## Difficulties Facing Jordanian Banks Related to Issued Letters of Credit

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**Abstract:** The purpose of this study is to investigate the difficulties faced by Jordanian banks with respect to issued letters of credit. To achieve the objectives of this study, a questionnaire was designed and distributed on 15 Jordanian banks, and a total of three questionnaires were solicited from each bank. The study found that Jordanian banks generally face fewdifficulties with respect to issued letters of credit. The main difficulties are: The client's lack of knowledge about rules and international norms for letters of credit, the inability of the client to fill in the letters of credit form, a mismatch between the documents and terms of the letters of credit, and the client's lack of English language skills.

**Keywords:** Difficulties, Issued letters of credit, The Jordanian banks.

**Jel Classification Codes :** G21, G 24, E59.

#### **I- Introduction:**

Letters of credit are one of the important credit facilities provided by commercial banks to their customers for the purpose of financing foreign trade operations related to import and export. This gives customers security and stability due to the confidence the importer and exporter puts in the mediation of the banks in the implementation of this process. is the initial knows bank will receive the value of exported goods as soon as implementation of the conditions contained in the letter of credit, and that the importer knows that the bank light of credit, will not pay value of the goods only after ensuring the implementation of the agreed terms contained in the letter of credit.

The Article (2) of the rules and norms of international standard for letters of credit publication No (600) states that "the letter of credit means any arrangement, however named described, that is irrevocable and thereby constitutes a definite undertaking of the issuing bank to honor a complying presentation".<sup>1</sup>

This study focuses on the difficulties of letters of credit (for import) issued in Jordanian banks because Jordan is among the importing countries for many goods, which increases the ration of imports to exports, as shown in Table 1. (See table (1) in Appendices).

#### I.1. Problem of study:

Jordanian banks play a critical role in facilitating the import operations that take place between Jordan and the rest of the world through issued letters of credit, seen by some as a magic solution to remove the risks of doing business both domestically - when the seller (beneficiary) and the buyer (which open credit) from the same country - and internationally.<sup>2</sup>

The problem of the study can be expressed through the following questions:

- 1. Do the Jordanian banks face difficulties with regards to issued letters of credit? What is the level of importance of these difficulties (if they exist)?
- 2. Are there differences between the Jordanian banks with regards to the difficulties faced with issued letters of credit?
- 3. What is the effect of the variables: the prevalence of the bank, the age of the bank, and the degree of use technology in the bank, the bank's size, and the volume of issued letters of credit at the bank, combined on difficulties of issued letters of credit.

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## I.2. Objectives of study:

This study aims to find out:

- 1. Whether the Jordanian banks face difficulties related to issued letters of credit, and identify the main difficulties (if they exist).
- 2. Differences between the Jordanian banks in the difficulties faced with issued letters credit.
- 3. The impact of the variables: the prevalence of the bank, the age of the bank, the degree of use of technology in the bank, the bank size and the volume of issued letters of credit at the bank, combined difficulties of issued letters of credit.

## I.3. Importance of the study

The importance of this study stems from the fact that the difficulties faced by banks with regards to ssued letters of credit (import letters of credit) must be reflected in and affect foreign trade. The main difficulties were relatively few as the movement of foreign trade continued to be facilitated, but some did negatively affect the movement of foreign trade. Given the important role played by Jordanian banks (both traditional and Islamic ones) in the process of importing from abroad through import letters of credit, the identification of difficulties related to this process helps the concerned departments of banks, the central bank, and those concerned with import and foreign trade, to focus on proposing appropriate recommendations to address them. The development of handling issued letters of credit through the reduction of these problems, would lead to the promotion of the Jordanian trader to deal and communicate directly with the outside world, and thus the development of foreign trade and economic sectors (commercial - industrial - service) for the advancement of the national economy in general.

The study focuses on the difficulties of issued letters of credit (import letters of credit) because the import operations in Jordan exceed export operations.

Table (1) shows exports and imports of goods for the years 2011 to 2013. It reveals that imports of goods were consistently more than double the exports during the period 2010-2013. The ratio of imports to exports was 221.89% in the year 2010, while the figure was 221.10% in 2013, given that the average of exports and imports for the past four years was 4476.5 and 9991.0, respectively. The average ratio of exports to imports reached 224.08%.

## I.4. Theoretical Background:

- **I.4.1.** Letters of credit( LCs) :are bank guarantees to pay a seller (usually an exporter) for goods or services that the seller has shipped to a buyer (usually an importer). The letters are obtained from the bank by the importer as a way to assure the exporter that he will be paid. They substitute the credit of the issuing bank for the credit of the buyer. That is, the bank takes on the obligation to pay for the goods. The exporter receives payment as long as he can show proof that he has sent the goods as agreed. The importer thereby has assurances that the exporter will ship the goods before receiving payment. Letters of credit are most often used in international trade when the importer is unknown to the exporter, or where there are political risks.
- **I.4.2. Issued letter of credit (Import letter of credit):** defined as the letter of credit to which the bank opens at the request of the client in order to import from other countries.<sup>4</sup>
- **I.4.3.** The parties involved in letter of credit: the main parties involved in letter of creditare:
- **Issuing bank:** the bank that issues the letter of credit at the request of its customers.
- Credit applicant (importer): the bank customers who requests the issue of letter of credit
- **Beneficiary (exporter):** the person in whose favor the letter of credit is issue.

- Advising bank: is a bank in the beneficiary's country usually a correspondent of issuing bank- through which the issuing bank communicates the LC to beneficiary.
- **Negotiating bank:** is the bankthat negotiates documents delivered to bank by beneficiary of letter of credit, negotiating bank is the bank who verifies documents and confirms the terms and conditions under letter of credit on behalf of beneficiary to avoid discrepancies.
- **I.4.4.** The required documents in the letter of credit: the most common documents required in letter of credit are:<sup>6</sup>
- **Bill of Lading**: abill of lading is considered the most important document involved in a shipment of merchandise. An exporter receives a bill of lading when delivering the merchandise to the shipping company for transport to an importer.
- Commercial Invoice: acommercial invoice is a document that describes merchandise, as stated in the letter of credit, and lists the costs. An importer may agree to pay, in addition to the cost of the merchandise, charges involved in shipping the merchandise. The description of the merchandise in the commercial invoice and the description of the merchandise in the letter of credit must be identical in every way.
- Insurance Policy: issued by an underwriting institution, the Insurance Policy states that a specified party will be reimbursed an amount in the event merchandise is damaged or destroyed. An Insurance Policy generally covers accidental losses and covers voluntary losses when a cargo must be sacrificed to save a ship. For additional cost, losses caused by spoilage, war, civil disturbance, riots and other risks can be included in the coverage. Because commercial banks are not included in the shipping business per se, questions regarding types of coverage should be referred to a freight forwarder or a customs broker.

#### I.4.5. The Uniform Customs and Practice for Letters of Credit:

(UCP) is a set of rules on the issuance and use of letters of credit. The UCP is utilized by bankers and commercial parties in more than 175 countries in trade finance. Some 11-15% of international trade utilizes letters of credit, totalling over a trillion US dollars each year.

Historically, the commercial parties, particularly banks, have developed the techniques and methods for handling letters of credit in international trade finance. This practice has been standardized by the ICC (International Chamber of Commerce) by publishing the UCP in 1933 and subsequently updating it throughout the years. The ICC has developed and moulded the UCP by regular revisions, the current version being the UCP600. The result is the most successful international attempt at unifying rules ever, as the UCP has substantially universal effect.

The latest revision was approved by the Banking Commission of the ICC at its meeting in Paris on 25 October 2006. This latest version, called the UCP600, formally commenced on 1 July 2007.<sup>7</sup>

#### **I.5.** The previous studies:

It should be noted that there is a lack in the number of field studies published in the field of problems or difficulties of letters of credits issued by Jordanian banks.

❖ Study (Thaher, 1997): the main objective of this study is to identify difficulties faced by Jordanian banks with regards to import letters of credit (L/C). Other minor objectives include testing relationships between the difficulties on one hand and the factors of bank's size, age and size of L/C individually as well as collectively. To achieve these objectives, a questionnaire was developed and distributed to sixteen banks. The results

- of the study show that Jordanian banks face the following six difficulties: Not receiving all documents, receipt of uncertified documents, documents being unmatchable with L/C provisions, receipt of documents after the expiration date of L/C, customers limited experience with L/C, and customers' ignorance of international uniform principles and practices for L/C. Finally, the results show that no significant relationships exists between the difficulties of L/C and each of the bank's size, age and size of L/C.
- ❖ Study (Thaher, 1999): the main objective of this study is to identify problems of import letters of credit (L/C) faced by Jordanian importers. Other minor objectives include identification of problems of (L/C) faced by individual importers as well as companies, especially in the service sector, durable goods sector, and nondurable goods sector. To achieve these objectives, a questionnaire was developed and distributed to sixteen banks. A final objective was to test the statistical differences between individual importers and companies as well as differences between different importing sectors with regards to problems of import (L/C). To achieve these objectives, a questionnaire was developed and distributed to 130 importers; however, only 106 questionnaires were returned and found valid for statistical analysis. The results of the study indicate that Jordanian importers face ten problems, among which are; the arrival of goods before documents, not receiving all documents, a high insurance premium, fluctuation in currency prices, and others. The results further show that individual importers of nondurable goods sectors. Finally the results indicate that individual importers in the service sector face more problems than company importers in the same sector. <sup>9</sup>
- Study (Thaher and Abdul Jalil, 2006): the main objective of this study is to identify problems of export letters of credit (L/C) from the point of view of Jordanian exporters. Other minor objectives include testing significant differences in the responses of Jordanian exporters related to business type and business experience. Also, the correlation among the different groups of problems was tested. To achieve the abovementioned objectives, a questionnaire was designed and distributed to 180 exporters, and 142 were returned valid for statistical analysis, i.e. the percentage of return for the questionnaires was 78.9%. The necessary statistical tests were performed with a 95% confidence level. The results of the study indicated that exporters face 27 problems out of the 30 problems that were studied. Among these problems were: the negative effect of the unstable political conditions in the area as well as the traffic jam in the Agaba seaport, which leads bills of loading not being issued on time. Moreover, the results showed significant differences, with regards to five problems only, among different types of exporters, as well as significant differences with another five problems among exporters of different experience. Finally, the results indicated the existence of positive correlations among most categories of studied problems. 10
- ❖ Study (Thaher and Abdul Jalil andHumidat, 2008): the main objective of this study is to identify the problems of export letters of credit (L/Cs) faced by the Jordanian banks. Other minor objectives include testing the relationship between these problems and the size of the bank (large, medium, or small) on the one hand, and the type of bank (Islamic /Traditional\*\*) on the other hand. To achieve these objectives, a questionnaire was developed and distributed to 16 banks. A total of 175 questionnaires were distributed proportionally to the banks' number of branches, and only 149 were returned valid for analysis. i.e. a percentage of 85.1%. The necessary statistical tests were performed with a level of confidence of 95%. Twenty-two initial problems of export

L/Cs that were studied. Results show that the Jordanian banks face the following five problems: customers' ignorance of uniform principles and practices of L/Cs, non-availability of a complete automatic system for export L/Cs, difficulty in preparing required documents for customers, customers' lack of knowledge of the English language which is the main language used in export L/Cs, and expertise errors committed in required documents for export L/Cs. Finally, the results show significant differences among different bank sizes with regards to these five problems, and significant differences among different types of banks in one problem only.<sup>11</sup>

## **\*** What distinguishes this study from previous studies:

Whilst based on a set of previous studies, the researcher collected and displayed some differences that distinguish this study from previous studies:

- 1. This study focuses on the Jordanian banks, including a new group of banks which has not been studied from this aspect before (Islamic International Arab Bank, SocieteGeneraleBanque / Jordan, Capital Bank of Jordan ..... etc)
- 2. Novelty of this study (2012-2013) Since the last study which addressed the issue of problems with issued letters of credits in Jordan was in 1997, 16 years ago, this study provides a critical update of information on the obstacles faced by Jordanian banks with regards to issued letters of credits.
- 3. This study uniquely examines the impact of both the degree of prevalence of the bank, and the degree of use of technology in the bank, on the obstacles of issued letters of credits.

## I.6. Hypotheses of the study:

Based on previous studies, this study is to test the following hypotheses:

- 1. Jordanian banks face high difficulties with regards to issued letters of credit.
- 2. There are significant statistical differences between the Jordanian banks regarding the difficulties faced with issued letters of credit.
- 3. There is a significant statistical relationship between the difficulties of issued letters of credit, and between the following factors: the prevalence of the bank, the bank age, the degree of use of technology in the bank and the bank's size and volume of issued letters of credit, combined on the other hand.

#### II. Methods:

The study's methodology can be illustrated through the following points:

- **II.1. Tool of study:** For the purposes of the field study questionnaire consisting of two parts was designed:
- ❖ The first part: This partcontains questions for measuring the degree of use of technology in the bank. It includes five questions about the services offered by the bank in the field of technology.
- **The second part :** contains:
  - **First**: 33 paragraphs related to the severity of the difficulties faced by the bank with regards to issued letters of credit. They have been measured using the scale of the Likert five-degrees:
- (1) means that the difficulty is insignificant, (2) means that the difficulty is of little significance, (3) means that the difficulty is of medium importance, (4) means that the difficulty is of great importance, and (5) means that the difficulty is of very great importance.

• **Second**: open-ended questions about difficulties or other problems facing the bank which are not mentioned in the questionnaire, relating to issued letters credit.

# II.2. Variables and the model of the study:

- **The variables of the study and how to measure:** 
  - First, the dependent variable: the difficulties with issued letters of credit facing the Jordanian banks (DIFLC)has been measured through a series of paragraphs in the second section of the questionnaire, and are answered according to the measure of the Likert five degrees. These paragraphs show the set of difficulties that the banks (issuing banks or advising banks), the staff of these banks, or customers seeking to open the credit, may encounter, as well as some of the problems that may exist in the documents of the issued letters of credits.
  - **Second, the independent variables:** the following is a brief explanation of these variables and how they are measured:
- The prevalence of the bank (BRACH): measured by the number of international branches of the bank.
- Bank of age (AGE):calculated by years; by subtracting the year of establishment of the bank from 2013 (Thaher, 1997).
- The degree of use of technology in the bank (TECH): measured with a questionnaire, through the arithmetic mean of the five answered questions about the banking services provided by the bank which fall within the framework of the technology.
- The size of the bank (BKSIZE): measured by calculating the natural logarithm of the average total assets to the bank over the past two years (2012-2013)(Thaher, 1997) and (Thaher and Abdul Jalil and Humidat, 2008).
- The volume of issued letters of credit at the bank (LCSIZE): measured by calculating the natural logarithm of the average value of issued letters of credit with the bank over the past two years (2012-2013) (Thaher, 1997).

# II.3. The proposed model for the study:

To test and analyze the impact of these factors (independent variables) on the degree or level of the difficulties faced by Jordanian banks in issued letters of credit (dependent variable), the following form was developed:

# DIFLCi = $b_0 + b_1$ (BRACH) $i + b_2$ (AGE) $i + b_3$ (TECH) $i + b_4$ (BKSIZE) $it + b_5$ (LCSIZE) it + u

Where:

- **DIFLCi**: average degree of importance of the difficulties of issued letters of credit faced by the bank i.
- **BRACH**i: the prevalence of the bank i.
- **AGEi**: the age of the bank i.
- **TECHi**: the degree of use of technology in the bank i.
- **BKSIZE**: the average total assets for bank i during period t.
- LCSIZE: the average value of issued letters of credit at the bank i during period t.
- **t:** represents the period (2012-2013).
- **b0**: intercept.
- **b1**, **b2**, **b3**, **b4**, **b5**: regression coefficients.
- **u**: coefficient of error.

### II.4. Sincerity of tool study:

To examine the validity of the measuring tool, the researchers introduced the questionnaire to professors in the faculty of Economics and Administrative Sciences and the faculty of Statistics at Yarmouk University, in order to determine the consistency and clarity in terms of drafting and designing the statement of views on the method of measurement, variables and harmony of paragraphs with the standards of clarity, comprehensiveness and objectivity appropriate to the research objectives and hypotheses, The observations made by them have been taken into account.

## II.5. Reliability of tool study:

The coefficient of credibility (alpha) was used to measure the degree of credibility of the responses to the paragraphs of the questionnaire, which aims to measure the reliability of procedure of the paragraphs of the questionnaire for its ability to give consistent responses of the respondents toward the paragraphs of the questionnaire, ranging from the value of coefficient alpha between (0-1), and be acceptable statistically, if exceeded (60%) and the credibility of the tool is good and we can generalize the results, has reached the results of alpha test of the clauses of the difficulties faced by Jordanian banks in import letters of credits for (97.7%), a high degree of credibility in the answers, and can therefore rely on the credibility of the measurement tool and disseminate the results of the study. This means that if we distributed the questionnaire to a sample other than that which has been selected in this study, and at different times, there is a 97.7% possibility of getting the sameresults in this study.

#### II.6. The population and the sample of study:

The population of this study included all Jordanian banks, traditional and Islamic, during the period 2012-2013. Questionnaires were distributed to the main centers of 15 banks, with an average of three questionnaires for each bank. They were filled out by participants in the study, namely a head of letters of credits, an Assistant Chief in the department of letters of credit, and a senior staff of the department of import letters of credits in the bank with expertise in this field. It has been limited to the main centers of banks (public administration) because of the central policy dealing with import letters of credits. A community sample of the study has been selected because of its small size. 45 questionnaires were distributed, with 29 recovered as valid for the purposes of statistical analysis; the rate of recovery was thus 65.5%. Table (2) shows the Jordanian banks and sizes and volumes of import letters of credits and the year of its founding by decreasing the size of the bank during the period 2012-2013.

## II.7. Statistical methods used in the analysis:

The statistical program SPSS (Statistical Package for the Social Sciences) was used to carry out the statistical analysis and to achieve the objectives of the study set in the context of this study. A significance level of 0.05 was adopted to correspond with the level of confidence (95%), in order to interpret the results of the tests conducted by the researchers

We have been using the following statistical methods: a test of alpha credibility and descriptive analysis (meaning standard deviation) and the T test and the Mann Whitney test (U) as well as multiple regression and correlation analysis to draw conclusions.

#### III. Test hypotheses and discussion of the results:

III.1. The degree of importance of the difficulties faced by Jordanian banks related to the issued letters of credit (test the first hypothesis):

A ladder to Likert five-in was used to answer questions related to the difficulties, according to the following degrees of importance: 1 = non-existent importance, 2 = fewimportance, 3 = medium importance, 4 = great, 5 = very great. The answers of respondents were divided into an average, symbolized as follows:

- (Q < 3): few or low importance.
- (Q = 3):medium importance.
- (Q > 3): high or greatimportance.

The following table (3) shows the mean and standard deviation for each of the difficulties faced by Jordanian banks regarding issued letters of credit.

The first hypothesis is as follows:

## "Jordanian banks face highdifficulties with regards to issued letters of credit"

To verify the rightness of this hypothesis, averages and standard deviations were calculated for all the paragraphs of a tool of the study and the tool as a whole, where the general arithmetic average (which is based upon will be accepted or rejected this hypothesis) of all paragraphs of the distributed questionnaires is 2.46. This reflects a low degree of difficulty, and most of the answers to the paragraphs of the study were the tool with respect to the order by degree of difficulties was less than the arithmetic mean (3) means few difficulties (low importance).

As shown above, there are nohigh (great importance) difficulties facing Jordanian banks related to issued letters of credits, and based upon that we can reject the first hypothesis, namely that "Jordanian banks face high difficulties with regards to issued letters of credit":

- 1. The client lacks the knowledge about rules and international norms for letters of credits.
  - 2. The inability of the client to fill out the form of the letter credit.
  - 3. Mismatch between the documents and terms of the letter of credit.
  - 4. The client lacks skills in English, the main language in the import letters of credit.
  - 5. Receipt of the documents after the expiry date of letter of credit.

# III.2. Differences between the Jordanian banks in terms of difficulties with issued letters of credit (test the second hypothesis):

The second hypothesis is as follows:-

"There are significant statistical differences between the Jordanian banks regarding the difficulties faced with issued letters of credit.".

To verify the rightness of this hypothesis the One Sample T-test has been applied on the studied population as a whole. Table (4) shows the results of applying this test.

It appears from Table (4) that the value of (T) of the tool as a whole amounted to 3.281, a value statistically significant at the degrees of freedom (28) because it is larger than the value (T) indexed. Further, the amount of 2.048 at the significance level ( $\alpha = 0.05$ ), as that the level of significance of the resulting 0.00 is lower than the significance level adopted in the study (0.05), resulting in a confidence level of at least 95%, with the percentage of error not exceeding 5%. This proves the existence of statistically significant differences between the difficulties faced by the Jordanian banks with regards to issued letters of credit. Based on this we accept the second hypothesis of the study, which shows that there are differences between the Jordanian banks in the difficulties they face regarding issued letters of credits.

Due to the small study sample size and to confirm the results of the One Sample T-test, the Mann-Whitney U test was also used, as shown in tables (5) and (6), where we put the dependent variable in this study (DIFLC). It represents the averages of answers of the banks about the degree of difficulties faced with issued letters of credit, categorized into two groups: group no (1) are averages of 3, and the largest group (2) represent averages of at least 3.

Previous findings showed that the average grades in the first group were 26.50 and the average level in the second group was 12.00, and aimed to determine whether there were differences in the difficulties faced by Jordanian banks regarding issued letters of credit. It was noted that the value of the Mann Whitney U test is equal to 0.000 and the level of statistical significance (Sig) was equal to 0.000, which is less than 0.05. This means there are significant differences between the Jordanian banks regarding the difficulties they faced with import letters of credit. These findings strengthen the result of test (One Sample T-test) and therefore we accept the second hypothesis.

The process of issued letters of credit between Jordanian banks; Islamic and traditional differ in the following points:

- a) The letter of credit under Al Murabahah: In an letter of credit linked to Al Murabahah, the Islamic bank at the request of their client imports goods for him through an letter of credit established to the seller with whom the buyer has a contract. TheIslamic bank utilizes its own funds to open the letter of credit and the terms of the letter of credit are in accordance to the terms agreed between the seller and the buyer. By doing this it assists their client to purchase the goods he requires without having to immediately commit his own funds. Applying the Al Murabahah contract, the Islamic bank in turn sells the goods to their client at the price agreed upon, which includes the banks profit. Depending on the terms of the Al Murabahah, payment can be prompt or deferred. Letter of Credit operations built on the Al Murabahah contract is permitted by Islamic law.In this case, the difficulties faced by Islamic bank are less than the difficulties faced by traditional bank because the Islamic bank replace importer in the process of issued letter of credit.
- **b)** Ownership of the imported goods: Islamic bank always requires that the ownership of the imported goods represented in the bill of lading to be in his name, while traditional bank does not always require that the ownership of the imported goods to be in his name.
- c) Interest rate: Islamic banks refused to deal with interest, do not take it and give it; basically the negotiating bankwill pay the beneficiary the letter of credit value upon submission of compliant documents and then reimburse itself by claiming reimbursement from the issuing bank (Islamic bank). In practice, the bank imposes charges for handling the letter of credit and treats the payment given to their client (the beneficiary) as an advance (loan) and the bank imposes interest on the amount from the date it pays to the date it is reimbursed. Because the funds take some time to reach the negotiating bank due to procedures involved exporters end up paying interest to the bank. The seller can avoid paying interest by waiting for payment to come from the issuing bank, by doing this he can avoid interest payments to the negotiation bank for the period between payment and reimbursement. He can also safe on the handling charges for negotiation which with some banks can be substantial. At the end of the operation the seller gets his payment from the issuing bank not from the negotiation bank. 12

# III.3. The relationship between the difficulties of issue letters of credit and the characteristics of banks (the third test of the hypothesis):

The third hypothesis is as follows:

«There is a significant statistical relationship between the difficulties of issued letters of credit, and between the following factors: the prevalence of the bank, the bank age, the degree of use of technology in the bank and the bank's size and volume of issued letters of credit, combined on the other hand."

To verify the accuracy of this hypothesis, the following test must be made:

- Factor analysis to find out the most important factors, or if there are another factors that must be considered.
- Pearson correlation coefficient between the independent variables in the study in order to make sure there is a high degree of multi correlation between them.
- Multiple regression analysis to predict the value of the dependent variable due to the change in the values of the independent variables.

# **III.3.1 Factor Analysis:**

The tables (7),(8),(9),(10),(11) show the following:

- Do not expect that all the factors are extracted every discrepancies variables, only the part of the variation that is due to common factors, which are shared by several previous variables. Subscriptions are is the contrast ratio in a particular variable and dating back to the common factors, for example the variable branch 89.5% of the variance associated with the first issue and existing notes under the table (7), we find that it was a way to follow the Principal Analysis.
- According to table (8) the value of inherent roots of the first component amounted to 53.041%, which explains the variation of this component of 2.652 % of the total variance. The value of inherent roots of the second component amounted to 27.129 % and 1.356 % of the total variance, and at the same time it has been explained by the sum of the first two components of 80.170 % of the total variance.
- Component Matrix describes the results of the extraction factors before rotation, as table (9) shows that it has been selected three factors with a note that he had been hiding load factors of less than 0.50.
- Component Matrix after rotation in the table (10) shows analysis of factors of each variable on each factor from three factors using the method Varimax with Kaisers Normalization. Depending on the factor of analysis after rotation, the following can be concluded:
  - First factor: includes three variables that are saturated (BKSIZE LCSIZE TECH).
  - **Second factor:** includes two variables that are saturated (AGE-BRANCH).
- Table (11) indicates the matrix converter components of the power relationship between the factors and the factors before rotation after rotation. The relationship between the first factor before and after rotation was 0.784. The relationship between the second factor before and after rotation was 0.784.

Based on the results of factor analysis will deal in pearson correlation coefficient and regression analysis only with important variables that appeared in first factor, and will exclude the variables least important that appeared in second factor.

#### **III.3.2 Pearson correlation coefficient:**

Table (12) shows the following:

- 1. The correlation coefficient between the size of the bank and the degree of use of technology in the bank reach 0.629 at 1% level of significance, which means that there is a positive relationship between them when the size of the bank increased the prevalence of the bank
- 2. There is a medium correlation between the size of the bank and the size of import letters of credit in the banks estimated at 0.700 at 1% level of significance, which means that there is a positive relationship between them when the size of the bank increased the size of import letters of credit in the banks.

## **III.3.3 Multiple regression analysis:**

It appears from table (13) that the model of the study is statistically significant, as the value of F Change was 0.000, which is less than the significance level adopted (0.05). The value of the explanatory power of the model (Adjusted R Square) of 67.3% means that 67.3% of the changes in the dependent variable were due to changes that occur in the independent variables.

It also shows a statistically significant relationship at the level of significance of 0.05 between each of the following independent variables: degree of use of technology in the bank, the size of the bank, the volume of issued letters of credit in the bank and the dependent variable: the difficulties of issued letters of credit, reaching the level of significance for each of the independent variables mentioned (0.000) (0.000) (0.001), respectively, and all these values are less than the approved level of significance (0.05).

The nature of the relationship between each of the independent variables which is statistically significant, and the dependent variable in the study (difficulties of issued letters of credit), was as follows:

- 1. There is an inverse relationship between the degree of use of technology in the bank and the difficulties with issued letters of credit. The higher the degree of utilization of technology by the bank (banking services and all of the services that fall within the framework of technology), the lower the mean of difficulties with issued letters of credit (b 1.278). This can be explained by the benefits provided by the use of technology in the bank to process the parties to this issued letter of credit. This is especially true with the aspects of technology associated with this operation and the means used in the electronic letters of credit such as the EDI system of any electronic data interchange system and EFT Any electronic transfer of funds, as well as Videotex, which can send e-mail and the EDI is a synthesis and send a tremendous amount of information to computers in remote locations, and at the same time brings them many benefits, such as the faster provision of information, quick delivery of data required, speed in cargo, provision of a lot of money for companies, and savings in the use of paper and the preparation of paper documents. This reflects positively on the process of the letter of credit in the bank and on the banking services provided and thus reduce the difficulties arising from the issued letter of credit.
- 2. There is a direct relationship between the size of the bank and the difficulties with issued letters of credit. A greater size of the bank (1 million Jordanian dinars) increased the mean of issued letters of credit by 1.257. The size of the bank is the most influential variable in the difficulties faced by Jordanian banks regarding issued letters of credit. This can be explained by the broad scope of supervision and control that comes with the

increased size of a bank. A low level of follow-up to ensure the correct conduct in processing the letter of credit as intended, results in an increase of difficulties related to this process, as we can explain it to increase the demand for clients (individuals or institutions) on the bank to open this type of letters of credit (because of the consolidation of trust between the customer and the bank, as well as increase the experience of bank staff and this is what often happens in large-sized banks, and age) and thus increase the potential difficulties in issued letter of credit.

3. There is an inverse relationship between the volume of issued letters of credit at the bank and the difficulties with issued letters of credit. The greater the volume of issued letters of credit at the bank (1 million Jordanian dinars), the lower the average of difficulties of issued letters of credit (b 0.672). Therefore, the greater the value (amount) of issued letters of credit and the greater the interest in issued letter of credit among all the parties (banks - exporters - importers), the lesser the difficulties faced by the bank. This may be due to the so-called learning curve, <sup>13</sup> meaning that the more experience bank employee or clients have with issued letters of credit, the lesser the possibility of difficulties or errors in this process.

As for the measure VIF, we note from table (13) that all values of this scale ranged between 2.386 and 4.536, which is less than 10. This means there is no similarity in the information provided by these variables, as well as the absence of many common factors between them, which strengthens the model study.

#### **IV. Conclusion:**

Based on statistical analysis and the testing of hypotheses of the study, the results reached can be summarized as follows:

- 1. Jordanian banks face few (low importance) difficulties with regards to issued letters of credit, where the general average degree of importance of the various difficulties is 2.46 (see table (3)), and the difficulties that have increased the degree of importance for the arithmetic mean (3) are:
- The client lacks the knowledge about rules and international norms for letters of credits.
- > The inability of the client to fill out the form of letter of credit.
- Mismatch between the documents and terms of letter of credit.
- The client lacks skills in English, the main language in the import letters of credits.
- Receipt of the documents after the expiry date of letter of credit.
- 2. There are statistically significant differences between the Jordanian banks regarding difficulties with issued letters of credit.
- 3. There is a statistically significant relationship between the difficulties faced by Jordanian banks regarding import letters of credits, and between the following factors: the size of the bank, the degree of technological use, the volume of issued letters of credit at the bank, combined on the other hand.

# - Appendices:

Table (1): Jordanian exports and imports of goods (million dinars)

Years	Imports	Exports	Ratio of imports and exports
2010	8187.7	3689.9	7.221.89
2011	9722.2	4063.6	7.239.25
2012	12060.9	5633.0	7.214.11
2013	9993.5	4519.7	7.221.10
Average	9991.0	4476.5	<sup>7</sup> / <sub>224.08</sub>

**Source:** Prepared by researchers based on the annual reports of the Central Bankof Jordan (2010-2013).

Table (2): Jordanian banks and sizes and volumes of issued letters of credit and the year established during the period (2012-2013)

		0 1	( )	
No	The name of the bank	Size of The bank(JD)	The volume of issued letters credit (JD)	Year established
1	The housing Bank for Trade & Finance	5760458391	649265511	1974
2	Jordan Kuwait Bank	2100825677	67755500	1977
3	Jordan Islamic Bank	2015718009	33368224	1979
4	Bank of Jordan	1797005026	55961694	1960
5	Cairo Amman Bank	1604579219	37529683	1960
6	Union Bank	1295521564	264373283	1991
7	Capital Bank of Jordan	1029074988	56202959	1996
8	Islamic International Arab Bank	974203156	18137744	1997
9	Arab Jordan Investment Bank	749148751	29338634	1978
10	SocieteGenerale Babque / Jordanie	288210318	*	1993

<sup>\*</sup> Researchers were unable to obtain this information from the bank.

**Source:** Prepared by researchers based on the annual reports of Jordanian banks.

Table (3): The degree of importance of the difficulties faced by Jordanian banks related to issued letters of credit in descending order by average importance

	related to issued letters of credit in descending order by average importance						
Number of Difficulty	The Paragraph	The sort by degree of importance	The mean	The standard deviation	Degree of importance of difficulty		
15	The client does not know the international rules and norms of letters of credits.	1	3.72	0.8	Great		
13	The client is not able to fill out a form of letters of credit (the lack of customer experience in letters of credit).	2	3.66	0.81	Great		
3	The documents do not match with the condition of letters of credit.	3	3.28	1.07	Great		
14	The client is not able to understand the English which is the main language in issued letters of credit.	4	3.21	0.90	Great		
7	Your bank receives the documents after the expiry date of letter of credit.	5	3.14	0.95	Great		
2	Your bank receives the documents, not certified.	6	3	0.89	Medium		
4	The documents do not match with each other.	7	2.90	1.08	Low		
26	Delay of the promotion of issued letters of credit because of the need to study the	8	2.89	1.03	Low		

	correspondent banks in full.				
16	The client is not able to pay the balance of credit pending receipt of documents.	9	2.72	1.25	Low
1	Your bank receives the documents incomplete.	10	2.69	1.04	Low
24	There are no messages documented among all the banks that use the SWIFT network for issued letters of credit, leading to delays in communicating and modified.	11	2.66	1.04	Low
25	Issuing banks set conditions which are not clear.	12	2.59	1.27	Low
27	Lack of confidence of foreign banks to the Jordanian banks	13	2.52	1.02	Low
23	There is no entire system of issued letters of credit.	14	2.52	1.43	Low
30	Correspondent banks are not sure whether documents match with the terms of the letter of credit, and they pay the value of documents to the importer.	15	2.45	1.27	Low
9	Insurance policy does not cover the risks associated with the shipment.	16	2.38	1.45	Low
11	Your bank does not take sufficient guarantees on letters of credit.	17	2.28	1.25	Low
6	Your bank receives the documents prior to the date of the opening of letter of credit.	18	2.28	1.25	Low
28	Sometimes the buyer is exposed to fraud and deceit as a result of charging the importer of the goods in violation of the contract agreed upon.	19	2.24	1.02	Low
8	Bill of lading indicating the existence of defects in the goods shipped on deck.	20	2.21	1.29	Low
17	The client complains of high costs when using the SWIFT network for import letters of credit.	21	2.17	0.85	Low
20	There are misspellings in the mobilization of letter of credit from the employee of letters of credit.	22	2.14	1.13	Low
18	Bank staffs do not know the rules and norms of international standard.	23	2.14	1.27	Low
32	Exposure of the bankruptcy of the issuing bank, which obliges the correspondent bank to pay its obligations.	24	2.07	1.33	Low
22	Delayed issuing banks (local) in the conversion of documents for issued letters of credit.	25	2.07	0.96	Low
19	Scan documents wrong examination of employee letters of credit.	26	2.03	1.40	Low
12	There is no insurance on the exported goods whatsoever	27	2.00	1.34	Low
10	Value of the insurance policy less than the desired value.	28	2.00	1.41	Low
21	Your bank is suffering from a lack of experience of its staff issued letters of credit.	29	1.93	1.07	Low
5	The documentsconcerning letter of credit did not reach (lost).	30	1.93	1.49	Low
33	Your bank pays the amount of error or before the due date, due to the omission of payment terms in the letters credit.	31	1.90	1.37	Low
31	Correspondent bank exposed to lawsuit resulting from the discovery of irregularities in the imported documents not discovered by the	32	1.79	1.24	Low

	bank.				
29	Sometimes your bank receives a postcard letters of credit forged.	33	1.66	1.26	Low
Σ	Tool as a whole		2.46	0.89	Low

**Source:** Prepared by researchers.

Table (4): Results of applying the test (One Sample T-test) to the instrument as a whole (the

study sample as a whole).

Field	The mean	The standard deviation	degrees of freedom	Т	Statistical Significance
difficulties faced by Jordanian banks with regards to issued letters of credit	2.46	0.89	28	-3.281	0.00

**Source:** Prepared by **researchers.** 

Table (5): The grades of the first group (1) and the second group (2)

	Group	N	Mean ranks	Sum of ranks
DIFLC	1	6	26.50	159.00
	2	23	12.00	276.00
	Total	29		

**Source:** Prepared by researchers.

Table (6): Results of applying the Mann-Whitney test (U) Is clear from

Test Statistics	DIFLC
Mann-Whitney U	0.000
Wilcoxon W	276.000
Z	-3.723
Asymp.Sig.(2-tailed)	0.000

**Source:** Prepared by researchers.

**Table (7): Communalities** 

	Initial	Extraction
BRANCH	1.000	.895
AGE	1.000	.935
BKSIZE	1.000	.929
LCSIZE	1.000	.655
TECH	1.000	.594

**Source:** Prepared by researchers.

Table (8): Total Variance Explained Total Variance Explained

		Initial Eigenvalu	ies	Extractio	n Sums of Square	ed Loadings	Rotation	Sums of Square	d Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.652	53.041	53.041	2.652	53.041	53.041	2.154	43.071	43.071
2	1.356	27.129	80.170	1.356	27.129	80.170	1.855	37.099	80.170
3	.774	15.486	95.656						
4	.181	3.628	99.283						
5	.036	.717	100.000						

Extraction Method: Principal Component Analysis.

**Source:** Prepared by researchers.

Table (9): Component Matrix<sup>a</sup>

	Component					
	1	2				
BKSIZE	.871					
BRANCH	.741	.588				
TECH	.697					
CSIZE	.649					
AGE	.662	.705				

a. 2 components extracted.

**Source:** Prepared by researchers.

Table (10): Rotated Component Matrix<sup>a</sup>

	Component					
	1	2				
BKSIZE	.939					
LCSIZE	.809					
TECH	.750					
AGE		.964				
BRANCH		.921				

a. Rotation converged in 3 iterations.

**Source:** Prepared by researchers.

**Table (11): Component ransformation Matrix** 

Component	1	2
1	.784	.620
2	620	.784

**Source:** Prepared by researchers.

Table (12): Pearson correlation coefficient between the independent variables in the study.

Variables	TECH	BKSIZE	LCSIZE
TECH	1		
BKSIZE	0.629**	1	
LCSIZE	0.295	0.700**	1

<sup>\*\*</sup> Statistically significant at the significance level ( $\alpha = 0.01$ ), (2-tailed)

**Source:** Prepared by researchers based on the annual reports of Jordanian banks.

Table (13): The results of multiple regression analysis to reveal the nature of the relationship between the dependent variable and independent variables

Variables	Standardized Coefficients (Beta)	Sig	VIF	Adjusted R Square	F Change
TECH	-1.278	0.000	2.536	0.673	0.000
BKSIZE	1.2.57	0.001	4.536		
LCSIZE	-0.672	0.001	2.386		

**Source:** Prepared by researchers based on the annual reports of banks

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