

DELINQUENT LOANS AND THEIR CAUSES FROM THE PERSPECTIVE OF BANKS' EMPLOYEES

Zaynab Hassan Alnabulsi, Al-Balqa Applied University

ABSTRACT

This study aims to define one of the major problems that commercial Jordanian banks face, namely the problem of delinquent loans and their causes from the perspective of banks' employees. To achieve the objectives of the study, a questionnaire was designed and distributed to workers in the field of granting facilities in banks operating in Jordan. The sample of the study constitutes of 110 respondents. The study found that there are many factors affecting for delinquent loans, some of which are related to low quality credit decision-making, others are related to guarantees and other restrictions provided by legislation, and the nature of the funded project. The study recommends taking adequate guarantees, and linking all concerned entities for the exchange data about customers.

Keywords: Bank Loans, Delinquency Loans, Credit Decision, Banks Employees, Commercial Jordanian Banks.

INTRODUCTION

It is important for banks to be aware of the risks they may face in order to maintain their financial and monetary stability, including difficulties with repayments (Sidawi, 2015). And as we know freezing payments affects the banking system as a whole. At the same time freezing the financial resources that banks rely on to operate impacts their profits negatively and weakens their ability to function properly in economic development. Recently, delinquent loans ratio (delinquent loans / total loans) has been undoubtedly high (www.cbj.gov.jo). Thus, the objective of this study is to identify the factors that may cause loan delinquency and attempt to find ways to minimise their occurrence.

According to prior literature, delinquent loans weaken the banking system and reduce the implementation of corporate governance (Yang, 2017). Financial institutions such as banks face several risks including defaulting on loans as part of their ordinary operations (Gadzo et al., 2019). The study adopted the following factors: the quality of credit decision-making, collateral, legislative restrictions (Cerulli et al., 2020), organisational structure, and the nature of the funded project. Hence, this study established five hypotheses, which investigate the relationship between these factors and the loan delinquency.

LITERATURE REVIEW

Delinquent loans are loans that banks are unable to recover, thereby increasing the risk of losing these loans and their interest (Al Rubaie, 2018). They are also known as loans that the borrower does not repay according to the agreed repayment schedule (Al Taher, 2018). Abdul-Jabbar (2016) defined them as loans that no longer generate income for the bank or that the bank is forced to reschedule according to the borrowers' new conditions, where the chance of non-recovery is 51%. They could also be called full or partial doubtful debts (Abdul Hamid, 2000).

Khan et al. (2020) aimed to observe a banking sector case in Pakistan between 2005–2017 and explore the determinants of delinquent loans. The results show that there is no strong correlation between the operational proficiency and profitability indicators with loan delinquency, whereas, Adequate capital and diversified income have a statistically insignificant negative association with loan delinquency. By using STATA software, they found a negative association between loan delinquency and income diversification.

Al Taher's study (2018) aimed to explain the concept of delinquent credit facilities, the main factors leading to this issue, and the degree of their impact on repayment difficulties. The study recommended paying attention to training workers in the area of granting funds and defining clear written credit policies. Bou Abdullah & Brishi (2017) investigated the most significant reason behind delinquent loans, namely, government policies to finance young people and employees' neglect of these loans due to lack of efficiency, leading to an absolute failure of projects.

Mohammed (2017) illustrated the role of accounting information quality in reducing the risk of default. The study recommended that a sound credit policy should be established to control credit granting procedures in order to limit loan delinquency. Rajha (2017) investigates the determinants of delinquent loans during the period 2007–2012 in the Jordanian banking sector, which used macroeconomic and the bank specific factors and panel data regression. The research found that the delinquent loans is positively related to the ratios of loans to total assets. In addition, the economic growth has a significant negative effect on loan delinquency as well as inflation rate have the same effect. The study recommended that banks must avoid extending credit to high-risk customers, and the Central Bank of Jordan must include factors such as GDP and inflation rate to their monitoring framework.

Abdul-Jabbar (2016) concluded that clients, the surrounding economic environment and the bank management are the main reasons for delinquent loans. The study recommended the need to emphasise the importance of continuous follow-up of trends and purposes of granted loans by banks to determine efficiency. Abéché (2015) examined how to manage delinquent loans and the factors affecting them in Algeria. The outcome of the study that the policy of granting loans, the borrower's slack of managerial competence, and the failure of the funded projects are the main reasons for loan delinquency. Zablon & others (2015) aimed to identify and assess the causes for loan delinquency. The study recommended the importance of reviewing Banks' credit policies in line with the volatile economic trends in the financial market and emphasising the creditworthiness of customers. Mohammad (2014) aimed to identify delinquencies, their causes, and the effect on the performance of banks. The study recommended the need for transparency and restraint from nepotism favouritism when granting funds and following up with the clients to ensure the success of their projects and enable them to repay their debts.

Muriith, (2013) sought to identify the cause of loan delinquency in banks in Kenya. The study concluded that a number of variables were jointly cause delinquencies in these banks. For example, the study found that there is a strong correlation between the inflation rate and the loan delinquencies. While a negative relationship was detected between loan delinquencies and the real interest rate. Finally, the study recommended the importance of the government initiatives to reduce the real interest rate in effect reducing delinquencies. Siam (2011) attempted to demonstrate the extent to which financial indicators are used by credit managers in banks that operate in Jordan when making credit decisions. The study found that the more financial indicators were used when making credit decisions, the better the contribution to determining customers' suitability and their ability to repay. Boguslauskas et al. (2011) aimed to create an

assessment of the risks associated with credit decisions by designing a special model for this purpose. The study proposed a model consisting 15 indicators and recommended its use to assess credit risk. Alarbeed (2007) demonstrated the relative importance of delinquent loans and an evaluation of the procedures followed to manage these loans at the Syrian Industrial Bank. The study found that the bank was unsuccessful in the preparation of credit studies and the lack of continues monitoring for client business. Hence, the study recommends to perform a critical analysis for the client's financial reporting and to perform a continuous evaluation for the client's physical grantee. Campbell (2007) aimed to provide guidance on a framework for developing and transitional economies, that still facing many delinquencies. This frame work focuses on the relationship between delinquent loans and bank insolvency.

This study differs in its attempt to tackle this issue from anew aspect s that are not covered by previous studies. It will address the reasons for delinquencies and propose ways to reduce their occurrence. Hence, this study suggests the following five hypothesises which intended to explain the main factors impacting loan delinquency:

- H1:** *There is no strong correlation between the quality of the credit decision and delinquencies!*
- H2:** *There is no strong correlation between collateral and delinquencies!*
- H3:** *There is no strong correlation between the legislative determinants and delinquencies!*
- H4:** *There is no strong correlation between the organizational structure of the bank and delinquencies!*
- H5:** *There is no strong correlation between the nature of the funded project and delinquencies!*

Methodology and Data Analysis

This study is based on the descriptive analytical approach that was adopted throughout collection, analysis, and interpretation of data related to the subject of the research. This study relied on a questionnaire for data collection. The questionnaire was designed according to Likert (1-5). This study also used secondary sources such as books, theses, periodicals, and articles. The study population is composed of thirteen commercial banks operating in Jordan. 125 questionnaire forms were distributed and 110 were retrieved and valid for data analysis. The study sample is represented as follows Table 1:

	Description	Frequency	%
Age	Less than 25 years	5	4.5
	25 years – 35 years	17	15.5
	36 years -45 years	38	34.5
	more than 46 years	50	45.5
Qualification	Diploma	18	16.4
	Bachelor	57	51.8
	M.A.	24	21.8
	Ph.D.	11	10.0
Experience	Less than 4 years	12	10.9
	4- 8 years	12	10.9
	9-15 years	34	30.9
	16 years and over	52	47.3

Job Position	Assistant Director General	2	1.8
	Department Director	25	22.7
	Branch manager	32	29.1
	Employee	51	46.4
Total		110	100

The following methods were applied to analyses data and test hypotheses utilizing SPSS:

1. Reliability Test (α) through Cronbach's alpha test was used to mensuration the internal stability of the subsections and the internal consistency between different responses. The coefficient of stability (α) 77.7% which is acceptable compared to the acceptable rate of 70% (Sekaran & Bougie, 2016).
2. The normal distribution test (Kolmogorov-Smirnov): the data was distributed normally and the mean Z was greater than the 5% (sig. Level) for all hypotheses.

Table 2 ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST					
Hypothesis	H1	H2	H3	H4	H5
Kolmogorov-Smirnov Z	1.213	1.285	1.350	1.468	2.711

The hypotheses were tested as follows in Table 2:

One Sample T-Test at a significant level (α) of 5%, and according to the rule of thumb which allows accepting the hypothesis if the calculated T is less than the tabulated value, otherwise rejecting it.

Using the descriptive analysis method, which includes the mode; arithmetic means and standard deviation, in order to accept or reject the hypothesis.

Results of Hypothesis Testing

First null hypothesis: There is no strong correlation between the quality of the credit decision and delinquencies Table 3:

Table 3 RESULTS OF THE FIRST HYPOTHESIS TEST					
Calculated T	T Table	SIG T	Result	Mean	Std. Deviation
13.797	1.986	.000	Rejected	3.85	.644

Since T is greater than tabulated T, the alternative hypothesis must be accepted and the null hypothesis is rejected. This indicates there is strong correlation between the quality of the credit decision and delinquent loans. The next table shows arithmetic means and standard deviations for each subsection in Table 4.

Table 4 FIRST HYPOTHESIS SUBSECTIONS			
o	Subsections	Mean	Std. Deviation
1	The absence of a specific and clear credit policy leads to delinquent loans	4.42	.596
2	The failure of credit department staff to conduct proper financial statement analysis for clients who request funding leads to delinquent loans	4.26	.774

3	Relying on collateral as opposed to the purpose of borrowing a basis for granting facilities leads to delinquent loans	3.83	1.380
4	The lack of practical experience of credit facilities staff leads to delinquent loans.	2.88	1.476
	The role of low quality credit decision on loan defaults.	3.85	.644

Second null Hypothesis: There is no strong correlation between collateral and delinquencies. The results of the analysis are as follows Table 5:

Table 5 RESULTS OF THE SECOND HYPOTHESIS TEST					
Calculated T	T Table	SIG T	Result	Mean	Std. Deviation
13.083	1.986	.000	Rejected	3.83	.663

Since T is greater than tabulated T, the null hypothesis should be rejected. This means that there is a relationship between guarantees and delinquencies. The arithmetic mean and Std. deviation of each hypothesis subsections in the next Table 6.

Table 6 SECOND HYPOTHESIS SUBSECTIONS			
No	Subsections	Mean	Std. Deviation
1	Failure to take collateral when granting loans according the credit policy leads to delinquencies.	4.24	.938
2	Failure to evaluate the assets provided as collateral contributes to delinquencies.	4.05	.994
3	Failure to adequately deal with personal guarantors when granting credit facilities contributes to delinquencies.	3.19	1.009
	The relationship between guarantees and delinquencies	3.83	.663

The previous Table 6 showed a positive attitude by respondents towards all hypothesis subsections, where the mean of responses was greater than 3, and the standard deviation was generally less than 1.

Third null Hypothesis: There is no strong correlation between the legislative determinants and delinquencies. The analysis results of this hypothesis as follows Table 7:

Table 7 RESULTS OF THIRD HYPOTHESIS TESTING					
Calculated T	T Table	SIG T	Result	Mean	Std. Deviation
9.417	1.986	.000	Rejected	3.62	.695

Since T is greater than tabulated T, the null hypothesis should be rejected, which indicates that there is a relationship between the legislative restrictions and delinquencies. The arithmetic mean and Std. Deviation of each hypothesis subsections in the next table.

No	Subsections	Mean	Std. Deviation
1	Laws related to the legal pursuit of defaulters and collection of debts are insufficient and therefore contribute to delinquencies.	4.32	.801
2	Suspension of the accrual of interest and commission after a specified period contributes to delinquencies.	4.21	.825
3	CBJ's auditing is not adequate enough which contributes to poor control and delinquencies.	2.35	1.259
	The relationship between legislative restrictions and delinquencies.	3.62	.695

The Table 8 shows positive trends for the third hypothesis. The arithmetic means of these subsections were greater than 3, and the standard deviation of most subsections was less than 1.

Fourth null Hypothesis: There is no strong correlation between the organizational structure of the bank and delinquencies. The analysis results of this hypothesis as follows Table 9:

Calculated T	T Table	SIG T	Result	Mean	Std. Deviation
-8.144	1.986	.000	Accepted	2.43	.738

Since T is less than tabulated T, the null hypothesis should be accepted and the alternative hypothesis rejected: which means that there is no significant relationship between the banks' organisational structures and delinquencies.

No	Subsections	Mean	Std. Deviation
1	Lack of sufficient technical skills to analyse, study, and prepare reports by credit facilities' staff in banks contributes to delinquencies.	3.92	1.235
2	Powers granted to branch managers are superfluous which contributes defaults.	1.98	.919
3	The absence of clear delegation systems in banks regarding responsibilities and powers contributes to defaults.	1.98	1.058
4	Lack of clear means of communication between different bank positions at the managerial level contributes to defaults.	1.83	1.164
	The relationship between banks' organisational structures and delinquencies.	2.43	.738

The Table 10 showed negative attitudes of respondents to all subsections of the fourth hypothesis except subsection number (13) where the mean was less than 3 for most subsections.

Fifth null Hypothesis: There is no strong correlation between the nature of the funded project and delinquencies. The analysis results of this hypothesis as follows Table 11:

Calculated T	T Table	SIG T	Result	Mean	Std. Deviation
12.897	1.986	.000	Rejected	4.05	.854

The calculated T is larger than the tabulated T. This leads to rejecting the null hypothesis, which means that there is a strong correlation between the nature of the funded project and delinquencies.

No	Subsections	Mean	Std. Deviation
1	Funding projects with long-term loans increases delinquencies.	4.06	.979
2	Funding some types of projects in particular contribute to delinquencies.	4.04	1.083
	The relationship between the nature of the funded projects and delinquencies.	4.05	.854

The Table 12 showed positive attitudes of respondents to all subsections of the fifth hypothesis where the means of these subsections were greater than 3, and standard deviations these subsections was less than 1.

RESULTS

After conducting the necessary statistical analysis using SPSS, it was found that the factors associated with loan delinquency in banks are as follows:

1. The low quality of the credit decision-making resulting from the absence of a clear and specific credit policy and the failure of staff in the banking sector to conduct the necessary financial analyses have a significant impact on delinquencies. This result is consistent with the studies of (Al Taher, 2018; Abdul Jabbar, 2016; Muhammad, 2017; Abish, 2015; Byrne & Kelly, 2019).
2. Failure to utilise guarantees when granting bank loans, not to evaluating the assets provided as collateral for the facilities in accordance with the law, as well as not dealing adequately with the personal guarantors are the three important factors that contribute to delinquencies. This finding is in line with (Zablon & others, 2015; Siam et al., 2011).
3. The results indicate an inadequate legislative laws regarding the legal pursuit of defaulters and collection of debts, suspension of interest and commissions after a specified period, and insufficient audit by the Central Bank of Jordan. This result is in agreement with (Muriith, 2013; Boguslauskas & Eta, 2011; Alarbeed, 2007).
4. There is no significant relationship between the organisational structures of the banks and loan delinquencies. This result differs from the study of (Abdul Jabbar, 2016).
5. Financing projects with long-term loans and certain types of projects in particular contribute to delinquent loans. This study is consistent with the study of (Bou Abdullah & Brishi, 2017; Abdul Jabbar, 2016; Abish, 2015).

Recommendations

Based on the data analysis conducted in this study, the researcher recommends the following:

1. Adapting a clear, specific and strict policy in granting loans, to ensure raising the proficiency of credit officers in studying and analysing the conditions of projects requiring finance. Banks also should work on increasing supervision to make sure that the client uses the loan for the claimed purposes in order to improve the quality of the credit decision.
2. Taking adequate guarantees, conducting accurate and comprehensive studies of expected cash-flows, and linking all concerned entities for the exchange data about customers. It is also important for banks to rely on the project's ability to make repayments as opposed to relying on collateral and guarantors and determine the size of the loan so that the value of monthly instalments does not exceed 50% of the monthly income.
3. Studying the laws and regulations governing the nature of the work of the project before financing it and imposing sanctions when the client reaches the point of suspension of interest and commission.
4. Selecting the right employees and providing easy, fast, and practical communication channels between the managerial levels of the credit granting function.
5. Offering advice to clients on the nature of the project they intend to finance, conduct the necessary feasibility studies, minimise the repayment time, and make sure that the repayment program matches with the cash-flows of the project.
6. Observing early warning indicators of bank insolvency by management, which means that the customers should be monitored.
7. Conducting a study on the Islamic banking sector.

REFERENCES

- Abdul, H.A. (2000). Comprehensive Banks Operations and Management, ALdar ALjameiah, Alexandria. Mentioned in Bin Bakhmeh - Idris, 2016, Role of Bank Loans in Financing SMEs in Small and Medium Enterprises, Master Thesis, Qasidi Merbah University, Algeria.
- Abdul-Jabbar, A.H., & Said, A.H. (2016). Problematic Bank Loans in Iraq and Ways to Address Them, *Journal of Economic and Administrative Sciences, University of Baghdad*, 22(87), 369-383.
- Abéché, B. (2015). Managing Non-performing loans Loans in Commercial Banks: Case Study of the Algerian National Bank BNA, Master Thesis, University of Qassidi, Marbah, Ouargla, Algeria.
- Al Rubaie, F.K. (2018), Proposals for Addressing Bank Loans Problems in Iraq, May 2018, *Araa Al Khaleej Magazine*, 3. from http://araa.sa/index.php?view=article&id=1762:2014-07-15-09-12-33&Itemid=172&option=com_content.
- Al Taher, O.A.B. (2018). Reasons for Credit Facilities default in Islamic Banks, study of the case of Sudanese banks, *Journal of Graduate Studies, University of Neelain*, 11, (1-41), pp. 238-253, GCNU Journal ISSN: 1858-6228.
- Alarbeed, N. (2007). Analytical Study of NPLs (Non-performing loans) in the Syrian Industrial Bank, *Damascus University Journal of Economic and Legal Sciences*, 23(2), 277-312.
- Boguslauskas, V., Mileris, R., & Adlye, R. (2011). The Selection of Financial Ratios as Independent variables for Credit Risk Assessment, *Economic and Management Journal*, 11(10), 6515-6522.
- Bou Abdullah, M., & Brishi, S. (2017). Non-performing bank loans and their treatment study of the case of the National Bank of Algeria in Ain Defla, Master's thesis, Jilali University Bounama, Khemis Miliana, Algeria.
- Byrne, D., & Kelly, R. (2019) Bank asset quality & monetary policy pass-through, *Applied Economics*, 51(23), 2501-2521, DOI: 10.1080/00036846.2018.1546953
- Campbell, A. (2007). Bank insolvency and the problem of nonperforming loans, *Journal of Banking Regulation*, 9(1), 25-45.
- Cerulli, G., D'Apice, V., Fiordelisi, F., & Masala, F. (2020) Benchmarking non-performing loans, *The European Journal of Finance*, 26(16), 1591-1605, DOI: 10.1080/1351847X.2020.1794923 To link to this article: <https://doi.org/10.1080/1351847X.2020.1794923>
- Gadzo, S.G., Kportorgbi, H.K., & Gatsi, J.G. (2019) Credit risk and operational risk on financial performance of universal banks in Ghana: A partial least squared structural equation model (PLS SEM) approach, *Cogent Economics & Finance*, 7(1).
- Khan, M., Asif, S., & Asima, Z.S. (2020), Determinants of non-performing loans in the banking sector in developing state, *Asian Journal of Accounting Research AJAR*, 5(1), 135-145.

- Mohammad, A.M.Y. (2014). Delinquency in paying bank financing and its impact on the performance of banks: Case Study of North Islamic Bank (2005-2013), Master Thesis, *Sudan University of Science and Technology*.
- Mohammed, T.A. (2017). The Role of the Quality of Accounting Information in the Rationalization of Decisions to Grant Bank Credit and Reduce the Risk of Delinquent Loans in Sudanese Banks: A Case Study Bank of Khartoum, Master Thesis, University of Neelain.
- Murithi, M.W. (2013). The Causes of Non-Performing Loans in Commercial Banks in KENYA, A Research Project Report Submitted in Partial Fulfilment of the Requirements for The Award of Degree of Master of Business Administration, *University of Nairobi*.
- Rajha, K.S. (2017), Determinants of Non-Performing Loans: Evidence from the Jordanian Banking Sector, *Journal of Finance and Bank Management*, 5(1), 54-65.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Siam, W., Zakaria, K., Husnian, A., & Al-Daas, A. (2011). The Utilizing of Financial Analysis in Rationalizing Decision of Granting Credit Facilities. *International Research Journal of Finance and Economics*, 69(11), 1450-2887.
- Sidawi, F. (2015). Management of the risks of bank loans Case study of the Algerian National Bank, Master thesis, *Qasidi Merbah University, Algeria*.
- Yang, C.H. (2017) Reduction of non-performing loans in the banking industry: an application of data envelopment analysis, *Journal of Business Economics and Management*, 18(5), 833-851.
- Zablon, E., Sambiri, M.J., & Otieno, O.D. (2015). Evaluation of the Factors Leading to Loan Default at Equity Bank, *Journal of Economics and Sustainable Development*, ISSN 2222-1700 (Print) ISSN 2222-2855 (Online), 6(9).