Egypt

The Egyptian market has three operational mobile-cellular operators. Mobinil started operations in May 1998. Competition commenced with the entrance of Vodafone Egypt in the same year, and was increased in May 2007 with the entrance of Etisalat Misr. Etisalat Misr started operating directly with a 3G license, while Mobinil and Vodafone Egypt received a separate 3G license in 2007. Vodafone Egypt launched its 3G/3.5G services in May 2007, while Mobinil launched its 3G/3.5G services in September 2008. By June 2011, the total mobile-cellular subscriptions amounted to 76,432 million, translating into a penetration rate of 96,6%.

Table 8: Egypt mobile-cellular subscriptions (December 2010 – June 2011)⁴⁸

Egypt	December 2010	June 2011
Mobile-cellular subscriptions	70.661	76.432
Added		5.771
Growth		8,17%
Mobile-cellular penetration rate	87.1%	96.6%

Vodafone and Mobinil lead the mobile telecommunications markets. Vodafone controlled by the Vodafone Group (54,93%) and Telecom Egypt (44,95%) had as of June 2011 a 39% market share. Mobinil controlled by Orange (36,4%) and Orascom Telecom Holding (34,6%) had as of June 2011 a 37% market share. The third operator, Etisalat Misr controlled by Etisalat (65%), the Egypt Post (25%) and the National Bank of Egypt (10%) had as of June 2011 a 24% market share.

In terms of the regulatory framework of the telecommunications sector, there are two main entities in charge of regulating the telecommunication sector in Egypt: the Ministry of Communications and Information Technology (MCIT), and the National Telecommunication Regulatory Authority (NTRA). In terms of licensing, NTRA is responsible for the approval of new services launched by operators such as mobile financial services.

1.2.4.1 Analysis of the Mobile Financial Services potential demand

Recent research shows how Mobile financial services should be offered first to young urban unbanked and then to banked customers less than 35 years old. In Egypt, according to the CIA World Fact Book⁴⁹, the Median age of its approximately 83 million people is 24,3 years being 32,7% (0-14 years), 62,8% (15-64 years) and 4,5% (over 65 years). The population is as a result mostly young and 43% of them live in urban areas.

⁴⁸ International Telecommunications Union, National Telecom Regulatory Authority

⁴⁹ <https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html>

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High literacy rates (71,4% of the population are able to read and write)⁵⁰ and openness to technology are enabling factors. Internet usage jumped from 17 million in January 2011 to 25 million the following month due to the revolution. The combination of high mobile penetration and low access to financial services means there is an opportunity for mobile financial services.

However, Egyptians need to see the value proposition before using a new service. Although internet service jumped during the revolution, movement from scratch cards to electronic top-up has been slow since. The same reluctance can be seen in terms of electronic methods of payments such as credit and debit cards. This suggests a need for extensive customer awareness campaigns for the uptake of mobile financial services.

Current regulation only allows person to person transfers to be offered, but potential “killer applications” for mobile financial services in Egypt could be when allowed: Bill payment, mostly utility payments such as electricity; International remittances; Microcredit Payments and social networking payments. Of particular relevance is the importance that mobile payments initiatives launched by payment service providers EBC and Masary (see section 6) give to serving the microfinance industry. Both institutions argue that in the current regulatory framework serving the microfinance industry could not only become the killer application for the development of mobile financial services but also a critical tool for economic development.

1.2.5 Analysis of the mobile telecommunications sector in the West Bank and Gaza

The Palestinian market has two operational mobile-cellular operators that can only offer 2G services. Jawwal started operations in May 1998. Competition commenced with the entrance of Wataniya Mobile (owned by Qatar Telecom) in late 2009. Palestinian operators have to face also competition from Israeli mobile operators that can offer 3G services, whose SIM cards are sold illegally on the Palestinian territories. Indeed, since Israeli settlements are expanding in the West Bank and each settlement has access to all required telecommunications infrastructure, Israeli operators have coverage in most of this region.

By December 2011, total mobile-cellular subscriptions amounted to 3,07 million, translating into a penetration rate of 97%. A great majority (90%) of total customers are prepaid. All prepaid customers need to sign a contract for KYC purposes, although the contract is much lighter than the postpaid contract.

Jawwal leads the market in the WBG with 80% market share, 2,5 million customers of which 60% reside in the West Bank and 40% in Gaza. Wataniya Mobile is only able to operate in the West Bank where it has a 26% market share, while in Gaza it is waiting for Israeli permission. It currently has 570.000 customers.

⁵⁰ male: 83% female: 59.4% (2005 est.)

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In terms of the regulatory framework of the telecommunications sector, the MTIT is the only entity in charge of regulating the telecommunication sector in the WBG. Although MTIT argues that they would like to allow new operators in the market, they blame Israel for not granting them the required frequencies for increasing competition. Besides, as in the case of Wataniya Mobile, new operators would also face problems regarding the equipment needed. Indeed Israel restricts imports of telecommunications equipment for Palestinian companies.

There is no Independent Telecommunication Regulatory Authority in charge of supervision of the sector, since the draft law for establishing an independent regulator has not been signed yet by the President to the current political situation existing in the WBG. As a result, MTIT is responsible for the approval of new services launched by operators such as mobile financial services. Its approach is however flexible in terms of value added services and they acknowledge PMA's leadership in mobile financial services.

1.2.5.1 Analysis of the Mobile Financial Services potential demand

Recent research shows how Mobile financial services should be offered first to young urban unbanked and then to banked customers less than 35 years old. In the West Bank, according to the CIA World Fact Book⁵¹, the Median age of its approximately 2,6 million people is of 21,3 years being 35,8% (0-14 years) , 60,5% (15-64 years) and 3,7% (over 65 years). The population is as a result mostly young and 78% of them live in urban areas. Very high literacy rates (92,4% of the population are able to read and write)⁵² and openness to technology are enabling factors.

In Gaza, also according to the CIA World FactBook⁵³, the Median age of its approximately 1,7 million people is even younger - 17,7 years, being 43,9% (0-14 years) , 53,5% (15-64 years) and 2.6% (over 65 years). The population is as a result very young and 72% of them live in urban areas. Very high literacy rates (92,4% of the population are able to read and write) and openness to technology are enabling factors.

The combination of high mobile penetration and low access to financial services means that there is an opportunity for mobile financial services in WBG. However, Palestinians need to see the value proposition before using a new service. For example movement from scratch cards to electronic top-up has been moderate reaching 70% for Jawwal but only 15% Wataniya Mobile. Reluctance to electronic means of payment can also be seen in the usage of credit and debit cards. This suggests a need for extensive customer awareness campaigns for the uptake of mobile financial services.

Mobile financial services demanded by Palestinians living in WBG could be: International remittances due to the volume of remittances received; Bill payment, mostly utility payments

⁵¹ <https://www.cia.gov/library/publications/the-world-factbook/geos/we.html>

⁵² male:96,7% ; female: 88%

⁵³ <https://www.cia.gov/library/publications/the-world-factbook/geos/gz.html>

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such as electricity; Government to Person (GtoP) payments such as welfare payments, and microcredit payments for microfinance institutions. Of particular relevance are mobile financial services offered by microfinance institutions in the current context of transformation of the sector. Indeed, as in other countries mobile financial services offered by the microfinance industry could not only become the killer application for the development of mobile financial services but also a critical tool for their survival in terms of improved efficiency and lesser delinquency ratios.

1.2.6 Analysis of the mobile telecommunications sector in Jordan

The Jordanian mobile-cellular market hosts three GSM cellular operators (Zain which is the incumbent, Orange and Umniah). Strong competition exists between the three operators. As of April 2012 Zen had a 37% market share, Orange followed with 36%, and Omnya was the close third one with 29%. As in most of the countries of the region prepaid contracts are the bulk of mobile phone users, representing as of April 2012 90% of all contracts.

Jordan Mobile Telephone Services Company (JMTC/Zain) was founded in September 1995, with an operating license valid for 15 years. Competition commenced in the year 2000 with the entrance of MobileCom (now known as Orange) and was increased in June 2004 with the entrance of XPress (iDEN operator) to the market, and in 2005 with mobile operator Umniah. In October 2010, Xpress (in coordination with the TRC) announced that it had suspended its cellular services due to difficult financial conditions, maintaining only some services – such as direct connect (push-to-talk), XGPS and interconnect receiving calls – in Amman and Aqaba. Xpress stopped all operations and had its license withdrawn in 2011. Orange Mobile launched its 3G services in March 2010. A year later, Zain Jordan launched HSPA+/3G services.

By end 2010, total mobile-cellular subscriptions amounted to 6,62 million, translating into a penetration rate of 107 %. During the first six months of 2011, mobile-cellular subscriptions increased by 10,2%. By end June 2011, total mobile-cellular subscriptions stood at 7.169 million translating into a penetration rate of 116,6%.

Table 9: Jordan mobile- cellular subscriptions (December 2010-June 2011) ⁵⁴

Jordan	December 2010	June 2011
Mobile-cellular subscriptions	6.620	7.169
Added		549
Growth		8,29%
Mobile-cellular penetration rate	107%	116%

The Telecommunications Regulatory Commission (TRC) was established in 1995, and charged with the task of regulating the telecommunication and information technology sectors in

⁵⁴ TRC 2011

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Jordan. The TRC performs its duties independently of the Ministry of Telecommunications and Information Technology (MoICT), but in compliance with the general policy of the government.

The Electronic Transaction Law Number 85 was passed in 2001, and a new bylaw is currently being drafted by the TRC for better defining e-signature and the licensing of certification authorities. Also, TRC is currently working on the telecommunications government policy strategy to be presented throughout 2012. This strategic document will include according to the TRC's officials met, supporting the development of mobile payments. TRC wants to include in the bylaw mentioned before, the strategic priorities presented in the government policy strategic document, such as the support of mobile payments and the need for coordination with CBJ.

TRC is well aware of CBJ's Circular regarding mobile payments. As a result, and in order to make sure the required documentation for know your customer purposes is received by mobile operators for all new prepaid account holders, TRC passed a circular in 2011 that determines that the required documentation must be in their possession 9 days after signing the contract. Since the mobile wallet account is tied to the prepaid account, the circular implies that the mobile wallet account will not be granted until the required documentation is received by the mobile operator. Besides, the circular also determines that only one mobile wallet can be offered per person, even if as it usually happens most customers have several prepaid accounts.

1.2.6.1 Analysis of the Mobile Financial Services potential demand

Recent research shows how Mobile financial services should be offered first to young urban unbanked and then to banked customers less than 35 years old. In Jordan, according to the CIA World Fact Book⁵⁵, the Median age of its approximately 6,5 million people is of 22,1 years being 35,3 % (0-14 years), 59,9% (15-64 years) and 4,8% (over 65 years). The population is as a result mostly young and 79% of them live in urban areas. Very high literacy rates (89,9% of the population are able to read and write)⁵⁶ and openness to technology are enabling factors.

The combination of high mobile penetration and low access to financial services means that there is an opportunity for mobile financial services in Jordan as in most of other countries of the region. However, Jordanians need to see the value proposition before using a new service. For example movement from scratch cards to electronic top-up has been moderate reaching only 30% of total customers according Orange. This suggests a need for extensive customer awareness campaigns for the uptake of mobile financial services.

Mobile financial services demanded by Jordanians could be: International remittances (12,32% of GDP in 2011); Bill payment due to the lack of national switch for retail payments and low bank access, mostly utility payments such as electricity; and microcredit payments for

⁵⁵ <https://www.cia.gov/library/publications/the-world-factbook/geos/jo.html>

⁵⁶ male:95,1% ; female: 84,7%

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microfinance institutions. Of particular relevance are mobile financial services offered by microfinance institutions in the current context of transformation of the sector promoted by the Ministry of Planning and International Cooperation (MPIC). Indeed, as in other countries mobile financial services offered by the microfinance industry could not only become the killer application for the development of mobile financial services but also a critical tool for their survival in terms of improved efficiency and lesser delinquency ratios.

1.2.7 Analysis of the mobile telecommunications sector in Lebanon

Lebanon's mobile-cellular market is served by a duopoly controlled by the government. Lebanon's two cellular networks are operated through management contracts between the government and regional operators Orascom Telecom and Zain Group; Orascom Telecom operates Alfa, while Zain Group operates MTC Touch. As of June 2012, Alfa had a 48% market share, while MTC Touch had a 52%.

Competition between the networks is managed by the State controlling the release of mobile numbers to the operators, so that each operator is within the 45%/55% market share. Competition control is also achieved by managing all expenses including marketing and product development, which are decided by the Ministry of Telecommunications.

In terms of 3G services, MTC Touch launched its 3G services in the country in November 2011, by upgrading 420 out of 850 sites. Areas covered include Beirut, Saida, Zahle and several parts of the Greater Beirut region. MTC Touch plans to further roll out its 3G services to cover the entire country by the end of 2012. Meanwhile, the second mobile operator, Alfa, launched its 3G services in October 2011.

As of December 2011, mobile penetration reached 81% according to the interviews held with both operators. Also, 80% of all accounts were prepaid. Although high, this ratio is lower than in neighboring countries. The main reason for such a lower ratio could be according to industry sources the definition of an active account. Indeed, in Lebanon a phone needs to have been used at least once for the last two months in order to be considered active, while in other countries is 1 year. As a result in Lebanon customers do not have several phones, but only one account. On the other side however, the percentages of smart phones (38% approximately) are the highest in the region.

In terms of mobile payments, mobile operators think that banks should and will lead. Mobile telecommunications is a very controlled ecosystem, where the mobile operator's role is limited to top up, postpaid payment and transfer of credit. Scratch cards represent 80 to 90% of mobile prepaid payments. Over the air (OTA) payment is still not available, although an RFP has been launched in order to allow both operators to offer this payment mechanism.

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Table 10: Lebanon mobile- cellular subscriptions (December 2010- December 2011) ⁵⁷

Lebanon	December 2010	December 2011
Mobile-cellular subscriptions (000s)	2.875	3.437
Added		562
Growth		19,55%
Mobile-cellular penetration rate	68%	81%

The Telecommunications law 431 issued in 2002 aimed at liberalizing the telecommunications market establishing an independent regulator, The Telecommunications Regulatory Authority (TRA). The TRA however was not fully operational until 2007. The government was also supposed to create a fixed line state owned company and privatize the other services. However, none of this liberalization process has taken place up to date. As a result, OGERO (Organisme de Gestion et d'Exploitation de l'ex-société Radio-Orient) is the only fixed operator in Lebanon resulting in high prices and poor quality of service. Due to the high prices of international calling services, VoIP services are in many cases provided illegally in the country. Moreover, due to the outdated fixed network, there are no intelligent network services, such as fixed SMS, toll free calling and collect calls. The lack of modern infrastructure could be however resolved by reinvesting part of the 1,5 Billion USD cash flow the sector earns yearly.

The future of the ICT sector in Lebanon is currently being discussed. The Ministry of Telecommunications and TRA had very different views up to now, but they are beginning to work together which might help the sector evolve. In the past the Ministry wanted to take some responsibilities from the TRA based on national security. Besides, since the revenues of the ICT sector in Lebanon are 80% public sector controlled, the role of an independent regulator was much less relevant. Also the future of the E-transaction law, drafted 8 years ago is at stake. Although it has been updated, the new Information Technology Law presented to the Lebanese Parliament in June 2012, is not likely to be approved anytime soon according to the TRA.

In the current political and economic context, the privatization of both mobile and fixed operators is unlikely. Mobile telephony alone is considered to bring more revenue (1,5 Billion USD) to the Lebanese State than personal income tax. Besides, bringing in new private investors requires ensuring them that the processes of nationalization they suffered in the past will not be repeated. Unfortunately, the current regulatory and institutional framework does not provide such a level of trust.

1.2.7.1 Analysis of the Mobile Financial Services potential demand

Recent research shows how Mobile financial services should be offered first to young urban unbanked and then to banked customers less than 35 years old. In Lebanon, according to the

⁵⁷ ITU/TRC 2011

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CIA World Fact Book⁵⁸, the Median age of its approximately 4,1 million people is of 29,8 years being 23 % (0-14 years), 68% (15-64 years) and 9% (over 65 years). The population is as a result young and urban, 87% of them live in urban areas. Very high literacy rates (87,4% of the population are able to read and write)⁵⁹ and openness to technology (highest percentage of smart phones in the region) are enabling factors.

The combination of high mobile penetration and low access to financial services means that there is an opportunity for mobile financial services in Lebanon as in most of other countries of the region. However, the lack of interest of mobile operators, due to the existing mobile telecommunications competitive structure in the country, might jeopardize the success of mobile financial services in Lebanon. For example movement from scratch cards to electronic top-up has been very slow reaching only 10% of total customers. This suggests a need for additional investment in infrastructures and customer awareness campaigns for the uptake of mobile financial services.

Killer applications for mobile financial services demanded in Lebanon could be first international remittances due not only to the importance they have for the Lebanese economy (17,92 % of GDP in 2011 being the 8th top 10 recipient of migrant remittances as a share of GDP in 2010)⁶⁰, but also because contrary to other countries where remittances are very important because prices are still very high (the highest among MPCs studied).

Remote and bill payments can also be demanded even if BdL is aiming at developing a national switch for retail payments which will make bank retail payments more efficient and as result nonbank service providers less attractive. Indeed, since Bank led are the business models likely to emerge, mobile financial services will add an additional and less costly channel for banked customers to pay their bills (additive business model as opposed to transformational business models).

Of particular relevance are mobile financial services offered by microfinance institutions in the current context of needed strengthening of the sector's technical and technological capacities. Indeed, as in other countries mobile financial services offered by the microfinance industry could not only become the killer application for the development of mobile financial services but also a critical tool for their survival in terms of improved efficiency and lesser delinquency ratios.

Serving the microcredit industry will however only be successful when they are allowed to offer the disbursement of the microcredit, and not only microcredit payments through the electronic wallet. Similar experiences in other countries probe that the receiver will keep approximately 15 to 20% of the microcredit balance in the e-wallet if they are offered useful

⁵⁸ <https://www.cia.gov/library/publications/the-world-factbook/geos/le.html>

⁵⁹ male:93,1% ; female: 82,2%

⁶⁰ Remittance flows in 2011 – an update. World Bank.

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payment services and trust in the system. The most important obstacle to widespread adoption of mobile financial services for microfinance is however the lack of MFIs understanding of mobile payments. As a result, Microcredit Organizations in Lebanon request technical assistance for better understanding how to use and offer mobile financial services to their customers.

1.2.8 Analysis of the mobile telecommunications sector in Israel

Israel's mobile communications market is served by five mobile network operators in a highly saturated market. Competition has led the mobile network operators to engage in a round of merger and acquisition activity with fixed line players to offer integrated services. Competition further intensified following the granting of Israel's first MVNO license in June 2010 followed by two 3G licenses in 2011. The difficulties of growth through new customer acquisition and voice tariff competition have led the operators to focus on mobile data, regularly launching new value-added products and extending their offerings to provide bundled services including fixed-line. 3G subscriber numbers are substantial. Success in selling mobile content and applications such as mobile financial services is perceived by operators as essential to combat falling ARPU.

There are currently 5 infrastructure based operators in Israel, with 3 older providers (Cellcom, Partner which does business under the "Orange" brand, and Pelephone), and 2 new providers that joined in 2012 (HOT communications, which is an offshoot of an older iDen operator called MIRS, and Golan Telecom, which is a subsidiary of the French Iliad group). In addition, many MVNO licenses have been granted and 3 are fully operational: Rami Levy, which is a discount supermarket chain, Alon Cellular, which is owned by a retail group focusing on petrol stations, and Home Cellular, which is owned by a DIY hardware and housewares chain.

The three older providers Cellcom, Orange and Pelephone have a 30% market share each, while the remaining market is served by the other two operators and the MVNOs. Israel mobile telecommunications market is saturated, with a 130% penetration rate (10 Million SIM cards out of a population of 7,7 million). Contrary to neighboring MPCs Postpaid contracts represent 70% of total customers. There is no independent telecom regulator, being Israel's Communications Ministry responsible of licensing and regulating this market.

Golan and HOT operate with a mix of own infrastructure and national roaming; the existing operators were required to offer them national roaming services while they build out their networks. Golan and HOT must hit certain coverage targets over time and the national roaming provision sunsets after 7 years, with a decreasing roaming allowance every year, so that at the end of the period they will have nationwide infrastructure.

Golan and HOT are also operating under a provision that allows them to receive a refund on the money they bid for the spectrum, tied to market share in the residential (non-business)

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sector. Thus, for every 1% of such market share each company gets, they receive back 1/7 of their spectrum bid (which about 705 million NIS (143 million EUR) was for HOT and 305 (61,8 million EUR) for Golan). This is to encourage them to be aggressive and competitive in gaining market share, specifically in the residential sector where the consumers have less countervailing power.

The regulatory framework is clearly moving to favor the customer with more competition and as result lower prices; ensuring number portability (approved in 2010) and reducing postpaid contract lengths. Recently, by an act of parliament, minimum contract lengths were barred and the handset was separated from the services. Thus, operators may offer handsets and service plans, and offer a rebate or refund on service so long as the customer remains with them, but if the customer should leave they may not charge a penalty. In addition, the Minister has recently significantly eased the regulation on the importation of handsets, so it is expected that the market for handsets not provided by operators is to become more significant.

Prepaid services (which are usually the best option for low income consumers) suffered from a low standing in Israel and were only used by migrant workers, those who were denied credit, etc., and prices were very high compared to post-paid services. This has changed, with many attractive prepaid plans being offered, mostly by MVNO's. In addition, Golan and HOT telecom offer "light" plans with a small basket of services (60 minutes of calls, 60 SMS and 10 MB of data) for about 10 NIS (2 EUR) per month. Given the high penetration rate of cellular services in Israel and the fact that they are ubiquitous, we do not believe there are any significant challenges to any citizen, including low-income citizens, having mobile phone service.

1.2.8.1 Analysis of the Mobile Financial Services potential demand

Contrary to other neighboring countries, in Israel both mobile penetration and access to financial services are very high. As a result we do not believe that there is a relevant opportunity for transformational mobile financial services. However, the saturation in the mobile telecommunications market, is forcing mobile operators to develop mobile content and applications such as mobile financial services in order to combat falling ARPU. Mobile financial services offered to banked customers are usually referred as additive⁶¹.

Recent research shows how additive Mobile financial services should be offered first to young urban banked customers less than 35 years old. In Israel, according to the CIA World Fact Book, the Median age of its approximately 7,5 million people is of 29,4 years being 27,6 % (0-14 years), 62,2% (15-64 years) and 10,1% (over 65 years). The population is as a result young and urban, 92% of them live in urban areas. Very high literacy rates (97,1% of the population are able to read and write) and openness to technology are enabling factors.

⁶¹ Porteous, David, 2006. Report produced for the DFID "The enabling environment for mobile banking in Africa".

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1.3 Review of the regulatory framework

The regulatory framework in the Mediterranean Partner Countries studied promotes the development of bank led business models. It can be considered enabling in Egypt and Jordan and evolving towards enabling in Morocco; Restrictive in Lebanon and Tunisia; In Israel it is also enabling, although there is neither demand nor interest for launching transformational business models. In the West Bank/Gaza and Algeria it does not exist.

Table 11: Review of the regulatory framework for mobile financial services in Mediterranean Partner Countries

Regulations	E-money	Agent	Payment Service Providers	Mobile Financial Services	Regulatory Framework
Morocco	Yes	Yes	Yes	Yes	Evolving
Algeria	No	No	No	No	Does not exist
Tunisia	No	No	Yes	Yes	Restrictive
Egypt	Yes	Yes	Yes	Yes	Enabling
West Bank and Gaza	No	No	No	No	Does not exist
Jordan	No	No	No	Yes	Enabling
Lebanon	No	No	Yes	No	Restrictive
Israel	No	Yes	Yes	No	Enabling

Regulation is one of the main challenges for the deployment of mobile financial services, in particular e-money and agent regulation. All financial regulators of the region are looking into these issues, in order to better understand how mobile financial services can be used to increase access to financial services while maintaining the stability of the financial system.

Definitions of electronic money vary by jurisdiction, but a common definition is —monetary value stored on an electronic device which is issued on receipt of funds and accepted as a means of payment by parties other than the issuer. Most banks store money in this way (on their computers) and they are regulated as e-money issuers or simply as bank institutions. A key question is whether non-bank organizations are permitted to issue e-money as well, and if so, under what conditions and subject to what prudential and non-prudential regulation.

The use of retail agents introduces new or enhanced risks policy makers and regulators should consider seriously. For example, agents present a variety of operational risks to the provider (particularly reputational risk, given that the agent is the public face of the provider) and to the consumer (particularly in terms of agent liability). Moreover, the use of agents adds a special dimension to the challenge of satisfying AML/CFT norms and to consumer protection — two other topics critical to mobile financial services.

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1.3.1 Review of the regulatory framework in Morocco

The Central Bank of Morocco (BAM) has clear authority over payment systems and related mechanisms such as e-money. The national Telecommunications Regulator (ANRT) recognizes such authority and expressed no interest in getting involved in regulating mobile financial services, although preliminary contacts and discussions have been held with BAM. Within BAM, the Banking Supervision Department claims authority over drafting and guiding draft legislation though it coordinates with the Monetary Operations Department (which houses the Payments Division).

The Banking Supervision Department has drafted amendments to Loi N°34-03 Relative aux Etablissements de Credit et Organisme Assimiles. These amendments define e-money and will create a category of Payment Service Providers (PSP) open to non-banks expressly engaged in e-money issuance.

Currently the banking law determines that providers of payment services can only be credit institutions. However the changes in the banking law that are currently being prepared will allow providers of payment services to issue electronic money payments. These modifications, currently being drafted, should be passed by the end of the year according to the Central Bank and will increase substantially the competition in the payments market currently controlled by the banks. Draft amendments expressly exclude funds received in exchange for electronic value from the definition of deposits. When issued, amendments will allow nonbanks licensed as payment service providers to collect funds from the public in exchange for electronic value.

Draft Amendments will require PSPs to demonstrate (i) adequate financial, human and technical resources and (ii) adequate experience and honesty of management and funders. BAM is considering whether to require that PSPs only engage in payment services – thereby necessitating in many cases the creation of a dedicated subsidiary.

The draft Amendments contains no provisions on PSP protection of customer funds in e-money schemes. However, BAM is still considering provisions to (i) safeguard customer funds (via liquidity requirements such as placing funds in bank account or in government bonds and (ii) isolated such funds from issuer misuse and creditors such as through a trust account (compte fiduciaire). The latter option, a pooled account (compte pivot) benefits from deposit insurance but deposits therein typically exceed deposit insurance caps. BAM would like e-money accounts to benefit from deposit insurance and recognizes a mechanism is needed to allow individual account holders to each benefit from the full deposit guarantees even if deposits are pooled.

In terms of agents, the banking law enables banks to outsource financial services through partnerships with commercial institutions. These partners operate as an IOB (Intermediare en

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Operation des Banques), and each partnership needs to be approved by the Supervision Department of the Central Bank before becoming operational. IOBs may only be legal entities established as SAs or SARLs, limiting the pool of eligible IOBs to larger retail establishments.

Draft amendments do not expressly allow payment service providers to use IOBs, although BAM is considering creating a category of PSP agents. It is unclear whether BAM will allow entities other than SAs or SARLs to be such PSP agents if created. A failure to allow PSPs to use agents, and to use a broader definition of agents, will not alleviate the current obstacles to agent roll-out.

The regulatory framework of the microfinance industry in Morocco is currently evolving, since the 1999 microcredit law is being amended in order to allow Microcredit Associations (AMCs) currently operating under the NGO status (association de microcredit) to transform into commercial financial companies. This amendment is still pending parliamentary approval, delayed due to the changes in government after the late general elections. Whenever approved, the amendment will not allow Microcredit Institutions to collect deposits, although in the context of the changes in the banking law regarding e-money issuance they could become incoming players in the mobile financial services market in Morocco.

In terms of credit infrastructure, regulations (2/G, 27/G, and 28/G) issued by the Central Bank of Morocco (BAM) in 2007 have pioneered an effective information sharing model unheard of in MENA before. Basically, in line with the discretionary powers given to BAM by the revised Banking Law (art 120 2007), BAM has “delegated” to the private sector (Private Credit Bureau-PCB) all credit information services that generally are performed by the Public Central Registry (PCR), and has closed the PCR to further inquiries from the lenders. In the Moroccan approach, the Central Bank plays a key role, not limiting itself to licensing and supervising PCBs, but taking a pro-active and intermediary function between the PCBs and the lending industry users-data providers. The regulation mandates lenders (MFIs, Banks, and NBFIs) to periodically provide BAM with all credit information, which is then transmitted, by BAM to all PCBs operating in the market (Mandatory Sharing Model).

Money Transfer Operators (Sociétés de transfert de fonds) are special type of regulated financial institutions whose licensing requirements and supervision is responsibility of BAM under the current regulatory framework (Arrêté du Ministre des Finances et de la Privatisation n° 1510.07 du 26 juillet 2007 ; Circulaire du Gouverneur de Bank Al-Maghrib 37/G/2007 du 9 juillet 2007 relative au capital minimum des intermédiaires en matière de transfert de fonds ; Lettre Circulaire 05/DSB/2007 du 18 septembre 2007).

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1.3.2 Review of the regulatory framework in Algeria

The regulatory framework for banking (savings, loans, means of payment) is set out in Ordonnance 10-04 of August 26 2010, which deals with banking regulations. They modify and complement Ordonnance 03-11 of 26 August 2003. This regulatory framework defines two types of credit institutions: banks and finance companies. Articles 70 and 71 of Ordonnance 03-11 state that banks and financial companies are able to manage means of payments. Article 56 states that the Bank of Algeria is responsible for organizing and supervising the proper functioning and security of payment systems.

The Council of Money and Credit (CMC), composed by members of Bank of Algeria (BA) and external members representing the banking industry and the Ministry of Finance, is responsible for authorizing new institutions to provide financial services as defined in article 66 of Ordonnance 03-11. If an existing bank or financial company wants to offer a new financial service, it needs to be first approved by BA (by delegation of the CMC).

Since 2010 consumer credit is not allowed. According to BA, prohibiting consumer credit was partially due to the fact that the credit bureau infrastructure currently being developed was not yet in place, and as a result the inability of banks to control whether or not customers were over indebted posed serious risks to the quality of consumer loans. One direct consequence of the ban on consumer lending was the weakening of financial companies competitive position since consumer lending was in many cases their most relevant service.

Law n° 07-01 of 27 February 2007 regulates saving and credit cooperatives. However, at the time of writing this report there are no active saving and credit cooperatives in Algeria. The only cooperative active in financial services is CNMA, the result of a merger of three cooperative credit banks in 1972, the oldest of which was founded in 1907. The CNMA group is the largest provider of farm insurance. It recently dropped its banking license granted by the CMC to CNMA Banque in 2006. CNMA has refocused its credit activities through its financial company subsidiary offering farm equipment leasing, including farm machinery, pumps, and agricultural products.

Algérie Poste (AP) is the result of the restructuring of the Ministry of Postal and Telecommunications services, following the enactment of Act 2000-03 of August 5, 2000. It was set up by Executive Order 2002-43 of January 14, 2002 in the form of a Government Corporation (EPIC). Incorporation means that the new government corporation AP is organically and functionally separated from the Ministry of Postal and Telecommunications Services, which is the supervisory authority. It also means that AP is supposed to be fully self-supporting financially. Act 2000-03 does not give AP authorization to grant loans. However, the corporation may make its branch network available to banks or finance companies to provide customer services related to loans through postal checking accounts.

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Article 12 of the Postal Law (2000-03) of 5 August 2000 states that AP can issue and manage payment systems. Besides since CCP accounts managed by AP are Treasury accounts, and the Treasury of the State of Algeria according to articles 76,77, and 78 can undertake bank operations as defined in article 66 of Ordonnance 03-11, AP can undertake banking operations on behalf of the Treasury.

Anti-Money Laundering Standards (AML) and Counter Financing Terrorism Regulations(CFT) are set in Ordonnance 12-02 of 13 February 2012 modifying and complementing law 05-01 of February 6 2005. Algeria adopted its first anti-money laundering regulations in 2002. Article 19 of the law 05-01 states that in addition to banks, AML/CFT regulations are applicable to finance companies, Algérie Poste, financial cooperatives, bureaux de change, and “any natural or legal person that, as a part of their regular business, advises and/or carries out transactions involving deposits, exchanges, investments, conversions, or any other capital movements, especially self-employed agents in regulated professions”.

Anti-money laundering standards could be a potential obstacle to the development of mobile financial services if they are applied too strictly to small value transactions. In particular, they will prevent the development of Cash In/ Cash Out agent networks using mobile telecom operator’s points of sale. Provisions such as the standards requiring accurate identification of customers, record retention, as well as the standards regarding the scope of suspicious transaction reports could mean substantial extra costs for institutions providing mobile financial services.

Interest Rate Caps have been reinstated in Ordonnance 10-04 of August 26 2010. The method for calculating the “Excessive interest rate” for loans has not been disclosed yet, but according to BA it will be announced shortly. Before Ordonnance 10-04 credit institutions were only required to state clearly the commissions charged in addition to the nominal rate. Interest rates had been gradually deregulated starting with Instruction 07-95 in 1995. Interest rate regulations were abolished in 2001, leaving credit institutions free to set their terms according to their own business policy.

Regulations regarding currency exchange (Bureau de change) relate to instruction 08-96 of December 18 1996. No active independent Bureau de change operates in Algeria, since currency exchange is undertaken in the informal market. The informal market is passively tolerated by Algerian authorities. Banks can open accounts in foreign currency, although AP cannot.

Only Banks authorized to undertake foreign exchange transactions and AP can manage international remittances. Western Union and money Gram are present in Algeria through partnerships with banks and AP. Banks have however a competitive advantage in international transfers, since they offer foreign currency accounts. As a result remittances can be received in foreign currency and then exchanged in the informal exchange market, at a better rate than the official one used by AP.

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1.3.3 Review of the regulatory framework in Tunisia

Only banks and the Post Office can collect deposits in Tunisia. In terms of Mobile Money, and as a response to the development of mobile money in Africa, Tunisia's Central Bank (BCT) issued a circular on mobile payments services in January 2011. This circular aimed at confirming that only banks could issue means of payments, whether prepaid or postpaid. As a result, mobile phones can be used for payments but they can only be loaded through a bank account or a pre-paid card issued by a bank. Bank led business models are therefore promoted for the deployment of mobile financial services.

As mentioned above, BCT is responsible for monitoring and controlling operations of financial institutions. Therefore, BCT must be notified of all payment service features, and of any changes to the service. Also, BCT aims at promoting the use of bank issued pre-paid cards for the unbanked sector to protect SMT's card-based settlement role.

Agent regulation does not exist in Tunisia, which severely limits the ability of mobile banking services to expand. Only bank branches and Post Office branches can perform cash in/cash out functions, although BCT is open to start discussions about agents.

The circular states that banks can hire a payment service provider to develop the solution (i.e. Via Mobile), but the ultimate responsibility lies with the bank. Although the circular also states that systems are to be interoperable, the emerging solutions are not.

The circular specifies Know your Customer/ Anti Money Laundering regulations by requiring both the ID (or photocopy) and the telephone number when registering for the service. This registration process can only be performed at a bank branch or Post Office. Customer protection is ensured by deposit insurance and cards encryption systems.

The regulatory framework of the microfinance industry in Tunisia is currently evolving. A new, microfinance law was passed in October 2010, and its implantation decrees are currently being developed. The new regulatory framework will allow two types of microfinance providers: For profit organizations, and non for profit associations. The first ones, with higher requirements in terms of equity (3 Million dinars- 1,5 Million EUR) will also be able to grant higher amounts credits. Associations whose equity requirements are lower (200.000 dinars- 100.000 EUR) will be allowed to offer lower amounts of credits. In any case, neither commercial organizations nor associations will be allowed to collect deposits.

The current regulatory framework imposes that Money Transfer Activities can only be undertaken by Banks and La Poste. The latter with its 1036 branches, is the leader with an overwhelming 85 % market share in the distribution of international remittances (either with its own services such as "Mandat International" or through partnerships with MTOs (Western Union)).

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1.3.4 Review of the regulatory framework in Egypt

Central Bank of Egypt (CBE) and the national Telecommunications Regulator (NTRA) are both involved in licensing mobile financial services. CBE licenses banks, and NTRA MNOs. This has created some confusion in the market, since banks can be licensed by one institution and then operators not licensed by the other one as it currently happens. In Feb 2010, CBE released regulations allowing banks to deliver mobile financial services subject to licensing by CBE. Although NTRA approved the service in general terms, some board members objected based on agents security, AML, and terrorism concerns, which has stopped emerging initiatives ever since. The revolution in early 2011 and the ulterior process of transition with the ongoing Presidential elections (May /June 2012) have brought progress to a halt.

The Central Bank of Egypt (CBE) supervises all banking activities, including all new financial activities and services such as mobile financial services require CBE approval. CBE currently provides e-money license to banks; supervises the national payments system and supports the development of central switching solution for retail payments through a company in which the Egyptian State has a majority share (54%).

The National Telecom Regulatory Authority (NTRA) is responsible of ensuring telecom services reach to all areas of the country. It also monitors technical and economic efficiency for all telecommunications services and gives approval before an MNO can launch new services. NTRA Board includes leading members of military units, since one of its objectives is to protect the telecom sector which is considered to be of national security and state interests. As a result, it is concerned about cash-in/out role of agents due to the deterioration of security conditions. It is therefore involved also in agent regulation, determining which entities can function as agents.

CBE's regulations on mobile payments and transfers (2010) give the right to issue electronic money units only to banks. As a result bank centric business models are encouraged, since nonbanks must have a bank partner. Each mobile phone number can only be connected to one mobile money account. Regulations only allow domestic payments and transfers at this stage, although CBE says that this restriction is for the pilot phase only. If there are no problems they are open to allowing other services.

The regulations on mobile payments and transfers (2010) impose limits on the maximum daily withdrawal limit (3.000 EGP- approximately 380 EUR); maximum account balance (5.000 EGP approximately 631 EUR) and the amount of e-money that the bank can issue (limiting it to no more than 5% of the bank's issued capital or 6,2 million EUR, whichever is less). Capital limitations for issuing banks are likely to become restrictive as volumes grow. This is why, the regulations state that "The CBE Governor may modify this threshold on a case by case basis".

CBE wants interoperability between mobile money solutions. Interoperability will be based on specifications that CBE will develop. The Egyptian Banking Company (EBC), the ATM switch

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presented below, should provide switching, clearing, and settlement services between e-money accounts. EBC planned to start by mid-2012, although the CBE has not licensed its service yet as presented in section 6 of this report.

CBE will supervise the bank issuing mobile financial services after approving the provision of the service, since the bank is the responsible of the mobile services offering. The bank's main responsibilities are: liquidity of the system; KYC and AML requirements, risk management, accounts settling, customer protection and data security. The MNO's role is supposed to be limited to provide the technology and telecommunications infrastructures. However in the two licensed emerging initiatives we have reviewed in section 6, the operator's role goes beyond providing the technology and telecommunications infrastructures.

In terms of agents, current regulation allows banks to choose the entities they want to use as agents. Agents are considered service providers to the bank, and as a result they need to be authorized by the CBE to be part of the mobile financial service offering. NTRA however, would like only MNO-owned shops and bank branches to function as agents. Agents can perform KYC, register new users, and provide cash-in and cash-out services. Account opening requires national ID, birth date, and the mobile number. The information provided by the customer is confirmed with the national Identity Card (that all Egyptians are required to have) and checked with the national AML database.

CBE says that it is open to enabling retail chains to serve as agents, but it does not believe small shops should be involved. There seems to be a desire among regulators and banks to "move one step at a time". Some of the banks are also being very cautious about the entities they are willing to use as agents, in order to properly manage the risks that agent use entails.

1.3.5 Review of the regulatory framework in the West bank and Gaza

WBG lacks the legal and regulatory framework required for mobile financial services partially due to the fact that the Parliament has not been able to convene since 2005. Some laws have been approved by Presidential decree since, but the President has recently decided not to approve any more until the Parliament meets again. As a result draft laws such as the Electronic Transactions Law, the Independent Telecommunications Regulatory Agency Law and the National Payment System Law have not been approved yet. Besides, the Parliament has to review and approve all draft laws dating as far back as 2005 when it reconvenes. Thus it is not likely that these three draft laws that affect mobile financial services are going to be approved anytime soon. Of particular relevance is the Draft Payments Law that reinforces the role of the Palestinian Monetary Authority (PMA) as the main regulator and supervisor of Payment Systems in WBG in order to ensure the stability of the system.

The Draft Payments Law is in harmony with the Electronic Transactions Law, where basic definitions related to e- transaction, e-signature, records...etc are identical to ensure coherence and to avoid any future contradiction. In addition the Payments Law defines the

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payment system, the electronic transfer of funds, and payment services but does not determine dispute resolution mechanisms. On the other side, Chapter five of the Electronic Transactions Law states that electronic transfers are acceptable as a mean of payment and that they may be conducted by an electronic cheque, e- payment cards, and any other tool approved by the PMA.

The draft National Payments Law stipulates that PMA shall give written approval before any payment service provider can execute such activity. This would both apply to entities already having a license as a bank or financial institution, or other commercial operators or new entities authorized according to this Law. However, no specific requirements to banks or companies who wish to engage in such service are drafted yet.

Finally, the draft Payment Law does not include e-money and agent regulation, although it leaves the door open by allowing that several matters will be further elaborated by PMA regulations. However, no secondary regulation or other measures are drafted yet, despite the importance of several instructions that are mentioned therein and would be necessary to compliment the law and enable its proper enforcement for mobile financial services.

The Palestinian Monetary Authority (PMA) Law of 1997, establishes that the PMA is the institution responsible for licensing and supervising banks, Microfinance Institutions and Money Exchanges. It also gives the PMA the ability to establish and monitor the credit bureau, and the payment system. A draft Central Bank Law was initially drafted in 2007 to replace this law but it has not been brought into effect yet. It is now going under substantial developments and changes in the preparation and discussion within the PMA.

The existing PMA law does not directly address issues related to electronic banking and payment and settlement outside the PMA in clear or detailed provisions. Besides, the PMA law does not address the nature of financial institutions that it may license or the nature of its activities, nor the scope of oversight or supervision.

Banking Law Number 9 of 2010, approved by Presidential decree amending the previous 2002 banking law reinforces the ability of the PMA to create and regulate all payments systems and to create and regulate new systems if needed. The Banking law also defines credit institutions as banks and microfinance institutions only. However, it leaves the option of amending the law to include also financial services companies as credit institutions.

The Banking Law does not include however any specific regulations on electronic banking nor payment instruments/tools. As a result there is no defined criterion that enables banks or subsidiary companies to issue any payment instruments. Also the Banking Law provides that PMA will issue regulations including the conditions that the banks should fulfill when they are to invest in a joint venture or establish a subsidiary company, such as for example a mobile financial services subsidiary. These regulations however, have not been issued yet. It only stipulates that the maximum percentage for banks' shareholding in other legal entity is 10%,

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unless there is prior approval for holding a larger share. Investments in shares that are not tradable in the stock markets also require a prior written approval.

Outsourcing is permitted pending prior approval and fulfillment of defined requirements and the extended responsibility of the boards of directors of the banks of the activities carried out by third party Regulation No5/2010, Section 5/3 provide details on outsourcing operations. Outsourcing regulations require the bank to obtain prior approval from PMA. The outsourcing is not a transfer of the bank's responsibilities in relation with the PMA to its clients to any other party and as a result the bank remains liable to all banks' operations and its clearance from any risks.

Also it is important to note that the banking law argues that any transactions or activities of any kind that will result to the bank individually or collectively through agreements with other entities a dominant position in the monetary or financial or foreign currency markets in Palestine is prohibited. Thus; if a bank was to partner with the leading mobile telecom operator leaving the rest out of the agreement, the service might be halted.

Money exchange regulation is defined by instruction number 3 of January 2011. This instruction gives the ability to Money Exchanges to operate international remittances if equity is equal or higher than 1 Million USD. MFIs are under the supervision of the PMA since the 2010 Banking Law. Microfinance regulation was passed in 2011, by presidential decree 132 of 2011.

Anti-Money Laundering Decree Law No. 9 of 2007, and Anti-Money Laundry Instructions for Banks Operating in Palestine No (1/2009) follow The Financial Action Task Force on Money Laundering (FATF) 40 recommendations for know your customer purposes. The Anti-Money Laundering (AML) national committee includes responsible of the Financial Intelligence Unit of each bank, the AML unit of the PMA and is headed by the PMA Governor. The AML unit of the PMA is legally separated from the PMA, and has issued distinct AML instructions for each type of institutions under the supervision of the PMA: Banks, MFIs and Currency Exchanges. AML instructions do not include however the 9 Special Recommendations (SR) on Terrorism Financing (TF).

1.3.6 Review of the regulatory framework in Jordan

The Banking Law Number 28 of the year 2000 (amended in 2003), gives the Central Bank of Jordan (CBJ) the ability to license and monitor all institutions undertaking banking activities. Article 3 of the Banking Law stipulates that it applies to anyone who engages in banking activities. Article 2 defines banking activities as —accepting deposits from the public and using these deposits in full or in part to grant credit, or for any other activities designated by the Central Bank as banking activities such as granting credits for financial companies. As of now

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banks are the only types of deposit and credit institutions operating in Jordan under the supervision of CBJ.

Jordan has no National Payments Law, although the IMF has been advising CBJ that they should prepare such a law. Indeed the regulatory and monitoring power of the CBJ regarding the payments system and specifically the retail payments system is unclear. Article 37 of the Central Bank Law states that “The central Bank shall provide Licensed Banks with services for interbank clearings”. However the supervisory role of the central bank is not clear in terms of retail payments. Only article 92 of the Banking Law refers to this, and article 29 of the Electronic Transaction Law No. 85 gives the CBJ authority over electronic funds transfer: “The CBJ shall issue the instructions for regulating the electronic transfer of funds, including the approval of the electronic means of payment, verification of the documents pertaining to an illegal transfer, correction of errors, disclosure of information and any other matters relevant to electronic banking activities . . .”. Furthermore, in Jordan the provision and the collection of payments by nonbanks does not require licensing by the CBJ.

According to the CGAP⁶², deposits are defined in the banking law of Jordan as: —funds turned over by any medium of payment by one person to another person who agrees to return said funds upon demand or in accordance with agreed-upon terms. The depository thus acquires ownership of the funds and the right to dispose of them, with the obligation to return to the depositor the equivalent amount in the same currency as that of the deposit. Consequently, by the terms of the Banking Law the issuance of e-money is not considered a banking activity subject to CBJ oversight as long as e-money issuers do not engage in the granting of credit or other intermediation of deposited funds. The issuance of e-money by a nonbank also does not qualify as a deposit under the Banking Law as long as the MNO does not acquire ownership of the entrusted funds. This can be easily monitored by putting deposited funds in an account segregated from monies received from the sale of prepaid airtime. Such segregated account would be considered the property of the depositor and held immune from issuer creditors in the event of bankruptcy. The funds therein would not be intermediated.

Following this logic, CBJ issued circular number 10/2/6492 dated 9/5/2010 regarding mobile financial services, stating that Banks could partner with Mobile Networks Operators (MNOs) in order to offer mobile payments using an electronic wallet if they complied with the following requirements.

1. The bank should make sure that the MNO is allowed to provide such a service by the TRC and the Ministry of Industry and Trade
2. The bank’s role is limited to opening a "Settlement Account” in the name of the MNO and making sure that all money received by the MNO in the electronic wallet is deposited in the account mentioned above.

⁶² Jordan Diagnostic Report, CGAP, 2009.

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3. The bank should make sure that the balance of the "Settlement Account" is always equal or exceeds electronic money issued.
4. The maximum amount the customer (defined in the circular as the MNO customer) can transfer should not exceed 2500 Jordanian Dinars per year (2.892 EUR).

CBJ considers that the regulatory framework established by this Circular does not allow CBJ to monitor the amount of electronic money managed by the two mobile operators that have launched mobile payments initiatives. As a result, CBJ aims at using the national retail payments switch to monitor mobile operator's electronic money.

CBJ issued on July 15th 2012 a new circular with guidelines for banks in order to help them comply with the existing regulatory framework for Mobile Payment Systems. These guidelines aim at helping banks that have already launched Mobile Financial Services in partnership with an MNO or banks that intent to launch them, to be in compliance with the existing regulatory framework. These guidelines are however issued for information purposes only. They will only be enforced when CBJ implements the national switch for mobile payments, when additional regulations will be issued.

Although from a pure legal perspective, CBJ acknowledges that amendments should be made in the electronic commerce law or even better, a National Payments Law should be passed in order to be able to implement a retail payments switch, they believe that the current state of affairs justifies the implementation of the new ACH without changing or approving new laws.

At the time of writing this report, CBJ runs the Real Time Gross Settlement system (RTGS), and the Electronic Clearing Checks system (ECC). In June 2012, the National Payments Council of Jordan decided that the national switch for retail payments would be implemented and run by the CBJ. As a result CBJ is currently drafting regulations in order to implement such an infrastructure. Mobile payments are the first type of retail payments to be integrated in the switch, since CBJ wants to be able to monitor mobile payments transactions managed by MNO's. Indeed, they think that CBJ's inability to monitor the amount of e-money managed by the operator, and as result that it is equal to the balance of the settlement account, poses inflationary risks due to the potential creation of money. Besides, CBJ argues that since the settlement account pays interest, the money deposited in the settlement account is invested by the bank. As a result CBJ argues that each individual account should be individually ensured, and not only the overall balance of the account since this is higher than the maximum amount ensured by the deposit insurance system of Jordan 50.000 JD⁶³ (approximately 56.773 EUR).

In a second step, CBJ would like to offer direct debit, and direct credit through the retail switch. Currently since there is no ACH system, in order to pay utilities through banks customers have to have a bank account with the same bank as the utility company. Also, cards

⁶³ The average amount of the settlement account that Housing Bank manages for Orange is approximately 200.000 JD, and the service has just been launched.

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are to be integrated in the system later, although as of now card systems are not regulated by the Central Bank.

In terms of agents, there is no specific regulation which explicitly deals with the topic of nonbank agents. Article 3 of the Banking Law stipulates that its provisions shall apply to anyone who engages in banking activities. Article 2 defines banking activities as: —accepting deposits from the public and using these deposits in full or in part to grant credit or for any other activities designated by the Central Bank as banking activities pursuant to special orders issued for this purpose. Articles 4a and 4b state that: —No person shall engage in banking activities without first obtaining a final license from the Central Bank ...and that —no person that is not licensed to engage in banking activities shall accept deposits without prior written approval of the Central Bank” . Despite the stated definition of banking activity as requiring some form of intermediation, it is commonly understood that agents are not permitted to accept deposits without prior approval of the Central Bank⁶⁴.

Anti-Money Laundering Law (AML) number 46 of year 2007, amended in 2008 is complemented by instruction 51 for banks and money exchanges in 2010, follow all 40 AML and 9 Counter Financing Terrorism international standards. Regulations clearly define know you customer procedures for both face and non-face to face transactions, and the file of suspicious activities and identities to be used.

Instruction 51 stipulates that banks must identify and verify customer identity. To comply, banks require customers to present their national ID and a proof of address in order to open an account. Instruction 51 stipulates that the supporting documents must be checked by a —bank employee, implying that face to face customer verification is required. However, KYC can also be conducted remotely by an agent faxing documentation to the bank. The vast majority of people in Jordan are able to provide a national ID and to give satisfactory proof of their address. Instruction 51 exempts wire transfer transactions below JD 700 (795 EUR) from KYC procedures. However it does not offer relaxed KYC procedures for the opening of low value accounts.

CBJ is debating internally whether these regulations are to be applied also to mobile wallet agents. Since MNOs are not financial companies, the wording of the AML Law currently would not cover mobile wallets. However, as mentioned before MNOs are themselves required to conduct KYC procedures including verification of the customer identity⁶⁵.The KYC requirement was implemented after many mobile subscriptions had already been sold, forcing MNOs to conduct retroactive KYC procedures. In some cases, where it is impractical or otherwise difficult to conduct a face to face verification, MNOs are permitted to obtain missing ID information over the telephone and verify such information against the national database.

⁶⁴ CGAP, Jordan Diagnostic Report, 2009.

⁶⁵ MNOs require their clients to present their national ID (for Jordanians) or passport (for non-Jordanians).

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Given the reliability of the national ID system and the relatively small population of the country, the non-face to face KYC procedure used by some MNOs (ID information collected over the phone and verified against a national database) was accepted the TRC and it seems particularly appropriate for low value accounts such as mobile wallets.

The Credit Information Law number 15 of 2010 and the Bylaw 36 of 2011 regulate the credit registry and the credit bureau infrastructure. The Law and Bylaw determine that Credit Bureaus are to be licensed and supervised by the CBJ, and run by a private company either owned by banks or by any other institutions previously approved by CBJ. Data providers or credit providers cannot own more than 5% of the shares, while all data providers cannot own more than 49%. Thus the technical provider partner should own the majority of the shares. Any changes in the owner structure have to be approved by CBJ. By the end of 2012, the banking association is leading the effort to find the strategic partner to apply for a license, although no applications have been received yet. In terms of public credit registry, the CBJ is required by law (Article 37b Central Bank Law and; Article 72-74 of the Banking Law; Circular 10/3/6439 year 2009) to provide licensed banks with credit information relating to their clients through the public credit registry.

The Money Exchange Business Law number 26 of 1992 regulates this activity in Jordan. Article 11 defines the transactions they are authorized to undertake, which include international transfers. The Law states that companies authorized for this activity must be at least 50% Jordanian, with different equity requirements according to the type of company (general partnership, limited partnership or shareholding partnership).

Approximately twenty Money Exchange Businesses run their own networks of branches. Creating networks requires CBJ authorization which is granted based on the volume of business managed and onsite inspections (financial soundness, and adherence to AML regulations). As mentioned earlier, Anti Money Laundering (AML) Law number 46 of year 2007 and instruction 51/2010 set special regulations for exchange business. Also an AML guidance manual was developed by CBJ in order to help Money Exchange Businesses comply with the regulations.

In terms of microfinance the Ministry of Planning and International Cooperation (MPIC) is leading the development of the regulatory framework with the support of German cooperation, and they expect to have it ready by the end of 2012 or early 2013. However, at the time of writing this report, there is no requirement to obtain a governmental license or other permission to lend. In addition, any legal entity may engage in lending. However, MFIs formed as associations were prohibited from engaging in lending activities because of a decision by the Ministry of Social Development (which regulates associations), although the Associations Law does not explicitly prohibit lending activities.

1.3.7 Review of the regulatory framework in Lebanon

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Although there is no payments law, the role of the Central Bank of Lebanon (BDL) was expanded to develop and oversee payments systems in Lebanon in virtue of Law No. 133/99 Modifying Article 70 of the Law of Money and Credit (Banking Law), dated 26 October 1999 in order to extend the prerogatives, duties and responsibilities of the BDL. The Law provides for (1) developing and regulating payment systems, especially with regard to ATMs and payment cards; (2) developing and regulating transfer payments, including electronic transfers; and (3) developing and regulating clearing and settlement operations related to payment systems and financial instruments.

Also in the year 1999, the Central Bank issued Circular 63 on ATMs and Credit Cards and in the year 2000, the central bank issued Basic Decision No. 7548 (circular 69) dated 30 March 2000 that defines “electronic financial and banking transactions”. Circular 69 determines also which are the types of institutions that can engage and how in domestic and international electronic transfers. Article 3 states that “Banks and other institutions officially registered with the Banque du Liban or operating under its supervision, with the exception of money changers, must inform the Central Bank in advance of their intention to carry out, partly or entirely, their authorized activities through any of the various electronic means...Lebanese institutions other than those specified in the previous Paragraph of this Article, including money changers, must obtain in advance, from the Banque du Liban, an authorization to undertake any of the activities specified in Article 1 of this Decision”. Thus, this article allows licensed institutions to issue electronic payments without being financial institutions or banks.

The regulatory framework for payment systems in Lebanon is complemented by Circular 92 of 1/24/2003 on the Electronic Clearing House for Credit Cards and Payment Cards and Debit Cards issued in the Lebanese Market and used on ATM’s; and by Circular 109 on Electronic settlement system relating to credit, debit or charge cards issued in the Lebanese market and used in local Points of Sale. This extensive regulatory framework gives BDL the ability to take the desired role of taking central control over the rule set for all payments instruments including ATMs, POS, money transfers, and clearing and settlement of all payment methods and financial instruments. Besides, BDL is also responsible for the creation and management of any new payment instrument. Also, BDL is authorized to develop and regulate payment products through regulations and instructions, without the need of having the Parliament adopting new laws.

In terms of mobile financial services, Lebanon has no regulations regarding mobile money issuance by non-banks. In terms of agents, Circular 69 also defines the requirements for points of sale that can be part of the network of the licensed institutions authorized to collect payments, undertake domestic and international remittances. Both the stores and the franchises of the financial institution authorized are to be included in the license. However, the franchises need to be independently approved and treated as a separate company requiring as a result additional capital requirements. Sometimes, banks partner with these companies to provide bill payments and remittances.

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There is no additional specific regulation neither regarding non-financial institutions agents nor outsourcing of financial services. In terms of agents however, BDL is open to apply international best practices in terms of AML rules on low value transactions. In Lebanon, all financial institutions are required by law to verify the identity of their clients; apply Know your customer rules when the operation exceeds 10.000 USD; keep copies of all operations and identities for 5 years; and apply all international best practices in terms of AML and CFT. BdL agrees that these requirements are not adapted for financial institutions willing to serve the unbanked. MNOs and their agents are also required to get a copy of the National ID for Lebanese or the Passport for non-Lebanese when selling a new contract, both prepaid and postpaid.

The microfinance regulatory framework is defined by Circular 93 of 2004. This circular establishes that exemption for legal reserves for banks that lend to NGOs for microcredit purposes. The Central Bank circular permits commercial banks to use up to five% of their mandatory reserve requirement for extending "small loans" to or through "small loan institutions." The Central Bank circular defines "small loans" and "small loans institutions" as follows: A small loan is a "Lebanese currency loan granted by a 'small loans institution' or a financial institution to individuals or small establishments that comprise no more than four persons to assist them in creating and developing production (industrial, agricultural, crafts), services, tourism or trade projects, provided that the loan amount does not exceed LBP 10,000,000 (7.000 USD) with a maturity of no more than three years." A "small loan institution" is defined as a civil association or nongovernmental organization that may, upon the approval of the Central Bank, enter into a partnership agreement with banks to directly or indirectly disburse small loans. The circular has however resulted in very little investment in microfinance (whether through direct microlending by banks or lending to microlending institutions).

NGOs willing to undertake microcredit activities need only to notify the Ministry of the Interior. However, some Central Bank officials (Legal department) argue that the Banking Law (Law of Money and Credit) does not allow NGOs to provide credit, and that they should transform into financial institutions in order to do so. The current position of the Governor of BdL is however let the microcredit granting NGO's operate, without forcing them to transform. Also, According to the credit bureau regulation (circular number 75 of year 2000, and article 147 of the Law of Money and Credit information) Microcredit granting NGO's cannot access the credit registry directly but through banks, which endangers their credit activities.

1.3.8 Review of the regulatory framework in Israel

Israel's Payment System's Law 5768-2008 sets a non-restrictive regulatory framework for mobile financial services in Israel. It empowers CBI however, to run and oversee any payment system that is considered of systemic importance. It also defines the "controlling" role of the Central Bank; a payment order; the payment system; operators and participants. There is not

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however any law or regulation regarding mobile payments or mobile money issuance by non-banks. The Ministry of communications is in talks with the Ministry of Justice in order to define clearly who will be licensing and monitoring mobile payments systems offered by mobile operators. As mentioned before, leading mobile operators are looking for alternative sources of revenue in the current context of saturation of the mobile telephone market.

Also in terms of payments, according to Debit Cards Law 5746-1986 debit card issuance is restricted to banks. Also cards acceptance, either through POS or ATMs requires CBI licensing. Credit cards and prepaid card issuing is however not regulated, and as a result open to non-bank institutions. Transfers not using the banking system are not regulated by CBI. In the case of international remittances, Money Exchanges or Banks are needed, both regulated institutions the former by the Ministry of Finance and the latter by CBI.

Banking Service to Customer Law, 5741-1981 defines as a the duty of a bank to provide certain services to all, stating that “a banking corporation shall not unreasonably refuse to provide services” such as ...” the acceptance of money deposits..” and “the opening of a current account..”. Besides, the role of the Postal Bank, under the supervision of the Ministry of Communications, is also relevant when explaining the level of access to finance Israel enjoys.

In terms of agents, regulation 5/97 related to the Proper Conduct of Banking Business defines the relations of Banking Corporations ties with intermediaries. This regulation defines what an intermediary is: “someone who refers customers to the banking corporation, excluding an auxiliary corporation or a portfolio manager”. Agent intermediaries are widely used in Israel, as the example of the Postal Bank mentioned before shows. Anti-Money Laundering regulations follow order 5761-2001 and are applicable to banks, money exchanges and intermediaries of banks. AML regulations follow strictly international best practices on know your customer and counter financing terrorism procedures

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2 Review of providers of low cost financial products: prepaid electronic methods of payment

Retail payments infrastructure is not yet widely developed throughout Mediterranean Partner Countries. Only Morocco, Algeria, Tunisia and Israel have fully operational retail payments and card switches. Egypt’s retail payments and card switch is not fully operational yet for all payment services. Lebanon is currently implementing its retail payments switch, through which card systems will be interconnected. Jordan and the West Bank/Gaza are also willing to implement retail payment switches after successfully implementing RTGS systems. The Postal Service through its financial services unit is a major provider of retail payments in all the countries studied.

Table 12: Retail payments infrastructure in Mediterranean Partner Countries

	Payments Law	Retail Payments National Switch	Card System Switch	Postal Service cards issuing
Morocco	No	Yes	Yes (CMI)	Yes
Algeria	No	Yes	Yes (SATIM)	Yes
Tunisia	No	Yes	Yes (SMT)	Yes
Egypt	No	(EBC) Not fully implemented	(EBC) Not fully implemented	Yes
West Bank and Gaza	No	No	No	No
Jordan	No	No	No	No
Lebanon	No	Being implemented	No	No
Israel	Yes	Yes	Yes	Yes

The card switches and processors of Tunisia (SMT), Morocco (CMI) and Egypt (EBC) are willing to lead the development of mobile financial services. Postal Systems throughout the MPCs studied are also able and willing to launch mobile financial services. Besides, payments service providers are also developing a mobile financial service offering in partnership with financial institutions and mobile operators.

2.1 Review of providers of low cost financial products: prepaid electronic methods of payment in Morocco

Currently the banking law determines that providers of payment services can only be credit institutions. However the changes in the banking law that are currently being prepared will allow providers of payment services to issue electronic money payments. These modifications, currently being drafted, should be passed by the end of the year according to the Central Bank

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and will increase substantially the competition in the payments market currently controlled by the banks.

Current regulations permit only bank-based e-money issuers. Loi N°34-03 Relative aux Etablissements de Credit et Organisme Assimiles. Draft amendments to the Law will create a category of Payment Service Providers open to non-banks expressly engaged in e-money. As of now, MNOs must currently partner with a bank that is authorized and supervised by the BAM. Amendments are not expected to be issued in the near future. MNOs may partner with multiple banks, a strategy which mitigates the leverage of any single bank.

In the area of payment cards, the Moroccan Banking Association decided to facilitate a national card switch to integrate the four previously non-interoperable ATM and POS networks in the country. CMI (Centre Monétique Interbancaire) is the network switch: it provides technical processing, authorization, clearing, and payment. The stock of cards issued by the CMI system as of December 2011 was of approximately 8 million, increasing by 13% since December 2010.

Table 13: Stock of Cards managed by the CMI (2010-2011)⁶⁶

	Visa	Mastercard	CMI	Closed	Total
31/12/2010	4 593 888	411 334	1 034 069	1 024 776	7 064 067
31/12/2011	4 956 187	392 459	1 568 403	1 106 105	8 023 154
Change	7,90%	-4,60%	51,70%	7,90%	13,60%

However the real problem is posed at the acceptance network. The CMI has only 25.000 Merchant Points of Sale (EFTPOS) and 5.024 ATMs. BAM considers rightly that the EFTPOS network lacks density in order to achieve its access to finance objectives. As a result it is considering different strategies in order to increase the acceptances network. First, it allowed service provider M2M to create an alternative acceptance network. Second, it is considering using Morocco’s Remote Interbank Clearing System or SIMT, as an alternative switch for cards for increasing competition and allowing new payments service providers to operate interconnected platforms. At present, SIMT processes on a national basis checks, direct credits and direct debits and it is run directly by BAM.

M2M argues that there 200.000 potential merchants that could be equipped with an EFTOS in Morocco. It plans to create a 50.000 network in 3 years, using a multiservice/multichannel approach. It is multiservice approach since the EFTPOS does not only allow the merchant to accept cards but also offers other services, some specially targeted to unbanked customers. It is a multichannel approach because it does not only use traditional EFTPOS but also Internet and Mobile gateways as well as NFC technology.

⁶⁶ CMI (Local debit) ; Closed (Closed-looped cards)

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The system aims at being interoperable, although different scenarios are to be considered depending on CMI's and BAM's final positions:

- a) CMI operates as a National Switch. This scenario could take place provided that:
 - The Switch is completely neutral with respect to its members.
 - Access to connection is subject to a higher authority to judge the eligibility of the applicant based on all criteria combined.
 - Technical specifications define the standardized exchange protocols with the National Switch.
 - Procedural specification defines both administrative and financial relationships between the members of the Switch and the Switch (CMI), and among the members.
- b) New National Switch
 - This scenario would be necessary if scenario a) is not possible. Indeed, interoperability would be ensured only if there is a new National Switch. In this case the switch would be either directly operated by BAM (SIMT) or by a BAM's subsidiary.
 - The same as in Scenario a), access to the connection must be subject to a higher authority to judge the eligibility of all criteria combined regarding the applicant
 - Technical specifications defining the standardized exchange protocols with the National Switch.
 - Procedural specifications defining both administrative and financial relationships between members of the Switch and the Switch and among the members.
- c) Using an International Switch to process local transactions:
 - This scenario would be necessary if neither Scenario a) nor Scenario b) take place. The newcomer will join and connect directly to the Visa and Mastercard Switch in order to accept domestic branded cards.
- d) Multi-center scheme
 - The new entrant will set up an infrastructure with connections to all the banks issuing cards as well as Visa and Mastercard networks.

M2M aims at ensuring the success of its project by providing not only solutions for the acceptance network but also by providing solutions for cards issuers. In terms of issuers, it has already reached an agreement with Al Barid Bank.

2.2 Review of providers of low cost financial products: prepaid electronic methods of payment in Algeria

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The most used non-cash retail payment instruments are checks representing in December 2011, 80,64% of all retail payments accounted by the BA (102.503 EUR million value) including cash. Given the importance of the informal economy, estimated in between 40% and 60% of the country's GDP, the amount of cash accounted by BA as payments representing 16,13% of the total value of retail payments (20.507 million EUR) is clearly underestimated. The third most important retail payment instrument is electronic transfers representing 2,94 % of total retail payments accounted (EUR 3.742 Million). Cards, only represented in 2011 0,29% of total retail payments (EUR 363 Million) being almost only used for withdrawals at ATM's. Electronic transfers maximum value is 1 million DZD (10.000 EUR), while checks have no limits and card parameters are defined by their issuers.

CPI (Centre de Pré-compensation Interbancaire) is the interbank pre-settlement center for retail payments. CPI is a commercial company (Société Par Actions) controlled by the Central Bank and hosted at the Central Bank premises. It operates following Règlement 05-06 of December 15 2006 regulating retail payment systems and Instruction 03-08 related to Arbitrage Committees.

The CPI allows the processing of checks, electronic transfers and the card system. Checks are settled on D+2; letters of credit on D+1; electronic transfers on D; Cards on D+1; and direct debits on D+1.

Only bank institutions can be direct participants in the CPI system. The system has currently 23 participants. Net balances are calculated and settled at least once a day. Final settlement of net positions takes place through the Algeria's Real Time Gross System (RTGS) called Algeria Real Time Settlement, that can be used either for transactions higher than 1 million DZD (10.000 EUR) or for urgent transfers.

Cards in Algeria are at a very early stage of development. Cards are not used as payment instruments in Algeria but almost exclusively for withdrawals in ATMs (in 2011 89% of all transactions and in 2010 almost 100%). SATIM (Société d'Automatisation des Transactions Interbancaires et de Monétique) is the inter-bank electronic banking operator and switch in Algeria, for domestic debit cards branded CIB. Credit cards are not allowed in Algeria, due to the existing ban on consumer credit. Banks ATMs and POS terminals are interoperable. For CIB cards, final settlement of net positions takes place through the RTGS system via the CPI.

Visa and Mastercard cards are only accepted at the CPA bank network (approximately 500 POS and ATMs located at international hotels and the airport). CPA and BDL are the only banks issuing Visa, while CPA is the only one issuing Mastercard. CPA's processing center for Visa and Mastercard is hosted by MCC in Egypt, while BDL's is hosted by SMT in Tunisia.

SATIM is a subsidiary of eight Algerian Banks (BADR, BDL, BEA, BNA, CPA, PSC, CNMA, ALBARAKA), established in 1995 at the initiative of the banking community. Today it has 20

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members of which 16 banks including 7 public banks and 9 private banks and Algeria Post for interoperability purposes although its data is not included in SATIM’s figures presented below.

In addition to the SATIM system, AP has its own network of ATMs (approximately 600), and 6 million cards issued, 4 million of which are active. It is also deploying its POS network for bill payment purposes at utilities provider’s outlets. SATIM and AP’s ATM network are interoperable. The importance of AP is so relevant that it creates a card system outside the banking system 6 times more important in terms of stock of cards and with approximately the same ATM network.

Table 14: SATIM card system basic indicators for Algeria⁶⁷

	ATM	POS	Cards Stock
2008	544	1 984	339 374
2009	572	2 639	569 558
2010	636	2 946	979 933
2011	647	3 047	850 008

The lack of use of cards as a payment instrument is mostly due to the fact that merchants are afraid of the traceability that cards provide to the tax authorities. As a result even if POS infrastructure is offered to merchants at no cost, and the discount rate that merchants pay is extremely low (only 2 DZD (0,02 EUR) for transactions below 2.000 DZD (approximately 20 Euros) and 6 DZD (0,06 EUR) for transactions above 2.000 DZD), small merchants do not accept card payments.

In addition to this, as mentioned earlier the lack of an adequate regulatory framework for e-commerce, m-commerce and remote payments prevents cards from being used for internet payments. As a result, initiatives such as the e-payments pilot launched by SATIM in collaboration with CPA bank had to be stopped by BA due to the lack of a regulatory framework. On the other hand, this lack of regulatory framework is allowing non-regulated institutions such as epay.dz to offer e-payment systems that can create mistrust and even systemic damage for the future development of card payments in Algeria.

Finally, the settlement system previously presented for cards explains why banks are more restrictive than AP issuing cards. Indeed, despite all cards in Algeria are debit cards, authorization is not online. As a result, branch managers have to face and price the risk of a customer not having enough funds for the transactions paid. In Algeria this risk is very serious since branch managers can face criminal charges for allowing customers to overdraw their accounts. As a result, branch managers analyze carefully who they debit cards to and price them expensively.

⁶⁷ <http://www.satim-dz.com/> accessed in May 2012.

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2.3 Review of providers of low cost financial products: prepaid electronic methods of payment in Tunisia

The banking law determines that providers of payment systems can only be credit institutions and the post office. According to the World Bank the most important mean of retail payment is the check while less than 20% of payments are made using cards⁶⁸.

Societe Monétique Tunisie (SMT), created and owned by banks centralizes all card traffic, providing not only services as a switch but also as a clearing system. SMT is linked to all banks, La Poste Tunisienne, MNOs, and international payments gateway. As of December 2011, there were 2.373.415 cards in Tunisia, of which 600.000 were issued by La Poste.

Table 15: Stock of Cards managed by the SMT (2005-2011)⁶⁹

Cards	2005	2006	2007	2008	2009	2010	2011
SMT/Tunisia							
Total Cards	951 802	1 333 750	1 628 996	1 870 125	2 082 905	2 382 315	2 373 415
Payment Cards	773 110	1 156 662	1 455 797	1 682 165	1 892 762	2 164 209	2 146 668
<i>CIB</i>	327 019	367 555	395 308	392 729	357 882	354 166	336 460
<i>VISA</i>	368 260	467 309	586 489	655 983	765 658	845 891	938 709
<i>MASTERCARD</i>	76 181	84 646	116 375	139 827	171 509	241 153	314 771
<i>Other</i>	1 650	237 152	357 625	493 626	597 713	722 999	556 728
ATM Cards	178 692	177 088	173 199	170 945	190 143	218 106	226 747

The acceptance network was composed as of December 2011 of 1.741 ATMs and 12.661 POS terminals. In terms of transactions, 89,1% (86% in value) were withdrawals at ATMs while 18,9% (14% in value terms) were merchant payments.

Table 16: Cards acceptance network managed by the SMT (2005-2011)⁷⁰

Tunisia	2005	2006	2007	2008	2009	2010	2011
Cards Acceptance Network							
POS	6 577	7 504	8 577	9 078	10 450	11 968	12 269
ATM	729	852	1 097	1 246	1 424	1 660	1 741

Two banks, BIAT and Attijari Bank and La Poste are using their prepaid cards (e-wallet) platform to provide low cost financial services to the unbanked. Their e-wallet platforms are also used for their mobile financial services (m-wallet), offering described in section 6.

⁶⁸ "Payment and securities settlement systems in the MENA region", World Bank, 2010

⁶⁹ Monétique Tunisie, 2012

⁷⁰ Monétique Tunisie, 2012

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2.4 Review of providers of low cost financial products: prepaid electronic methods of payment in Egypt

The Law of the Central Bank, the Banking Sector, and Money (Law No. 88 of 2003 amended in 2005) provides the legal basis for the oversight function of the Central Bank of Egypt (CBE) over the retail payment system. There is no payments service providers (PSP) regulatory framework, although all PSPs serving banks are monitored by the CBE since they are service providers to banking institutions. The retail payments market in Egypt is in its early stages of development, where interoperability is not fully achieved since operators are supporting proprietary platforms. The check is the primary cashless instrument used for corporate and retail payments in Egypt. It is used extensively both by corporations and individuals, and the settlement and clearing system is run by CBE.

Payment cards were introduced recently and the number of cards is still low. According to the Central Bank of Egypt in 2012 there are approximately 2 million credit cards and 12 million debit cards in use, 6 million of which are used to pay the salaries of civil servants through a card based system run by the Egyptian Banking Corporation (controlled by the Egyptian State with 54% of the shares and the rest owned by private banks). Another 3 million are prepaid cards issued by banks and the Egyptian institute of pensioners for the payment of pensions. The rest, are mostly local debit 123 cards, operated by EBC.

Egypt has approximately 5.000 ATMs and above 35.000 POS terminals. The country does not have a national POS switch. All POS networks switch through VISA and MasterCard. Commercial International Bank (CIB), Arab Bank, Banque Misr, National Bank of Egypt, Societ  Generale of Egypt and Bank of Alexandria (Intesa/San Paolo) have POS licenses. At present, all transactions with cards using the major brands like Visa and MasterCard (except for ATM use), must travel abroad for approval purposes.

In terms of ATM infrastructure the Egyptian Banking Corporation operates as a central switch for local cards (123brand) and Mastercard used in Egypt's ATMs. Three additional sub processors provide card processing and ATM outsourcing services: MSCC; NPC and IBS. IBS was separated from the Egyptian Banking Corporation (EBC) in 2006 in order to leave EBC with noncompetitive services (ATM switch and ACH), while competitive services such as card processing and ATM outsourcing services would be provided by IBS.

2.4.1 State owned payment service providers: the Egyptian Banking Corporation (EBC) and E-Finance:

The Egyptian Banking Corporation (EBC) was established in 1995 by the leading Egyptian banks under the umbrella of the Federation of Egyptian Banks and with the approval of the Central Bank of Egypt, which retains a 27% share in the company. Another 27% is owned by the

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National Investment Bank, while the remaining shares split between 16 banks operating in the country. The target was providing the infrastructure and services required for electronic payments services and products. It currently operates both the 123 platform (local debit) and the ACH platform for direct debits and credits, and debit and credit transfers. It also functions as an international gateway through relationship with MasterCard.

The ACH system currently run by EBC was developed by Giro Nil⁷¹, an Egyptian joint venture founded in 2005 by Banque MISR, Egypt Post, Commercial International Bank (CIB), and Inclusion Group from The Netherlands. The company developed an interbank infrastructure for funds transfer and bill payments/collection. The system is however not widely used by member banks that claim technical problems as a reason for its failure. As a result, the future of Giro Nil and that of the Clearing House are at cross roads.

EBC has also supported the Ministry of Finance (E-Finance unit presented below) in key areas like customs, taxes and other related payments through the ACH system and salaries and pensions using a card based system. EBC developed a secure infrastructure that allows all government payments, both incoming and outgoing to be processed electronically through the ACH system and settled through the central bank. The infrastructure allows all payments to be processed electronically through the banking sector, with Government of Egypt (GOE) distribution channels accepting electronically either/both direct debit tools and credit transfer services.

E-Finance is the technology arm of the Ministry of Finance. The E-Finance organization was formed to provide outsourcing services to the accounting and financial management functions at the Ministry of Finance associated with payments (to suppliers, employees, pensioners, etc.) and collections (of customs duties, taxes, etc.). The founding shareholders of E-Finance were: National Investment Bank (Government Investment Bank) – 40%; Raya Holdings (Leading Technology Company in Egypt) – 30%; National Bank of Egypt (Largest Bank in Egypt, Government Owned) – 10%; Bank MISR (Second Largest Bank in Egypt, Government Owned) – 10%; and the Egyptian Banking Corporation (EBC) – 10%.

2.4.2 Other payment service providers

NPC owned by Network International and MSCC owned by British investment fund Actis provide card management and ATM outsourcing services. Fawry, BEE and Masary are three other payment service providers are specialized in bill payment services.

The Egyptian Company for Electronic Systems Development (NPC) founded in 2001, was Egypt's first electronic funds transfer (EFT) company offering integrated third-party solutions to the financial sector. It was a joint venture established under the Egyptian investment law

⁷¹ Company where the EIB invested

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between the National Telecommunications Corporation of Egypt and Euronet Worldwide. Recently it has been acquired by Network International of Dubai. NPC provides the following services to 11 banks in Egypt: Outsourcing of ATMs; POS driving for cash Advance and card Issuance and management for Visa and MasterCard.

The Mediterranean Smart Cards Company (MSCC) is a smart-card-technology service provider in Central and Eastern Europe, the Middle East and Africa established in 2001. The company offers a complete outsourcing solution to financial institutions. MSCC was formed by Visa, the largest shareholder with 33% of its capital, and by a group of major banks (Banque Misr, CIT, Ahly United Bank, Societe Arabe Internationale de Banque (SAIB), Faisal Islamic Bank, Arab African International Bank, Arab International Bank and Suez Canal Bank). The company currently serves more than 40 domestic and international banks within Egypt and international locations. It was recently acquired by British investment fund Actis that is also present in the payment sector of Jordan. MSCC's services include initial support services, support for card procurement and personalization, issuer processing, ATM processing, POS (point of sale) processing, inter-bank processing with a help desk and call center support.

Fawry is a payment service launched in 2008 available through banks (for banked customers), a nationwide network of retailers (for the unbanked) and Egypt Post offices. Fawry enables to pay bills or recharge different services like mobile phones or other services like the CashU or National Bank of Egypt prepaid card (in progress). The platform used for the prepaid card issued by NBE is also to be used for the mobile financial service initiative where both NBE and Fawry participate (see section 6). Other Fawry Partner banks include Bank of Cairo, Banque Misr, Bank of Alexandria, AWB, Arab African International Bank, Crédit Agricole and HSBC. It is regulated by the Ministry of Communications and Information Technology as a mobile and e-commerce service provider.

Masary is the payment service launched by "Applications & Payment Systems Development (APSD) – Egypt" in 2009 based on an e-Wallet service concept. Masary currently has 7.000 points of sales, 2.500 of which are active (at least 3 transactions per month). Masary's network is located mostly in rural areas and offers bill payment, top up and recharge of prepaid cards. It is regulated by the Ministry of Communications and Information Technology as a mobile and e-commerce service provider, since most of the services it offers (approximately 95%) are related to mobile telecom payments. In terms of mobile payments, they are undertaking negotiations with two banks, CIB and NBE in order to provide the mobile application currently used by Masary stores to the banks customers. Also they have launched a program to support Microfinance called "Masary for young entrepreneurs", where entrepreneurs become traders of load.

Bee is a Singapore-based company that through a joint venture with a local company entered the Egyptian payments market in October 2010. It offers bill payments services and mobile top up through 1.000 agents and plans to grow the network in urban areas. Regulated by the

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Ministry of Communications and Information Technology as a mobile and e-commerce service provider, it is still building its network which is less dense than Fawry's and Masary's.

2.5 Review of providers of low cost financial products: prepaid electronic methods of payment in West Bank and Gaza

There is currently no local interbank switch service which allows for the direct switching of retail payments transactions between Palestinian banks. PMA is currently working in the development of a national switch for retail payments, after having completed the implementation of the RTGS system.

The payment environment in Palestine is predominantly paper-based, with cash remaining a very important payment medium for the general public. By global standards, Palestine's electronic payment industry is relatively underdeveloped. The proportion of cash in the economy in Palestine measured as the value of cash as a % of real GDP was estimated by the PMA in 2009 as 19,43%.

The use of non-cash payment instruments is growing, but remains relatively modest and is dominated by checks and paper-based direct transfer orders. In addition to checks, paper-based money orders are widely used to settle long-term obligations such as house rental fees, mortgages, utility bills, life-insurance premiums, car monthly installments, payrolls, etc. This medium of payment is slow and costly, particularly when money is being transferred from an account at one bank to an account at another bank, or from the bank's headquarters to the various branches of the same bank, as an inter-bank communication database is lacking and intra-bank systems are inadequate in some cases, particularly in the smaller banks. The use of electronic payment instruments such as intra-bank direct credits and debits is increasing.

In terms of cards penetration, according to the PMA less than 20% of banks accounts are connected to electronic channels through cards. As of the end of 2011, there were just over 354.352 debit/VISA Electron cards, 101.728 ATM (non-debit) cards, and about 47.046 credit cards. The use of ATMs is growing rapidly while use of POS networks remains low, mostly credit card based (90%).

The larger banks operate their own ATM networks not interconnected through switches. As of December 2011 there were 378 ATMs installed. The PMA requires all new bank branches to be equipped with ATMs, so the number of installed machines is growing. Since the ATM networks are not interconnected each card can only be used at an ATM belonging to its issuing bank. Banks have introduced Visa Electron cards to replace their ATM cards, which will be able to be used in all ATMs and POS terminals. As a result at the end of 2011 the number of ATM cards decreased to 101.728 while the number of Visa Electron Cards reached 354.352 cards.

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Table 17: Stock of ATM, POS and cards in the West Bank and Gaza⁷²

31/12/2011	Gaza	West Bank	Total
Number of ATMs	326	522	378
Number of POS	2.637	1.021	3.658
<i>Number of credit cards</i>	34.736	12.310	47.046
<i>Number of ATM Cards</i>	79.507	22.221	101.728
<i>Number of Visa Electron Cards</i>	274.323	80.029	354.352

Authorization of ATM transactions are undertaken through two off-shore channels; the first being switching via VISANet and the second being that of the Jordanian owned banks which switch their transactions via JoNet in Jordan. This therefore exposes the Palestinian banking sector to potential political disruption of its services, as well as driving unnecessary costs for ATM transactions.

POS usage is at a very early stage, and so far only the Bank of Palestine, which is the largest Palestinian-owned bank, has established a POS network. Bank of Palestine is currently the only card acquirer serving both its local acquiring and international transaction switching needs. Its POS network is composed as of December of 2011 of 3.658 POS, 1.021 of which in Gaza and 2.637 in the West Bank. The Bank of Palestine is also the only bank which issues its own credit cards (branded Visa and MasterCard). These are integrated with its POS operations, with in-house processing of credit card transactions.

This Monopolistic structure provides the merchants with limited scope to negotiate an acquiring rate with the acquirer, which increases prices and lowers acceptance. High acquiring costs are inevitably passed on to the consumer either as an increased cost of the transaction, or by way of reduced discounts being offered to card users. In order to resolve this problem, USAID financed in 2011 the feasibility analysis of the Palestine Banking Services Company (BSC), a company that will serve the whole banking industry for POS acceptance purposes and ATM switching. The BSC will be a neutral provider of payments infrastructure in order to provide the benefits to all its members and shareholders. In the first instance the BSC will be the central point of payment clearing interconnectivity between all Financial Institutions in Palestine. In the future it may develop other services which are agreed will support the industry as a whole including mobile financial services. PMA and the Association of Banks of Palestine are considering this possibility for enhancing the use of electronic payments.

⁷² Palestinian Monetary Authority, 2012

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2.6 Review of providers of low cost financial products: prepaid electronic methods of payment in Jordan

There is currently no local interbank switch service which allows for the direct switching of retail payments transactions between Jordanian banks. As mentioned before CBJ is currently working in the development of a national switch for retail payments including direct debits, direct credits, cards and mobile wallets although neither cards nor payment service providers are currently regulated.

In Jordan the provision and the collection of payments by nonbanks does not require licensing by the CBJ. Cash is the most important payment instrument for individuals in Jordan. Retail payments processed by banks are not interoperable and do not rely on real time settlement which leads to public concern over meeting payment deadlines. As a result bill payment through banks faces strong competition by nonbank service providers playing a significant payment role for the unbanked and low income people.

Jordan Post dominates bill payments. It currently offers a collection of bill payment services for private and public service companies (such as mobile network operators and utility companies) through its 350 post offices. It also offers allocations payment services, prepaid recharges, postal orders, domestic and international money orders. A Jordan Post money transfer service in cooperation with Western Union was also launched in 2009.

Payment Centric is a private clearinghouse offering Electronic Bill Payment Solutions (E-Jaby and E-Sal). E-Jaby offers electronic bill payment (primarily for mobile phone accounts and utility companies) through some 420 bank branches. E-Sal offers electronic small value payments up to a maximum of JD 40 (45 EUR). Customers can make payments at 1.200 service points throughout the country, including shops, supermarkets and other merchants. Merchants usually work on pre-paid accounts with Payment Centric. An estimated 80% of Jordan's population has access to one of these two payment products. Payment Centric signed in 2009 a contract with the MOICT to collect payments on its behalf for the e-government gateway.

The CBJ started to operate the new ECCH in July 2007. The system processes electronically checks images and data; the physical exchange of checks is no longer necessary. Checks processed through the ECCH are cleared and settled on the same day (T+0) at the interbank level.

The number of payment cards and their usage is growing rapidly. As of June 2011, there were approximately 1,7 Million Debit Cards (Mostly Visa Electron although there are still private label cards) and 0,22 Million Credit Cards (All international brands including VISA and Mastercard). There are three POS networks in the country that are not interoperable, totaling nearly 28.200 POS terminals. The card switches do not participate in the national Real Time

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Gross Settlement (RTGS) system owned by banks and operated by CBJ, but rather settle their accounts bilaterally.

Table 18: Stock of cards, transactions and value settled for cards in Jordan⁷³

Jordan Card System	no. of users		no. of transactions		value settled	
	total no. of debit cards	total no. of credit cards	total payments by debit cards	total payments by credit cards	total payments by debit cards	total payments by credit cards
as 30/6/2011						
Total	1.781.019	227.177	21.256.237	1.793.387	6.292.017.882	970.167.811

The most important network is run by EMP (formerly Visa Jordan), unique acquirer of Visa and also acquirer of all other brands with approximately 14.000 POS across the country. ICC is the second most important network, with processing POS capabilities acquiring with Mastercard in its 8.700 POS network, 3.700 of which are connected to EMP for Visa acceptance purposes. The third network is run by company MEPS, also processing POS acquiring with Mastercard in its 5.500 POS, 1.000 of which are connected to EMP for Visa acceptance purposes.

CBJ is willing to encourage greater interoperability among POS Networks, although card systems are not under CBJ’s supervision. Given the large number of POS devices relative to ATMs, greater interoperability among POS networks would significantly increase the number of payment access points throughout the country. The CBJ has indicated that is considering mandating interoperability of POS networks through the new retail payments switch, though given the fact that POS networks are not under its supervision, the CBJ may wish to first encourage greater voluntary interoperability. Mandating interoperability may ultimately be required.

Regarding ATMs, to facilitate interoperability among the various networks the banking community set up a national switch (JO-NET) owned and operated by EMP since 1997. At the time of writing this report 25 banks are currently connected to JO-NET, being Citibank the only bank operating in Jordan that is not connected and BLOM Bank finalizing the contract with JO-NET. As of December 2011, there were in Jordan 1.197 ATMs all interconnected through JO-NET. The leading banks in terms of ATM network were: The Housing Bank -198, Cairo Amman Bank -179, Arab Bank 139, Bank of Jordan-109 and Jordan Islamic Bank -106.

⁷³ Central Bank of Jordan, 2011

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2.7 Review of providers of low cost financial products: prepaid electronic methods of payment in Lebanon

The most used cashless retail payment instruments in Lebanon are checks⁷⁴. BdL Clearing is the check’s clearinghouse, which will become the national switch for all retail payments, including remote and mobile payments, and it is operated by the Central Bank of Lebanon. BdL Clearing is also developing direct debits and direct credits facilities, which according to the Payments Unit of BdL should be operational at the beginning of 2013. BdL just launched its RTGS system.

The card system in Lebanon has four interoperable switches: CTM (ATM and POS switch owned and participated by two banks); IPN (ATM only switch owned and participated by eighteen banks); CSC (ATM and POS switch owned and participated by twenty six banks) and CCM (POS only switch owned and participated by 22 banks). Bank Audi, Blom Bank and Bank Med have their own POS networks. For the time being clearing of POS is undertaken by Visa and Mastercard outside Lebanon (BdL is trying to integrate cards in the national retail payments switch, although Visa and Mastercard have opposed such a decision until now), while settlement of net positions is processed by the RTGS system of BdL. Clearing of ATMs is undertaken through BDL clearing, while settlement of net positions also goes through BdL RTGS.

According to BdL as of May 2012, there were 1.359 ATMs, 630 of which located in the Beirut area. Also, there were 43.071 POS of which only 51% connected online. In terms of payment cards, there were approximately 1.8 million payments cards hold by residents in Lebanon. Debit cards represented 65% of all, while 24% were credit cards and 11% charge/prepaid. In terms of transactions, 76% were ATM withdrawals while 24% POS transactions.

Table 19: Stock of cards per type in Lebanon⁷⁵

Total Resident payment cards	Resident - Credit Cards	Resident - Debit Cards	Resident - Charge Cards	Resident - Prepaid Cards
1.789.096	436.258	1.163.003	137.781	52.054
100,00%	24,38%	65,01%	7,70%	2,91%

2.8 Review of providers of low cost financial products: prepaid electronic methods of payment in Israel

Between 2004 and 2007, there was a comprehensive reform of the payment and settlement systems, including the TASE Clearing Houses, check clearing and Masav. In July 2007, a new

⁷⁴ “Payments and securities settlement systems in the MENA region”, World Bank 2010.

⁷⁵ Banque du Liban, May 2012

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RTGS payments system, the Zahav system was launched. Development of the new system and legislation of the Payments Systems Law, 5768-2008, also helped the shekel join the trade in the CLS bank. A new unit has also been created at CBI for monitoring and promoting the development of payments systems. Up to now it has been mostly dedicated to the development of the RTGS system (Zahav), although it is expected also to participate in the future development of retail payment systems.

In line with the rules of the Zahav system, during the course of 2009 a National Committee for Payments and Settlement was established, whose members represent different entities operating in Israel, including representatives of the Bank of Israel, the banking corporations and the payment systems, as well as representatives of interested parties (such as the Securities Authority, provident funds, insurance companies, pension funds and credit card companies). The council is headed by the Assistant Governor of the Bank of Israel. The Committee is an advisory body only, whose function is to assist in assuring the efficiency and stability of the Israel's payment systems. The Committee meets at least once in each calendar year

Other than the Zahav system, which is designated for immediate and final settlement of large or urgent payments in Israel we currently find the following switches: the Paper-Based Clearing House for paper transmissions (checks and various credits and debits); the Masav (banks' automated clearing house), which settles electronic debit and credit instructions; the TASE (clearing house for securities) and the card companies switch. The CLS system which operates outside of Israel is an integral part of Israel's payment and settlement system: it settles the Israeli currency against foreign currencies which are settled in CLS since Shekel joined the CLS in May 2008. All the switches settle using the Zahav RTGS system.

Card penetration and card usage in Israel is very high, being the stock in 2011 of almost 7 million most of them credit cards used as deferred debit. The cards market in Israel is dominated by three card companies that are subsidiaries of banks: IsraCards (approximately 3 million cards); LeumiCard (2 million cards), and ICC (1,5 million cards). In terms of acceptance network, IsraCards manage 50% of POS while LeumiCard and ICC-Cal manage 25% each. Merchant acceptance network is very large due to very low discount merchant rates (1,5%) and very low interbank interchange rates (0,875%).

IsraCards founded in 1975 is Israel's cards leader both in terms of issuance (3 million cards) and acceptance (100.000 merchants). In terms of issuance, it issues all international brands and it is the only issuer in Israel that issues its own brand, Isracard. Isracard is owned by Bank Hapoalim, and also serves the following banks: Mizrahi Tefahot, The First International Bank of Israel, Bank Otzar HaHayal , Bank Massad , Bank Yahav for Civil Servants , Bank Poaley Agudat Yisrael. Although they have looked into mobile payments and have launched some initiatives such as mobile POS for taxis, they do not see the business potential and they are currently more interested in implementing contactless (NFC) technology for Isracards.

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Table 20: Number of payments Cards and Terminals in Israel (at year end)⁷⁶

Israel	2009	2010	Annual Change (percent)
Cards issued in Israel			
Cards with cash withdrawal function	5,949,619	6,451,991	8.44
Debit cards	2,099,250	2,269,106	8.09
Deferred-debit cards	4,021,238	4,259,923	5.94
Credit cards	4,607,068	4,856,696	5.42
Electronic Money Cards	556,676	623,526	12.01
Of which: cards that were loaded at least once	379,854	397,88	4.75
Total number of active cards	5,013,650	5,674,448	5.99
Terminals located in Israel			
ATMs	5,504	5,944	7.99
Of which: ATMs with cash withdrawal	3,237	3,662	13.13
Selling points that honor payment cards	105,112	108,576	3.30

Leumi Card is Israel's second biggest card company with over 2 million cards and 50.000 businesses. It provides a wide range of card issuing and clearing services, as well as payment and credit solutions. It is owned by Bank Leumi (80%) and distributes its cards either through Bank Leumi's network or through co-branded partnerships with retailers such as Carrefour. They analyzed serving the under banked market with prepaid cards but they concluded that there was no business opportunity. In terms of mobile financial services, they have looked at technologies that enable mobile phones to become POS. However, in terms of issuing mobile wallets they think that given the level of access to finance in Israel there is no business case for such products and they rather want to invest in the implementation of contactless (NFC) technologies.

ICC- Cal is Israel's third largest card company, although in very close competition with Leumi Card. ICC-Cal is owned by Israel Discount Bank (71,8%) and First International Bank of Israel (28,2%), markets Visa, MasterCard and Diners credit cards, and provides a wide range of issuing and clearing services and credit solutions to over 1,5 million card holders and 50.000 businesses. ICC- Cal is partnering both with mobile operator Cellcom to develop a mobile wallet, and with Postal Bank to develop prepaid solutions for the underbanked (see section 6).

⁷⁶ Israel's Payment and Settlement Systems. Red Book 2010.

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3 Review of low cost financial intermediation networks

Physical access to financial services in the Mediterranean Partner Countries (MPCs) analyzed measured as the number of bank branches per 100.000 adults (15 or older) in 2011 was 16,08. This ratio for OECD countries was in 2009 ⁷⁷ of 33,4 branches, while some individual countries with high ratios of physical access to finance like Spain had 38,3 branches in 2009 and the USA 35,74⁷⁸ in 2010.

Although Israel is the only MPC analyzed that has no access to finance problem, the ratio of bank branches per 100.000 adults does not change dramatically without taking it into account. Without Israel the ratio of bank branches per 100.000 adults in the remaining seven MPCs studied is of 15 bank branches, while with Israel it is 16,08. Both ratios are higher than the one for the MENA region as a whole (14,3), almost equal to the ratio for Latin America and the Caribbean (15,8) and slightly smaller than the one for high income countries non OCDE (19,8) in 2009⁷⁹.

A very distinctive characteristic of the majority of MPCs studied is that the Postal service has a dominant position in the distribution of retail financial services and payments. As a result, if we include the network of postal branches in order to obtain the ratio of branches per 100.000 adults including Banks and Postal Services, the result is 23,56 for all MPCs analyzed (22 without Israel). Money Exchanges, Payment Service Providers and Microfinance Institutions have also important networks in MPCs. However, the density of Mobile Network Operator networks franchises is by far the highest in the region, although the potential of these networks for cash in/cash out purposes remains to be exploited in the region.

Table 21: Low cost financial intermediation networks in Mediterranean Partner Countries

2011	Bank branches	Bank Branches per 100.000 adults (15 or older)	Postal Services network	Branches per 100.000 adults including Banks and Postal Services	Money Exchanges/ Payment Service Providers	Microfinance network	MNO's network	Adult Population
Lebanon	1.032	32	75	35	1.200	40	12 Stores, 2.000 POS	3,19
Israel	1.179	21	700	34	3.000	N/A	N/A	5,50
Morocco	4.909	21	1.800	29	2.500	1.000	N/A	23,32
Jordan	770	18	250	24	234	60	150 Stores, 6.000 POS	4,21
Tunisia	1.400	17	1.036	30	N/A	377	200 stores, 150.000 POS	8,22
West Bank and Gaza	226	8	51	10	302	68	33 Stores, 2.550 POS	2,78
Egypt	3.502	6	3.800	13	6.000	250	300 stores, 110.000 POS	56,32
Algeria	1.425	5	3.500	18	N/A	N/A	350 stores, 60.000 POS	26,90

⁷⁷ Physical access to Financial Services for selected MENA countries in “Financial Inclusion in the Middle East and North Africa”, World Bank 2011.

⁷⁸ International Monetary Fund, Financial Access Survey, accessed in July 2012. <http://fas.imf.org/>

⁷⁹ Physical access to Financial Services for selected MENA countries in “Financial Inclusion in the Middle East and North Africa”, World Bank 2011.

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3.1 Review of low cost financial intermediation networks in Morocco

As of June 2011, the banking network in Morocco was composed of 4.909 branches, including the newly formed Postal Bank (Al Barid Bank) with 1.800 branches. In addition to this network, payment service providers such M2T or Wafa Cash had a network of approximately 2.500 branches while microfinance institutions had approximately 1.000 branches. Bank physical access to financial services in Morocco measured as the number of Bank Branches per 100.000 adults (21) is the second highest among the Mediterranean Partner Countries Studied with Israel, although much lower than the average of developed OECD countries (33,4). This ratio has however increased dramatically since the transformation of the financial services unit of the Postal Service into a bank (Al Barid Bank), by adding 1.800 bank branches to the system. Indeed, if we substracted the network of Al Barid Bank in order to estimate the ratio of branches per 100.000 adults, the ratio for Morocco would be the fifth of the eight countries studied instead of the second.

Since financial inclusion and promoting physical access to financial services is one of the priorities of Morocco's Central Bank (BAM), the banking law enables banks to outsource financial services through partnerships with commercial institutions. These partners operate as an IOB (Intermediare en Operation des Banques), and each partnership needs to be approved by the Supervision Department of the Central Bank before becoming operational.

MNOs currently function as agents of the bank issuer (IOB). According to the CGAP⁸⁰, a legal argument can be made that customer databases are the property of the bank and must have access. In practice, MNOs own the e-money platform and although banks have access to the information, there is no indication that banks are preventing MNOs from using the database for their own purposes, such as cross-selling.

IOBs may only be legal entities established as SAs or SARLs, limiting the pool of eligible IOBs to larger retail establishments. Some MNOs report that IOB restrictions are not onerous since the MNOs are focusing on IOBs with multiple points of sale. This may be workable in early stages of roll-out but may hinder roll-out of agent network in more isolated areas where sole proprietorships are more common.

IOBs may not subcontract IOBs – all IOBs must have a direct legal relationship with the bank (though a legal entity with multiple points of sale, such as a grocery store, requires only a single contract). In practice, MNOs identify IOBs for contract signing with the bank. This causes delays in the roll-out of the agent network. As a result when the MNO has franchises, the IOB contract is a 3-way contract between the MNO, the bank, and the IOB – laying out IOB status of the IOB while setting forth the MNO's managerial rights. Indeed, the IOB has to sign a contract directly with the bank, although the MNO has to state that is responsible for

⁸⁰ Michael Tarazi, Senior Policy Specialist CGAP

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supervising the IOB since it is its franchise. The same model also applies when instead of an MNO, the responsible of the IOB is a subsidiary of the bank, such as in the case of Wafa Cash and AttijariWafa.

Draft amendments currently being made to the Banking Law do not expressly allow payment service providers to use IOBs, although BAM is considering creating a category of Payment Service Providers agents. It is unclear whether BAM will allow entities other than SAs or SARLs to be such PSP agents if created. A failure to allow PSPs to use agents, and to use a broader definition of agents, will not alleviate the current obstacles to agent roll-out.

In terms of KYC/AML requirements, current regulation requires (i) national ID (which is widely available) and (ii) verification of customer address through secondary documentation. Although address verification can be an obstacle, it is not always required in practice and not all stakeholders believed it was necessary. BAM expressed a willingness to eliminate the address verification requirements in the draft amendments related to PSPs and e-money. A failure to do so could hinder customer enrolment.

BAM allegedly requires full KYC of payment recipients, not just senders. MNOs report that off network transactions (P2P transfer to non-account holder, known in Morocco as P2Cash) are prohibited in part because of difficulty in verifying recipient identity. However Al Barid Bank reports it will verify P2Cash recipients at time of funds retrieval.

IOB regulation hampers the use of MNO networks as agents. In particular, the use of Meditel's and INWI's, whose network is mostly composed of franchises (80% approximately in both cases). Maroc Telecom's network is however mostly owned by the operator (80%). Directly controlling the network facilitates partnerships with financial institutions through IOBs.

The existing network of remittances services could also be used for the deployment of mobile financial services. Indeed, the three most important remittances operators, BCP, Wafa Cash and Al Barid Bank have together almost 6.000 points of service that could form a very dense cash in/cash out network.

3.2 Review of low cost financial intermediation networks in Algeria

As of December 2011, the banking network of Algeria was composed of 1.425 branches. Algérie Post had an additional network of 3.500 branches. Bank physical access to financial services in Algeria measured as the number of Bank Branches per 100.000 adults (5) is the lowest among the Mediterranean Partner Countries Studied, and much lower than the average of developed OECD countries (33,4). This ratio however, does not take into account Algérie Post that on its own has a larger network than the whole financial system of Algeria. Including Algérie Post's network and all Postal Networks for the other countries, the number of branches per 100.000 adults (18) is the fifth highest among the Mediterranean Partner Countries Studied, higher than Egypt and the West Bank and Gaza.

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Within the financial system out of the existing 1.425 branches in December 2011, 1.081 were part of the government banking network; while 273 belonged to private banks and 71 composed the financial company's network. The banks with a larger network in Algeria are BADR (290 mostly located in rural areas); CNEP Banque 211; BNA 200; BDL 149, CPA 140 and BEA 91. Among private banks, only French Banks subsidiaries BNP Paribas (66) and SGA (78) had relevant branch networks.

Since in Algeria there is no agent regulation, all banking transactions have to be undertaken either at the financial services network or at AP's network. However, if Mobile Telecom operators were allowed to use their network for mobile financial services physical access to financial services would increase dramatically. Although the number of storefronts is not very large (OTA has a network composed of 90 storefronts, ATM 120 and WTA 140), the number of points of sale that all of them use (since it is not exclusive by law), is approximately of 60.000 merchants. Assuming that only one third of all the points of sale⁸¹ that are part of this network are eligible provide Cash In/Cash Out, including the 20.000 additional outlets would add four times the existing physical network providing financial services in Algeria.

3.3 Review of low cost financial intermediation networks in Tunisia

As of December 2011, the banking network of Tunisia was composed of 1.400 branches. Other than the banking sector, La Poste has a network of 1.036 branches. The microfinance's sector network is composed of ENDA's 65 branches, and Banque Tunisienne de la Solidarité's 24 own branches, and the 288 associations that belong to its network.

Bank physical access to financial services in Tunisia measured as the number of bank branches per 100.000 adults (17) is the fifth highest among the Mediterranean Partner Countries Studied, and much lower than the average of developed OECD countries (33,4). This ratio however, does not take into account the Postal Service network which is almost as dense as the whole financial system of Tunisia. Including The Postal service network and all Postal Networks for the other countries, the number of branches per 100.000 adults (30) is the third highest among the Mediterranean Partner Countries Studied.

The current regulatory framework does not enable banks to outsource financial services through agents. However, if agent's regulation was passed and the MNO network was allowed to operate as such, mobile financial services could benefit from a very dense network that includes:

- MNO Storefronts- Tunisia Telecom: 100 owned; Tunisiana: 85 outlets, 600 POS terminals, Orange: 16 exclusive agents, 400 POS.

⁸¹ This is the number of merchants that leading operator OTA uses for selling SIM cards

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- Distribution Partners- Tunisia Telecom: 4-5 distribution partners - some exclusive; Tunisiana: 8 distribution partners - all exclusive; Some partners have 4-5 levels; Orange: 5-6 distribution partners - non-exclusive
- Airtime Resellers- Tunisia Telecom has 10.000 of their own agents, used to be exclusive but the regulator forced them to open up. Have access to another 35.000 – 40.000 through partners. Tunisiana’s distribution partners provide a network of 36.000 to 40.000 agents. Orange claims that their network exceeds 65.000 agents

3.4 Review of low cost financial intermediation networks in Egypt

As of December 2011, the banking network of Egypt included 3.502 branches. In addition the Postal Service had a network of 3.800 branches, and microfinance institutions had approximately 250 outlets. Of special relevance is the network of payments service providers of almost 6.000 merchants, mostly used for bill payments and mobile top ups.

Bank physical access to financial services in Egypt measured as the number of bank branches per 100.000 adults (6) is the second lowest among the Mediterranean Partner Countries Studied only higher than Algeria’s, and much lower than the average of developed OECD countries (33,4). This ratio however, does not take into account the Postal Service network which is denser than the whole financial system of Egypt. Including The Postal service network and all Postal Networks for the other countries, the number of branches per 100.000 adults (9) is still the second lowest after the West Bank and Gaza among the Mediterranean Partner Countries Studied.

The recently passed regulations on mobile payments will allow banks to use agents, which when fully implemented might help resolve the problems of lack of physical access to financial services in Egypt with low cost distribution networks. When mobile payments and transfers regulations are fully implemented the MNO network will also be able to offer mobile financial services. This network includes:

- MNO Storefronts- Vodafone: 100 owned; Mobinil: 50 shops, 46 co-branded; Etisalat: 40 shops, 50 co-branded
- Distribution Partners- Each MNO uses some of the same distribution partners. Vodafone uses 4 non-exclusive distribution partners, 800-900 exclusive dealers and 5,000 non-exclusive dealers. Etisalat uses 4 national distribution partners, 30-40 regional distributors and 1.000 POS terminals.
- Airtime Resellers- over 100.000 claimed by each MNO. They are non-exclusive.

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3.5 Review of low cost financial intermediation networks in the West Bank and Gaza

As of December 2011, the banking network of the West Bank and Gaza included 226 branches. In addition, Money Exchanges had a network of 302 stores and Microfinance Institutions had a network of 68 branches. The Postal Service does not offer financial services, but has a network of 51 branches.

Bank physical access to financial services in the West Bank and Gaza measured as the number of bank branches per 100.000 adults (8) is the third lowest among the Mediterranean Partner Countries Studied, and much lower than the average of developed OECD countries (33,4).

If mobile payments and agent regulations were passed the MNO network would also be able to offer mobile financial services. This network currently includes:

- MNO Storefronts- Jawal: 24 and Watanya: 9
- Points of Sale- Jawal: 1.800 (800 of which in Gaza) and Watanya 750 in the West Bank.

Besides, if agent regulation was passed, some of the 28.951 merchants accounted by the Palestinian Central Bureau of Statistics as active in the WBG could also be used as agents for mobile financial purposes.

3.6 Review of low cost financial intermediation networks in Jordan

As of December 2011, the banking network of Jordan included 770 branches. In addition the Postal Service had a network of 250 branches, microfinance institutions had approximately 60 outlets, and the network of money exchange providers included 234 stores. The current Mobile Payments Circular allows the MNO network to offer mobile financial services using the mobile wallet. This network includes approximately 150 storefronts and 6.000 points of sale for the three mobile operators.

Bank physical access to financial services in Jordan measured as the number of bank branches per 100.000 adults (18) is the fourth highest among the Mediterranean Partner Countries studied and much lower than the average of developed OECD countries (33,4). This ratio does not take into account the Postal Service network, although in Jordan is not as dense as in other MPC's with only 250 branches.

Banks have continued their policy to increase their branches in the Kingdom of Jordan to cover the largest areas. The number of bank branches increased from 449 at the end of 2003 to 770 at the end of 2011, i.e. an increase of 321 branches and a growth rate of 71%. Amman still has the largest number of these branches with a percentage of 61.6% at the end of the first half of

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2010⁸². As for branching abroad mostly in Palestine, the number of branches increased at the end of the first half of 2010 to 141 representing 18% of all branches. As of December 2011, the leader in terms of the bank network was The Housing Bank for Trade & Finance with 111 branches, followed by the Bank of Jordan PLC with 80, the Arab Bank PLC with 79, the Jordan Islamic Bank with 75 and the Cairo Amman Bank with 74.

Other than the mobile payments circular, there is no other specific regulation which explicitly deals with the topic of nonbank agents. Both banks and MNOs express low levels of comfort with the idea of entrusting nonbank retail agents (other than the MNO network of storefronts) with handling cash operations on their behalf. Their main concerns seem to center around the perceived likelihood of abuse and fraud.

Two banks (CAB and SGBJ) provide a narrow range of products outside their branches by using the post offices operated by the Jordan Post Company. In the context of recent efforts to downscale its operations to small businesses and individuals, CAB uses some 20 post offices throughout the country, to market and process loan and credit card applications. The work is done by CAB employees who act primarily as loan officers (processing applications and related verifications). In rare cases, they process applications for account opening. However, the CAB employee does not handle any cash transactions. Loans are neither disbursed nor are they repaid at the post offices.

SGBJ offers —personal computer loans through Jordan Post offices. Clients file the loan applications with a post office employee who then passes them on to SGBJ and the computer store. After SGBJ's approval, the computer store delivers the computer to the post office where it is picked up by the customer. Loan repayments can be made at an SGBJ branch or at a post office. SGBJ does not offer any other service through the Jordan Post.

3.7 Review of low cost financial intermediation networks in Lebanon

As of December 2011, the banking network of Lebanon consisted of 1.032 branches. In addition the Postal Service had a network of 75 branches, microfinance institutions had approximately 40 outlets, and the network of payment service providers included 1.200 stores. The MNO network includes 12 operator owned stores (5 MTC and 7 Alpha), 19 Distributors for both operators; and approximately 2.000 sub dealers.

Bank physical access to financial services in Lebanon measured as the number of bank branches per 100.000 adults (32) is the highest among the Mediterranean Partner Countries Studied and just slightly lower than the average of developed OECD countries (33,4).

In terms of individual Banks, Byblos Banks is the most important in terms of retail network with 77 branches and 115 ATMs, followed closely by Bank Audi with 72 branches and 162

⁸² Financial Stability Report. Central Bank of Jordan, 2010.

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ATMs; Blom Bank with 61 branches and 90 ATMs; Fransabank 61 branches and 74 ATMs; Bankmed 53 branches and 87 ATMs, and BLF 44 branches and 101 ATMs.

As mentioned when reviewing the regulatory framework, electronic financial transactions may only be executed by institutions licensed by the Central Bank. The Central Bank does not provide for any express general regulations for the outsourcing of financial services (nor are there any restrictions on outsourcing). In any case, if a bank were permitted to outsource banking services, it is assumed that such entity or person would be subject to the restrictions applicable to those employed by a bank.

Current law is not explicit regarding banks' permitted outsourcing of services, including in particular financial services. Although it is possible for a bank to seek permission from the Central Bank to outsource bank operations (whether back office, financial or otherwise, such as KYC activities), banks might be more inclined to explore the possibility of outsourcing if there were greater legal clarity. This may prove of significant importance regarding the possibility of mobile financial services.

3.8 Review of low cost financial intermediation networks in Israel

As of December 2011, the banking network of Israel consisted of 1.179 bank branches. In addition the Postal Bank had a network of 700 branches, and money exchanges had approximately 3.000 points of sale. Bank physical access to financial services in Israel measured as the number of bank branches per 100.000 inhabitants (21) is the second highest among the Mediterranean Partner Countries Studied with Morocco but lower than the average of developed OECD countries (33,4). If we include the network of the postal bank, the number of branches per 100.000 adults (34) is still the second highest of the countries studied. In addition to this, regulation 5/97 related to the Proper Conduct of Banking Business gives banks the ability to work with intermediaries/agents. As a result, access to finance is not a problem in Israel, not even physical access to finance for low income or rural based customers.

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4 Review of providers of alternative risk analysis methodologies

4.1 Review of the microfinance industry

Although Microfinance in most Mediterranean Partner Countries is young compared to other areas of the world such as Asia or Latin America, it has developed extensively over the past years in some countries like Morocco, Egypt or Jordan. As a result the government institutions of Morocco, Tunisia, Egypt, WBG and Jordan are leading the development of new regulatory frameworks for microfinance that they expect to have ready by the end of 2012 or early 2013.

Table 22: Microfinance Regulatory Frameworks in Mediterranean Partner Countries

	State of the regulatory framework for Microfinance
Morocco	New Regulatory framework to be passed in 2012 for the transformation of MFIs.
Algeria	Government controlled. No specific regulation and no changes expected.
Tunisia	New Regulatory framework being developed based on the Microfinance Law passed in 2010.
Egypt	Draft Microfinance regulation not yet approved, but expected to be approved in 2013.
WBG	New Regulatory framework forces transformation by January 2013.
Jordan	Development of the new regulatory framework for microfinance to be ready by the end of 2012 or early 2013.
Lebanon	No Microfinance regulatory framework that partially explains the sector's lack of development.
Israel	No Microfinance.

Most institutions interviewed consider that new technologies and capabilities such as mobile financial services could greatly benefit the development of the microfinance sector. Also, in the future context of transformation of MFIs in the region their performance and profitability ratios are likely to worsen due to the required operational investments and additional equity. As a result, the use of mobile financial services by MFIs can not only be useful in order to keep delinquency ratios at bay by improving microcredit payments mechanisms, but also by improving the efficiency of their operations and as a result their profitability and sustainability.

However, serving the microfinance industry will be successful when MFIs are allowed to offer not only microcredit payments through the electronic wallet but also the disbursement of the microcredit. Similar experiences in other countries probe that the receiver will keep approximately 15 to 20% of the microcredit balance in the e-wallet if they are offered useful payment services and trust in the system. The most important obstacle to widespread adoption of mobile financial services for microfinance is however the lack of understanding MFIs have of mobile payments. As a result, assistance in training MFIs on how to use and offer mobile financial services to their customers is needed.

4.1.1 Review of the microfinance industry in Morocco

Morocco has become the regional leader in terms of the development of the microfinance sector. The development of its micro-finance sector although very relevant is also quite recent. The microcredit law passed in 1999 gave NGOs among other privileges the ability to offer

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microcredit without being restricted by the price caps that regulate credit in the financial industry. Besides, the positive attitude of the regulators and supervisors has helped enormously the development of the industry.

Table 23: Evolution of the microcredit in Morocco 2008-2010⁸³

Millions of Euros	2008	2009	2010
Total Assets	618	555	510
Outstanding credits	510	430	421
Delinquency ratios	53	64	62
Net Income	3	-11	3

Of special relevance in explaining the success of the microfinance industry is also the process of deregulation that the financial sector has gone through over the past years. This process has allowed micro-finance institutions to get funding from the banking and the financial industry of Morocco. Besides, the increased solvency and stability of the financial sector of the country has allowed them to offer better rates and conditions of funding to MFIs.

There are currently 13 Microcredit associations that have a license to grant microcredit in Morocco under the 1999 law that regulates associations of microcredit, after the merger of Zakoura and Fondation Banque Populaire. Under this legal framework all associations must register with the Ministry of finance, although its supervision is delegated to the Central Bank.

Commercial Banks have established close relations with microcredit institutions. BCP controls the second-largest microcredit Association (Fondation Banque Populaire pour le Microcrédit). This association was founded by BCP and benefits from operational support and funding from its parent company. BCP envisions that its foundation will not only promote economic and social development through microcredit, but also will allow BCP to gain new customers from its microcredit subsidiary. BCP has established a global strategy where it begins offering services at the base of the pyramid (Fondation Banque Populaire pour le Microcrédit), and once these customers become bankable by BCP they are transferred to the parent institution. Besides, BCP also finances the development of other microcredit associations, and therefore the industry leaders have become some of its most important corporate customers.

The Microcredit associations that operate in Morocco are however very different in terms of size, growth, target segment, credit methodology used and product offering. The microfinance sector is highly concentrated where four organizations control approximately 95% of its active customers and outstanding credit. These organizations have a national profile, extensive presence in urban areas (except ARDI) through a very dense and growing distribution network that allows them to enjoy important growth in assets. Besides, the flexible and adequate approach that the regulators and supervisors of the microfinance sector have in Morocco has allowed MFIs to expand its product offering to services other than microcredit. The growth of

⁸³ Fondation Banque Populaire Pour le Microcrédit. 2010 Annual Report.

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these three leading associations has been funded by local commercial banks that have seen how these institutions are properly managed and represent highly profitable and low risk investments.

Table 24: Customers and outstanding credit per AMC in Morocco⁸⁴

USD	Year	Gross Loan Portfolio		Number of borrowers with loans outstanding	
Al Amana	2010	295.347.932	50,04%	339.408	41,57%
Al Karama	2010	5.042.769	0,85%	16.074	1,97%
AMOS	2010	709.029	0,12%	2.779	0,34%
AMSSF/MC	2010	6.510.911	1,10%	16.476	2,02%
ARDI	2010	24.806.889	4,20%	100.743	12,34%
ATIL	2009	653.485	0,11%	1.376	0,17%
FBPMC	June 2011	173.521.704	29,40%	201.925	24,73%
FONDEP	2010	80.811.518	13,69%	132.419	16,22%
INMAA	2010	2.868.224	0,49%	5.181	0,63%
Total		590.272.461	100,00%	816.381	100,00%

The other microcredit associations are smaller and very different not only from the majors but also in between them. Some are concentrated in serving rural areas with difficult access; others concentrate on serving the poorest of the poor. These smaller organizations have low efficiency ratios, are not financially sustainable and therefore are donor-dependent for their operations. In order to become sustainable like the other three majors, they would need to merge in order to gain enough scale and improve their efficiency ratios.

However, the recent crisis has hit both the major and minor AMC's. Indeed, the excessive growth (from 2001 to 2009, AMCs have seen a yearly growth in clients of 40%) has not been adequately matched with adequate organizations able to follow up their clients of the payment of their credits. As a result, the second most important AMC (Zakoura) had to be rescued by merging it with Fondation Banque Populaire. Although it seems that the worst of the crisis has already passed, most AMCs still suffered in 2010 and 2011 from high delinquencies. As a result, and in order to strengthen the sector and enforce greater supervision the Ministry of Finance is analyzing ways for transforming the AMCs into regulated financial institutions.

Group based methodologies are the most commonly used credit risk analysis methodologies by microcredit associations in Morocco. However, over the past years leading microcredit associations have also started to grant individual credits using individual credit analysis. The law that regulates microcredit associations originally only allowed financing income generating activities, but the regulator has also allowed microcredit associations to grant home lending

⁸⁴ MIX Market, www.mix.org

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for improvements in sanitation, water and electricity. As a result microcredit associations have been able to enlarge their product offering. However, as of today microcredit associations do not provide remittances, payments, savings or insurance yet.

The thin line that separates consumer lending and microcredit in most developing nations does not apply to Morocco. Price caps do not allow commercial banks or financial companies to compete with microcredit associations, and as a result consumer financing is offered to totally different clients. As a result, banks and financial companies cannot serve profitably the customers of microcredit associations. This is one of the reasons why banks such as BCP and Crédit Agricole started their own microcredit associations, in order to be able to serve these customers without being limited by price caps regulation. Besides, these institutions plan to serve these customers during the whole cycle of their expected economic development, transferring them to the parent institution when the time comes.

Despite the current crisis, microcredit associations are still a best practice in the region in terms of supply of micro-finance services and in particular of microcredit. The success of their business model is not only explained by its specific value proposition adequately tailored to the needs of the unbanked, but also to the synergies generated with the banking and financial sector. However, the restrictions in terms of the products they can offer have limited their potential of growth although the changes being currently implemented in their regulatory framework will give them more options to grow.

The regulatory framework of the microfinance industry in Morocco is currently evolving, since the microcredit law is being amended in order to allow AMCs currently operating under the NGO status (association de microcredit) to transform into commercial financial companies. This amendment is still pending parliamentary approval, delayed due to the changes in government after the late general elections. Whenever approved, the amendment will not allow Microcredit Institutions to collect deposits, although in the context of the changes in the banking law regarding e-money issuance they could become incoming players in the mobile financial services market in Morocco.

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4.1.2 Review of the microfinance industry in Algeria

The Algerian experience in microfinance is quite recent (since the late nineties) initiated by the government in parallel with other development projects. No specific microfinance regulation exists in Algeria, although the savings and credit cooperatives regulations and specially government support schemes are supposed to lead the development of the sector. Also law (No. 90-31 on associations) and Article 77 of Ordinance No. 03-11 allow Algerian NGOs to engage in lending to their members without being subject to banking supervision. However as opposed to other countries of the region such as Tunisia, NGO's granted microcredit is not relevant.

Government Support Agencies are leading the development of microfinance in Algeria. The National Microfinance Management Agency (ANGEM), the most important government support scheme, was set up by a decision of the government council on December 16, 2003. It took over the loan portfolio of the Social Development Agency (ADS) set up in 1999, which contained many troubled loans. ANGEM is an agency reporting to the Ministry of Solidarity.

ANGEM currently has a network of 554 branches (one per "sous-prefecture") with 725 credit officers. It also has 147 trainers that monitor, help and train micro-entrepreneurs in management issues. ANGEM's network has two intermediate monitoring levels: the first one, per Willaya (prefecture) is composed of 49 branches; while the second one supervises each of the ten regions in which ANGEM's network is divided.

ANGEM currently markets two products (see below), having at the time of writing this report a total outstanding portfolio of 11 million DZD (0,1 Million EUR) with an NPL ratio of 28%. Loan disbursements and payments are undertaken at partner's banks premises. AP network is not included, since the demanded fees (4% of the payment) were too high.

- Work in capital financing (Up to 100.000 DZD (1.000 EUR)). Loan granted at 0% interest rate, fully financed by the "The Fonds Soutien du Microcredit" of the Ministry of Finance. There are currently 338.00 active loans.
- Microenterprise credit (up to 1 million DZD (10.000 EUR)) : requires 1% own financing, 29% financed by ANGEM at 0% interest rate, and the remaining 70% financed by banks at a subsidized rate of 95% in the South of the Country and the 85% in the rest. There are 23.000 active customers. Partner banks are five government banks. The only non-partner government bank is CNEP Banque that is developing an Islamic microfinance program with Al Baraka bank. The "Fonds de Soutien du Microcredit" of the Ministry of Finance guarantees 90% of principal payment.

Other microcredit government support schemes are ANSEJ CNAC. The National Agency for Youth Employment (ANSEJ) provides young people aged 19 to 35 with support for starting and financing microenterprises. The eligible investment amounts are higher, up to DZD 10 million

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(0,1 Million EUR). It has a network of 49 branches located in each Willaya, and it uses the same payment network as ANGEM.

The National Unemployment Benefit Fund (CNAC) set up a scheme to provide financing for the unemployed aged 35 to 55, for investment amounts up to DZD 10 million(0,1 Million EUR). It has a network of 49 branches located in each Willaya, and it uses the same payment network as ANGEM.

4.1.3 Review of the microfinance industry in Tunisia

The microfinance sector in Tunisia is currently served by two major providers: Enda Interarabe (ENDA) and Banque Tunisienne de la Solidarité (BTS). Enda has approximately 200.000 active clients while the BTS system (including its associations) has approximately 380.000 (80.000 served directly and 300.000 through its partner associations). A recent study commissioned by the European Commission presented in 2010, estimated that between 800.000 and 1 million economically active unbanked individuals were willing to access microcredit services⁸⁵.

In regional terms Tunisia is the third most important market, far behind Egypt and Morocco but bigger than Jordan. In terms growth while ENDA is growing the BTS system is consolidating, which gives an average growth (7% according to the World Bank in 2009), lower than countries such as Egypt, Palestine, or Lebanon but higher than Jordan and Morocco whose market is stagnating. In terms of profitability and delinquency, the very different profiles of its two main providers make a general description non relevant, as we will see in the detailed analysis per provider presented below.

The regulatory framework of the microfinance industry in Tunisia is currently evolving. A new, microfinance law was passed in October 2010, and its implantation decrees are currently being developed. The new regulatory framework will allow two types of microfinance providers: For profit organizations, and non for profit associations. The first ones, with higher requirements in terms of equity (3 Million dinars- 30.000 EUR) will also be able to grant higher amounts credits. Associations whose equity requirements are lower (0,2 Million Dinars- 2.000 EUR) will be allowed to offer lower amounts of credits. In any case, neither commercial organizations nor associations will be allowed to collect deposits.

It is expected that some private banks will be entering the market in the future by creating especially dedicated subsidiaries in order to avoid interest rate caps and offer microcredit. However, in the short run no massive interest is expected from the banking sector since it is currently focusing on its own restructuring in order to gain size and efficiency. On the other hand, three international microfinance players have already expressed interest in entering the market.

⁸⁵ « Etude sur le marché de la microfinance en Tunisie » ; IBM, 2010 . EUROPEAID/119860/C/SV/multi.

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4.1.3.1 Enda Interarabe (Enda)

Enda inter-arabe is an international non-profit NGO governed by law n° 93-80 dated 26 July 1993 which provides the legal framework under which international non-governmental organisations can set up and operate in Tunisia. A member of Enda Third-World based in Senegal, Enda has been operating in Tunisia for 20 years, 15 of which have been spent providing microcredit.

Enda is the leading MFI in the country with 65 branches, having as of March 31 2012, 204.805 active clients (with outstanding loans) for a global loan portfolio of 113 million dinars (56,3 Million EUR). Since Enda's inception, its programme has served 346.000 clients and 1.034.000 loans have been granted for a total amount of 648 million dinars (322,7 Million EUR).

Enda is a professionally managed sustainable MFI, as the following indicators prove:

- Enda reached both operational and financial self-sufficiency in 2003 (all operating costs are covered by income). Improvements in operational and financial self-sufficiency have since been recorded every year, reaching 143% and 132%, respectively, at January 31, 2012.
- In terms of profitability, return on assets reached 7% on January 31, 2012 while return on equity 31%.
- Since 1995, the overall repayment rate of Enda's microcredit programme is 99.5%.
- In May 2010, Enda received an "a" for our financial performance and "excellent" for our social rating from MicroRate.

Due to this professionalism and sustainable business model implemented, Enda is able to raise capital through several national and international financial institutions. In September 2005, Enda's first commercial loan (2 million dinars- 1 million EUR aprox.) was granted by Banque de l'Habitat. This was the first-ever commercial loan granted by a bank to a Tunisian NGO. In 2006, the European Investment Bank (EIB) was the first international financial institution to grant a commercial loan (750.000 EUR) to Enda. Since then, global loans contracted have amounted to 74 million dinars (36,8 Million EUR), most of which - 74% - come from Tunisian banks.

One of the key elements of Enda's strategic plan is to keep on improving efficiency. As a result, it has started conversations with several providers of mobile financial services in order to facilitate the payments of microcredits through the cellular phone. The solution that they are currently considering implementing, is the one developed with Via Mobile in partnership with Bank BIAT that will be described in detail below.

4.1.3.2 Banque Tunisienne de la Solidarité

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Banque Tunisienne de la Solidarité (BTS) was formed in December 1997 following the decision of a Ministerial Council of 21 May 1997. Its mission was the provision of financial services for job creation purposes. As a commercial bank, is governed by Tunisian banking law n ° 67-51 of 7 December 1967 which regulates the banking industry. It started operations in March 1998.

BTS is under the joint supervision of the Ministry of Finance and Central Bank of Tunisia (BCT), and it aims to provide funding and creating revenue streams for those who cannot gather the necessary resources or to offer sufficient guarantees for the conventional bank credit. It is as result a government run financial institution that provides subsidized microcredit, and therefore implementing a business model that has not been based on financial sustainability (in 2011 it suffered a net loss of 3,4 Million dirhams- 1,7 Million EUR).

As of December 2011, its equity (40 Million Tunisian Dinars (TND)- approximately 20 million EUR) was held (54%) held by the State and certain public enterprises, and the remaining (46%) by the private sector (with more than 220.000 individuals shareholders located throughout the country).

BTS outstanding loan portfolio as of December 2011 is of 350 Million dinars (175 Million EUR). BTS operates through two different business models:

- Direct lending through its 24 branches (1 located at each Prefecture). Loans ranging from 2.500 dirhams (1.250 EUR) to the maximum amount of 50.000 dirhams (25.000 EUR), charge a subsidized 5% interest rate. BTS currently serves 80.000 customers directly following this business model.
- Partnership with 288 associations, offering loans up to 2.500 dinars (1.250 EUR). The 300.000 customers of the associations have to pay no interest for these loans (the state pays 5%).

The BTS system is currently under review. The African development bank is launching a study to analyze its future role, in the context of the recently passed microfinance law. Some of the problems the BTS system poses are:

- Delinquency ratios: according to BTS, direct credit has a 30% delinquency ratio while association credit has 10%. Although delinquency ratios pose no solvency risk to BTS, since 90% of outstanding loans are ensured by Société Tunisienne de Garantie, the systemic consequences of “non payment” attitudes can be very damaging for the development of the microfinance industry as the case of Fondation Zakoura in Morocco proves.
- Subsidized microcredit, such as the one BTS offers, hampers competition in the microfinance sector and its sustainability over time.

Although BTS is a bank, and as a result it is allowed to collect deposits and issue means of payment, it only collects deposits in the Tunis branch (located in its headquarters) and issues

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no means of payment. However, its strategy in terms of deposits aims at having all BTS branches opening bank accounts for their clients (the number of branches is expected to increase to 100). In terms of means of payments, BTS currently partners with La Poste for microcredit payments, handling 90% of all its payments. The rest are direct transfers or payments in cash to the BTS account in Tunis.

La Poste seems BTS best partner for deploying mobile financial services since they already have a payments partnership, and they are both state controlled institutions. Besides, as we will see later in this report La Poste has already launched its own mobile financial services offering called Mobidinar that could be also used for microcredit payment. However, BTS current priority is to redefine its role in the Tunisian microfinance sector, and any other initiative is likely to be postponed until the decision on the future role of BTS is made.

4.1.4 Review of the microfinance industry in Egypt

Egypt is with Morocco leading the development of Microfinance in the region⁸⁶. As of June 2011 the sector's total customer base was estimated to exceed 1.6 million⁸⁷ – of which approximately 50% were females – served by more than 400 institutions with a total outstanding portfolio of almost EGP 2.2 billion (approximately 280 million EUR). Institutions offering microcredit programs in Egypt include four banks and more than 396 NGOs. In spite of this large number of institutions, market research indicates a supply gap estimated at 90%⁸⁸.

Seven institutions serve approximately 65% of active borrowers, namely Assiut Businessmen Association, Lead Foundation, Alexandria Businessmen Association, the Egyptian Small Enterprise Development Association, Dakahleya Businessmen Association for Community Development, Banque du Caire, and Al Tadamun. The remaining NGOs (more than 395 NGOs) and banks (three banks and two service companies) have respectively 25% and 10% market share.

Institutions providing microfinance services in Egypt include banks and non-governmental organizations (NGO-MFIs), as well as the National Postal Authority and informal institutions such as rotating savings and credit associations (ROSCAs). Banks are regulated by the Central Bank of Egypt (CBE). The Egyptian Financial Supervisory Authority (EFSA), a regulatory authority created in 2009 under the Law for the Regulation of Non-Banking Financial Markets and Instruments (the "Single Regulator Law"), regulates securities markets and non-bank financial institutions. NGO-MFIs are overseen by the Ministry of Social Solidarity (MSS).

⁸⁶ "Financial Inclusion in the Middle East and North Africa. Analysis and Roadmap Recommendations". The World Bank 2011.

⁸⁷ SANABEL, Quarterly Newsletter June 2011.

⁸⁸ SANABEL. Microfinance Industry Profile: Egypt. January 2010

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A draft microfinance regulatory framework (Draft General Rules for Microfinance Companies) was presented in 2010 (before the revolution), but that has not been approved yet. When passed (2013 expected⁸⁹), it will create a new category of non-banking financial institution (microfinance companies or MFCs) in order to facilitate commercial microlending under the regulation of the EFSA. Successful Egyptian NGO-MFIs are keen to transform into microfinance companies (MFCs) so that they can provide a variety of services and increase their access to funding. However, they will first have to face the legal and technical barriers to such transformation⁹⁰.

Within the existing regulatory framework in Egypt, there are two categories of microcredit providers in Egypt: NGOs and Banks. Other microfinance services have been offered on a relatively small-scale by other institutions such as: the National Postal Authority in Egypt provides micro-saving schemes and micro-remittances; and Insurance companies have recently started to offer microinsurance – life and disability insurance– through MFIs to the clients of their microcredit programs.

Microcredit programs were first introduced in Egypt by USAID through National Bank for Development (NBD) and Alexandria Businessmen Association (ABA) in the late 1980s with the technical and financial assistance of USAID. In the following decade, more NGOs were engaged in the provision of microcredit led by donors, while banks remained reluctant to explore this industry.

In 2001, Banque du Caire – with the technical and financial assistance of USAID – introduced its microcredit program. The success of BdC's program encouraged another Public Sector Bank – Banque Misr (BM) – to launch a microcredit program in 2004 with the technical assistance of the IFC. In 2007, the service company microcredit business model began to be implemented in Egypt whereby companies acted as agents for banks and other financial institutions (e.g. insurance companies) to provide microfinance services.

Non-Government Organizations (NGOs) are the major suppliers of microcredit in Egypt with a market share of 83% of the total number of active borrowers and 68% of the total outstanding portfolio of microcredit in Egypt⁹¹. There are currently approximately 400 NGOs in Egypt providing microcredit programs, divided into two main groups:

- The six biggest MFIs (mostly financed by USAID since their inception), control over 60% of active clients and more than 40% of the total outstanding portfolio. Three or four of these MFIs are ready to transform whenever the regulatory framework is approved.

⁸⁹ According to the interviews held, the new regulatory framework is not expected to be approved until 2013

⁹⁰ “ The Legal and Regulatory Environment for Microfinance in Egypt: Diagnostic Study with Focus on NGO-MFI Transformation Issues”; 15 Jun 2009, Chemonics International Inc. & CGAP

⁹¹ EFSA, http://www.efsa.gov.eg/content/efsa2_en/efsa2_merge_page_en/micro_merge_page_en.htm accessed in May 2012

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- A great number of village-based community development associations offering microcredit services that are financially and technically supported by the Social Fund for Development (SFD).

Banks remained reluctant to offer microcredit with the exception of four banks, namely National Bank for Development (NBD), Banque du Caire (BdC), Banque Misr (BM), and recently Bank of Alexandria (BoA). Private sector banks remain reluctant to offer microcredit due to a number of reasons, among which are the limited network of branches and infrastructure, lack of human resources and know-how of microcredit, in addition to the banks' perception that MF clients are of high risk.

Banks directly offering microcredit in Egypt own a total market share of approximately 14% of the active borrowers and 26,5% of the total outstanding portfolio. BdC has the largest microcredit program among all banks (market share of 6,8% of the total number of active clients and 15,2% of the total outstanding portfolio).

Microfinance service company business model. Two private sector banks offer microcredit in cooperation with microfinance service companies. Such model has been adopted by "Reefy" in cooperation with the Commercial International Bank (CIB) and "Tanmeyah" in cooperation with the Egyptian Gulf Bank (EGB). The service company model overcomes the factors mentioned above which inhibited banks from offering microcredit.

- "Reefy" was established in 2007 as a Joint Stock Company with Egyptian shareholders and SFD. It has been cooperating with CIB to offer microcredit to small and microenterprises.
- "Tanmeyah" was established in 2009 as a Joint Stock Company with Egyptian shareholders, Finance Unlimited – a platform company of Citadel Capital - and EGB. Both service companies own a market share of 3% of current active borrowers and 5,8% of the total outstanding portfolio.

4.1.5 Review of the microfinance industry in the West Bank and Gaza

The microfinance industry in the WBG is dominated by Microfinance Associations while banks do not participate actively. MFIs are not allowed to collect deposits, and since 2010 they are under the supervision of the Palestinian Monetary Authority. As a result, all Microfinance Associations previously subject to the Associations law and to the Ministry of Interior have to transform into specialized lending institutions by January 2013, although according to the PMA this deadline could be extended.

The most important requirement of the transformation process is the capital needed, although other conditions set in the regulations relate to liquidity, governance, disclosure of information, and internal/external audit. Microfinance associations can be transformed into two types of specialized lending institutions:

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- Private limited company - 5 million USD equity required
- Corporation listed in the Stock Exchange- 10 million USD equity required

As of December 2011 the number of microfinance associations that were working within the framework of the Palestinian Network for Small and Microfinance (Sharakeh) was of 10 institutions, operating through a network of 68 branches. Microfinance institutions manage a portfolio of loans which reached a total value of USD 75,6 million in December 2011, an increase of 19% compared to what it was in 2010. Also in December 2011, Palestinian MFIs served 43.409 customers, and increase of 18% compared to 2010. Per regions, 72% of the total value of the portfolio and 73% of total clients were in the West Bank, while the rest were in Gaza.

Table 25: Outstanding portfolio and number of active clients of Palestinian MFIs⁹²

MFI	OUTSTANDING PORTFOLIO Dec 2011	NO. OF ACTIVE CLIENTS Dec 2011	OUTSTANDING PORTFOLIO Dec 2010	NO. OF ACTIVE CLIENTS Dec 2010
Asala	\$3.450.509,00	4.065	\$3.457.363,00	3.172
UNRWA MD	\$14.742.054,00	13.222	\$13.480.195,00	10.960
Faten	\$27.057.330,00	14.114	\$21.109.777,00	11.008
CHF - Ryada	\$13.420.164,45	4.937	\$11.551.959,97	5.510
Women Fund	\$831.100,00	388	\$74.442,09	66
Islamic Relief	\$1.637.800,00	636	\$1.337.125,00	639
PDF	\$4.724.975,00	1.346	\$4.764.707,95	960
REEF	\$5.068.643,00	1.085	\$3.511.528,00	769
YMCA	\$248.233,88	206	\$503.469,60	298
ACAD	\$4.466.920,00	3.410	\$3.761.780,42	3.389
Total	75.647.729	43409	63.552.348	36771

Most Microfinance associations suffer from a capital shortage, and the subsequent negative impact on the possibility of expanding their funding. On the other hand, according to the PMA the risks associated with the quality of the assets of these institutions are considered critical and could threaten the sustainability of their financial activity, on the basis of risk management processes used and the nature of guarantees from borrowers accepted by these institutions compared with the loans guarantees from banks.

Despite the increased risks associated with the activity of these institutions, Palestinian MFI's achieved good performance with an average return on equity (ROE) of 5.4% in 2009, while the

⁹² Microfocus Report. December 2011. Palestinian Network for Small and Microfinance (Sharakeh)

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rate of the return on assets (ROA) was 4.4% (no available data for 2010)⁹³. However, in the context of the transformation of the Palestinian MFIs their performance and profitability ratios are likely to worsen due to the required operational investments and additional equity. As a result, the use of mobile financial services by MFIs can not only be useful in order to keep delinquency ratios at bay by improving microcredit payments mechanisms, but also by improving the efficiency of their operations and as a result their profitability and sustainability.

4.1.6 Review of the microfinance industry in Jordan

Jordan was the first Arab country to develop a National Microfinance Strategy to guide the development of the microfinance sector. The strategy was developed by the Jordanian Microfinance Committee established by the Ministry of Planning and International Cooperation (MPIC), with technical assistance made available by CGAP. The strategy was approved by the Jordanian Council of Ministers in the spring of 2005. As a result, today Jordan is after Morocco and Egypt one of the countries of the region where microfinance is most developed⁹⁴.

In February 2011 the government of Jordan, under the direction and leadership of the Ministry of Planning and International Cooperation (MoPIC), launched a participatory review process to update the National Microfinance Strategy prepared in 2005. According to this study⁹⁵ presented in May 2012, the state of the microfinance sector in Jordan can be described as a sector in constant growth, where the government is actively involved and open for new initiatives.

As shown in the table below, at the time of writing this report in Jordan there are five registered not for profit institutions and 3 commercial companies that are labeled Microfinance institutions whose sole activity is microcredit. In addition there is one commercial bank, one donor agency and one governmental agency that disburse micro and small loans. And several smaller NGOs and informal institutions that grant micro loans.

MFIs are organized in a national level microfinance association called Tanmeyah, which has an official legal form, offices and employees, with the objective of sharing experience and data, advocate, and collaborate in order to provide a more convenient environment for the development of new microfinance products.

Average annual growth rate in outreach has achieved a ratio of 28% between 2006 and 2010, translating into an increase in active borrowers from 76.830 to 203.579 clients (71% of which are women), and a total Gross Loan Portfolio of 111,6 million JD (128,6 Million EUR). In fact, a

⁹³ Palestinian Monetary Authority. Financial Stability Report, 2010.

⁹⁴ "Financial Inclusion in the Middle East and North Africa Analysis and Roadmap Recommendations". World Bank. 2011.

⁹⁵ "Jordan Microfinance Study", May 2012

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previous study undertaken in 2007 by Planet Finance argued that while Jordanians have reasonable access to the banking infrastructure, they have limited access to loans. “Access to finance is less available to low-income people, as a result of the sizes of loan amounts which are not adapted to their needs”. The study concluded that the number of borrowers could triple based on the existing demand.

Table 26: Outstanding portfolio and number of active clients of Jordanian institution involved in Microfinance⁹⁶

Types of MFIS	Name	Borrowers December 2010	Total Market Share Clients	Outstanding Portfolio Jordan Dinar	Total Market Share Outstanding Portfolio
Not For Profit Company	Al Watani National	24.521	12%	11.283.365	10%
	Middle East Microcredit	11.948	6%	13.348.321	12%
	MicroFund for Women (MFW)	62.408	31%	14.311.062	13%
	Tamweelcom	51.574	25%	13.497.602	12%
	Total Not-for-Profit	150.451	74%	52.440.350	47%
For Profit Company	Al Ahli Microfinance Company	6.136	3%	4.423.187	4%
	Al Amin	3.210	2%	1.437.241	1%
	FINCA Jordan	11.197	6%	3.871.956	3%
	Total For Profit Companies	20.543	10%	9.732.384	9%
Commercial Banks	Cairo Amman Bank (CAB)	1.641	1%	1.501.142	1%
	Total Commercial Banks	1.641	1%	1.501.142	1%
Donor Agency	UNWRA	5.568	3%	3.476.833	3%
	Total Donor Agency	5.568	3%	3.476.833	3%
Governmental Agencies	Development Employment	25.376	25.376	44.418.871	40%
	Total Government Agencies	25.376	12%	44.418.871	40%
Total		203.579	100%	111.569.580	100%

MFIs operating in the sector exhibit strong operational and financial performance, with the majority achieving sustainability and having full time, highly educated managers. MFIs are expanding their networks, with an ever-growing number of agencies and field Officers for each of the MFIs operating. There is also a growing practice of client credit information sharing among MFIs to help prevent against over indebtedness and maintain good portfolio quality. The credit bureau will implemented, will allow them also to access banking and other financial and payments information. Finally, MFI’s have increased the diversity of commercial funding sources among MFIs to fund expansion and growth.

As mentioned earlier, the Ministry of Planning and International Cooperation (MPIC) is leading the development of the new regulatory framework for microfinance that they expect to have ready by the end of 2012 or early 2013. MPIC considers that new technologies and capabilities such as mobile financial services could greatly benefit the development of the microfinance sector in Jordan, and this is why they want to leave that option available for willing MFIs in the new regulatory framework. Also, in the future context of transformation of Jordanians MFIs their performance and profitability ratios are likely to worsen due to the required operational investments and additional equity. As a result, the use of mobile financial services by MFIs can not only be useful in order to keep delinquency ratios at bay by

⁹⁶ Jordan National Microfinance Strategy 2011

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improving microcredit payments mechanisms, but also by improving the efficiency of their operations and as a result their profitability and sustainability.

4.1.7 Review of the microfinance industry in Lebanon

Lebanon’s microfinance sector has not developed as much as other countries in the Arab Region over the past 10 years, being far from meeting the potential demand. Most of Lebanon microfinance providers offer only microcredit services. The existing Lebanese regulatory framework does not impose an institution to obtain permission to engage in lending. As a result the following types of institutions currently provide microcredit in Lebanon: NGOs (which includes civil associations), financial institutions, cooperatives and banks. In addition there is the United Nations Relief and Works Agency for Palestine Refugees (UNRWA program). Most of the microcredit providers in Lebanon operate as NGOs although the second biggest, Ameen, is a financial institution.

Most of the microcredit providers were formed by local or international NGOs to provide various social and economic development services, including microcredit. Credit is often provided at below market interest rates, where credit and repayment risk are not always properly analyzed. Market leaders Al Majmoua and Ameen focus however on financial sustainability following international best practices.

Table 27: Microcredit providers in Lebanon⁹⁷

MFIs	Customers	Loan Portfolio (million USD)
Al Majouma (March 2012)	30.057	26,26
Ameen (March 2012)	16.000	17,15
ADR (2010)	14.407	2,16
Makhzoumi Foundation (2010)	448	0,65
EMKAN (2010)	4.930	0,01

The comparative lack of development of Lebanon’s microfinance industry is largely due to the limited capacities of the NGOs. In particular, though engaged in microcredit, small NGOs are also involved in a number of other development activities and have not invested significantly in improving their management or growing their portfolios. As a result, most of Lebanon’s microcredit providers lack the sound financial and operational capacity to manage funds at a significant scale. Even the outreach of Al Majmoua and of Ammeen, the two leading microcredit providers specialized in microfinance is limited compared to other microfinance institutions of similar age in the region.

⁹⁷MIX Market: <http://www.mixmarket.org/mfi/country/Lebanon>

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In order to resolve the problems mentioned related to the lack of capacity of Lebanese microcredit providers, the two leading microcredit institutions have been working with banks in order to increase their capacity and improve their efficiency. Ameen for example, partners with banks by identifying potential borrowers. The bank's role is to fund the loans, either 100% or partially with Ameen. Typically, Ameen identifies potential clients and manages the portfolio and the bank disburses the loans and collects repayments thereof.

On the funding side, Al Majmoua obtained in May 2010 a loan from the EIB for the USD equivalent of EUR 2 million. Also, this microcredit organization has negotiated with commercial banks partially guaranteed loans by donors like AFD or Grameen-Jameel to finance its growth.

Finally, both Al Majmoua and Ameen use bank tellers to disburse loans and collect payments. Typically, the Microcredit Organization manages the portfolio and arranges for disbursements and loan repayments to be made at the bank's tellers. However, using this payment network is expensive and both institutions are willing to explore ways in which they could use mobile financial services as a more efficient way of disbursing loans and collecting payments.

4.1.8 Review of the microfinance industry in Israel

There is no microfinance in Israel. The Postal Bank was interested in offering credit to its low income clientele. CBI responded that in order to do so they needed to apply for a bank license, and that is currently beyond the possibilities of the Israeli Postal Service.

4.2 Credit information infrastructure

In the Mediterranean Partner Countries Studied, while the quality of credit reporting has improved in recent years especially in Morocco, Egypt and WBG due largely to the introduction of new credit bureaus, much remains to be done, both in terms of design and coverage. Six of the countries studied have Public Credit Registries (PCR) while only three have Private Credit Bureaus (PCB).

Table 28: Credit Information Infrastructure in Mediterranean Partner Countries

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2011	Private Credit Bureau Coverage	Public Credit Registry Coverage	Depth of Credit Information
Morocco	14,60%	N/A	5
Algeria	N/A	0,30%	3
Tunisia	N/A	27,30%	5
Egypt	13,70%	3,50%	6
WBG	N/A	5,50%	3
Jordan	N/A	1,60%	2
Lebanon	N/A	16,60%	5
Israel	100%	N/A	5

PCRs are administered by central banks or bank supervisors and basically collect information from supervised institutions. PCBs constantly seek to expand the scope of their information and thus develop a more complete picture of a borrower’s financial dealings. Because participation in PCRs is mandatory, they can build a picture of the regulated financial system relatively quickly, and support the oversight functions of the regulators. As a result, if PCR’s coverage was large enough, they could help nonbank mobile financial services operators enter the market.

4.2.1 Credit information infrastructure in Morocco

BAM set up a central risk registry in 1978 with the objective of making available credit institutions a device for decision support that is reliable, secure and available for assess the risks of their counterparties. The role of Bank Al-Maghrib in this area has subsequently been more clearly defined, including the adoption of the Banking Act of 06 July 1993, which stipulates in Article 109 that: "BAM organizes and manages a Service Centralization of Risks; credit institutions are required to communicate to BAM all documents and information necessary to operate this service within the time limits and conditions fixed by him". Similarly, the new Banking Act No. 34-03 of 14 February 2006 confirmed, through Article 120, the functions previously provided, in Article 109 referred to above, in terms of centralization and risk communication credit.

Since 2004, BAM has engaged in a process of developing its core information by defining a comprehensive strategy for implementing a new system of reliable financial information, meeting the highest international standards. In this context and following a diagnosis of infrastructure sharing credit information established in late 2005, Bank Al-Maghrib begun its proposed delegation of the current Central risk to one or more structures benefiting of proven experience in the field, commonly known as "credit bureaus."

The main goals of this project were: 1)Strengthening and modernizing the existing infrastructure of information sharing on debt and delinquencies;2) Making available to credit

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institutions and similar bodies concerned of a reliable decision support, enabling them to better assess the risks of their counterparties, through reporting gathering aggregate information on all credits to their customers and their payment;3) Reduction of defaults; 4)And increasing the rate of access to bank financing while helping to lower the cost of credit.

For the implementation of this delegation, BAM launched in February 2007, an international call for applications, based on a management contract establishing the legal, technical and financial, under which an operator International expert in the trade was approved by BAM dated September 21, 2007. The implementation of the first structure of sharing credit information started in the second half of 2008 and was completed in 2009.

In addition , the regulations (2/G, 27/G, and 28/G) issued by the Central Bank of Morocco (BAM) in 2007 have definitely enhanced the regional panorama, pioneering an effective information sharing model unheard of in MENA before. Basically, in line with the discretionary powers given to BAM by the revised Banking Law (art 120 2007), BAM has “delegated” to the private sector (Private Credit Bureau- PCB) all credit information services that generally are performed by the Public Central Registry (PCR), and has closed the PCR to further inquiries from the lenders. In the Moroccan approach, the Central Bank plays a key role, not limiting itself to licensing and supervising PCBs, but taking a pro-active and intermediary function between the PCBs and the lending industry users-data providers. The regulation mandates lenders (MFIs, Banks, and NBFIs) to periodically provide BAM with all credit information, which is then transmitted, by BAM to all PCBs operating in the market (Mandatory Sharing Model).

According to a recent report published by the World Bank⁹⁸, the innovative model of “delegation” introduced by BAM offers significant advantages for the establishment of a complete national credit reporting system. This is particularly recommendable for countries where, understanding and awareness about information sharing benefits are still to be acquired, as it facilitates the roll-out of effective credit reporting.

However, the many pros of the Moroccan credit reporting model can be offset if monopoly situations, even temporary, are created. Empirical evidence so far shows that this model, quite successful in Latin America, becomes fully viable and efficient when more PCBs are licensed by the Supervisor and become operational in the market. In fact, the information that freely flows to the PCB from the Central Bank represents an enormous competitive advantage if only one PCB is licensed and operating in a situation of actual monopoly. Obviously a situation of market competition, with a second licensed PCB, would represent a stronger stimulus, for the existing PCB, to pursue the evolution of the system and develop tailored services for special lenders (e.g. MFIs). Prices would be lower, dictated by market forces and would not need to be imposed. So far, in Morocco, only one PCB, EXPERIAN, has been licensed (December 2009). Undoubtedly, a second license, would benefit the market, and render it more, open, free,

⁹⁸ “Financial Access and Stability: A Road Map for the Middle East and North Africa”, World Bank, 2011

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competitive, client and borrowers oriented. Regulators adopting the Morocco model should be vigilant on this issue.

The results of the Moroccan Model , according the Doing Business project, whose most recent round of data collection for the project that was completed in June 2011, shows that coverage in Morocco is 14,6% of total population of individuals and firms as the following table shows.

Table 29: Credit bureau coverage⁹⁹

Coverage	Private credit bureau	Public credit registry
Number of individuals	3,040,349	0
Number of firms	98,895	0
Percent of total	14.6	0.0

In terms of the quality of information, the depth of credit information index gives Morocco a quit high score (5 out of 6) as the following table shows. Both the depth information index is higher than the MENA average (3) and that the private credit bureau coverage MENA average (9,3%), although much lower than OECD high income countries with also a 5 depth information index coverage but a 63,9% Private Credit Bureau coverage.

Morocco’s PCB system, if the competition issue is resolved, allows existing and potential actors in mobile financial services access relevant information from both financial and non financial operators, both for banked and non banked customers. Some the many benefits this centralized system of information has for the uptake of mobile financial services are: 1)Permits to tailor ad-hoc services, and define ad-hoc prices and conditions for Microfinance institutions, mitigating the disparity existing with other lending sectors, and strengthening the MFIs important social role; 2)Establishes full-file, positive credit reporting available to every mobile financial services operators operator in the country; 3) Prevents market fragmentation / vertical informational silos (separate/partial PCBs); 4) Prevents lenders’ reluctance to share data (generally a major issue); 5) Establishes cross-sector sharing (regulated with non-regulated); 6) Allows non-regulated lenders to be part of the system (with consumers’ consent).

Table 30: Depth on credit information in Morocco¹⁰⁰

⁹⁹ <http://www.doingbusiness.org/data/exploreeconomies/morocco/getting-credit/> accessed in april 2012

¹⁰⁰ <http://www.doingbusiness.org/data/exploreeconomies/morocco/getting-credit/> accessed in april 2012

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Depth of credit information index (0-6)	Private credit bureau	Public credit registry	Score
Are data on both firms and individuals distributed?	Yes	No	1
Are both positive and negative data distributed?	Yes	No	1
Does the registry distribute credit information from retailers, trade creditors or utility companies as well as financial institutions?	No	No	0
Are more than 2 years of historical credit information distributed?	Yes	No	1
Is data on all loans below 1% of income per capita distributed?	Yes	No	1
Is it guaranteed by law that borrowers can inspect their data in the largest credit registry?	Yes	No	1
Score ("yes" to either public bureau or private registry)			5

4.2.2 Credit information infrastructure in Algeria

Ordonnance 03-11 calls for a credit reporting system to be set up at the Bank of Algeria, with a central credit register and a central default register. The central credit register is responsible for centralizing data on all bank loans and providing information to lenders on request about the level of indebtedness of all loan applicants. Banks and finance companies are required to file reports on all loans over DZD 2 million (20.000 EUR) granted to and used by the same borrower which explains why according to the World Bank¹⁰¹ credit information coverage in Algeria is so low (0,3%). Indeed, although the cost of running the registers is borne by banks and finance companies, the minimum reporting amount is so high enough that excludes substantial numbers of small loans to craft workers, merchants, farmers and payroll employees.

The default register is responsible for centralizing data on all payment incidents, including loan defaults and dishonored checks. The register's database is updated by means of payment incident reports filed by financial intermediaries. Banks are required to file such reports.

Reglèment of the 4th of August 2011 states the Council of Money and Credit decision to put in place a Credit Bureau. The non-existence of this credit bureau is as mentioned before, the

¹⁰¹ <http://www.doingbusiness.org/data/exploreeconomies/algeria/getting-credit/> accessed in May 2012

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reason that according to the BA explains the 2010 ban of consumer credit. The new system will be run by the Central Bank, with a unique identification number for companies (tax number) and individuals (ID). According to BA, the system should be operational in August 2013. It will be developed by D&B on of the world's leading source of commercial information, and it will have 5 years of information stored.

In terms of depth of credit information, according also to the World Bank “Doing Business Report”, Algeria scores low (3 out 6), as we can see in the following table. Indeed, in regional terms Algeria ranks 12 out of 18 in the getting credit ranking (that includes both coverage and depth of PCR or PCB) of the MENA region according to the World Bank Doing Business ranking produced in June 2011.

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Table 31: Depth on credit information in Algeria¹⁰²

Depth of credit information index (0-6)	Private credit bureau	Public credit registry	Score
Are data on both firms and individuals distributed?	No	Yes	1
Are both positive and negative data distributed?	No	Yes	1
Does the registry distribute credit information from retailers, trade creditors or utility companies as well as financial institutions?	No	No	0
Are more than 2 years of historical credit information distributed?	No	No	0
Is data on all loans below 1% of income per capita distributed?	No	No	0
Is it guaranteed by law that borrowers can inspect their data in the largest credit registry?	No	Yes	1
Score ("yes" to either public bureau or private registry)			3

4.2.3 Credit information infrastructure in Tunisia

Tunisia has one Public Central Registry (PCR) and no Private Credit Bureau (PCB). The lack of a PCB does not favor the deployment of mobile financial services, since it prevents the synergies between PCBs and MFS operators from materializing. In the case of Tunisia however the PCR's coverage is high in regional terms. Tunisia's PCR although not optimal, reports 1.382.647 individuals and 641.984 firms, which represents 27.3% of the total population.

Table 32: PCR coverage¹⁰³

Coverage	Private credit bureau	Public credit registry
Number of individuals	0	1,382,647
Number of firms	0	641,984
Percent of total	0.0	27.3

¹⁰² <http://www.doingbusiness.org/data/exploreeconomies/algeria/getting-credit/> accessed in May 2012

¹⁰³ <http://www.doingbusiness.org/data/exploreeconomies/tunisia/getting-credit/> accessed in april 2012

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In terms of depth of credit information, Tunisia also scores high (5 out of 6) as we can see in the following table, confirming that although the PCR is not the ideal solution, its usability for financial inclusion purposes is acceptable. Indeed, in regional terms Tunisia ranks 5 out of 18 in the getting credit ranking (that includes both coverage and depth of PCR or PCB) of the MENA region according to the World Bank Doing Business ranking produced in June 2011.

Table 33: Depth on credit information in Tunisia¹⁰⁴

Depth of credit information index (0-6)	Private credit bureau	Public credit registry	Score
Are data on both firms and individuals distributed?	No	Yes	1
Are both positive and negative data distributed?	No	Yes	1
Does the registry distribute credit information from retailers, trade creditors or utility companies as well as financial institutions?	No	No	0
Are more than 2 years of historical credit information distributed?	No	Yes	1
Is data on all loans below 1% of income per capita distributed?	No	Yes	1
Is it guaranteed by law that borrowers can inspect their data in the largest credit registry?	No	Yes	1
Score ("yes" to either public bureau or private registry)			5

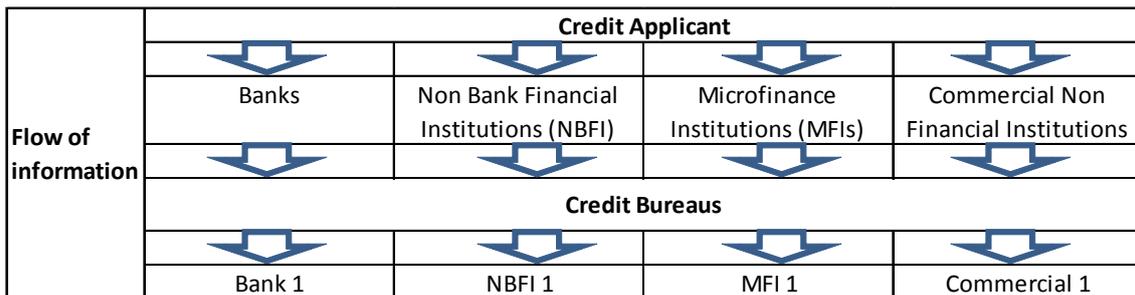
¹⁰⁴ <http://www.doingbusiness.org/data/exploreeconomies/tunisia/getting-credit/> accessed in april 2012

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4.2.4 Credit information infrastructure in Egypt

Egypt is the only Mediterranean Partner Country that has both Public Credit Registry and a Private Credit Bureau¹⁰⁵. In the MENA region, only the United Arab Emirates are in the same situation. Egypt’s private credit bureau (I-Score) started functioning in 2008, after the Central Bank of Egypt enforced a regulation in 2006 for “The Setup and Operations of Credit Reporting, Scoring, Licensing, and Supervision by the Central Bank”, paving the way for the establishment of the first Private Credit Bureau (I-Score, formerly Estealam). The norms contained in the regulation are comprehensive and consider all aspects of private credit reporting such as set-up, licensing, operations, data security, consumers’ rights, supervision, violations and sanctions¹⁰⁶. The main difference with the Morocco’s model is that the information sharing scheme does not require the involvement of the Central Bank (supervisor of the system), since information is deliberately and directly exchanged between lenders/users/data providers and the PCB (Voluntary Sharing Model).

Table 34: Credit bureau Voluntary Sharing Model in Egypt¹⁰⁷



I-Score maintains a database of credit information for SMEs and consumers. Authorized users (I-Score bank members¹⁰⁸) are entitled to access I-Score's database to carry out creditworthiness checks on consumers. According to I-Score, as of June 2010 the PCB held more than 89% of credit data of individuals and SMEs from financial institutions in Egypt (both banks and non-banks).

Coverage in Egypt is high in regional terms. Egypt’s Private Credit Bureau (PCB) scores higher than the average for the MENA region, with a 13,7% coverage (9,3% MENA region average). Egypt’s Public Credit Registry (PCR) however scores lower than the average for the MENA region with a 3,5% coverage (average MENA region 8,1%).

¹⁰⁵ “The status of information sharing and credit reporting infrastructure in the MENA region”, World Bank, June 2010.

¹⁰⁶ “Rules, Regulations and Licensing for Egyptian Credit Bureaus Technical Report #39”. USAID, February 2006.

¹⁰⁷ “The status of information sharing and credit reporting infrastructure in the MENA region”, World Bank, June 2010.

¹⁰⁸ I-Score is owned by the Egyptian Banks

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Table 35: PCB and PCR coverage¹⁰⁹

Coverage	Private credit bureau	Public credit registry
Number of individuals	7,254,378	1,787,764
Number of firms	78,583	73,708
Percent of total	13.7	3.5

In terms of depth of credit information, Egypt scores very high (6 out of 6) as we can see in the following table. Indeed, in regional terms Egypt ranks 2 out of 18 in the getting credit ranking (that includes both coverage and depth of PCR or PCB) of the MENA region according to the World Bank Doing Business ranking produced in June 2011.

Table 36: Depth on credit information in Egypt¹¹⁰

Depth of credit information index (0-6)	Private credit bureau	Public credit registry	Score
Are data on both firms and individuals distributed?	Yes	Yes	1
Are both positive and negative data distributed?	Yes	No	1
Does the registry distribute credit information from retailers, trade creditors or utility companies as well as financial institutions?	Yes	No	1
Are more than 2 years of historical credit information distributed?	Yes	No	1
Is data on all loans below 1% of income per capita distributed?	Yes	No	1
Is it guaranteed by law that borrowers can inspect their data in the largest credit registry?	Yes	No	1
Score ("yes" to either public bureau or private registry)			6

4.2.5 Credit information infrastructure in the West Bank and Gaza

The credit bureau system in the WBG is quite advanced and undoubtedly one of the most effective Public Credit Registries (PCR) in the region, particularly when considered that it was internally designed and developed. In 2011 the World Bank defined it as a “First Class Private

¹⁰⁹ <http://www.doingbusiness.org/data/exploreeconomies/Egypt/getting-credit/> accessed in May 2012

¹¹⁰ <http://www.doingbusiness.org/data/exploreeconomies/egypt/getting-credit/> accessed in May 2012

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Credit Registry with Private Credit Bureau Functionality”¹¹¹. The Palestine Monetary Authority (PMA) pioneered the sharing and usage of positive and full credit information, by educating lenders about the necessity and importance of sharing credit information. The PMA established its first manual Private Credit Registry (fax operated) in 2007. In 2008 the on-line credit reporting service was launched, and in 2009 the first microfinance institutions were connected.

The PMA’s fundamental goals were twofold: First, to collect information from the credit industry to support its oversight duties; Second, to supply lenders with reliable and complete information for credit underwriting purposes. The credit bureau database is available for use by banks and specialized lending institutions (MFIs). The system aims at facilitating lending and borrowing, and enhancing the strength of the Palestinian financial sector. The credit bureau system uses three automated systems: the Credit Registry (launched in 2008), the electronic Bounced Checks System (launched in 2010), and the Credit Scoring System (launched in 2010). The following is a profile of each of these systems:

- The Public Credit Registry is a web-based, on-line facility for inquiries and data sharing. Banks (87% of all records) and MFIs (13% of records) provide the PCR with all credit information on all borrowers. No threshold is applied, and even the smallest loan amounts must be reported (mandatory). Regulated entities are mandated to inquiry the PCR before lending. Information is stored at customer level.
- The automated unpaid-checks file that must be consulted by the lenders before a new current account is open and the checkbook given is integrated within the system. When a bounced check is registered on the history of a consumer, and a credit report is pulled from the PCR on the same name, a flag is shown on the credit report highlighting the problem to the users. The report visually identifies the seriousness of the situation through different colors.
- The credit scoring system is the latest addition of the system, and it is considered an outstanding addition to the tools for reducing credit risk. It aims at being used when preparing credit studies and analyses. This system strengthens the ability of financial institutions that lack the required expertise and infrastructure, to study and analyze a client’s outstanding and paid facilities data.

Although mandatory, the coverage of the credit registry system in the WBG is lower than average in the MENA region combined coverage of PCB and PCR (9,3% MENA region combined average) and even lower than the average for public credit registry coverage (average MENA region 8,1%). This low coverage is however due to the lack of credit in the WBG not to the system itself.

¹¹¹ “The status of information sharing and credit reporting infrastructure in the MENA region”, World Bank, June 2010.

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Table 37: PCB and PCR coverage¹¹²

Coverage	Private credit bureau	Public credit registry
Number of individuals	0	116,402
Number of firms	0	2,751
Percent of total	0.0	5.5

In terms of depth of credit information, WBG scores (3 out of 6) also lower than the MENA region average (4 out of 6). This low ranking is mostly due to the fact that non-financial institutions such as electricity, water and telecom companies do not provide information to the system. Also the lack of a regulatory framework guaranteeing that borrowers can access their credit information lowers WBG's ranking.

Table 38: Depth on credit information in the West Bank and Gaza¹¹³

Depth of credit information index (0-6)	Private credit bureau	Public credit registry	Score
Are data on both firms and individuals distributed?	No	Yes	1
Are both positive and negative data distributed?	No	Yes	1
Does the registry distribute credit information from retailers, trade creditors or utility companies as well as financial institutions?	No	No	0
Are more than 2 years of historical credit information distributed?	No	No	0
Is data on all loans below 1% of income per capita distributed?	No	Yes	1
Is it guaranteed by law that borrowers can inspect their data in the largest credit registry?	No	No	0
Score ("yes" to either public bureau or private registry)			3

¹¹² <http://www.doingbusiness.org/data/exploreeconomies/west-bank-and-gaza#getting-credit> accessed in July 2012

¹¹³ <http://www.doingbusiness.org/data/exploreeconomies/west-bank-and-gaza#getting-credit> accessed in July 2012

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4.2.6 Credit information infrastructure in Jordan

There is no operational private credit bureau in Jordan, although the regulations regarding Credit Information were passed in 2010 and 2011, replacing the unsuccessful Credit Information Law of 2003. The banking association is leading the effort to find a strategic partner to apply for a Credit Bureau license, although no applications have been received yet.

In terms of public credit registry, the CBJ is required by law to provide licensed banks with credit information relating to their clients through the public credit registry. The CBJ will notify the bank if (i) the loan applicant has been granted a loan by any other bank and (ii) the total debt of such person (of which the CBJ is aware) if such total exceeds JD 20.000 (23.0937 EUR). However as we can see in the following table, coverage is very low being only 1,6% of total population of individuals and corporations according to the World Bank.

Table 39: PCB and PCR coverage in Jordan¹¹⁴

Coverage	Private credit bureau	Public credit registry
Number of individuals	0	-
Number of firms	0	-
Percent of total	0.0	1.6

In terms of depth of credit information, Jordan scores (2 out of 6) also lower than the MENA region average (4 out of 6). This low ranking is mostly due to the fact that not only non financial institutions such as electricity, water and telecom companies do not provide information to the system, but also to the lack of a regulatory framework guaranteeing that borrowers can access their credit information lowers WBG’s ranking and that loans below 20.000 JD (23.0937 EUR) are not reported.

¹¹⁴ <http://www.doingbusiness.org/data/exploreeconomies/Jordan/#getting-credit> accessed in July 2012

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Table 40: Depth on credit information in Jordan¹¹⁵

Depth of credit information index (0-6)	Private credit bureau	Public credit registry	Score
Are data on both firms and individuals distributed?	No	Yes	1
Are both positive and negative data distributed?	No	Yes	1
Does the registry distribute credit information from retailers, trade creditors or utility companies as well as financial institutions?	No	No	0
Are more than 2 years of historical credit information distributed?	No	No	0
Is data on all loans below 1% of income per capita distributed?	No	No	0
Is it guaranteed by law that borrowers can inspect their data in the largest credit registry?	No	No	0
Score ("yes" to either public bureau or private registry)			2

4.2.7 Credit information infrastructure in Lebanon

There is not private credit bureau in Lebanon, since banks did not want to share customer’s information. Lebanon’s public credit registry is run by BdL, following circular 75 of the year 2000, on the Status of the Central Office of Credit Risk. Information is received from all financial institutions under the supervision of BdL: Commercial Banks (Local and Foreign); Investment Banks; Representative Offices of Foreign Banks; Financial Institutions; Leasing Companies; Brokerage Firms; Money Dealers and Mutual Investment Schemes (Mutual Funds and Investment Companies). Although the public registry does not receive information coming from non financial companies such as utilities, coverage is very high (16,6% according to the World Bank, see table below), because no loan limits are set on the amount of the loan to be reported and distribution of information is mandatory.

Lebanon’s public credit registry is electronically accessible, with positive and negative information reported of individuals and companies. It provides credit classification although not scoring. Price per query is not an obstacle since it is low (20 cents), however microcredit

¹¹⁵ <http://www.doingbusiness.org/data/exploreeconomies/> Jordan #getting-credit accessed in July 2012

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NGO's cannot access the information directly, but through a bank which jeopardizes their credit risk analysis.

Table 41: PCB and PCR coverage in Lebanon¹¹⁶

Coverage	Private credit bureau	Public credit registry
Number of individuals	0	304,257
Number of firms	0	13,692
Percent of total	0.0	16.6

In terms of depth of credit information, Lebanon scores (5 out of 6), higher than the MENA region average (4 out of 6). As a matter of fact Lebanon complies with all best practices presented in the table below except with the fact that the registry does not distribute credit information from retailers, trade creditors or utility companies as well as financial institutions. As a result in regional terms, Lebanon scores 2 out of 18 in the general getting credit category¹¹⁷.

Table 42: Depth on credit information in Lebanon¹¹⁸

Depth of credit information index (0-6)	credit bureau	credit registry	Score
Are data on both firms and individuals distributed?	No	Yes	1
Are both positive and negative data distributed?	No	Yes	1
Does the registry distribute credit information from retailers, trade creditors or utility companies as well as financial institutions?	No	No	0
Are more than 2 years of historical credit information distributed?	No	Yes	1
Is data on all loans below 1% of income per capita distributed?	No	Yes	1
Is it guaranteed by law that borrowers can inspect their data in the largest credit registry?	No	Yes	1
Score ("yes" to either public bureau or private registry)			5

¹¹⁶ <http://www.doingbusiness.org/data/exploreeconomies/lebanon/getting-credit/> accessed in July 2012

¹¹⁷ <http://www.doingbusiness.org/Rankings>

¹¹⁸ <http://www.doingbusiness.org/data/exploreeconomies/lebanon/getting-credit/> accessed in July 2012

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4.2.8 Credit information infrastructure in Israel

There are two private credit bureaus in Israel that follow the requirements set in the credit services data Law of 2002. Although the scores the World Bank¹¹⁹ gives Israel both in terms coverage (100%) and depth of credit information (5 out of 6) are very high, commercial lenders argue the information provided is not commercially useful and as a result it does not enhance competition.

Table 43: PCB and PCR coverage in Israel¹²⁰

Coverage	Private credit bureau	Public credit registry
Number of individuals	4,596,252	0
Number of firms	450	0
Percent of total	100.0	0.0

In terms of depth of credit information, Israel complies with all best practices presented in the table below except with the fact that the credit bureau does not distribute credit information positive information required for scoring purposes.

Table 44: Depth on credit information in Israel¹²¹

Depth of credit information index (0-6)	Private credit bureau	Public credit registry	Score
Are data on both firms and individuals distributed?	Yes	No	1
Are both positive and negative data distributed?	No	No	0
Does the registry distribute credit information from retailers, trade creditors or utility companies as well as financial institutions?	Yes	No	1
Are more than 2 years of historical credit information distributed?	Yes	No	1
Is data on all loans below 1% of income per capita distributed?	Yes	No	1
Is it guaranteed by law that borrowers can inspect their data in the largest credit registry?	Yes	No	1
Score ("yes" to either public bureau or private registry)			5

¹¹⁹ <http://www.doingbusiness.org/data/exploreeconomies/israel#getting-credit> accessed in July 2012

¹²⁰ <http://www.doingbusiness.org/data/exploreeconomies/israel#getting-credit> accessed in July 2012

¹²¹ <http://www.doingbusiness.org/data/exploreeconomies/israel#getting-credit> accessed in July 2012

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5 Review of providers of Remittances

International remittances could be one of the mobile financial services more demanded in Mediterranean Partners Countries due not only to the importance they have for the economies of the region in terms of GDP, especially for the lower income segments of the populations of MPCs, but also because prices of remittances in the region are still high compared to other regions. The uptake of mobile financial services in countries like the Philippines or Kenya is mostly explained by the success of operators such as M–Pesa, G-Cash, or Smart in providing remittances services, whether international (the Phillipines) or domestic (Kenya).

Table 45: Remittances inflows received in Mediterranean Partner Countries¹²²

2010	Remmittances Inflows USD Millions	% GDP
Morocco	6.423	7,04%
Algeria	2.044	1,28%
Tunisia	1.970	4,45%
Egypt	7.725	3,53%
WBG	1.151	15,39%
Jordan	3.641	13,78%
Lebanon	7.558	19,38%
Israel	1.411	0,65%

In the Mediterranean Partner Countries studied, remittances inflows are important in terms of GDP in Morocco (7.04%), in Tunisia (4.45%), in Egypt (3.53%), in WBG (15.39%), in Jordan (13.78%) and in Lebanon (19,38%). In Algeria and Israel remittances inflows are not relevant. In terms of prices, sending remittances to MPCs cost average the same as the average obtained for the other corridors followed by the World Bank’s remittances database. The cost of sending 500 USD to MPCs was in the first quarter of 2102 5.56%, while the average for all corridors was 5.57%. As a result there is room for incoming players such as in the case of the Phillipines, using mobile financial services to offer international remittances at a lower price.

¹²² World Development Indicators, World Bank “<http://databank.worldbank.org/data/home.aspx>”

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Table 46: First Quarter 2012 Average remittances prices for selected Mediterranean Partner Country corridors for sending 500 USD (393 EUR)¹²³

Sending country	Receiving country	Percent (%)
Germany	Lebanon	8,84
Germany	Morocco	7,84
France	Algeria	7,41
France	Tunisia	7,02
UAE	WBG	7,00
Belgium	Morocco	6,68
USA	Lebanon	6,51
France	Morocco	6,31
United States	Lebanon	5,25
Italy	Morocco	5,15
Spain	Morocco	4,90
Netherlands	Morocco	4,25
Jordan	WBG	4,00
Saudi Arabia	Egypt	3,24
Saudi Arabia	Jordan	2,73
United Arab Emirates	Egypt	1,83
	Average MPCs	5,56
	Average Worldwide	5,57

5.1 Review of providers of Remittances in Morocco

According to the current regulatory framework¹²⁴ Money Transfer Operators (Sociétés de transfert de fonds) are a special type of regulated financial institution whose licensing requirements and supervision is responsibility of BAM. As of June 2011, there were 10 MTOs licensed in Morocco.

The remittances phenomenon has helped Morocco to improve its macroeconomic situation. On the one hand, remittances flows are very relevant in terms of the percentage of GDP they represent and their growth explains part of the country's economic growth. On the other hand, the impact of remittances in the balance of payments has helped to stabilize the macroeconomic situation by improving the current account balance and diminishing interest rates. Morocco received 6.422 million US dollars in remittances in 2010 that represented 7,04% of its GDP. Neighboring countries also received important flows such as Argelia, Tunisia, and Egypt although those flows were less important in the percentage they represented of

¹²³ <http://remittanceprices.worldbank.org/>

¹²⁴ Arrêté du Ministre des Finances et de la Privatisation n° 1510.07 du 26 juillet 2007 ; Circulaire du Gouverneur de Bank Al-Maghrib 37/G/2007 du 9 juillet 2007 relative au capital minimum des intermédiaires en matière de transfert de fonds ; Lettre Circulaire 05/DSB/2007 du 18 septembre 2007

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their countries GDP's. Remittances received in other MPC countries such as Jordan or Lebanon, were in percentage terms more important than in Morocco.

Table 47: Evolution of remittances in Morocco 2000-2010¹²⁵

Morocco	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP (Million US\$)	37.021	37.725	40.416	49.823	56.948	59.524	65.637	75.226	88.883	91.375	91.196
Workers' remittances and compensation of employees, received (Million US\$)	2.161	3.261	2.877	3.614	4.221	4.590	5.451	6.730	6.895	6.270	6.423
Remittances/GDP (%)	5,84%	8,64%	7,12%	7,25%	7,41%	7,71%	8,31%	8,95%	7,76%	6,86%	7,04%

However, the analysis of the impact of remittances in the economy of Morocco (and in general of any recipient country) would not be complete if we only used macroeconomic indicators. Microeconomic indicators allow us to better understand the importance of those flows in terms of the percentage of income they represent for receiving households that are normally poor. Remittances in Morocco (based on WDI 2005 data) represented 27,55% of the per capita income of the poorest 20% of the population of the country. They represented 16,90% of the second 20% poorest segment of the population of Morocco. However, they only represented 3,84% of the per capita income of the richest 20% of the population of the country. As a result we can see how relevant remittances flows are for the poorest 40% of the population of Morocco who receives the bulk of these capital flows, in absolute and even in comparative regional terms¹²⁶.

However, remittances are not only important in terms of balance of payments and economic impact per income quintiles, but also in terms of their funding importance for the Moroccan Banking system. Deposits remain the main funding source for banks (72,5% of total liabilities and equity), of which 20,5% of deposits come from Moroccans living abroad.

Remittances operators (Sociétés de Transferts des Fonds) could be used as the ideal network for cash in/cash out purposes for mobile financial services. Indeed, According to market research produced for BCP, MTOs handle approximately 38% of the total volume of remittances received in Morocco, followed by cash (27%), bank transfers (17%), postal services (11%) and other (7%). Although the three most important players in the market in Morocco are banks with approximately 30% market share, each has a large network serving remittances receivers: BCP (BCP's network (948 branches) also with FBPMC's network (308) since January 2012), AttijariWafa (mostly through Wafa Cash -1550 outlets), and Al Barid Bank (through La Poste Network- 2.000 branches).

An example of an independent local MTO is payments and transfer company M2T, with 960 points of service, largely small shops, branded under a common name "L'Espace Service," enabled to receive utility payments. M2T charges a fee to bill issuers for each payment collected and they pay a fixed fee to the merchants (1 Dirham per transaction). The network

¹²⁵ World Development Indicators, World Bank "http://databank.worldbank.org/data/home.aspx"

¹²⁶ "Océanos Azules para productos financieros", Prior F., Santomá J., 2008. Ed. Deusto

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handles close to 3 million payment transactions per month. In addition to offering a cash in/out network, M2T is currently making its technology available as a payments platform to secure cards through mobiles transactions.

5.2 Review of providers of Remittances in Algeria

According to the World Bank Algeria received 2.044 million US dollars (1.643 Million EUR) in remittances in 2010 that represented 1,28% of its GDP. According to the World Bank’s Migration and Remittances Factbook 2011, in 2010 Algeria had 1,2 Million emigrants , which represented 3,4% of its total population. Top destination countries were: France, Spain, Israel, Canada, Italy, Belgium, Germany, the United Kingdom, Tunisia, and the United States.

The current regulatory framework imposes that Money Transfer Activities can only be offered by licensed Banks to operate in foreign markets and La Poste d’Algérie. Western Union and Money Gram operate in partnership with banks and AP.

Table 48: Evolution of remittances in Algeria 2000-2010¹²⁷

Algeria	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP (Million US\$)	54.790	55.181	57.053	68.019	85.014	102.339	117.169	135.804	170.989	140.577	159.426
Workers' remittances and compensation of employees, received (Million US\$)	790	670	1.070	1.750	2.460	2.060	1.610	2.120	2.202	2.059	2.044
Remittances/GDP (%)	1,44%	1,21%	1,88%	2,57%	2,89%	2,01%	1,37%	1,56%	1,29%	1,46%	1,28%

Banks can offer both remittances in local and foreign currency. The ability to offer accounts denominated in foreign currency is a major competitive advantage for banks since remittances receivers are interested in receiving foreign currency, in order to exchange if needed in the informal market where the exchange rate is much higher than the formal one.

Prices for sending remittances to Algeria are high in regional terms as we can see in the following table. Indeed, according to the remittances price database for selected corridors set up by the World Bank, in the first quarter of 2012 sending money from France to Algeria costs 7,41% of the amount sent (500 USD), while from France to Tunisia the cost is 7,02% of the amount sent and from France to Morocco the cost is of 6,31%. Other corridors are also cheaper, but since the country of origin is different comparisons are less meaningful.

The relative high cost of sending remittances to Algeria can make of this service a killer application for mobile financial services when authorized. As we can see in the following table however, the prices charged by providers differ substantially. Besides, banks do not charge any exchange rate commissions since the reception is in foreign currency. Operators using mobile wallets might be forced to receive remittances in local currency as AP currently does, thus decreasing the competitiveness of their offer.

¹²⁷ World Development Indicators, World Bank “<http://databank.worldbank.org/data/home.aspx>”

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Most remittances sent to Algeria come from the former Metropole France (90 % according to the interviews held with central and commercial bank officials¹²⁸). Banks dominate the formal transfer market from France to Algeria, since banks have the advantage of offering accounts in Euros for receiving remittances. Besides transfer agreements such as the one that BRED in France has with BADR and BEA decrease costs and the time of the transfer. Also the fact that French banks such as BNP Paribas and SG have a presence in Algeria improves its service offering.

In addition to bank remittances, transfers include pensions sent through AP and informal transfers (cars, cash). AP receives the payment of pensions by the French Treasury to Algerians having retired and relocated to Algeria. Pensions are received only in DZD, although some pensioners in order to avoid any potential risk of devaluation cash them out, buy Euros in the informal market and deposit them in a Euro denominated account in a bank.

Informal remittances are estimated to represent a very important percentage of the remittances received by Algerians, although no precise value is known. Algerian Migrants seem to prefer to take presents and cash with them when going home. According to the EIB¹²⁹, the majority of the total volume of remittances made by Algerian migrants living in France passes through unofficial channels (51%).

5.3 Review of providers of Remittances in Tunisia

The current regulatory framework imposes that Money Transfer Activities can only be undertaken by Banks and La Poste. The latter with its 1.036 branches, is the leader with an overwhelming 85 % market share in the distribution of international remittances (either with its own services such as “Mandat International” or through partnerships with MTOs (Western Union)).

According to the World Bank Tunisia received 1.970 million US dollars in remittances in 2010 that represented 4,45% of its GDP, more than 50% of which are supposed to come from France¹³⁰. Importance of remittances as percentage of GDP is average/low in regional terms, lower than Morocco, Jordan or Lebanon but higher than Algeria, and Egypt.

¹²⁸ This percentage was also mentioned in EIB/FEMIP sponsored study on “Study on improving the efficiency of workers’ remittances in Mediterranean countries”, 2006

¹²⁹ EIB/FEMIP sponsored study on “Study on improving the efficiency of workers’ remittances in Mediterranean countries”, 2006

¹³⁰ “Study on improving the efficiency of workers’ remittances in Mediterranean countries”, EIB, 2005.

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Table 49: Evolution of remittances in Tunisia 2000-2010¹³¹

Tunisia	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP (Million US\$)	19.443	19.988	21.047	24.992	28.129	28.968	30.962	35.620	40.845	43.522	44.291
Workers' remittances and compensation of employees, received (Million US\$)	796	927	1.070	1.250	1.431	1.393	1.510	1.716	1.977	1.964	1.970
Remittances/GDP (%)	4,09%	4,64%	5,09%	5,00%	5,09%	4,81%	4,88%	4,82%	4,84%	4,51%	4,45%

Also, the analysis of the impact of remittances in the economy in Tunisia (and in general of any recipient country) would not be complete if we only used macroeconomic indicators. Microeconomic indicators allow us to better understand the importance of those flows in terms of the percentage of income they represent for receiving households that are normally poor. Remittances in Tunisia (based on WDI 2005 data) represented 17,74% of the per capita income of the poorest 20% of the population of the country. They represented 10,34% of the second 20% poorest segment of the population. However, they only represented 2,25% of the per capita income of the richest 20% of the population of the country. As a result we can see how relevant remittances flows are for the poorest 40% of the population of Tunisia who receive the bulk of these capital flows, in absolute and even in comparative regional terms¹³².

5.4 Review of providers of Remittances in Egypt

The current regulatory framework imposes that Money Transfer Activities can only be undertaken by Banks, the Egypt Post and licensed Money Transfer Operators. Two money transfer operators have been licensed up to now by the CBE, Western Union and Sphinx. Western Union operates with its own network and in partnership with Egypt Post. Sphinx does not currently operate.

According to the World Bank, Egypt received 7.725 million US dollars in remittances in 2010 that represented 3,53% of its GDP. According to the IOM¹³³, remittances form a significant proportion of household income representing, on average, 43 % of the total household income

According to the Central Bank of Egypt, in 2009 approximately 23% of remittances came from the USA, 15% from Kuwait, 14% from UAE, 9% from Saudi Arabia, and 8% for the EU. The importance of remittances as percentage of GDP is low in regional terms, lower than Tunisia, Morocco, Jordan or Lebanon but higher than Algeria.

Also according to the IOM, the most widely used method to send remittances to Egypt are bank transfers 62,4%, followed by a friend or relative visiting 21,5%; Money transfer services in partnership with banks 6,8%; Post office 4,6% ; Western Union 3,0%; payment cards 0,8%; Migrant' s employer' s Cairo branch office 0,4% and In-person, when visiting 0,4%.

¹³¹ World Development Indicators, World Bank “<http://databank.worldbank.org/data/home.aspx>”

¹³² “Océanos Azules para productos financieros”, Prior F., Santomá J., 2008. Ed. Deusto

¹³³ “A Study on Remittances and Investment Opportunities for Egyptian Migrants”. IOM, 2010.

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Table 50: Evolution of remittances in Egypt 2000-2010¹³⁴

Egypt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP (Million US\$)	99.839	97.632	87.851	82.924	78.845	89.686	107.484	130.473	162.836	188.984	218.912
Workers' remittances and compensation of employees, received (Million US\$)	2.852	2.911	2.893	2.961	3.341	5.017	5.330	7.656	8.694	7.150	7.725
Remittances/GDP (%)	2,86%	2,98%	3,29%	3,57%	4,24%	5,59%	4,96%	5,87%	5,34%	3,78%	3,53%

The Egyptian Postal Service has developed a financial service through which migrants can send money to a specific person using their bank accounts abroad and the beneficiary can cash it in EGP by going to the Egyptian post office against a fee. Moreover, Egypt Post provides a variety of remittance services where migrants can pay government entities when abroad and can have remittances transferred electronically.

Neither individual banks nor the SFD in Egypt have special, tailored products for migrants. However, the two largest public banks in Egypt – the Bank Misr and the National Bank of Egypt have agreements with almost 56 exchange bureaus in other Arab countries and have a large number of branches in different parts of Egypt and other Arab countries to facilitate access by migrants. Besides, Bank Misr and the National Bank of Egypt have introduced a system of cards (similar to ATM cards) whereby migrants abroad can deposit their transfers at the exchange bureaus or cooperating banks using their bank card and the recipients (in Egypt) can withdraw the money by using another similar card.

According to the World Bank ¹³⁵ remittances database, sending money to Egypt is relatively non expensive compared to other countries of the region. Indeed, In the first quarter of 2012 the average fees for sending 500 USD (393 EUR) from UAE to Egypt represented 1,83% and from Saudi Arabia to Egypt costs 3,24% of the total amount sent.

One of the reasons behind the relatively low fees of remittances to Egypt is that banks market remittance transfers by lowering fees to beneficiaries (recipients), since they do not generally provide any other specific branded service for remittances senders or receivers.

5.5 Review of providers of Remittances in the West Bank and Gaza

Remittances in the WBG are currently provided by banks, international remittance companies, and licensed money exchange companies connected either to banks or to international remittance companies. At the time of writing this report there were two International Remittance Firms operating in Palestine: Western Union with 52 outlets and Money Gram with 55. According to recent market research, 47% of unbanked Palestinians and 50% of banked Palestinians living in the WBG receive remittances. Unbanked customers receive remittances mostly through banks (38%), relatives visiting the WBG (28%) and international remittances

¹³⁴ World Development Indicators, World Bank “<http://databank.worldbank.org/data/home.aspx>”

¹³⁵ <http://remittanceprices.worldbank.org/> consulted on May 15th 2012

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companies (23%). Banked customers receive remittances also mostly through banks (57%), international remittance companies (27%) and relatives visiting the WBG (12%).

In terms of Money Exchanges, the current regulatory framework imposes that Money Transfer Activities can only be undertaken by licensed Money Changers with 1 Million USD in equity. At the time of writing this report there were in the WBG 282 Money change companies, 44 operating in Gaza and 238 in the West Bank. Money exchanges are the most attractive remittances network because of their working hours, and better services (open on Saturdays, and even Fridays- religious day).

Remittances are a very important driver of the economy in the West Bank and Gaza, and it is often argued that in their absence, the economy would be much worse off than it is. According to the World Bank the WBG¹³⁶ received 1.151 million US dollars in remittances in 2010, which represented 15,39% of the GDP of the WBG. Remittances are considered to have played a particularly important role since the Israeli occupation in 1967, with remitted earnings from Gulf states and Israel benefiting households across the West Bank and Gaza. According to the World Bank, sizable portions of households in the West Bank (a fifth) and in Gaza (about two-fifths) currently receive remittances.

It is estimated that there are approximately 3 million Palestinian emigrants that represent a 68,3% of the population of the WBG. Most Palestinian emigrants reside in Israel, the Syrian Arab Republic, Jordan, Saudi Arabia, the Arab Republic of Egypt, Libya, the Republic of Yemen, Canada, Iraq, the United Kingdom and Australia.

Table 51: Evolution of remittances in WBG 2001-2010¹³⁷

USD Million	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Nominal GDP	3.897	3.432	3.840	4.198	4.634	4.619	5.182	6.247	6.763	7.478
Remittances	1.066	1.035	571	637	705	928	1.084	1.227	1.105	1.151
Remittances/GDP (%)	27,35%	30,16%	14,87%	15,17%	15,21%	20,09%	20,92%	19,64%	16,34%	15,39%

Prices of remittances to the WBG are average-high in regional terms. While sending 500 USD from Jordan costs approximately 3 to 4% when using banks and 6 to 8,5% when using international remittances companies such as Western Union and Money Gram , sending the same amount from the UAE costs approximately 12 to 31 % when using banks and 2,4 to 3% when using international remittances companies.

The costs of sending 200 USD are much higher in percentage terms, being from Jordan approximately in between 12%-20% for banks, and between 12%-15% for International

¹³⁶ The Migration and Remittances Factbook 2011, World Bank.

¹³⁷ World Bank (Migration and Remittances Factbook 2011), and Palestinian Monetary Authority (Annual report 2010)

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Remittances Operators. From UAE costs are approximately 12 to 31% of the amount sent when using banks and 12% to 15% when using international remittances companies.

5.6 Review of providers of Remittances in Jordan

Remittances in Jordan are currently provided by banks, money exchange companies, the postal service and international remittance companies like Western Union and Money Gram. Money exchanges are the most attractive remittances network because of their working hours, and better services (open on Saturdays, and even Fridays- religious day).

At the time of writing this report there were 139 Money Exchange Businesses in Jordan, with a total network of 234 branches. The sector is highly fragmented, and in terms of remittances they are mostly connected to International Money Transmitter Operators, although some of them are also agents of banks or the postal service for remittances purposes.

According to the World Bank¹³⁸, foreign nationals mostly Palestinians make up 39 % of Jordan’s population, one of the highest rates in the world. Just over one % of the Jordanian population works abroad. Inward remittance flows in 2011 totaled an estimated USD 3.554 million, 12,32 % of GDP. The true size of remittances, including unrecorded flows through formal and informal channels, is believed to be even larger.

Table 52: Evolution of remittances in Jordan 2001-2010¹³⁹

USD Million	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nominal GDP	8.464	8.980	9.584	10.198	11.411	12.589	15.057	17.111	21.972	23.820	26.425	28.840
Remittances	1.845	2.011	2.143	2.201	2.330	2.500	2.883	3.434	3.794	3.597	3.641	3.554
Remittances/GDP (%)	21,80%	22,39%	22,36%	21,58%	20,42%	19,86%	19,15%	20,07%	17,27%	15,10%	13,78%	12,32%

Prices of remittances to Jordan and from Jordan are relatively non expensive compared to other corridors according to the World Bank remittances database. Indeed sending 500 USD from Saudi Arabia to Jordan costs 2,73% while sending 500 USD From Jordan to the West Bank and Gaza costs an average of 4% of the amount sent.

5.7 Review of providers of Remittances in Lebanon

As presented in the review of the regulatory framework, circular 69 states that only licensed institutions can engage in collecting payments, domestic and international remittances. Thus, international remittance companies like Western Union and Money Gram, need to use licensed affiliate networks in order to offer their services. Western Union uses OMT, while Money Gram uses Cash United.

¹³⁸ World Bank (Migration and Remittances Factbook 2011

¹³⁹ World Bank (Migration and Remittances Factbook 2011

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Cashunited SAL is a financial services provider that operates through more three branches and 440 agents in Lebanon. The company is the representative of MoneyGram in Lebanon since 2001 offering international money transfers. It also offers other services including bill payment, mobile / internet recharge and insurance.

OMT SAL is Western Union financial services distributor. It provides its services through a network of more than 10 standalone locations, 650 retail locations, and the banking networks of BLC Bank, Credit Libanais, First National Bank and Lebanon & Gulf Bank. Other than Western Union international, domestic and business transfer it also provides payment services such as Telecom Bill Payments, credit cards payments, and governments payments. It also distributes pre-paid lines, post-paid lines, recharge cards and e-vouchers.

According to the Migration Policy Institute¹⁴⁰, foreign nationals make up 18% of Lebanon’s population. Also Lebanese emigration is relevant, representing 16% of Lebanon’s population in 2010. Inward remittances flows in 2011 totaled an estimated USD 7.558 million, 17,92% of GDP one of the highest rates in the world. Besides inward remittances have grown constantly over the past ten years, being in 2011 almost twice the value recorded in 2002.

Table 53: Evolution of remittances in Lebanon 2002-2011¹⁴¹

USD Million	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nominal GDP	19.152	20.083	21.789	21.861	22.438	25.057	30.080	34.925	39.006	42.185
Remittances	2.544	4.743	5.591	4.924	5.202	5.769	7.181	7.558	7.558	7.558
Remittances/GDP (%)	13,28%	23,62%	25,66%	22,52%	23,18%	23,02%	23,87%	21,64%	19,38%	17,92%

Prices of remittances to Lebanon are expensive compared to other corridors according to the World Bank remittances database. Indeed sending 500 USD from Germany to Lebanon costs 8.84% while sending 500 USD from the USA to Lebanon costs an average of 6,51% of the amount sent.

5.8 Review of providers of Remittances in Israel

Contrary to neighboring MPCs Israel is not a net receiver but a net sender of remittances. According to the World Bank, as the table below shows in 2010 remittances outflows totaled 3.739 Million USD (1,72% GDP), while remittances inflows totaled 1.475 Million USD (0,65% GDP). Also according to the World Bank, Israel is the third non OECD receiver of immigrants only after Saudi Arabia and the United Arab Emirates.

¹⁴⁰ Migration Policy Institute, Lebanon Profile 2011.

¹⁴¹ <http://databank.worldbank.org/ddp/home.do?Step=3&id=>

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Table 54: Evolution of outflows and inflows of remittances in Israel 2000-2011¹⁴²

USD Million	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nominal GDP	124.895	122.940	112.974	118.673	126.571	133.959	145.479	167.111	201.661	194.866	217.443	242.928
Remittances Outflows	3.255	3.039	2.781	2.502	2.218	2.206	2.334	2.798	3.550	3.283	3.739	
Remittances/GDP (%)	2,61%	2,47%	2,46%	2,11%	1,75%	1,65%	1,60%	1,67%	1,76%	1,68%	1,72%	
USD Million	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nominal GDP	124.895	122940	112974	118673	126571	133959	145479	167.111	201.661	194.866	217.443	242.928
Remittances Inflows	400	499	409	423	714	850	944	1.042	1.422	1.267	1.411	1.475
Remittances/GDP (%)	0,32%	0,41%	0,36%	0,36%	0,56%	0,63%	0,65%	0,62%	0,71%	0,65%	0,65%	0,61%

Migration of Jews to Israel has taken place since the founding of the State of Israel in 1948. However, since the second Intifada, a new wave of immigration is taking place in order to replace the Palestinians that are not allowed to work in Israel any more. As a result Asians (Filipinos, Thai and Chinese) and recently also Africans from Eritrea and Sudan have illegally infiltrated Israel. As of April 2012, 59.858 Illegal immigrants of African origin were living in Israel. Approximately 34.000 illegal immigrants originated from Eritrea, about 15.000 originated from Sudan and 10.000 originated from other African countries. This latter wave of African immigration has created some upheaval in the Israeli public opinion. As a result, recent draft law outlaws money remittances from migrants in Israel back to families in their countries of origin. The goal of the law is to reduce “the economic incentive” of migration to Israel, according to the Justice Ministry. However, the law may actually create an incentive for migrants to stay in Israel and to bring family members to Israel.

Most international remittances sent abroad are payments that are not executed through the banking system, but through “currency services providers” located throughout the country or through the Postal Bank (that also has a Money Exchange License). As previously mentioned according to the Ministry of Finance that is responsible for registering currency services providers and supervising their activity, there are approximately 2.000 providers in Israel with a network of approximately 3.000 branches. In addition, the Postal Bank has approximately 700 branches.

Remittances between customers are executed by the currency services providers according to the stipulations of the Money Laundering Law. These payments are executed by various payment systems/infrastructure communication systems—SWIFT, GMT, Western Union, MoneyGram, etc. In certain cases the payment is executed directly against another currency services provider abroad who has an agreement with a currency services provider in Israel.

¹⁴² Migration and Remittances. World Bank.
econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS accessed in July 2012

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6 Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects.

The involvement of banks and telecom operators in the delivery of financial services by mobile phones creates according to the Mobey forum¹⁴³ four different mobile financial services ecosystems. A report financed by the DFID in 2006¹⁴⁴, added to this analysis the distinction between four critical roles played in each scenario by the bank or the telecom operator. This report argued that the first role to consider is who is legally responsible for the deposits; Second role, is who bears the reputational risk which implies whose brand is more exposed to the public; Third, whether deposits can be accessed through agents or only through bank branches or ATM's; The fourth and final role considered is who carries the payment instruction. Based on this framework, the four business models defined by the Mobey Forum have the following characteristics:

Table 55: Classification of emerging mobile financial services business models

Model name	Bank-centric models	Collaborative models	Independent service providers	Operator centric models
1-Who holds accounts/deposits?	Bank	Bank	Bank	Telco/ Non bank
2-Whose brand is dominant?	Bank	Joint- Non Bank or Telco	Usually non bank or telco dominant	Telco/ Non bank
3-Where can cash be accessed?	Bank	Bank+ alternative agents	Bank+ alternative agent network	Telco network+ other
4-Who carries the payment instruction	Any telco (sometimes 3rd party payment gateway)	Usually specific to one telco	Usually many telcos	Specific to offering telco

¹⁴³ www.mobeyforum.org, 2006. M.Stomar " Mobile Payments Value Chain and business model"

¹⁴⁴ Report produced for the DFID " The enabling environment for mobile banking in Africa", David Porteous, 2006.

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In the Mediterranean Partner Countries analyzed most of the existing mobile financial services regulatory frameworks encourage the development of bank-centric models. Collaborative business models, where the mobile operator is the dominant brand, and where cash can be accessed in networks other than the bank’s network are also emerging. Independent service providers such as cards associations are also launching mobile financial services in many MPCs studied.

Table 56: Classification of emerging mobile financial services business models in Mediterranean Partner Countries

Model name	Bank-centric models	Collaborative models	Independent service providers	Operator centric models
Morocco	1-BCP/FBPMC 2-Attijari Wafa Bank /Wafa Cash 3-Al Barid Bank/ M2M	4-Mobicash: Maroc Telecom, BCP, AttijariWafa	5-CMI	6-Meditel/BMCE not yet launched
Algeria	1-Algérie Poste		2-SATIM, not yet launched due to lack of tehcnical capacity	3-OTA, not yet launched pending clarification of the regulatory framework 4-ATM, not yet launched pending clarification of the regulatory framework 5-WTA, not yet launched pending clarification of the regulatory framework
Tunisia	1-Attijari Bank: MobiBank 2-La Poste Mobidinar		3-Mdinar: Via Mobile/BIAT/ Enda 4- SMT	
Egypt		1-Mobinil/BNP Paribas: To be launched when NTRA approves it 2-Vodafone with Housing & Development Bank: To be launched when NTRA approves it	3-EBC with NBE, Mastercard and Fawry: Not yet operational 4-APSD (Masary): Not yet operational	
West Bank and Gaza				1-Jawal: not yet launched pending clarification of the regulatory framework 2-Wataniya mobile: not yet launched pending clarification of the regulatory framework
Jordan				1-Zain with Capital Bank 2-Orange with Housing Bank
Lebanon			1-Pinpay with Bank Audi and Bank Med 2-Via Mobile with Framsabank	
Israel	1-Postal Bank: Design phase			

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Finally, we have only found one MPC, Jordan, where mobile operators have been able to launch operator centric models, although many others are willing but unable due to the existing or lack of regulatory framework. Indeed, although the regulation is currently being amended, as of now the mobile operator holds the accounts/deposits (the bank only provides the settlement account but does not have individual information of the customers). Besides, the business model of Orange and Zain also meet the other three conditions defined in the previous table for being considered an operator centric model such as: the dominant brand, where can cash be accessed and who carries the payment instruction.

6.1 Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects in Morocco

6.1.1 Mobile operators

Maroc Telecom and MediTel are implementing their projects in partnership with three large banks, and to ensure conformity with the current legal framework, the two MNOs will operate the services under the guise of “Banking Operations Intermediaries” or IOBs. Under this framework, which is already outlined in the current Banking Law, retail agents act as banking intermediaries under the two main intermediaries, Maroc Telecom and MediTel, who act on behalf of their respective partner banks. Under this regulation, funds stored in the mobile wallets are stored in individual bank accounts (as opposed to pooled accounts which many mobile wallets utilize), and customers that open mobile wallet accounts in fact establish a contract with a bank. Third operator, Inwi has not started to offer any payment nor financial service at the time of writing this report.

6.1.1.1 Maroc Telecom (IAM)

In late 2009, Maroc Telecom (IAM), Morocco’s largest mobile operator with 46,85% market share (ANRT 2011), along with Attijariwafa Bank and Banque Central Populaire (BCP), started implementation of Mobicash, Morocco’s first mobile payments platform. MobiCash, the money transfer and payment service via mobile phone launched by Maroc Telecom (IAM) was the first available service of its kind in Morocco. IAM had prepared its project before the summer of 2009 but had to postpone its launch as Bank Al-Maghrib required it to be granted its approval beforehand. Mobile banking emerged in Morocco in January 2010 with the launch of Mobicash by IAM.

The service is a mobile wallet, and while users need to be Maroc Telecom subscribers, they do not need to have a bank account. All they need to do is activate the service at any Maroc Telecom location with a national ID card. Maroc Telecom’s partners in this project are two of the largest banks in Morocco, who together account for almost 80% of the banked population.

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BCP also has 30% of the market share in international transfers, while Attijariwafa holds a strong position in domestic remittances with its WafaCash service.

To access this service customers must first open a Mobicash account at an IAM agency for a MAD 20 (2 EUR) fee. They then receive user identifiers allowing them to perform banking transactions from their mobile phones such as cash deposits or withdrawals, money transfers to relatives across Morocco, receiving money or paying for purchases with many authorized retailers.

Users can credit their Mobicash account for free by depositing cash at any IAM agency or within the authorized distributor network. They can also make domestic transfers up to MAD 3.000 (271 EUR) or withdrawals up to MAD 5.000 (453 EUR). Fees vary from MAD 5 (0,5 EUR) to MAD 30 (3 EUR) for withdrawals and from MAD 10 (1 EUR) to MAD 30 (3 EUR) for money transfers.

At the time of writing this report the service Mobicash has 100.000 clients although most of them are not active. Besides, 80% of transactions were for IAM purposes, either buying prepaid load or for invoice payment (postpaid contracts). As a result, it is agreed by all stakeholders (Maroc Telecom, its banking partner BCP, the Financial regulator (BAM) and the Telecom regulator (ANRT)) that Mobicash has not achieved its expected results. Indeed, partner banks perceived Mobicash as a competitor service that was cannibalizing its own business. IAM was leading this initiative and the required participation of partner banks was imposed by BAM for prudential purposes.

Besides, partner banks are not happy with the revenue sharing agreements of splitting the direct transactional revenue of the service 50/50 between the banks and IAM. Banks argue that IAM also receives “indirect” sources of revenue, such as an increased subscriber base and greater monthly telecoms revenue while they do not since Mobicash has resulted to be an effective tool for “bankarization”

Banks lack of interest in Mobicash Business model has limited its cash in/cash out (CICO) network, since partner banks have not allowed its own network to be used to for Mobicash CICO purposes. In addition to this, partner banks have not allowed franchises of IAM not directly owned by IAM to become IOB, since they only signed an IOB contract with IAM and not with its franchises.

IAM also argued that the marketing rigidity of the model, due to the regulatory constraints of opening a mobicash account with the bank, hampered mass marketing strategies commonly used by mobile operators that could have made the service more appealing to customers.

Mobicash is as a result in an impasse. The collaborative business model has proven not to work in Morocco. However if the current regulatory changes regarding e-money issuance are passed, IAM could be able to operate the service on its own implementing an operator led business model. As a result, its transformational impact could fully be used for financial

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inclusion purposes. Partnering with Micro Credit Associations for example, such as Al Amana and Fondép (FBPMC being part of the BCP group is not likely to join), would allow the associations to improve their efficiency in disbursing and paying the microcredits, while giving the service the “killer application” needed for its uptake.

6.1.1.2 Meditel:

Morocco’s number two mobile operator, MediTel, with 37% market share, is also planning to launch a mobile banking service, with partner bank Banque Marocaine du Commerce Extérieur (BMCE). MediTel is partly owned by FinanceCom, a company owned by BMCE’s parent group, so the partnership is a natural one for offering a joint mobile wallet.

MediTel, is testing the development of the wallet, but is taking its time to launch it commercially given Maroc Telecom’s MobiCash lack of success and the expected changes in the regulatory framework. MediTel’s wallet is expected to have the same functionality as that of MobiCash but will additionally offer a debit card that can be used in BMCE’s network of ATMs as well as used to pay at existing POS. Given the additional attributes of the card they believe they will come out in the market with a stronger value proposition.

However the partnership between Meditel and BMCE could also pose problems. Although MediTel clearly sees this as part of their core business strategy, BMCE does not seem to consider this as a strategy to complement its core business. BMCE’s perception is that the mobile account customers will be likely to remain unbanked since they are below the traditional bank customer income level, and therefore less valuable to the bank. While the process of launching the wallet will help them learn more about lower-income customers, BMCE’s objective in the partnership seems to be more one of going along with the parent company and learning what it can in the process.

The MediTel service will be first launched in 3.500 of their service points. However a complete rollout throughout its sales and service network might pose future problems, since Meditel only controls directly 20% of its network and according to IOB regulation, the remaining 80% will have to sign independent IOB agreements with BMCE.

6.1.2 Banks

Most banks in Morocco have added the mobile channel as an additional informational channel. However, in terms of the transactional services offered to low income customers BCP, Attijari Wafa and Albarid Bank are leading the development of mobile financial services for financial inclusion purposes.

6.1.2.1 BCP

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BCP has developed its in house transactional platform. It currently allows prepaying load, invoice payment and domestic transfers. International transfers are also to be offered, but merchant (POS) payment will be offered through the CMI solution (see below).

BCP's mobile financial services platform is being currently tested with bank customers. In June, they plan to adapt the platform for LIB customers use, so the services can be offered in partnership with FBPMC.

The solution aims at being offered through Morocco's three mobile operators with USSD technology. However, IAM has argued that due to technical issues only the SMS based solution is available. As a result, and in order to ensure interoperability with the operators and greater usability, an application needs to be downloaded on the phone. Downloading the application requires however, the handset to be 3G, which limits the ability of low income customers to use the service.

6.1.2.2 Attijari Wafa Bank

Attijari Wafa Bank is also developing its in house transactional platform with leading service provider HPS. The telephone is however an additional channel for banked customers, which will have access to all the financial services the customers have with the bank. Where the Attijari Wafa Bank model becomes transformational, is when it is used by its the low income unit Wafa Cash. Basic services such as prepaid load, invoice payment and domestic transfers are to be offered in the initial phase of deployment by Wafa Cash. However, since Wafa Cash implementation depends on the rollout of all remote banking channels solutions currently being developed by Attijari Wafa Bank, its mass commercialization can take longer. In a second phase international transfers are also to be offered by Wafa Cash through cellular phones. Merchant (POS) payments however, will be offered through the CMI solution (see below).

6.1.2.3 Al Barid Bank/M2M

Al Barid Bank is also developing its mobile financial services offer in the context of its multi-channel strategy implemented through its distribution network of branches (1.800); the ATM network (589) and the Web. The deployment of mobile banking is expected by the end of 2012 and will include the following services:

- Transfers between accounts
- Transfers of money (cash to cash)
- mobile wallet top up
- mobile wallet withdrawals
- Phone recharge (prepaid)
- Bill payment
- Internet payments using the mobile
- Information services: SMS alerts, balance inquiries and recent operations

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- Merchants Payment with M2M

Al Barid Bank is partnering with M2M to offer also mobile merchant payments. As presented before, M2M is developing an alternative merchant payment network to CMI. The development of this network requires equipping merchants with electronic payment terminals that include an integrated solution for managing payments. The establishment of this new merchant payment network will be achieved through a dedicated unit.

6.1.2.4 CMI

CMI, the cards switch of Morocco's banking industry, is planning on implementing its mobile payments service before the end of 2012. This new service, being developed with technology provider HPS, aims at increasing the cards acceptance network by allowing merchants with a cellular phone to accept card payments without and EFTPOS.

This service aims at resolving one of Morocco's obstacles for the development of its electronic payments industry, the limited acceptance network it currently has with only 25.000 EFTPOS. This new service will allow all card users, to pay with cards in a much larger network of merchants. CMI expects to motivate merchants to accept cards, not only by eliminating the investment required for an EFTPOS but also by decreasing commissions paid on the newly launched mobile payment service.

Although this initiative reinforces the position of electronic money issuers, and as a result the prospects for the uptake of mobile financial services in Morocco it is not likely to achieve relevant results in terms of financial inclusion. Indeed, merchant payments are not the service mostly demanded by low income customers. Also, the enlargement of the acceptance network will not imply an increase in the CICO network, since most of the merchants accepting payments will not be eligible for IOBs under the existing regime. Finally, the three most important cards issuers for low income customers BCP, Wafa Cash and Al Barid Bank have their own mobile banking initiatives offering domestic and international transfers, invoice payment, prepaid load, micro deposits and even microcredit (BCP) with an extensive and dedicated CICO network. As a result, any of these three initiatives is more likely to attract the interest on low income customers than CIM's, while already banked customers willing to use mobile financial services might be the primary beneficiaries of CMI's initiative.

6.1.3 The microfinance industry

Although the current regulatory framework does not allow Microcredit Institutions to collect deposits, proposed changes in the banking law regarding e-money issuance could allow them to become very important players in the mobile financial services market in Morocco. Indeed, their existing portfolio of unbanked customers, their dense distribution network in non-banked

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areas and their expertise in non-banked customers make them the ideal partners for a mobile financial services value proposition aimed at increasing financial inclusion.

As of now leading MFI Al Amana has already expressed an interest in offering mobile financial services. It originally envisioned entering the market by developing its own platform in partnership with services provider HPS. However, this initiative has been postponed given the changes in top management and existing delinquency problems that needed urgent attention.

Fondation Banque Populaire pour le Microcrédit (FBPMC), Morocco's second largest MFI, signed in January 2010 and IOB (Mandat en Intermédiation des Opérations des Banques) with its parent company Banque Centrale Populaire. At the time of writing this report the Partnership between BCP and FBPMC has materialized in the distribution of LIB accounts and remittances with Western Union (since January 2012). LIB accounts functionality is as of today restricted to the disbursement of credits and the utilization of the bank card associated with this account. Its implementation is however quite widespread, with 60% of existing customers already having LIB accounting, and aiming at achieving 100% by the year's end. In terms of transfers for the disbursement of the microcredit, achievement rates are even higher having 65% of the volume of new microcredits granted already electronically transferred to LIB accounts and aiming at achieving almost 100% by June 2012. Also, BCP has already installed 50 ATMs in FBPMC premises.

Domestic transfers and mobile banking are the next phase in the implementation of this partnership. Domestic transfers, whose required infrastructure is already in place, are planned for the end of the year. In terms of mobile banking, FBPMC will follow the bank's strategy. As presented before, BCP is currently testing its new platform with bank customers and it aims to adapt it to FBPMC needs shortly in order to offer mobile banking and mobile payments services.

6.2 Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects in Algeria

At the time of writing this report only AP offers a top up system in partnership with mobile operator ATM, that they plan to use for bill payment purposes as we well see below in this section. Although all mobile operators have prepared or are currently working on mobile financial services initiatives, no such a service has yet been approved neither by the financial nor by the telecommunications regulator. The fact that two of the three mobile operators are private companies belonging to international groups explains in part why operators are more interested in launching new initiatives such as mobile financial services than Algerian banks, mostly government controlled.

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The lack of an adapted regulatory framework has been mentioned by all the players during the field visit as one of the main reasons for not approving the initiatives proposed. However, we have also been able to identify other obstacles for the uptake of financial services in Algeria such as the lack of understanding of mobile financial business models by the financial regulator and financial institutions at large. As a result, some institutions such as SATIM and Banque d'Algérie have asked about potential EIB funded Technical Assistance for training and workshops dedicated to mobile financial services, and focused in particular on prepaid platforms and agent networks.

This training program could be followed by assisting AP, which is already developing a pilot of mobile financial payments, to design a solution interoperable with the three operators. Although the services to be offered at the initial stage would be limited to bill payment, the experience will allow the financial and telecom regulator to understand better the benefits and risks of a mobile financial solution.

Finally, once the results were properly analyzed and the potential risks and benefits understood, both the financial and telecom regulator would be better equipped to adapt the regulatory framework as required.

6.2.1 Mobile operators:

6.2.1.1 Orascom Telecom Algérie (OTA)

OTA is the leading mobile operator in Algeria. As the other mobile operators has a network of 60.000 non-exclusive points of sale organized through 7 major distributors that manage approximately 200 merchant wholesalers. Wholesalers manage the points of sale, most of which usually are small merchants.

OTA has approximately 20.000 points of sale where the SIM card is sold. This function requires more control than simple top up function, since the customer has to properly identify itself according to the Know Your Customer (KYU) telecom regulatory requirements. In addition, the contract signed has to be sent to the closest OTA storefront (it currently has approximately 90).

The electronic top up system that OTA uses handles approximately 97% of all top ups (80% average for the three operators). The remaining 3% top ups (20 % average for the market) are paid using the scratch card. The same Top Up system, is used by all operators to distribute load to distributors and merchant wholesalers. As a result we can conclude that this system has proven its reliability and efficiency for distributing load.

In between 2007 and 2009 OTA submitted several proposals directly and via its partner financial institutions to the financial and telecom regulator to offer mobile financial services.

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The services to be offered included P2P, Bill payment, International transfers, and savings using a mobile wallet.

The initial partner financial institution, BNP Paribas had to be replaced by a government financial institution (the name of the institution was not disclosed) following the demand of the financial regulator. According to OTA officials, there was a preliminary agreement with the financial partner (25 Million USD estimated income in 3 years) and with the financial regulator, so OTA decided to invest in the necessary equipment and staff. In March 2009 however, the financial regulator communicated OTA's partner financial institution that the application had been finally rejected since BA considered that the regulatory framework had first to be adapted before allowing mobile financial services to be offered.

OTA is currently waiting and monitoring what is happening in the market. According to its management, OTA is ready to go operational immediately although they are aware that BA is not ready to approve this service yet. Besides, given the current problems OTA is having with the Algerian tax authority they consider that their position to be the first in the market has been seriously weakened.

6.2.1.2 Algérie Télécom Mobile (ATM)

ATM is the second mobile operator in Algeria, and the only operator state owned. As the other mobile operators, ATM has a network of 60.000 non-exclusive points of sale organized through major distributors and merchant wholesalers. ATM has approximately 9.000 points of sale where the SIM card is sold. The contract signed has to be sent to the closest ATM storefront (it currently has approximately 120, or one per Willaya). ATM has also a more restricted sub network of 3.500/4.000 merchants to allow for postpaid contracts since they are the operator with the highest percentage of postpaid contracts (8%) in Algeria.

ATM is the only operator that offers a mobile top up system branded Racimo (see further explanation of this service below) in partnership with AP, although most payments are electronic to ups from the point of sale and a few are still using the scratch card. They would like to expand Racimo's services in order to offer ATM customers bill payment for utilities (electricity and gas, water, and telecommunications) and other services. They are currently defining their strategy in terms of mobile payments, although they are aware the current regulatory framework does not favor the development of such initiatives.

6.2.1.3 Wataniya Telecom Algérie (WTA)

WTA is the third mobile operator in Algeria. It uses the same network of 60.000 non-exclusive points of sale organized through major distributors and merchant wholesalers. WTA presented a mobile payments application dossier in partnership with BNP Paribas and SG Algérie. The offering was aiming at replicating other mobile financial services initiatives WTA's partner company (Qatar Telecom) had successfully implemented in other countries. The offering was

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not approved, but WTA remains very interested in mobile financial payments and is closely following how the regulatory framework and the market evolves.

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6.2.2 Financial Sector**6.2.2.1 SATIM**

SATIM, the national's card switch of local debit brand CIB, has not starting yet analyzing the development of mobile financial services based on cards. Indeed, their priority was to successfully implement a platform for e-commerce in collaboration with Bank CPA. Although the platform is ready to operate, the lack of a regulatory framework regarding e-commerce made BA not to approve this service. As a result SATIM is lobbying BA for reforming the regulatory framework in coordination with other agencies and ministries.

On the other hand, SATIM acknowledges that the card industry in Algeria is in its infancy, and as result its priorities are to develop basic card related services before implementing more sophisticated services. In particular, they would like to know more about the functionalities of prepaid card platforms and how they could be used in Algeria, since they also acknowledge they do not know enough about them, and in particular on how they could be used for deploying mobile financial services.

6.2.2.2 Crédit Populaire d'Algérie (CPA)

CPA is Algeria's leading bank in the cards market, although in terms of total assets market share they are the fourth (11,62%). They currently have a stock of approximately 300.000 CIB cards (approximately 35% market share), and 147 ATMs (22% market share). Cards are processed through SATIM while ATMs are managed internally and then connected to SATIM for interoperability purposes.

CPA's card strategy has been mostly focused in promoting withdrawals through ATM's in order to reduce this type of transactions from branches (migration strategy). Merchant POS use is very low as for the whole market, although they are currently marketing this service actively in pharmacies. Bill payment for utility providers is also a priority for CPA, and they are actively marketing the POS service among gas/electricity, water and telecommunications providers.

Hotels are the only type of merchants where cards are widely accepted. Since CPA is both issuer and acquirer (the only one in Algeria) of Visa and Mastercard, their POS network in international hotels composed of approximately 500 outlets is very active.

Although they were approached by OTA in order to provide mobile financial services, and they have extensively studied the M-Pesa case, they are not thrilled about mobile financial services. They consider that Algeria is not in the same situation as Kenya in terms of existing financial infrastructure, and as a result they think mobile financial services might not be needed in Algeria. In any case, they are following all developments in the market and in terms of the

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regulatory framework in order to respond to any changes that might lead the Algerian banking community to launch mobile financial services.

6.2.2.3 Banque Extérieure d'Algérie (BEA)

BEA is Algeria's second bank in terms of total assets (14,51% market share). Although most of this bank's businesses are conducted with Algeria's oil and gas industry, we have included BEA in this report because it is the only bank in Algeria that has launched a co-branded prepaid card in partnership with Algeria's oil company NAFTAL. This closed-looped prepaid card can only be used at NAFTAL's network, and it is chip based.

6.2.3 Algérie Poste (AP)

AP's financial unit is the leading player in retail payments in Algeria. As presented before it has a network (3.500 branches) much larger than the whole banking industry, and it manages more cards (6 million of which 4 million are active) than the SATIM system. Besides with 15,1 million accounts (of which 9 million are active), it has the required scale in terms of customer base in order to reach the economies of scale and scope required for massive implementations of retail payments systems.

AP already offers bill payments through its network of all major utility providers: electricity, gas, water, and telecommunications. In the case of telecommunications as mentioned before, it has developed and manages the platform required for mobile top ups from postal checking accounts (CCP accounts) with operator ATM. AP also offers international remittances directly and in partnership with Western Union.

The mobile top up service Racimo is the base for the mobile financial services offering AP is currently developing. Indeed, AP aims at making the platform available to all operators, making the service interoperable. It has launched a call for proposals in order to undertake this project, and aims at having it completed by the end of 2012.

AP also aims at launching a mobile wallet using a chip based prepaid platform for youngsters not yet having a CCP account or for social payments. They are still fine tuning this product, although they have set a 500.000 cards target to be reached before the end of the year.

AP seems to be the ideal candidate for launching mobile financial services in Algeria. First, they already have the expertise and the legal ability to manage card platforms and other payments and transfers. Second, they have the more extensive cash in/cash out network of the country. Third, they have already developed the required interfaces with one mobile operator and they are about to begin developing them with the remaining two. Fourth, they are state controlled, which might make the Algerian authorities feel that they can better control the potential risks.

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6.3 Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects in Tunisia

6.3.1 Mobile operators

Mobile operators in Tunisia are limited to serve as communication channels in the deployment of mobile financial services, due to BCT's circular on mobile payments of January 2011. Since they cannot issue payments services, their revenue model is based on the percentage of the commission charged to customers (for transfers) or merchants (bill payment and merchant payment). Both Tunisiana and Tunisie Telecom work or are in negotiations with all major mobile financial issuers. Orange is not yet partnering with any of them.

6.3.2 Banks

Most banks in Tunisia have added the mobile channel as an additional informational channel. However, in terms of the transactional services offered to low income customers BIAT, Attijari and La Poste are leading the development of mobile financial services for financial inclusion purposes.

6.3.2.1 BIAT/Via Mobile: mdinar

Tunisian Bank BIAT has partnered with Creova, a French based Mobile Financial Solutions developer in order to develop and manage its prepaid/m-wallet platform called mdinar. The resulting joint-venture, called Via Mobile aims at offering financial services using mdinar to the unbanked. The mdinar service offers transactional services such as person-to-person money transfer, mobile phone & m-Wallet top-up, and loan payment services from a user's mobile phone. It offers multiple ways to access the service, which include SMS, Smartphones applications (iPhone, Blackberry, Symbian, Android, etc), and Internet.

Via Mobile has already reached an agreement with leading Tunisian MFI Enda, in order to manage its microcredit's disbursements and payments using mdinar. Also, Carrefour Tunisia is participating in this initiative. Although the service was officially launched in February 2012, it is still in being tested with Tunisie Telecom and no massive rollout has been implemented yet.

6.3.2.2 Attijari Bank: MobiBank

Attijari Bank, subsidiary of Morocco based AttijariWafa Bank has also launched a mobile financial solution with Tunisian software developer Tritux called MobiBank. Attijari mobile financial services offering build on its prepaid platform that currently manages 25.000 cards.

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Those cards mostly offer payment services, such as salary payments, invoice payments, domestic and international transfers. Attijari prepaid cards can be loaded at the banks branches and ATM's; through Internet for salary payments and by phone (transactional mobile financial services)

Transactional Mobile financial services were first offered in December 2011 using SMS technology for buying prepaid load, and for transferring money from a bank account to a prepaid account issued by Attijari Bank. At the time of writing this report, these services were available with operator Tunisiana and were being negotiated with Tunisie Telecom

6.3.2.3 La Poste: MobiDinar

La Poste Tunisienne is the leading issuer of prepaid cards e-Dinar in Tunisia. As of December 2011 it had 500.000 prepaid e-dinar mastercard cards. The eDinar card, is used primarily by students. Cash-in can occur thru bank account, Internet, or ATM transfer, or at post office branches. Cash-out, if required, is through ATMs. In addition to prepaid cards, La Poste also issues visa debit cards, being its stock as of December 2011 of 100.000.

e-Dinar has its own acceptance network other than the SMT, composed of approximately 300 merchant sites, of which 57 are POS located in Ministries and La Poste's 180 ATM. Of special relevance, is the Ministry of Education since most of the prepaid cards are issued for students that pay their fees with this card.

Building on La Poste's strengths such the e-Dinar platform, its network composed of 1.036 branches and its leadership in domestic and international remittances, La Poste Tunisienne launched MobiDinar. MobiDinar is a mobile electronic wallet offered for Tunisie Telecom and recently also for Tunisiana customers. The services offered through Tunisie Telecom are Top up, invoice payment, consultations and domestic transfers. With Tunisiana, they also offer international remittances and micropayments in taxis.

6.3.2.4 SMT

Société Monétique de Tunisie (SMT), Tunisia's card switch has been pioneering mobile financial services in Tunisia since 2008 when they started offering top ups (prepaid load) and invoice payment (mostly payment of postpaid mobile telecom contracts), both offered with Tunisie Telecom and Tunisiana. In 2010, SMT started testing merchant mobile micropayments with Tunisie Telecom. They currently offer this service with Tunisie Telecom, but its usage and acceptance network is still limited. Indeed, massive deployment of micropayments requires facing the following challenges:

- Negotiations with telecom operators. Mobile operators revenue model is based on splitting the commissions charged to consumers and to merchants. For merchant payments, SMT confirmed that TT receives 0,3% of the 1,5% commission that the

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merchant pays. Tunisia and the SMT have not yet concluded tariffs negotiations for merchant payments.

- Increasing the acceptance network. SMT is offering lower commissions to merchants accepting mobile payments (1,5%) than cards payments through POS (3,5% average). However, major commercial efforts are required to motivate merchants accept mobile payments and require banks to develop the service. SMT is also adapting acquirer's contracts, in order to adapt them to mobile payments.
- Increasing the number of mobile payments users. SMT is launching a major commercial campaign for motivating card holders to register for mobile financial services through the specially dedicated site: <http://www.mobilepayment.com.tn/mobilpayment/>, and enhance the interest of banks.

SMT is also developing other projects in terms of mobile financial services, such as domestic transfers (with mobile operator Orange); contactless payments with NFC Pay Pass technology and international transfers with Mastercard.

6.3.3 The microfinance industry

Although the current regulatory framework does not allow Microcredit Institutions to collect deposits, not issue payment services, both leading MFIs in Tunisia Enda and BTS are interested in using mobile financial services to increase the efficiency of the process of disbursement and payment of the microcredits and also to expand their service offering.

Enda has already talked to a number of potential mobile financial services partners, and has decided to partner with ViaMobile/BIAT to offer their services. ENDA has expressed however the need for technical assistance in order to define how the proposed partnership should be implemented. Annex I presents the general operational and business model characteristics of this partnership, although fine tuning is required.

BTS is currently focusing in redefining its role in the microfinance industry, and as result has not analyzed in detail this initiative yet. However, La Poste seems BTS best partner for deploying mobile financial services since they already have a payments partnership, and they are both state controlled institutions. However, since both BTS and la Poste are under internal reorganization reviews (BTS financed by the ADB and La Poste cofinanced by EIB/WB), this partnership may take longer to be implemented.

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6.4 Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects in Egypt

At the time of writing this report CBE has approved two bank applications to provide mobile payments: BNP Paribas and the Housing and Development Bank and they are currently reviewing the one prepared by the National Bank of Egypt. However, some Board members of the National Telecom Regulatory Authority (NTRA) belonging or being associated with the military consider that within the current context of political turmoil is better not provide mobile financial services. They argue that in the current circumstances the security of agents providing cash in/ cash out services is not ensured. As a result they have not allowed the telecom operators to provide mobile payments which have brought to a halt the initiatives launched by BNP Paribas with Mobinil and the Housing and Development Bank with Vodafone. Whenever approved, CBE wants the initiatives to be interoperable using EBC as a Switch.

6.4.1 BNP Paribas with Mobinil

BNP Paribas announced in March 2010 that they'd be launching in mid-year a mobile money transfer service called M-Wallet, in partnership with MNO Orange (Mobinil). BNP Paribas and Orange have already partnered in 3 other countries for mobile banking services – Cote d'Ivoire, Mali and Senegal - and are clearly seeking to have a strong, strategic presence in the region with their mobile banking service. Orange in particular has designed a global strategy in mobile financial services that is being implemented worldwide.

BNP leads this initiative, having developed the platform and expecting to offer the service not only to its approximately 170.000 retail customers, but mostly to Mobinil approximately 31 million customers (of which approximately 20 million are active). The Cash In/Cash Out network will include in the first phase BNP branches (67) and Mobinil Storefronts (110). Later they plan to add BNP's ATMs (120), and Mobinil's distribution partners (10.000 branded partners). As the other initiatives, the only service to be offered when NTRA approval is granted is P2P although over time they expect to increase its value proposition adding additional financial services.

6.4.2 Vodafone with Housing & Development Bank

Vodafone Egypt is leading the second initiative announced in partnership with Housing & Development Bank. Vodafone Egypt has already been getting involved in various financial services in Egypt, including putting in place e-payment and airtime top-up via bank accounts with several banks, and is also looking to put in place a similar capability via ATMs.

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In 2007 they launched a prepaid card linked to the mobile phone called Vodafone Cash₂ in conjunction with HSBC (issuer) and EBC (manager of the ATMs) that could be used to transfer money to other users, pay Telecom Egypt bills, Vodafone bills, and recharge airtime balances. Cash out was available at all EBC ATMs (123 brand), while the card could be charged in approximately 40 Vodafone stores and some 100 radio shack outlets. Before the end of this service (Feb. 2010), it reached 120.00 subscribers, but only 20.000 active. Vodafone argues that the lack of commercial success was due to HSBC's lack of commercial interest partly due to the risk posed by fact that there was no regulation on mobile payments. In February 2010, the Central Bank of Egypt asked HSBC to stop the Vodafone Cash Service.

Once mobile payment regulations were approved by the CBE, and in order not to repeat the same commercial mistakes Vodafone decided to launch a new payment service but this time with a different bank, Housing and Development Bank (HDB) committed to massively market this service. In this partnership, Vodafone is the primary business driver providing the technology platform, developing the agent network, leading marketing efforts and offering new customer services. In this partnership the 59 HDB bank branches will also offer cash in services, together with the approximately 150 Vodafone storefronts in the first phase. This network should be expanded later with the Vodafone distribution partners (1.000 exclusive partners). Cash out is also to be offered through HDB's 130 ATMs.

6.4.3 Payment service providers initiatives not needing immediate NTRA approval

6.4.3.1 The Egyptian Banking Corporation (EBC)

EBC is leading the third mobile payments initiative with the National Bank of Egypt, Mastercard and payments provider Fawry. This service has not however received the approval of the Central Bank of Egypt at the time of writing this report. EBC has the following two fold mandate of CBE to serve mobile payments in Egypt:

- Switch and clearing: EBC is to become the switch for all money schemes being developed in Egypt, in order to provide interoperability. As a result EBC will become the switch for all retail payments in Egypt through three different platforms: mobile payments, cards (in process) and ACH.
- Provide the platform for mobile financial services to other banks not directly partnering with mobile operators. In order to provide such a platform they decided to partner with Fawry, Mastercard and National Bank of Egypt. The role of each partner will be:
 - Fawry will provide connection through the application to be downloaded on the phone. This application should work on any mobile phone in Egypt no matter the mobile operator. Fawry will also provide the Cash In/Cash Out network.
 - National Bank of Egypt is the legal issuer of the mobile money account.

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- EBC will authorize all transactions, since it will manage the platform as a payment service provider of the National Bank of Egypt.
- Mastercard will provide the overall infrastructure of the system

The system is currently being reviewed by the CBE under mobile money regulations. CBE's decision is expected in early July 2012, although the current process of political transition in Egypt may delay its approval. This solution however does not need to be approved by the NTRA since it is independent from the operator. However, a problem may arise related to Mastercard's role. Mastercard would like to partner with EBC not only in the development of the platform of mobile financial services for other banks not directly partnering with operators, but also to provide the clearing of the system of mobile money in Egypt. As a result EBC fears, that since they are not allowed to let Mastercard do the clearing of mobile payments, Mastercard might not be willing to partner with EBC to provide the platform for other banks beyond NBE. As a result they demand assistance to analyze the existing providers available in the market that could provide such a platform, and helping them select the right one if it was needed.

Lately, Etisalat the third Egyptian Mobile operator has also expressed interest in joining this partnership. Its role however, is not as significant as in the cases of Mobinil and Vodafone, focusing its participation in using its network of points of sale for cash in cash out purposes. EBC acknowledges however that Etisalat needs NTRA approval to join. Given the current position of NTRA, Etisalat's involvement might pose additional problems to the partnership.

Also the Principle Bank for Development and Agricultural Credit (PBDAC) and Egypt Post are to join this initiative. The participation of these two institutions reinforces the ability of the grouping to serve the microfinance industry by providing them the technology platform and payments infrastructure they need. EBC also demanded assistance in order to better understand how to better serve the microfinance industry, service that they consider of critical importance for the development of the country.

6.4.4 Applications & Payment Systems Development (APSD)

Applications & Payment Systems Development (APSD) manages the payment service Masary. Masary currently has 7.000 points of sale, of which 2.500 are considered active undertaking at least 3 transactions per month. Each point of sale has a Masary issued electronic wallet to provide payments services to customers. Points of sale are connected to Masary either by Internet or by Mobile phone. If they connect by mobile phone, they need to download an application that manages the electronic wallet and that can be used on any mobile phone belonging to any operator in Egypt.

Masary envisages two main strategies for development:

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- In the short run, they could partner with a bank in order to provide the electronic wallet application to bank customers. This solution would only need CBE approval as a bank service provider, but not NTRA approval since no mobile operators are involved. They are currently in talks with banks CIB and NBE.
- A second possibility is to partner with any of the mobile financial services initiatives presented before. This partnership would need to be approved also by the Central Bank, since it will allow to expand not only the Cash In/Cash Out network but also the payment services being offered. However this possibility is not yet available since the NTRA has halted both mobile financial services initiatives.

Masary sees serving the microfinance industry as one of the killer applications for mobile financial services, although they tried in the past unsuccessfully to partner with MFIs in the past:

- It partnered with 8 small MFIs for microcredit payments, but the commission charged did not cover the cost of service and after a few months it stopped offering the service.
- It launched the e-masary trading program, where the microcredit given to a receiver was used to operate as point of sale Masary. The microcredit was given in the form of a telephone charged with masary airtime. The results have however not been very successful

Masary management argues however, that serving the microfinance industry will be successful when they are allowed to offer the disbursement of the microcredit, and not only microcredit payments through the electronic wallet. As a matter of fact, they could already offer this service in partnership with a bank without needing NTRA approval. They argue that similar experiences in other countries prove that the receiver will keep approximately 15 to 20% of the microcredit balance in the e-wallet if they are offered useful payment services and trust in the system. The most important obstacle to widespread adoption of mobile financial services for microfinance is however the lack of understanding MFIs have of mobile payments. As a result, they request assistance in training MFIs how to use and offer mobile financial services to their customers.

6.5 Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects in the West Bank and Gaza

Mobile telecom operators are willing to lead the development of mobile financial services in the WBG. Banks are lagging behind, with no defined strategy in this area. The PMA is also very interested in promoting Mobile Financial Services in the context of the development of the retail payments infrastructure. In order to do so however, it requires assistance in better

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understanding mobile financial services business models, and the different regulatory approaches that can be taken.

6.5.1 Jawal- Palestine Cellular Communications

Palestine's leading mobile operator would like to launch mobile payment services as soon as possible. It already approached the Supervision Department of the PMA in 2010, but the PMA responded negatively arguing that they had to wait until the regulatory framework was in place. Jawal's management has analyzed and studied different business models, and they aim at following a similar business model to the one implemented by Orange in Jordan. In this model the mobile operator is responsible for marketing and for managing the m-wallet platform that is separated from the prepaid calling account. They have already launched a request for proposals (RFP) to develop the m-money platform.

The Jordanian Regulatory framework allows for business models with very limited bank's participation, such as Orange Mobile Money, which is the one Jawal would like to implement to. Indeed, according to the Circular Number 10/2/6492 issued by the Central Bank of Jordan in 2010, the partner bank is only responsible for:

- Making sure that the MNO is allowed and able to provide such a service.
- Opening a "Settlement Account "in the name of the MNO and to deposit all money received by MNO in the account mentioned above.
- Follow up and monitor the above account to make sure that its balance is always equal or exceeding the e-money issued by the MNO. The maximum amount an MNO customer can transfer should not exceed 2500 Jordan Dinars per year.

Jawal is willing to discuss with the PMA its current regulatory approach, as operators and payment processors did in Jordan and Egypt. In order to launch mobile payments, they count on their distribution network for cash in/cash out purposes. Jawal's distribution network currently includes 24 stores; 3 exclusive dealers (1 in the West Bank and 2 in Gaza) that manage 135 subdealers (90 in the West Bank and 65 in Gaza). Subdealers manage the 1.800 Points of sale (1.000 in the West Bank and 800 in Gaza).

Prepaid accounts are mostly topped up electronically (70% and increasing), while scratch cards still represent 30% of total prepaid payments but they are decreasing. They offer transfer load between customers since 2004. SMS banking is also offered to bank customers, but only for information purposes.

6.5.2 Wataniya mobile

Palestine's second operator was willing to offer mobile payments since commencing operations in 2009. Being part of Qatar's Telecom group, they could benefit from the platform

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its parent company had already developed and rolled out in other countries. As a result, they decided to undertake a market research study in the WBG in order to analyze the feasibility of such a study. The conclusions were that although there was market potential, the company was not yet ready to offer such a service, nor the regulatory framework was adapted. As a result they decided to postpone the initiative until they were ready. The company considers that now it is ready, although they acknowledge that the regulatory framework is not.

Wataniya's distribution network includes 9 stores, 3 distributors and 750 points of sale all located in the West Bank that could be used for cash in/cash out purposes. They offer Load Transfer, but not only domestic such as Jawal but also international using Qatar Telecom's platform. The maximum amount that can be transferred as load both domestic and international is of 100 Scheckels, the same amount as the value of the Scratch card. Scratch cards still represent the bulk of prepaid payments (85%), while electronic to up only accounts for 15% of total prepaid payments although it is increasing. SMS banking is also offered to bank customers, but only for information purposes.

6.5.3 Palestine Monetary Authority (PMA)

The development of retail payment systems is one of the pillars of PMA's national payment system project. After completing the implementation of the RTGS system, the development of a national switch and that of an automated clearing house (ACH) for retail payments is the next step in the national payments systems project. Mobile financial services and mobile payments in particular are to be an integral part of the retail payments project.

The PMA acknowledges their lack of knowledge and expertise in mobile financial services and mobile payments. This is the reason why they demand guidance and technical assistance for better understanding how to promote the development of mobile financial services and how to integrate them in the national payments system project. They are particularly eager to understand the different regulatory approaches other countries have taken when regulating mobile payments.

6.6 Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects in Jordan

Two mobile telecom operators (Orange, and Zain) are leading the development of mobile financial services in Jordan. Two banks (Housing Bank with Orange, and Capital Bank with Zain) are partnering with mobile operators, but their role is limited to providing and monitoring the settlement account. Payments processors such as EMP and MEPS (already partnering with ZAIN) are also considering mobile payments initiatives but they have not disclosed them yet. EMP is working with some banks to develop a mobile payments platform. EMP stated that the

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platform will be open to all and will support mobile payments and mobile banking for the banked, the underbanked and the unbanked.

As for CBJ, mobile payments are now a priority in the context of the development of a retail payments switch. Indeed, some CBJ officials including the head of the payments task force consider that under the existing regulatory framework (circular number 10/2/6492 regarding payments through mobile phones) they are unable to monitor the amount of electronic money managed by the two mobile operators that have launched mobile payments initiatives. As a result, CBJ wants to issue additional regulations and using the national retail payments switch to monitor mobile operator's electronic money.

6.6.1 Zain (e-mal)

Zain Jordan, part of the Kuwaiti based company Zain Group (formerly MTC) with a commercial presence in 7 countries across the Middle East, was the first operator launching a mobile financial services (branded E-Mal) in Jordan in 2010 in partnership with Capital Bank for managing the settlement account after CBJ issued the circular on mobile payments. The service is coupled with a free payment card, managed by MEPS.

E-MAL service is a virtual wallet to be accessed and controlled from the Zain customer's mobile handset which will be utilized as an alternative payment method. The m-wallet (mobile wallet) is unique per customer, since most customers have several prepaid accounts. It uses USSD technology with PIN-Code needed for any transaction.

Zain E-mal current services are:

- Talk-time recharge for any of Zain's subscribers.
- Zain postpaid & internet bill payment for any of Zain's subscribers.
- Micro-finance mobile payments in partnership with Tamweelcom for micropayments
- Cash-in and Cash-out from the mobile wallet, at any of Zain Shops or accredited Partners or Sub-Dealers
- Locally transfer money from your mobile wallet to any Zain customer inside Jordan with a yearly limit of JD 2500 per year.
- Zain E-mal card subscribers can use this card to shop at more than 6000 merchants all across the kingdom. Zain E-mal card outlets can be recognized through the Zain E-mal logo at window shops. This card is powered by MEPS.
- Although international transfers are not offered, international transfer of credit between Zain prepaid accounts is available for Zain customers.

The subscriber can register, deposit for free or withdraw money from:

- Any of Zain 40 stores
- Accredited Partners or Sub-Dealers : 3.500 points of sale

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- AML control is undertaken by the bank, since each application goes to bank the before being approved

Zain E-mal card is a card that is connected to the mobile wallet enabling the customers to pay at different merchants' outlets. Each card has its own (PIN) password that is different from the mobile wallet's password. In order to have this card; the customer must be registered with Zain E-mal and must have an active wallet. The customer must also fill the Zain E-mal card's application.

Although E-mal has been offered for two years it has only 40.000 customers registered, 50% of which are active. Zain management considers that the service has not achieved its expected results. Zain argues that lack of success is partially explained by:

- Transfers, and Cash Out transactions are taxed at 16% which undermines the attractiveness of E-Mal
- Cash in/ cash out networks are not promoting the service. Since the distribution system through dealers is not used, contractual relations are directly established in between Zain and the points of sale. As a result, merchants have to pay the electronic money in advance for a service for which they do not get any commissions. Besides, merchants see this service as a direct competition to the scratch cards, electronic vouchers and electronic payment they offer for payment of prepaid airtime.

Zain is trying to resolve the second problem by giving a percentage of the commissions' charged to the customer, transfer fee and cash out fee- cash in is free. In addition Zain, is considering repositioning the E-MAL service for banked customers, transforming it into an additional channel for accessing the accounts of 3G phones holders. If implemented, this strategy would clearly imply implementing a non-transformational business model with no benefits in terms of access to financial services to the unbanked.

6.6.2 Orange (Orange Money)

Orange Money is Orange's mobile wallet solution launched in Jordan in April 2012. It uses USSD technology with PIN-Code needed for any transaction. It partners with Housing bank for managing the settlement account. Orange Money in Jordan follows the parent's company business model already implemented in 9 countries in Sub-Saharan Africa with more than 4.1 million subscribers. It uses also the same platform, located at Orange's headquarters in Paris. Orange Money Jordan expects to reach 250.000 customers in less than 5 years.

The specifications of the Orange Money service are:

- A prepaid money wallet per customer separated from airtime credits.
- Transaction limits of 2.500 JD per year as the CBJ circular states, and 500 JD per month decided by Orange.

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- Subscribers must complete & sign the application and submit valid credentials (National ID/ Passport for non-Jordanians) at any of the 60 Orange stores.
- AML and CFT regulations are implemented by Thomson Reuters not by Housing Bank, scanning subscribers against international blacklists. According to the contract for delivering Orange Money Service between Orange and Housing Bank, Orange is responsible for complying with AML instruction number 3 of year 2010 for non-bank financial service providers.
- Each wallet is connected with the subscriber National Number.
- Subscribers receive an SMS receipt for all transactions.

Orange Money current services are:

- Cash in/Cash out, at any of the 60 Orange stores and 206 points of sale (of the 6.000 points of sale Orange has) that have been selected based on the prepaid volume sold.
- Bill Payment
- Loan installment payment
- Amman Municipality Traffic-Tickets Payment
- Merchant payment
- Domestic Money transfer
- Air time credit top up
- Bill payment

6.7 Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects Lebanon

BdL's position in terms of the regulatory framework of payments makes that bank led business models of mobile financial services are they only ones to emerge in Lebanon. Besides, the structure of the telecommunications industry directly controlled by the Lebanese State prevents MNOs from playing a leading role in the development of mobile financial services in Lebanon. Only financial service providers and the microfinance industry seem willing and able to add value to the mobile financial services value proposition. Indeed, the most likely scenario is that financial services providers such as Via Mobile and Pin Pay partnering with banks, institutions with remittances licenses and microfinance institutions, will develop mobile financial services applications to be downloaded on the phones on any mobile operator of Lebanon.

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6.7.1 Payment Service Providers**6.7.1.1 Pin Pay**

Pin-Pay is a Lebanese company founded in 2008 that has developed a platform in-house to provide mobile banking and mobile payment solutions. It aims at transforming the phone into a payment tool by linking the mobile phone to the bank account or to a payment card, and as a result transforming the mobile number into a payment instrument. The shareholders are Danny Abla, Founder and CEO; VC Middle East Venture Partners, and leading Lebanese Bank Audi. In June 2012, Pin Pay applied for a license for electronic financial transaction purposes, under circular 69 of the year 2000 which at the time of writing this report is still being reviewed by BdL.

Pin Pay delivers customized solutions that enable market makers to offer mobile money services. In Lebanon, due to the legal regulatory framework described the Central bank does not currently allow any non financial institutions to issue means of payment. As a result, the legal issuer of the electronic mean of payment needs to be a bank which in the case of Pinpay are Bank Audi and Bank Med (to be launched in August 2012). Pin Pay offers mobile payments in between Pin Pay accounts (P2) and Bill payment, mobile banking services for bank accounts, and international remittances.

The application and clearing is run by Pin Pay, and the banks only manage the settlement. The application developed is Web Based or SMS Based, depending on the handset and the telco contract of the user, since it is independent from the operator. The cash in/cash out network to be used is the partner's bank network and the network of Cash United, Money Gram's agent in Lebanon. Pin Pay is also partnering with Microcredit NGO Al Majmoua.

6.7.1.2 Via Mobile:

ViaMobile is a Lebanese Company, founded in 2010 and subsidiary of CREOVA, an international company based in Paris that develops mobile payment platforms. The issuer of the electronic mean of payment is Fransabank (although they are also in negotiations with BLF). The application developed is Web Based or SMS Based, depending on the handset and the telco contract of the user, since it is independent from the operator. The cash in/cash out network to be used is the partner's bank network.

Via Mobile's service, branded SIMBA, allows Fransabank customers (and in the future other bank's customers too), to offer:

- Mobile Payments in between SIMBA accounts: Peer to Peer Money Transfer; M-Cart (Mobile shopping); Music and Video and Top-up;

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- Utility Payment- from a SIMBA account to a bank account: Bills payment; loan payment; and mobile ticketing
- Mobile banking for bank accounts: Access to banks accounts for information and transactional purposes
- Marketing Smart services: Retail promotions and loyalty programs

6.7.1.3 Mobikick

MobiKick is a Lebanese mobile service provider founded in 2006 with presence in Lebanon and Canada. Although it also aims at offering mobile financial services through its MobiBank service offering, it currently does not partner with any bank in order to offer neither mobile payments nor mobile banking. Its main activity in Lebanon is to facilitate lottery payments with airtime credits through a service branded MobiLoto. Since it launched the service in December 2010, it has been able to manage 2% of all lottery payment transactions (1,5 million transactions). Mobiloto allows also distributing small winnings, being credited on the airtime account.

6.7.2 Banks

Major banks in Lebanon interested in mobile financial services are partnering either with Pin Pay or with Via Mobile in order to develop its service offering in terms of mobile payments and mobile banking. As previously mentioned, the existing regulatory framework in Lebanon requires their participation as the legal issuers of the payment instruments, and also for the time being as the only network for cash in cash out, together with licensed institutions under circular 69 and Liban Post.

Bank Audi and Bank Med are Pin Pay partners, and they aim at offering Pin Pay services to their large customer base. Bank Audi currently has 475.000 customers, while Bank Med has 130.000 customers. Also, their network of branches will be used for registering to the service, and cash in/cash out purposes. Bank Audi has approximately 72 branches and 162 ATMs, while Bank Med has 53 branches and 87 ATMs.

Fransabank is currently partnering with Viamobile. Fransabank has 250.000 customers, 61 branches and 74 ATMs. BLF is also willing to partner with Via Mobile, offering the service to its 142.000 customers via its 44 branches and 101 ATMs. The rest of the banks will follow suit, either with these service providers or with others. For banks creating new revenue sources by offering new transactions through mobile phones, is much cheaper than through any other channel. The remaining question is which standard will be used, and BdL wants to play a role in setting it with the implementation of the retail payments national switch.

6.7.3 Mobile Operators

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Mobile operators are unlikely to play any relevant role in the development of mobile financial services, which might be an obstacle to their development for the following reasons: First, MNO distribution network might not be fully used for cash in cash out networks unless operator obtain an electronic banking license, and this seems very unlikely in the current scenario. Two, since MNOs will not launch their own mobile financial services initiatives the level of competition will decrease, thus increasing prices and lowering quality of service. Third, since the State of Lebanon owns the telecom infrastructure MNOs are not likely to develop technologies such as USSD or SIM Toolkit servers. At the time of writing this report there are no USSD gateways in Lebanon, restricting the ability of users to access services through menus regardless of the handset. Also, SIM services are unlikely to be implemented reducing the security offered by SIM cards.

6.7.4 Microcredit Organizations

One of the biggest challenges microcredit organizations have in Lebanon is strengthening their technical and technological capacities. Indeed, as in other countries mobile financial services offered by the microfinance industry could not only become the killer application for the development of mobile financial services but also a critical tool for their survival in terms of improved efficiency and lesser delinquency ratios. The two leading microcredit organizations are already undertaking such a task of becoming more efficient and they see mobile financial services as way of improving their operations.

6.7.4.1 Al Majmoua

Al Majmoua began operations in 1994 as a program of Save the Children (funded by USAID). The program spun off from Save and registered as an NGO in 1998. Al Majmoua offers group and individual loans, with the latter categorized as general loans, business development loans, and worker loans. The group-guaranteed lending product targets only women, while the individual lending targets both men and women entrepreneurs. Al Majmoua is self sustainable since 2003, with a PAR (>30 days) of 0,6% as of December 2011.

Also, as of March 2012 Al Majmoua had 30.057 customers with an outstanding portfolio of 26.26 Million USD. The number of loans disbursed in 2011 was of 29.218, while the total number of repayment transactions was of 269.437. Al Majmoua distributes its services through 19 regional centers. For repayment it also uses the network of Liban Post, Cash United and the following banks: SGBL, Bank of Beirut and Bank Audi.

Al Majmoua is very interested in offering mobile financial services. It is currently in negotiations with mobile financial services provider Pin Pay. As an EIB borrower, he has expressed formal interest in being part of a follow up project implemented by the EIB.

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6.7.4.2 Ameen

Ameen s.a.l. has been a major player in the Lebanese Microfinance sector since 1999. Originally, a micro-credit program created by CHF International, Ameen evolved to become Ameen s.a.l in 2003, a Lebanese services company. In 2007, Ameen registered with the Central Bank of Lebanon to become the first Lebanese financial institution specialized in Microfinance. Ameen had as of March 2012 approximately 16.000 customers and a loan portfolio of approximately 17,15 million USD.

According to the interview held with Ameen's management, the benefits of mobile financial services for microcredit institutions are still unclear. Although they agree that serving microfinance institutions will only be successful when they are allowed to offer the disbursement of the microcredit, and not only microcredit payments through the electronic wallet, he argues that as of now based on Ameen's experiences with banks the balance customers keep in their accounts is close to zero. As result, they would like to know how in other countries the receiver keeps approximately 15 to 20% of the microcredit balance in the e-wallet. If this is proved to be right, Ameen is ready to partner with a mobile service provider that offers useful payment services and trust in the system.

6.8 Existing or potential mobile financial services operators (institutional, financial, or mobile phone players) that could fit into follow-up projects in Israel

Israel does not have an access to finance problem like neighboring MPCs. As a result transformational mobile financial services business models are not needed nor demanded. However, three factors explain the emergence of additive business models of mobile financial services: First, the saturation of the mobile telecom sector and the need for mobile operators to find additional revenue streams; Second, the dramatic decrease in postal revenues by the Israel Postal Service and the resulting need for restructuring and finding additional revenue drivers; Third, the development of new contactless technologies that make the mobile phone the perfect channel for undertaking electronic transactions.

There are three types of institutions that have looked at mobile financial services and that are willing to implement them: Mobile Operators; Card Companies and the Postal Bank. However, as described in the previous sections not all players within those sectors are willing to enter this market. Until now only one mobile operator (Cellcom), and one card company ICC-Cal and the Postal Bank have either launched these types of initiatives or expressed interest in launching them.

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6.8.1 Cellcom and ICC-Cal partnership

Cellcom Israel and Israel Credit Cards-Cal (ICC-Cal) signed a cooperation agreement to turn the mobile phone into an e-wallet using Near field communication (NFC) technology in March 2012. At the time of writing this report the project had not been implemented yet.

This is not Cellcom's first attempt to enter the financial industry, where it already has a Money Exchange license. In 2010 it launched Cellcom Direct, a joint venture with Citigroup Inc. for transferring money abroad via mobile phones. Launched in the summer of 2010, it turned out to be a negligible service, which was barely used by foreign workers for sending remittances, and was irrelevant to most of the carrier's customers. Cellcom quietly terminated the service early 2012.

Cellcom and ICC-Cal partnership will market this service to Cellcom subscribers, who will be issued an ICC-Cal credit card. Customers applying for this service will receive benefits and discounts from participating retailers.

Cellcom plans to leverage its customer database in order to create a customer club for this service and to customize benefits. The contactless credit cards will use NFC technology embedded in the phone's SIM cards, instead of an NFC sticker fixed to the phone, which Isracard is using in a pilot with Super Pharm Ltd. and Aroma Café Ltd.

Discount Bank's (ICC-Cal main shareholder) has approved the e-wallet venture after consulting with Bank of Israel following the procedures for a new banking product. Since Cellcom is a subsidiary of IDB Holding Corp., which also controls Clal Insurance Enterprises Holdings, it cannot be ruled out that either the Ministry of Finance or the Antitrust Authority may have objections to the venture, or may restrict its activity.

Other questions relate to the conversion of points of sale at businesses to NFC technology and who will bear the cost, and which company will carry out the conversion. There are two big companies in the field operating in Israel: VeriFone Holdings and Retalix. It is believed that Verifone will carry out the project, although a final decision has not yet been made.

6.8.2 Postal Bank:

Israel's Postal Company is restructuring due to the decline of postal services and as a result it aims at expanding to other business such as finance through the Postal Bank. It also aimed at entering the telecommunications industry by asking for an MVNO license, but the Communications Ministry declined the application.

The Postal Bank currently collects deposits and issues means of payment, but cannot grant credits. It currently has 350.000 active postal bank accounts, and 700 post office branches

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mostly located in rural areas. Most of its customers are low income, either underbanked or unbanked.

Besides Postal Bank is already a major provider of payments; intermediary to commercial banks; provider of foreign exchange services; provider of transfers both domestic and international; and issuer of prepaid cards. This latter activity is of special relevance to mobile financial services, since it provides the platform to manage the electronic account.

The Postal Bank seems as in other countries analyzed, the ideal candidate to deploy mobile financial services targeting the underbanked/unbanked. Although the consultant was contacted by Yoel Naveh, Director of Postal Bank after the field mission in Israel, no formal expression of interest has been received asking for support for a follow-up project.

FINAL REPORT

7 List of persons interviewed

7.1 List of persons interviewed in Morocco

- Bank Al Maghrib (BAM)
 - Lhassane BENHALIMA. Adjoint au Directeur. Direction de la Supervision Bancaire.
 - Fatima BENNANI. Responsable du service des Agréments. Direction de la Supervision Bancaire.
- Agence National Réglementation des Télécommunications (ANRT)
 - Ahmed KHAOUJA. Directeur de la Concurrence et suivi des operateurs
 - My Abdelaziz TIB. Directeur responsable de la mission réglementation
- Banque Populaire
 - Laïdi el WARDI. Directeur Générale. Banque de Détail et des Marocains du Monde.
- Centre Monétique Interbancaire
 - Ismaïl BELLALI. Directeur Générale Adjoint
- Al Barid Bank
 - Redouane NAJM-EDDINE. Président du Directoire
 - Zakia HAZZAZ. Directeur Markering
- BMCE Bank
 - Adil LAHBICHI. Directeur. Direction Particuliers/Professionnels et Bancassurance
- Fondation Banque Populaire pour le Microcrédit
 - Mustapha Bidouj. Secrétaire Générale
- Al Amana
 - Hicham Talib. Directeur Pole Support
- HPS
 - Badr BENAÏSSA. Business Development Director
- M2M
 - Mounir M. ESSAYEGH. Chief Executive Officer
- M2T
 - Mourad Mekouar. Chief Executive Officer
 - Imane Maleb. Business Development Manager
- Maroc Telecom
 - Brahim BOUDAOU. Directeur Marketing. Direction Générale des Services

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7.2 List of persons interviewed in Algeria

- BANQUE d'ALGERIE:
 - Mr Mohamed Lahbib GOUBI, Directeur Général des Études
 - Mr Mohamed BOUSSABA, Directeur des Centrales des Risques
 - Mr Farid Zineddine TIAIBA, Membre de la Comssion Bancaire
 - Mr BOUDJENNAD, Sous Directeur DGIG
 - Mr Mohamed Larbi BRAHIM, Directeur Générale DGRSP
- SATIM:
 - Mme Newel BENKRITLY, Directrice Générale
 - Mme Assia BENCHABLA, Directrice Technico Commerciale
- BEA
 - Mr Rachid BACHA, Directeur des Etudes Economiques
 - Mr Said TALEB, Directeur des Moyens des Paiement
- CPA
 - Mme Horia FERHAOUI, Directrice de la Monétique
- ARPT
 - Mr Ahmed BERBAR, Electronic Certification Manager
 - Mr Nacer DJIDA, Directeur Economie Concurrence et Prospective
 - Mlle Soumaya BENBARTAOUI, Chef de Département des Prestataires de Service de Certification Electronique/PI
- Algérie Télécom Mobile- MOBILIS
 - Mr Barhim HADJADJ, Directeur de la division Commerciale et Marketing
 - Mr Faycal TOUATI, Direction de la division Commerciale et Marketing
- Orascom Telecom Algérie -DJEZZY
 - Mr Rachid REKIS, Directeur Général Adjoint chargé de la stratégie Business et Développement
 - Mr Toufik OUAGUENOUNI, Business Development Manager
- Wataniya Telecom Algérie - NEDJMA
 - Mr José NAZARIO, Directeur de la Stratégie et développement
- ALGERIE POSTE
 - Mr Rachid BENAZOUZ, Chef de la Division Monétique et Services Financier Postaux
- ANGEM
 - Mr Med El Haidi AOUAIDJIA, Directeur Général
 - Mr Djalil BOUZITOUNE, Directeur de développement

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7.3 List of persons interviewed in Tunisia

- Banque Centrale de Tunisie
 - Ali Ridha BEN ACHOUR, Directeur des Relations Internationales
 - Mustapha HEFAIEDH, Chargé de Mission en Informatique auprès du Gouverneur
 - Kedhai ALI, Directeur des systèmes de Paiement
 - Khémaies BEN ARFA, Directeur General de la caisse générale et de paiements
 - Faicel BELAID, Chef de Service de la Coopération Internationale
- Ministère de Finances
 - M. Houcine Dimass, Ministre des Finances
 - M. Slim Besbès, Secrétaire d'Etat auprès du ministre des Finances
- Ministère de l'Investissement et de la Coopération Internationale
 - Nabgha Fayache, Gestionnaire Conseiller
- Ministère des Télécommunications
 - Mbarka MISSAOUI GUESMI, Conseiller Juridique
- Société Monétique de Tunisie (SMT)
 - Khaled FRADI, Directeur Général
 - Habib BEN ALI, Directeur Centrale des Operations
- ENDA Inter Arabe
 - Essma BEN HAMIDA, Executive Director. Co-founder
 - Mohammed ZMANDER, Directeur du credit
- Banque Tunisienne de Solidarité
 - Hafedh GHARBI, Président Directeur Général
- Tunisie Telecom
 - Anis Zourai, Directeur Exécutif
- La Poste Tunisienne
 - Zouheir ELLOUMI, Directeur Central Poste Finance
 - Abderrazak SLAMA, Directeur de la Monétique
- Via Mobile
 - Ramzi EL FEKIH, Président Directeur Général
- Attijari Bank
 - Nedra BESBESS, Directrice de la monétique
- Délégation en Tunisie Union Européene
 - Corinne SALINAS, Chargée de Programmes Secteur Privé- Appui Budgetaire

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7.4 List of persons interviewed in Egypt

- The Central Bank of Egypt (CBE)
 - Ahmed A. Faragallah. Head of Payment Systems Department.
- National Telecom Regulatory Authority (NTRA)
 - Mr. Mahmoud El-Gouainy. Vice President.
- The Egyptian Financial Supervisory Authority (EFSA)
 - Mohaammed Susa. Head of International Relations.
- Social Fund for Development (SFD)
 - Nevine Badr El Din. Senior Manager Microfinance Sector.
- BNP Paribas bank
 - Tawfik Tawfik. Head of Compliance & Permanent Control Coordination.
- Mobinil
 - Asmaa Hosny. Senior Manager Business Development -> Corporate Strategy & Business Development.
- Vodafone
 - Mohamed Wahba. Mobile Payments Marketing Senior Manager.
- Emerging Markets Payments Holdings (EMPH)
 - Charles Gill. Chief Operating Officer of EMPH and a Director of MSCC, EMP Middle East and ACET Processing
- Egyptian Banks Company (EBC)
 - Mohamed Bayoumi. Managing Director.
- Fawry
 - Ashraf Sabry. Chief Executive Officer.
- Masary
 - Moatessem Ossam. Commercial consultant.
- International Finance Corporation (IFC)
 - Xavier Reille. Manager of IFC advisory services on access to finance in the MENA region.
 - Philippe Breul. Independent Consultant.
- European Investment Bank (EIB)
 - Carl Fredrik Gronhagen. Deputy Head of Regional Office, Cairo at European Investment Bank.
 - Anders Risberg. Senior Loan Officer. Near East Division. Facility for Euro-Med Investment Partnership (FEMIP) Department.
 - Paola Ravacchioli. Investment Officer. Special Operations Division/ENPC Department .

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7.5 List of persons interviewed in the West Bank and Gaza

- Palestine Monetary Authority
 - Hattem Hamdallah. RTGS Supervisor. Payments Systems Department
 - Taher Hasan Nofal. Payments System Project Manager.
 - Ragheb O. Budeiri. Consultant. Development Project Management Unit. Governor's office.
 - Mohammed Atallah. Department Supervisor/ Research Advisor. Research and Monetary Policy Department.
 - Shaher Mahmoud Mousa. Senior Researcher. Research and Monetary Policy Department.
 - Jamal A. Odeh. Acting Division Chief. Non Banking Financial Institutions. Banking Supervision Department.
 - Ali A. Faroun. Director. Consumer's Relations & Market Conduct Department.

- Jawwal. Palestinian Cellular Communications Co. Ltd.
 - Rami Hinawi. Services and Product Management Department Head.
 - Raouf Said. Mobile Data Services Unit Head.

- Wataniya Mobile
 - Ahmad Eid Hussein. Product Development Senior Manager
 - Fadi Abdellatif. Finance Director.

- MTIT
 - Florid Zurba. ADG Telecommunications Administration

- Arab Bank
 - Ghassan Jabr. Head of Operations.

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7.6 List of persons interviewed in Jordan

- Central Bank of Jordan
 - Maha M. Bahou. Executive Manager. Domestic Payments & Banking Operations Department. Jo-National Payment Council
 - Mohamad Subhi Amaireh. Assistant Executive Manager. Banking Supervision Department
 - Waleed Qasrawi. Head of Studies and Licensing Division. Banking Supervision Department.
 - Maha I. Al Adallat. Head of Credit Concentrations and Risk Division. Banking Supervision Department.
 - Zakaria Harees Al Hawash. Legislation and Studies Division. Banking Supervision Department.
 - Sawsan A. Jarrar. Head of Banking Operations Follow-Up Division. Banking Supervision Department.
 - Sameer Yousef Quza. Acc. Mang. Division. Domestic Payments & Banking Operations Department.
- Telecommunications Regulatory Commission
 - Mohammad Al Taani. Chairman of the Board/ CEO
 - Al-Ansari M. Al-Mashagbah. Board Member. Commissioner
 - Nael Adwan. Economic Department Directors
- MEPS
 - Abdul Malek Al jabber. Chairman.
 - Abdallah Qtaishat. Deputy General Manger Commercial
- EMP
 - Amjad Al Sadeq. Director of Issuing and Business Development
 - Radwan Darwish. Managing Director/General Manager
- Zain
 - Ahmad Hanandeh. CEO
 - Mohanned Audeh. Head of Corporate Sales.
- Orange
 - Raslan Deiranieh. Chief Finance Officer
 - Ayman Al Jabaei. Business Development Supervisor. Orange Money
- Housing Bank
 - Mohammad Y. Awwad. Head of banking & services center
 - Nayef H. Al- Hussein. Anti-Money Laundering Officer
 - Wadie G. Mattar. Compliance Officer

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7.7 List of persons interviewed in Lebanon

- Banque du Liban
 - Ramzi Hamadeh. Executive Director Head of Payment Systems Department.
 - Najib Anwar Choucair. Executive Director. Head of Banking Department.
 - Carine Antoine Chartouni. Senior Legal Counsel.
 - Ali Nahle. Director Information Systems Department.
- Banking Control Commission
 - Nasr El- Khoury. IT Control- CISM Manager
- FransaBank
 - Wissam Ali Hassan. Head of E- Banking Department.
 - Rabih Dayeh. Deputy Head E- Banking Department.
 - Elissar Hajj Zarwi. Head of Marketing & Corporate Communications Department.
- Via Mobile
 - Karim El-Khoury. Chairman & CEO.
- Pin Pay
 - Danny Abla. Founder and CEO.
 - Mazen Obeidi. Chief Financial Officer.
- Liban Post
 - Eli Touma. Business Development Director.
 - Naji Banjak. Corporate Relations Advisor.
- Ameen
 - Ziad Halaby. General Manager.
- Al Majmoua
 - Michelle Touma. Research and Development Manager
 - Alia Farhat. HR & Social Performance Manager
- Touch- Zain
 - Claude Bassil. General Manager.
 - Charbel Corddahi. Chief Financial Officer.
 - Nadim Khatteer. Chief Commercial Officer.
- Alfa – Orascom
 - Marwan Hayek. Chairman and CEO
- Ministry of Telecommunications
 - Antoine Hayek. Owner Supervisory Board Representative.
 - Moussa A. Khoury. Attorney at Law.
- Telecommunications Regulatory Authority
 - Imad Hoballah. Acting Chairman and CEO

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7.8 List of persons interviewed in Israel

- Bank of Israel:
 - Herman Litman. Chief Economist. Banking Supervision Department
 - Ronit Chitayate. Head of Payment & Settlement Systems Division.
 - Orna Vago. Deputy General Counsel.
 - Ilanit Madmoni. Head of Off site Examination Unit. Banking Supervision Department.
 - Pynchas Katz. Senior Economist. Head of International Affairs Unit. Banking Supervision Department.
- Ministry of Finance
 - Yitshak Malka. Head of Currency Service Providers. Audit Department.
- Ministry of Communications
 - Eden Bar Tal. Director General.
 - Nati Bialistok Cohen. Senior Advisor to the Director General.
- Leumi Card
 - Gilead Kehat. VP Human Resources, Risk Management & Regulation.
 - Lilach Bar-David. Business Development Director.
- Isacard
 - Ami Alpan. Director Strategic Planning & Business Development.
 - Oved Berlowitz. Software Department Manager.
- Ideomobile
 - Dan Lichtenfeld. CEO.
 - Ron Mimoun. VP Marketing and Sales.
- Postal Bank
 - Yoel Naveh. Director of Postal Bank.



Facility for Euro-Mediterranean Investment and Partnership



Financial services are accessible to only a small part of the Mediterranean partner countries' population unlike mobile phones which have high penetration rates. In the region, less than 4 per cent of the population have access to traditional payment systems, while 9 out of 10 have a mobile phone.

Starting from this fact, the study aims to contribute to the development of alternative financial service distribution models, based on prepaid electronic payment systems and cellular technology in order to help address the problem of limited access to financial services observed in the Mediterranean partner countries.

In particular, the study first undertakes a mapping of the countries in the region with the view to assessing the feasibility of deploying new technologies for financial services in each country. The study also clarifies the elements needed for the successful implementation of the newly identified models, at the end of which it lists the institutions that could implement such projects in the region.

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