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Managing of treasury in the banking system within a multi currency economy: evidence from Palestine

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Abstract: The Palestinian economy has no national currency which led to having three currencies in use for deposits, saving, wealth measurement and trade transactions. The non-national currency status leads to various problems and add additional risk aspect, due to the fact that the changes in the exchange rates between the used major currencies are so significant. Thus, it leads to make challenges to the management of banking treasury activities and following balances of each single currency. Therefore, this research aimed to target this issue using three research instruments, including examining the related laws, imposed by the Palestinian Monetary Authority (PMA) on banks working in Palestinian economy, structured interviews with banks' treasurers, and a relevant questionnaire which was directed to a selected sample of treasury staff and employees regarding closeting of foreign currency positions. The study found that management of banks working in the Palestinian economy imposed more strict levels than that imposed by PMA regarding balances of the related currencies. The closing of surplus of currencies available in the Banks treasury, occur in the last hour of working day. The study recommended to relaxing the maximum ratio of each single currency to be hold, reducing the restrictions on investments outside Palestine, permitting trading in options and future transactions.

Keywords: treasury; management of multi currencies; Palestinian economy; foreign currency positions.

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1 Introduction

The GDP of Palestinian economy was about ten billion US\$ in 2012, the contribution to GDP comes mainly from service sector followed by commerce and retailing sector, construction, industrial and agricultures sectors respectively. The public sector contributes to 20% of GDP compared to 80% to the private sector (PMA, 2013, 2014). The public sector in Palestine includes three major groups: the Palestinian National Authority through central budget allocations, the UNRWA agency which offers free goods and services to the Palestinian refugees and the NGOs which have a significant role in offering social, health and educational subsidised services and financed by international aids.

The financial sector including banking system plays a significant role in developing both Arab as well as the Palestinian economy (Sabri, 2010, 2008; Sabri and Jaber, 2006). The financial system in the Palestinian economy includes:

- First: The official banking system: it includes about 18 banks, some are Palestinian while the others are Arab and foreign banks, they include commercial and Islamic banks with 209 branches located in both West Bank and Gaza Strip cities. The total owner equity value of banks working in the PNA was about 1,258 million dollars, with total assets of ten billion dollars at the end of 2012 (PMA, 2013). However, the majority of the market share of banking services belongs to the Arab banks working in PNA as expressed by total deposits and granted credits rather than to the Palestinian banks.
- Second: The currency changers: the currency changers perform different tasks such as buying and selling of currencies, currency transfers, cashing checks, and granting small loans. However, the Palestinian related laws prevent the currency changers from accepting deposits or granting loans, and dealing with options and derivatives (PMA, 2009). In the PNA there are about 276 currency changers working in most of major Palestinian cities, with a total capital value of 25 million dollars. Of the total of currency changers about 37% are working as sole firms while 63% of changers are working as corporations (PMA, 2013).
- Third: Microfinance organisations: there are about nine microfinance organisations besides the UNRWA, who offer short term loans to small business firms, without complicated procedures. The outstanding granted loans offered to small businesses firms were about 57 million dollars at the end 2009 (PNSMF, 2010). The major

benefited clients are small business firms, especially those owned by Palestinian women. All microfinance firms in the PNA are working as non- for profit organizations (NGOs) and receiving their sources of funds from international aids.

- Fourth: The FOREX trading firms; there were various FOREX trading firms trading in international currency markets working in the PNA. They used to be working in the form of sole firms, partnership firms or private corporations. However, these firms were liquidated and closed based on instructions issued from the Palestinian Monetary Authority in 2007, under justifications that such firms may harm the Palestinian retail clients' interests.
- Fifth: The insurance sector, which includes ten insurance corporations, and 229 insurance agents. The total assets of insurance companies were about 340 million dollars in 2012 with a paid capital of 67 million dollars. The total collected annual insurance premium was about 145 million dollars compared to 88 million dollars paid as compensation at the end of 2012. The Palestinian insurance sector deals mainly with auto insurance, which formed about 61% of total market share, followed by general insurance, health, fire, life and marine insurance respectively (PCMA, 2013). The general insurance includes casualty and property insurance, travel insurance, and workmen's causality insurance.
- Sixth: The financial market: there is one stock exchange, dealing with the trading of common shares of 48 national Palestinian corporations, with market capitalisations of 2.9 billion dollars at the end of 2012, while there is no trading related to bonds, options or derivatives. In addition, there are ten private corporations that operate as registered brokers, with total capital value of about 36 million dollars at the end of 2009 (PCMA, 2013; PSE, 2010). The financial settlement of the Palestinian stock exchange transactions is conducted through the Arab bank for residents' transactions and through the HSBC bank for foreign transactions.

2 Significant and justification of the study

The significance of this study comes from the unique merits of the Palestinian economy in general and the Palestinian financing sector in particular. For example, the Palestinian economy has no national currency. Politically, the Palestinian Authority has no right to issue its own currency due to the present political situation. This situation has led to having various currencies in use for different purposes, such as exchange transactions, deposits, saving and wealth measurement, budget and tax bases. In addition, the share of each of the three currencies in the Palestinian economy is different based on financial transactions as well as types of goods and services. For example, in the case of banking deposits, US\$ and JD are the most used as saving currencies, in case of loans US\$ and NIS are the most used in getting loans from the official banking system, for checks and business transactions, the NIS is the most used among three currencies. The Euro and other currencies formed about 4% of deposits value in Palestinian banks (PMA, 2013), as shown in Table 1. Which shows that the total current and deposit account values for the various currencies in the banks working in Palestine was about US\$8,306 million compared to US\$4,415 million as the balance of loans granted by the banking system. In addition, all Palestinian banks have ATM machines, dealing with three currencies

including JD, NIS, and USD with various transactions (Sabri et al., 2014a). However, in some banks the type of deposits reached up to 12 currencies, in addition, the ATMs of the Banks working in the PNA deal with three currencies at the same time. This situation is also applied to the payment systems for daily transactions, which are based on the types of goods and assets. For example, when dealing with lands, the JD is the only accepted currency, but to buy an apartment the US\$ is the used currency, while trading in glossary and consumables goods occurs in NIS. The Palestinian National Government budget prepares in both dollar and NIS, while the local government budgets are prepared in both JD and NIS.

Table 1 Currencies' market shares in the Palestinian economy in 2013

	<i>Value by \$ million</i>	<i>US\$</i>	<i>JD</i>	<i>NIS</i>	<i>Euro and others</i>
Current and deposits accounts	8,306	42%	25%	29%	4%
Granted credits	4,415	55%	11%	33%	1%
Checks presented for clearing	1,060	18%	5%	74%	3%

Source: Compiled by authors based on PMA (2014)

As indicated in Table 1 we find that US\$ is the main currency for saving and loans, while the NIS is the main currency for internal trading in which 74% of checks presented for clearing were in NIS as expressed in their values. In addition, the loans in NIS are mainly to cover the overdraft accounts related to trading (PMA, 2014). Selecting of a currency in case of loans and deposits is based on factors other than the cost or return. For example, a study found that the interest rate is not a critical factor in selecting a currency for savings and deposits in Palestinian banks, as reported by the clients and banking staff, as well as found by the financial analysis, which shows weak or no correlation between changes in interest rates and changes in values of deposits in banks (Sabri et al., 2014b).

Finally, the non-national currency status leads to various problems and has negative aspects on the financial sector, due to the fact that the changes in the exchange rates between the major used different currencies are so significant. In addition, its increasing in the last period in short times of about minutes and hours such as between US and Euro.

3 Purposes of the study

This study aimed to accomplish the following stated purposes:

- to state the management aspects followed in managing treasury activities in the Palestinian banking system
- to determine the closing practices of the cash surplus position of the different used currencies in addition to indicating the ways and conditions of implementing such practices
- to get the perceptions of treasury managers and staff, regarding reducing risk of the treasury activities in the Palestinian banking system
- to state the most needed reforms to increase the efficiency of Treasury management.

4 Review of the related literature

Various studies discussed the issue of volatility of exchange rates between national and international currencies and their relationship to interest rate and trading. For example, Capstaff and Marshall (2005) examined using of international cash management systems to hedge foreign exchange (FX) risks using a sample of French and UK companies. They find that matching, netting and pricing policies are the most commonly used techniques in both the UK and French. Agénor and Khan (1996) examined the relative demands for domestic and foreign currency deposits by residents of developing countries, and found that the rate of interest and the expected rate of depreciation of the parallel market are important factors in the choice between holding domestic currency or foreign currency deposits abroad. Frankel and Rose (1996) discussed the causes of exchange rate crises in emerging economies and reported that the rate of change of credit, the total debt burden and foreign interest rates are possible causes for national currency crashes. Menkhoff et al. (2011) found a significant cross-sectional spread in excess returns of up to 10% between past winner and loser currencies and shows behaviour consistent with investor under- and over-reaction. Others explored the network externalities for the automated clearing house (ACH) as presented by Ackerberg and Gowrisankaran (2006). Bonser-Neal and Tanner (1996) tested the effects of central bank intervention on the volatility of \$/DM and \$/yen exchange rates and found little support for the hypothesis that central bank intervention decreases expected exchange rate volatility. Ma and McCauley (2002) reported a high return to higher dollar interest rates could lead to a growth in foreign currency deposits in China and any shift to a flexible exchange rate system would add a new element to the formation of exchange rate expectations.

Azar (2008) discussed resistance levels for FX rates, and concluded that three FX rates of British pound, Japanese yen and Swiss currency follow a strong mean-reverting process in the upper bands. Osler (2000) used support and resistance levels provided to customers by six firms active in the FX market and found strong evidence that the levels help to predict intraday trend interruptions. Menyah (2005) examined models of international cash management with the cooperation of banks and technology, and recommended further research to evaluate the extent to which corporate practice is consistent with multi-currency balance. He and McCauley (2010) reported that the development of offshore markets of currencies could pose risks to monetary and financial stability in the home economy which need to be prudently managed. Suthar (2008) tested the association with the exchange rate between the Indian rupee and the US dollar, and found that the rate of change of FX reserves have a significant impact on the monthly average of the exchange rate between Indian rupee and the US dollar. Finally, Duangploy and Helmi (2000) recommended using a multi-currency accounting as an alternative to functional-currency accounting as its more clearly provides information on the respective positions of the hedged instruments.

5 Methodology

In order to accomplish the stated objectives of this research three research instruments were used which may be summarised as follows:

- First: Examining the related laws, rules and regulations regarding the issues that are to be discussed in this research. This includes laws, the related regulations imposed on banks regarding closing of foreign currency positions (short, long and flat) including central regulations as well as individual banking regulations regarding managing of currencies held by the banks.
- Second: Interviews with banks' treasurers, about the various currency positions, and currency trading management issues were conducted. The selected sample covered a group of bank managers, and treasurers. The selected sample included 12 out of 18 Banks working in the Palestinian economy including Palestinian, Arab and foreign banks.
- Third: a relevant questionnaire consisted of three parts was used of five answers of Likert scale (5 stands for strongly agree while 1 stands for strongly disagree). The first part of the questionnaire was related to managing practices of holding currencies, the second part was about the needed reforms to increase the efficiency of treasury management and the third part was related to reducing risk of the treasury activities. The questionnaire was developed based on initial interviews of related bank staff. The questionnaire directed to a selected samples of treasury staff and employees. In order, to collect the perceptions of all concerned parties regarding the conditions of managing treasury departments in banks working in Palestinian economy.

6 Findings of the study

Managing of Treasury transactions in multi currency economy: the major aspects of present situation were examined in this study regarding managing currency by Palestinian banking treasuries, as presented in the following section:

6.1 Closing currency positions (surplus) as existed in the Palestinian banking system

Due to the fact that the Palestinian banks deal with four currencies in most of the transactions, and with the highly volatility that exists between the exchange rates of such currencies in short times, there is a need to keep a match between the available cash of each currency and its actual clients' accounts held by banks' books, and thus, the surplus of any currency should be within the limits stated by PMA and the top management of the bank. Accordingly, this study examines the practices of treasury departments that deal with this issue as reported in Table 2 using structured interviews with directors of the treasury departments and a special questionnaire directed to treasury directors and staff.

Table 2 Managing of the treasury in multi currency economy

<i>Management practices</i>	<i>Local</i>	<i>Ratio to the total sample</i>
Maximum of currency surplus permitted	5% of owner’s equity for each currency and/ or 20% of owner equity for all currencies together	16%
	1–3% of owner’s equity or less	42%
	Maximum amount \$200,000–500,000	42%
Time of closing currency’ surplus	Immediately special (large amounts)	20%
	End of the day (normal transactions)	80%
Closing of currency’ surplus	Other banks and branches working in Palestine, and currency changers	15%
	Headquarters of Arab banks (Jordan)	40%
	Corresponding foreign banks	45%
Working days of treasury	Sunday to Friday	50%
	Sunday to Thursday	50%

Based on the findings of the structured interviews and the articulated questionnaire, it may be indicates that all Palestinian banks used the maximum stated level of holding foreign currencies imposed by both the PMA and their managements of the bank in a strict way. The PMA imposed 5% of owner equity as a maximum permitted limit for each currency, and 20% of owner equity for total currencies. However, the management of 42% of the banks imposed more strict levels and decreased it to a range from 1% to 3%, while others reduced the maximum permitted surplus of a currency to a value ranged between US\$200,000 and US\$500,000.

For closing the surplus of currencies, the majority of banks close the surplus in the last hour of working day. However, in case of large values of currencies, the time of closing is supposed to be immediately with other buyers. The selected partner to close the daily currency’ surplus is either at a corresponding foreign bank, or at the headquarters of the Jordanian banks, or at other local Palestinian banks or local currency changers. It is estimated that a share of 15% is closed at local economy as presented in Table 2. Finally, 50% of the banks, their treasury departments working six days to follow exchange rates of currencies in Fridays, which is working days in foreign corresponding banks, while its holiday in Palestine, while the other 50% of treasury departments of Palestinian banks working only five days, and not working in Fridays.

6.2 The most needed reforms to increase the efficiency of treasury management

On the other side, when the directors and staff were asked about the most needed reforms in the conditions of managing banking treasuries in multi currencies banking system, the majority of participants consider to have additional instructions that cover some of the activities of treasury management as ranked number one of the most needed reforms as presented in Table 3.

Table 3 Ranking of the most needed reforms to increase the efficiency of treasury management

<i>Rank</i>	<i>The most needed reforms to be</i>
5	To cancel the 5% limit imposed on the balance of currency positions by the PMA in order to match customer transactions and assets
3	To cancel restrictions imposed on some speculative trading instruments such as options trading in currencies
2	To allow the treasury staff to work fully on Fridays in order to track the ongoing changes in currency rates
1	There is a need for additional instructions that cover some specific activities of the treasury
4	To increase the percentage of the total balance for all major currencies while conducting speculative operations for the bank

The need to allow the treasury staff to work fully on Fridays and to cancel restrictions imposed on some speculative trading instruments such as option trading were ranked number two and three in the priorities of reforms. However, the majority of the participants did not see that there is no need to cancel the maximum limit imposed on the surplus of the currency positions and consider it as the least priority. This finding goes with the fact that banks managements imposed much strict limits that reached up to 1% of the owner equity as reported in the above section. However, in each bank they believe that the 5% limit on each currency may restrict their work and they prefer to keep the 20% limit for all currencies and make limits over individual currencies more flexible.

6.3 Perceptions of Treasury managers and staff, regarding reducing risk of the treasury activities

The last part of this regard was to get the perceptions of treasury mangers and staff, regarding reducing the risk and improving efficiency of the treasury activities. As indicated in Table 4, the majority of treasuries' staff strongly agreed that there is a need for additional legislations to cover all related transactions to facilitate the work of the treasury, and the implementation of an electronic payment system by the PMA to facilitate the process of treasury management. In addition, they believe that the fluctuations in exchange rates and increasing of bank clients who trade in currencies through internet transactions led to an increase of treasury risk. On the other side, they disagree on the suggestion to separate the Treasury Department into tow departments, one for the speculative transactions and the other for clients' transactions, and they do not think that increasing of electronic transfers by customers increases the risk of treasury management, use of mobile banking will increase the risk of treasury activities, and use of various currencies will increase the risk.

Table 4 Perceptions of Treasury staff regarding risk and performance of Treasury activities

	<i>Mean</i>
The implementation of an electronic payment system facilitated the process of Treasury management	4.3
Increasing of bank clients who trade in currencies through internet transactions led to an increase of Treasury risk	4.0
The use of three major currencies in the Palestinian economy is a negative phenomenon and increases the risks in Treasury management	3.1
The fluctuations in exchange rates increase the risk of Treasury management	4.4
The increased of electronic transfers by customers increases the risk of Treasury management	3.3
I prefer to separate the Treasury Department into tow departments, one for the speculative transactions and the other for clients transactions	3.2
The use of mobile banking will increase the risk of treasury activities	3.1
There is a need for addition legislation to cover all related transactions to facilitate the work of the Treasury	4.5

Note: *1 point strongly disagree to 5 points strongly agree.

6.4 Recommendations of treasury managers and staff

Based on the findings of the interviews and the related questionnaire, the following recommendations need to be considered to facilitate the work of treasury in multi currency economy and make it more efficient and effective:

- the maximum ratio of 5% to be held should be varied based on the currency and keep 20% for the total
- to extend the time of work including Fridays in order to keep up with the time differences in international markets
- to reduce the restrictions imposed by the Palestinian Monetary Authority on trading and investments by Palestinian banks outside Palestine
- to permit trading in options and future transactions including docu deposits
- to permit trading using margins in transactions settlements
- to adopt advanced MIS programmes to connect treasury transactions with outside banks
- to use awards system to encourage employees and staff of the treasury in Palestinian banks
- to offer special trainings to employees and staff of the treasury in the Palestinian banks
- to issue exchange rates (prices) currency bulletins every two hours, instead of one time every day by PMA and each bank.

7 Summary and conclusions

7.1 Summary

The Palestinian economy has no national currency which led to having various currencies in use for deposits, saving and wealth measurement and trade transactions. In the case of banking deposits, US\$ and JD are the most used as saving currencies, in case of loans, US\$ and NIS are the most used in getting loans from the official banking system. Euro and other currencies are also use in Palestinian banking system at low level compared to the above currencies.

The non-national currency status leads to make challenges to the managements of banks in managing treasury activities and currencies balances in the Palestinian banking system. Due to the fact that there are highly volatility existed between the exchanges rates of the world currencies, which need to keep a match between the available cash of each currency and its actual client's accounts holding by banks' books, and thus, the surplus of any currency should be settled within the limits stated by PMA and management of the banks. Three research instruments were used including examining the related laws, rules and regulations regarding closeting of foreign currency positions (short, long and flat positions) including central regulations as well as individual banking regulations. Interviews with banks treasurers, about the currencies positions, and currency trading management; and a relevant questionnaires was directed to a selected samples of treasury staff and employees regarding the research issues.

7.2 Conclusions

The study found that the management of the banks working in the Palestinian economy imposed more strict levels and decreased the 5% permitted to the holding balances of foreign currency to about 1% to 3%, of the total owner equity, while others reduced the maximum permitted surplus of a currency to a value ranged between US\$200,000 and US\$500,000. Bank treasurers believe that the 5% limit on each currency may restrict their work and they prefer to keep the 20% limit of the owner equity for all currencies and make limits over individual currencies more flexible.

For closing the surplus of currencies, the majority of banks close it in the last hour of working day, while the majority of treasuries' staff strongly agreed that there is a need for additional legislations to cover all related transactions to facilitate the work of the treasury, and the implementation of electronic payment systems by the PMA to facilitate the process of treasury management. In addition, they believe that the continued fluctuations in exchange rates of the used currencies in the Palestinian banking system and the increasing direct trading in currencies by the clients through internet transactions led to an increase of the risk of holding the treasury assets. On the other side, they disagree on the suggestion to separate the Treasury Department into tow departments, one for the speculative transactions and the other for clients' transactions.

The study recommended to relaxing the maximum ratio of 5% imposed on each single currency to be hold keeping the 20% level for the total of currencies, extending the time of work including Friday days, reducing the restrictions on investments outside Palestine, permitting trading in options and future transactions including Docu deposits transactions and margins, adopting advanced MIS programmes to connect treasury transactions with outside banks, and issuing exchange rates (prices) currency bulletins

every two hours, instead of one time every day by PMA. Finally, and due to the fact that volatility between the currency exchange rates of the major used currencies is increasing significantly in the last period, there is a need to issue a special and detailed regulations to cope with this situation. Moreover, we recommend further research to explore different aspects of this issue.

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