

**Evaluation of Factors Affecting Loans Granting
Decisions to Bank Customers in Arab Republic of Egypt**

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Abstract

This paper aims to evaluate the key factors that have an effect on loan granting decision in Egyptian banks through examining actual data of 657 borrowers from 12 Egyptian banks. SPSS statistical software was used to conduct descriptive analysis. Using the results showed that collateral, income and the level of risks have an effect on the loan amount. At the same time, level of education, income and age have an effect on the loan term. Lastly, the decision to grant loan was influenced by experience, income, the level of risks, reputation and the ability to repay. In the light of findings, this paper discussed number of theoretical and managerial implications.

Keywords: Loan amount, Loan term, Granting loan, Reputation, Collateral.

1. Introduction

Banks have a significant role in the formulation of the financial backbone of the economy; they are mainly engaged in providing loans for projects that support any country (Kannan & Sudalaimuthu, 2016). Therefore, it must be noted that the most important and dangerous jobs offered by banks is to grant credit facilities for achieving enough profit. Accordingly, Sousa & Figueiredo (2014) asserted that, the use of instruments that support that process is desirable and may become a key factor in credit management in the bank.

In addition, Hoseini et al. (2013) showed that, banks must analyze the key factors that have an effect on granting credit to their customers because of this process will enable them to decrease credit risk associated with granting credit. In this regard, banks can use credit ratings in order to determine who is eligible to what sources of loan and to what interest rate. So, banks may depend on some inputs such as customer records, including audited financial statements, balance sheet to take a sound decision to grant loan or not.

2. Research Gap

Ofori et al. (2014) examined the determinants of credit default in micro-finance institutions. In this study, Logistic regression was used to identify the factors associated with the occurrence of micro credit default. The analysis showed that age, gender, gross monthly income, tenure with current employer, loan amount, and tenor of loan were important determinants of default.

In addition, Al-rawashdeh et al. (2013) investigated the impact of customer borrowers, credit policies, the central administration of the loans and the environmental conditions of the local economy on the facilities granted by commercial banks in the Aqaba Special Economic Zone authority. The results showed that the most important factors affecting the credit facilities related to customers' borrowers are: the customer's reputation, credit history, the diversity of the client activities, the size of the market share of the client, the information offered to the bank, the collateral and economic feasibility studies prepared for projects to be financed.

Meanwhile, Fungacova et al. (2015) analyzed the critical factors in improving loan repayment by yam farmers in the Sene district of Ghana. The results showed that education, experience, profit, age, supervision, and off-farm income have positive effects on loan repayment performance. Conversely, gender and marriage have negative effects on loan repayment while the effect of household size was found to be unclear.

In the light of the pervious literature review, the researcher noticed that there are many factors affecting loan granting decision, but there is no study grouped all these factors in one model. Therefore, banks may fail in making credit decisions properly. Most of researchers have focused on one or several factors and showed different results. However, no researcher has put all factors in one model.

Therefore, the researcher has found the existence of research gap and devotes her effort to conduct a research on it. So, this study will fill the research gap of the factors affecting credit granting decision in Egyptian banks. Consequently, it can provide the knowledge that is more comprehensive for other researchers who wish to dig into further study of such area.

3. Literature review and hypothesis development

In fact, the banking sector plays an important role in any country; it contributes in increasing the economic growth because of its critical role in financing various economic sectors by enough money required to establish projects that create many job opportunities. It represents the corner stone of economic prosperity. Bank lending and investments are the main supporter of the national economy, as investment projects always depend upon credit facilities provided by the bank. Those credit facilities play an important role of progression of the national economy (Al-rawashdeh et al., 2013). At the same time, Credit facilities consider the main source of profit for banks, but the wrong use of credit would bring disaster not only for the bank but also for the economy as a whole (Hossain,2016).

It is very important to predict future loans' delinquency by analyzing the influence of credit history variables, demographic variables and income variables that will facilitate in determining the credit risk. The younger age group is more likely to default compared to middle age group, also unskilled person, single or divorced person, or uneducated person are more likely to default (Peter and Peter, 2011). Nketani (2007) Showed that default risk is associated with number of factors that have been seen to be attributable to the occurrence of default in the loan such as; income, age and other demographic factors including level of education, occupation, migrant level. To control this risk, banks have policies and procedures that allow creditors to analyze an application and take credit granting' decision depending on factors affecting credit.

Gonzalez (2015) carried study to identify factors that influence Greek customers' decision to take out a loan from commercial banks. Logistic regression results showed that personal marital status, customer service, level of income, shop design and interest rates were the most significant predictors of taking loans. In addition, Al-rawashdeh et al. (2013) investigated the impact of customer borrowers, credit policies, the central administration of the loans and the environmental conditions of the local economy on the facilities granted by commercial banks in the Aqaba Special Economic Zone authority. The results showed that the most important factors affecting on the

credit facilities related to customers' borrowers: the customer's reputation; credit history; diversity of the client activities; size of the market share of the client; information offered to the bank; collateral and economic feasibility studies prepared for projects to be financed.

Based on the review of previous studies, the researcher found that the previous studies agreed on some common factors that have significant effect on granting credit's decision. Conversely, there are other factors that have less effect. Accordingly, this paper summarizes these factors in table 2.

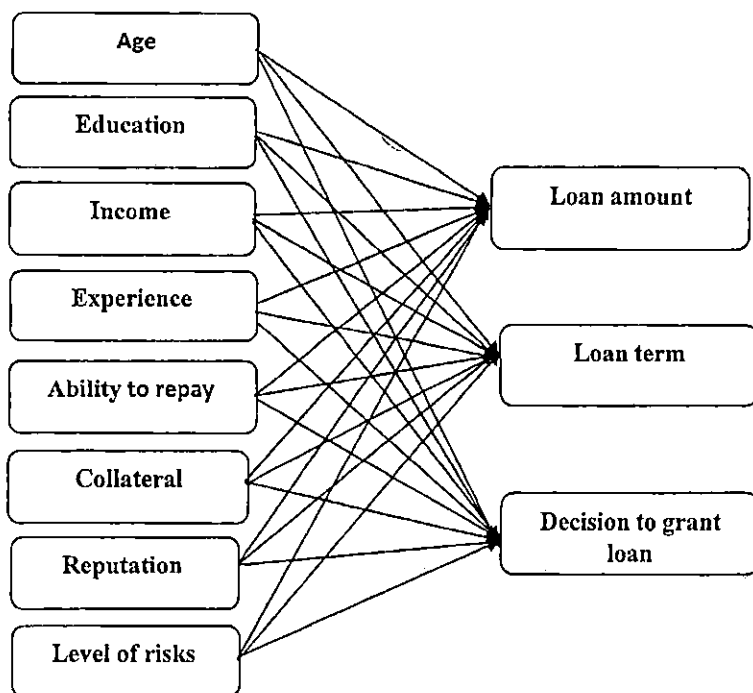
Table 2 Factors affecting on granting loan's decisions based on previous studies

Author	Year	Character	Capital	Capacity	Collateral	Condition	Customer Financial Position	Political Factors	bank credit policy	Liquidity	Gender	Age	Education	Applicant Experience	marital status	Income	customer credit history	Purpose of loan	credit staff experience
Duchess	1988		✓	✓	✓														
Gustafon	1989	✓	✓	✓	✓	✓													
Arene	1992											✓	✓	✓			✓		
Oni et al	2005												✓				✓		
Vansanthi & Raja	2006												✓				✓		
Nketani	2007	✓	✓	✓	✓	✓		✓	✓				✓						✓
Kohansal & Manscori	2009				✓							✓		✓			✓		
Agier et al.	2010																		✓
Nene	2010	✓	✓		✓	✓													
Acquah & Addo	2011											✓	✓	✓			✓		
Ottavia	2011																		✓
Ajagbe	2012				✓						✓	✓	✓						✓
AL-Abedallat & Jaafreh	2012																		✓
Mandala et al.	2012	✓	✓	✓	✓	✓													
Ojiako & Ogbukwa	2012																	✓	
Al-rawashdeh	2013	✓			✓	✓		✓	✓									✓	✓
Ibtissem & amel	2013					✓					✓	✓	✓	✓	✓			✓	✓
Imran and Nishat	2013					✓			✓										
Wongnaa & Vitor	2013										✓	✓	✓	✓	✓	✓			

Author	Year	Character	Capital	Capacity	Collateral	Condition	Customer Financial Position	Political Factors	bank credit policy	Liquidity	Gender	Age	Education	Applicant Experience	marital status	Income	customer credit history	Purpose of loan	credit staff experience
Nawai &sheriff	2013													✓					
Duy	2013										✓		✓						
Magali	2013														✓				
Ofori et al.	2014										✓	✓			✓	✓			
Aivazian et. al.	2014				✓														
Erdogan	2014	✓	✓	✓	✓	✓													
Sharma and Kalra	2015	✓	✓	✓	✓	✓													
Gonzalez	2015	✓	✓	✓	✓												✓		✓
Fungacova et al	2015	✓	✓	✓	✓						✓	✓	✓				✓		

Source: Prepared by the author

In the light of the past literature review, the researcher noticed that there are many factors affecting on the loan granting's decision, but there is no study grouped all these factors in one model. Therefore, banks may fail in making credit's decision properly. Most of prior authors have focused on one or several factors and showed different results. However, no author has put all factors in one model. Therefore, this paper aims at answering the following question: **What are the main factors must be considered from Egyptian' banks during making credit's decision for their customers?** So, this paper will fill this gap by grouping all the factors affecting on granting credit's decision in Egyptian banks in one model. Consequently, this paper can provide the comprehensive knowledge that is more needed for other researchers who wish to dig into further study of such area. Accordingly, this paper focused on the significant factors that affecting on granting credit's decision in Egyptian banks as shown in figure 1.



Source: prepared by the researcher

Fig. 1 Research model

In the light of the past literature review, this paper aims at examining the following hypotheses:

- 1- There is no significant impact of I-Score report, the ability to repay, collateral, age, education, experience, income and level of risks on the loan amount.
- 2- There is no significant impact of I-Score report, the ability to repay, collateral, age, education, experience, income and level of risks on the loan term.
- 3- There is no significant impact of I-Score report, the ability to repay, collateral, age, education, experience, income and level of risks on the decision to grant loan.

4. Research methodology

4.1 Population and Sample

The population of this research consists of all banks working in Egypt and the sampling unit represents the borrower from the bank. As the current research attempts to identify factors affecting on the decision of granting loan; the population consists of individuals and corporates loan's applicants from Egyptian banks. On the other hand, this research sampled banking's borrowers from 12 banks (all banks' information is confidential and accessible only to the researcher) as referred in table 1.

Table 1 Sample distribution among corporates and individuals' loan applicants

Bank No.	Companies			Individuals			Accumulative
	Accepted	Rejected	Total	Accepted	Rejected	Total	
1	22	26	48	20	11	31	79
2	-	-	-	110	10	120	120
3	-	-	-	60	25	85	85
4	-	-	-	15	5	20	20
5	3	8	11	8	13	21	32
6	2	2	4	5	5	10	14
7	5	5	10	-	-	-	10
8	2	2	4	17	9	26	30
9	6	3	9	3	10	13	22
10	3	-	3	7	-	7	10
11	1	3	4	3	9	12	16
12	41	39	80	66	79	145	225
Total	85	88	173	314	176	490	663
Outlier value	2	4	6	-	-	-	-
Total After outlier	83	84	167	314	176	490	657
%	12.63%	12.79%	25.42%	47.79%	26.79%	74.58%	100%

Source: Prepared by the researcher

Consequently, the researcher has obtained 657 cases for individuals and corporates' loan applicant after excluding abnormal values and incomplete cases divided into 397 accepted loans and 260 rejected loans as shown in table (1). Table 1 refers to 173 of companies' borrowers applied their applications to banks to take loans, but only 85 from them are accepted where 88 are rejected to take the loan. On the other hand, individuals' borrowers applied their applications, but 314 were accepted where 176 were rejected. These cases are obtained from records of Egyptian banks. The differentiation between banks; industry and borrower's type (individual-companies) are considered as shown in table1.

4.2 Data Types and Sources

4.2.1 Secondary data:

This research depends mainly on secondary data obtained from different sources such as literature, articles, researches and books regarding the study's variables to determine the main independent and dependent variables.

4.2.2 primary data:

The researcher collected the primary data from actual data for both individuals and corporates applied for borrowing in studied banks. Therefore, the researcher got confidential data about 663 borrowers distributed between 173 companies' borrowers and 490 individuals' borrowers. The researcher examined every application according to studied variables, some of these applications were accepted and others were rejected. In addition, the data was coded and then analyzed to test the hypotheses in order to reach the results.

5 Analysis and results

5.1 Descriptive analysis

Table 3 displays Spearman correlation matrix between the variables of the study. It refers to a weak positive correlation between collateral ($r= 0.354$; $p \leq 0.01$), age ($r= 0.266$; $p \leq 0.01$), experience ($r=$

0.133; $p \leq 0.05$), income ($r= 0.101$; $p \leq 0.05$), education ($r= 0.264$; $p \leq 0.01$) and reputation ($r= 0.226$; $p \leq 0.01$) and a weak negative correlation between the level of risks ($r= - 0.079$; $p \leq 0.05$) as independent variables and the loan amount as dependent variable. In addition, table 3 shows a weak positive correlation between collateral ($r= 0.352$; $p \leq 0.01$), age ($r= 0.296$; $p \leq 0.01$), ability to repay ($r= 0.246$; $p \leq 0.01$), level of income ($r= 0.240$; $p \leq 0.01$), experience ($r= 0.231$; $p \leq 0.01$) and a moderate negative correlation between the level of risks ($r= - 0.437$; $p \leq 0.01$) as independent variables and the loan term as dependent variable. Lastly, table 3 shows a weak positive correlation between ability to repay ($r= 0.233$; $p \leq 0.01$), income ($r= 0.189$; $p \leq 0.01$), experience ($r= 0.176$; $p \leq 0.01$), reputation ($r= 0.142$; $p \leq 0.01$), collateral ($r= 0.124$; $p \leq 0.01$) and a weak negative correlation between the level of education ($r= - 0.166$; $p \leq 0.01$) as independent variables and the decision to grant loan as dependent variable.

Table 3 Correlation Matrix between variables

Variables	1	2	3	4	5	6	7	8	9	10	11
1-Decision to grant	1.000										
2-Loan amount	-.070	1.000									
3-Loan term	-.099*	.383**	1.000								
4-Age	.032	.266**	.296**	1.000							
5-Income	.189**	.101*	.240**	.167**	1.000						
6-Education	-.166**	.264**	.097	.040	-.009	1.000					
7-Experience	.176**	.133*	.231**	.165*	.020	-.097	1.000				
8-level of risks	-.044	-.079*	-.437**	-.160**	.384**	-.008	-.428**	1.000			
9-Reputation	.142**	.226**	.010	-.092*	.069	.263**	-.211**	.259**	1.000		
10-Ability to repay	.233**	.044	.246**	.153**	.046	-.015	.207**	-.503**	-.028	1.000	
11-Collateral	.124**	.354**	.452**	-.345**	.190**	-.420**	.157*	.261**	-.093*	-.098*	1.000

* $p < 0.05$, ** $p < 0.01$

Source: SPSS outputs.

5.2 The effect of independent variables on the loan amount

The stepwise multiple regression model was used to identify the most important independent variables that have an impact on the loan amount. Table 4 displays the model estimates which refer to a significant model ($F = 18.469, p < 0.01$) and the coefficient of determination (R^2) for the model is 0.213. this means that 21.3% of the variance of the loan amount is explained by collateral, income and level of risk.

In addition, table 4 shows the significant regression coefficients and the most important variables are collateral, Income and level of risks that have an effect on the loan amount. Income and collateral have a significant positive effect on the loan amount ($\beta = 412.865, P \leq 0.01$; $\beta = 304.533, P \leq 0.01$ respectively), but the level of risks has a significant negative effect on the loan amount ($\beta = -120.266, P \leq 0.005$).

Table 4 Stepwise multiple regression estimates

Independent Variables	β	t	Sig.	R^2	ΔR^2	I-Score report (order)
Constant	313.136	1.078	.283	-	-	-
Collateral	304.533	4.185	.000**	0.119	0.119	1
Income	412.865	4.541	.000**	0.198	0.079	2
Level of risks	-120.266	-1.976	.050*	0.213	0.015	3
$F = 18.469, p\text{-value} = 0.000, R^2 = 0.213$						

$p < 0.05,$ $p < 0.01$

Source: SPSS outputs.

Depending on the above results, the first hypothesis was partially accepted where the results have revealed that the main independent variables that have an effect on the "loan amount" as reported in the study model are: collateral, income and the level of risks.

5.3 The effect of independent variables on the loan term

Table 5 displays a significant model ($F = 6.021, p < 0.01$) and the coefficient of determination (R^2) for the model is 0.081. This means that 8.1% of the variance of the loan term is explained by education, income and age.

In addition, table 5 refers to a significant negative effect of both education and age on the loan term ($\beta = -0.335, P < 0.010$; $\beta = -0.433, P < 0.004$ respectively). This result refers to the great care from banks to youth and newly graduates to establish small and medium enterprises. In addition, there is a positive effect of income on the loan term ($\beta = 0.715, P < 0.001$).

Table 5 Stepwise multiple regression estimates

Independent Variables	β	T	Sig.	R^2	ΔR^2	I-Score report (order)
Constant	2.295	5.782	.000	-	-	-
Education	-.335	-2.600	.010**	0.020	0.020	3
Income	.715	3.340	.001**	0.044	0.024	2
Age	-.433	-2.876	.004**	0.081	0.037	1
$F = 6.021, p\text{-value} = 0.000, R^2 = 0.081$						

* $p < 0.05$, ** $p < 0.01$

Source: SPSS outputs.

Depending on the above results, the second hypothesis was partially accepted where the results have revealed that the main independent variables that have an effect on the “loan term” as reported in the study model are: the level of education, income and age.

5.4 The effect of independent variables on the decision to grant loan

As shown in Table 6, the regression model is significant (Chi-square = 93.211 $p < 0.00$) and the coefficient of determination (R^2) for the model is 0.361. This means that 36.1% of the variance of the decision to grant loan is explained by experience, level of income, level of risks, reputation, and the ability to repay. In addition, the experience, reputation, the ability to repay and the level of income coefficients have a

significant positive effect on the decision to grant loan ($\beta = .696, p < 0.05$; $\beta = 1.427, p < 0.0$; $\beta = 1.539, p < 0.01$; $\beta = .897, p < 0.05$ respectively) whereas the level of risks has a significant negative effect on the decision to grant loan ($\beta = -1.297, p < 0.01$).

Table 6: logistic regression estimates

Independent Variables	β	Standard Error	Wald	Sig.	R ²	ΔR^2	I-Score report (order)
Constant	-1.060	1.929	.302	.583	-	-	-
Experience	.696	.275	6.392	.011	.250	.250	1
Income	.897	.363	6.091	.014	.311	.061	2
Level of risks	-1.297	.393	10.874	.001	.332	.021	3
Reputation	1.427	.394	13.101	.000	.344	.012	5
Ability to repay	1.539	.675	5.203	.023	.361	.017	4
Chi-square = 93.211 (0.00), R ² = 0.361							

$p < 0.05$, $p < 0.01$

Source: SPSS outputs.

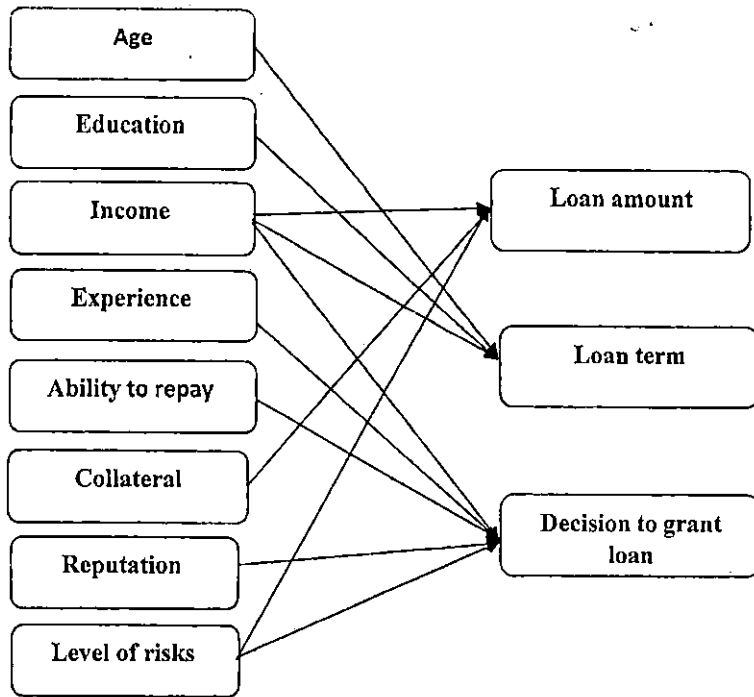
Depending on the above results, the third hypothesis was partially accepted where the results have revealed that the main independent variables that have an effect on the “decision to grant loan” as reported in the study model are: experience, income, the level of risks, reputation and the ability to repay.

Depending on the above results, the researcher can summarize the factors that have a significant impact on granting the credit loans in figure 2 and the results of hypotheses' testing in table 7.

Table 7: the results of hypotheses' testing

Hypothesis	Result
H1	Partially supported
H2	Partially supported
H3	Partially supported

Source: Prepared by the researcher



Source: prepared by the researcher

Fig. 2 Results of factors affecting on granting loans

6 Discussion

Commercial banks form the financial backbone in any economy. They are mainly engaged in providing loans to business enterprises of different magnitudes thus facilitating capital formation in the country (Kannan & Sudalaimuthu, 2016). Therefore, this study takes its contribution through examining the main factors that have impact on granting credit to borrowers in Egyptian's banking environment. The study concluded to valued results which can be discussed as follows.

6.1 Factors affecting on the loan amount

Results showed that the amount of collateral and the level of income have a significant positive effect on the loan amount. This means that the more collateral introduced by the borrowers the more loan amount lent to them. This result is logic because the collateral represents the indicator of borrower's creditworthiness on one side and it gives a positive sign for bank to lend the borrowers a large amount of money on the other side.

In this respect, banks are financial institutions that are established for lending, borrowing, issuing, exchanging, taking deposits, safeguarding or handling money under the laws and guidelines of a respective country. Among their activities, credit provision is the main product which banks provide to potential business entrepreneurs as a main source of generating income (Milcheva, 2013; Bucher et al., 2013; Madsen & Carrington, 2012; Mirach, 2010).

On the other side, the result showed that the level of income has a significant positive effect on the loan amount. Therefore, studied banks tend to increase the amount of loan for borrowers who have a great level of income. The researcher thinks that the level of income represents one of the triangle's creditworthiness of the borrowers (the level of income; collateral and the ability to repay). This result agrees with Feschijan (2008) who claimed that the level of income plays an important role in increasing the ability of borrowers to meet agreed deadlines related to repaying the credit and the interest accrued without affecting the vitality of the borrower.

Furthermore, the results showed also that the level of risks accompanied with loan has a significant negative impact on the loan amount. Therefore, most studied banks tend to increase the loan amount when the level of risks is low. This may due to the basic goal of the granting credit's process is to balance the potential risk of loss against the probability of profits from granting credit. Therefore, prior studies showed that the bank strives to collect necessary information about clients to support its decision whether to determine the loan amount; loan term or to grant the loan or not because any neglected information can be the root cause of their problem or default (Ganja, 2016; Natocheeva et al., 2016; Manab et al., 2015; Mirach, 2010).

6.2 Factors affecting on the loan term

Results showed that there is a significant negative impact of level education on the loan term. The researcher thinks that this negative impact is due to people with high level education are engaged with different interest such as continuing their post graduate or getting a job with high status, but many people with low level education have entrepreneurial characteristics which enable them to achieve success in

their businesses because they devote all their best to care and support their businesses. This result agrees with prior studies which asserted that most of the loan clients of the bank's educational level was secondary education (Mirach, 2010).

Furthermore, Mandalaa et al. (2012) asserted on the character of the borrower as determinant of loan term. They stated that Character is the borrower credit rating, which assesses his willingness to repay and the ability to repay based on defined agreement with the bank. Therefore, the borrower's age is one of the most important factors that determines the duration of the loan. In addition, the level of income has the first position in its effect on loan term where the bank lends long term loans for borrowers who have a high level of income because it represents a strong guarantee for the bank to receive its loan and interest at due date.

This result consistent with prior studies which asserted on the positive impact of the level of income on the loan term where Filip noted in his study (2015) that if the borrower uses the loan inefficiently and, therefore, the activity financed with loans is underperforming, there will not be ensured the income necessary for repayments and interest payments, under these circumstances the level of income plays an important role in guarantying the rights of the bank to get its loans and interest.

6.3 Factors affecting on the decision to grant loan

Results showed that the factors which have an effect on the decision to grant loan are more than the factors which have an effect on the loan amount or the loan term. This result may due to the decision to grant loan represents the core credit's decision in the banks. Therefore, the researcher thinks that granting loans should take the first priority in credit management in the bank and it must depend on accurate information about borrowers. Furthermore, the results showed that the strongest factor that effect on the decision to grant loans is the ability to repay. This means that the ability of borrower to repay represents a strong guarantee for the bank that the borrower will repay the loan and interest at due time without late. This result agrees with the results of prior studies which asserted on the importance of the ability to repay as determinant in granting loans (Lin & Shou, 2015; Eriksson et al., 2014).

In addition, the results showed that reputation of the borrower come into the second position in its effect on the decision to grant loan. The researcher thinks that this personal factors represents the outcome of personal characteristics that effect on the decision to grant loan by the bank because the Egyptian banking environment depends mainly on personal relationships during granting loans and the reputation of the borrower considers an objective criterion to judge on his ability to repay in the future. This result agrees with prior studies which asserted on the reputation of the borrower in deciding to grant loans or not. In addition, in approving borrowers or counterparties for the first time, consideration should be given to the integrity and reputation of the borrower or counterparty as well as their legal capacity to assume the liability (Eriksson et al., 2014; Yurdakul, 2014, Agur, 2013; Mandalaa et al., 2012).

Furthermore, results showed that the level of risks has a significant negative impact on the decision to grant loan. This means that the bank hesitates to grant loans for borrower who has a high level of risks in his business. The researcher thinks that this action is justified from the bank to keep its financial resources from losses. Therefore, banks must receive sufficient information to enable a comprehensive assessment of the true risk profile of the individual borrower or counterparty through examining the borrower's repayment history and current capacity to repay based on historical financial trends and future cash flow projections under various scenarios (Ramos-Tallada, 2015; Chaibi & Ftiti, 2015; Zhang et al., 2014; Bessler & Kurmann, 2014).

In addition, the results showed that the level of income has a significant positive impact on the decision to grant loans. This means that the ability of the borrower to receive loan increases when he has a high level of income because this the strong financial position considers one of the determinants of the borrower's creditworthiness. Accordingly, the researcher suggests that the credit files should include all of the information necessary to ascertain the current financial condition of the borrower as well as sufficient information to track the decisions made and the history of the credit. This result agrees with prior studies that concluded that the level of income has a significant positive impact on the

decision to grant loan (Allen & Paligorova, 2015; Bekhet & Eletter, 2014).

Lastly, the results showed also that the number of years' experience plays an important role in deciding to grant loan or not in studied banks. Therefore, the borrower experience in his business or in the past dealing with the banks determines the decision to grant loan to him. The researcher suggests that the borrower experience considers one the most factors that should take more attention by the bank during granting loans. This result agrees with the study of Croci et al. (2016) who suggested that the number of experienced loan clients of the bank decreases disclosing the turnover of clients as they accumulate loan experience that enable to access other competing banks and this impedes the performance and loan growth of the bank.

7 Managerial implications

By evaluating factors affecting on granting credit's decision, banks may have more resources on decision making according to the empirical result of this research. Therefore, bank's supervisors will be provided more evidence for these factors and to investigate if it is necessary to deregulate or impose further regulation to adjust credit risks. Consequently, the researcher can summarize the practical contribution of this research to banks as the following:

- The failure to employ funds leads to a lack of access to the target and thus decreases the size of the profits in the banks.
- The failure to employ funds leads banks to pay interest to depositors, but they failed to employ part of these deposits.
- Banks seek to maintain existing customers and attract new ones in the field of deposit and employment which makes this subject is the most important topics in the banks.
- The absence of sound study of the factors affecting on the decision to grant loans leads to a greater likelihood of default that has many negative effects.

Depending on the results and recommendations mentioned above, the researcher suggests some **future research** as follows:

- Comparative analysis of the factors influencing the decision to grant loans: an applied study on commercial and specialized banks in the Arab Republic of Egypt.
- Suggested framework to raise the investment rate of the funds through supporting the credit process in the Egyptian commercial banks.
- The impact of the deposit structure on the capital investment policies of money: an applied study on the Egyptian banks.
- The impact of electronic banking on supporting innovation and investment policies at banks: an empirical Study on Egyptian banks.

8 Research limitations and future research suggestions

This research was carried out in the light of some limitations which must be considered in the future research as follows:

- Sampling unit in this research was borrower (individual-company) without differentiate between the type of the bank. Therefore, future research must take the type of the bank as main determinant in granting loans for customers.
- As the risk of credit decision has an effect on solvency of the bank, this significant factor must be considered in the future research.
- As this research used actual data for analysis and did not rely on questionnaire, the opinions of credit managers in banks must be considered in the future research by designing questionnaire to examine their attitudes about the decision of granting loans.

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