'Factors affecting the decision of grant bank loans to economic institutions.'
—The case of SMEs Tlemcen —

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ABSTRACT:

The banking sector is most important sectors that support economic development without them can any economy presses that does its job. Bank credit is effective banking very important, as generated by the return represents the main focus of revenue for any bank no matter how many and varied other sources of revenue; without him, Bank loses his job as financial brokers in economics, but at the same time invest surrounded by risks, especially the financial risks.

The aim of this article is to know the factors affecting the decision of grant bank loans to economic institutions. In order to address this problem, we relied on a series of previous studies in this area to study the variables did not study. On all public banks, including foreign and Arab represented in 12 banks. Through direct

delivery to form the survey of credit officers and charged with studying the loan files, and to answer a series of questions the variables of the study and the nature of their impact on decision — making in the banks' employees.

JEL classification:

Keywords: banks, economic institutions, bank loans, decision-making.

INTRODUCTION:

The process of granting bank loans are always accompanied by risks, there is no process for the loans granting without risk, where the latter vary in nature and severity degree.

Perhaps the lending institutions unable to pay the proper time or are unable to pay the process fully is the most important risk is linked to the process of granting loans by the bank. So the bank takes the necessary precautions in order to minimize or reduce these dangers and as well as carrying out the coverage in the case achieved.

The process of granting loans by the bank are after analysing loan applications and that the diagnosis of the general situation of the institution through financial her studies, relying on financial ratios. Lead take irrational decisions and in order to know the factors affecting the decision to grant loans to these institutions. We want to bring the theoretical side the ground by carrying out a study on all the banks exist in the spatial boundaries of the study.

Among the problems raised in the economic arena, regulate bank's relationship with its surroundings, especially with the economic institutions, in order to revive the proportional relationship between banks and institutions. It is already during studying Which We would like Do Them, and given the importance of decision—

making in the field of the private banking business. Its sensitivity and gravity of the overall economic and social activity, we will try to answer to the problem at hand:

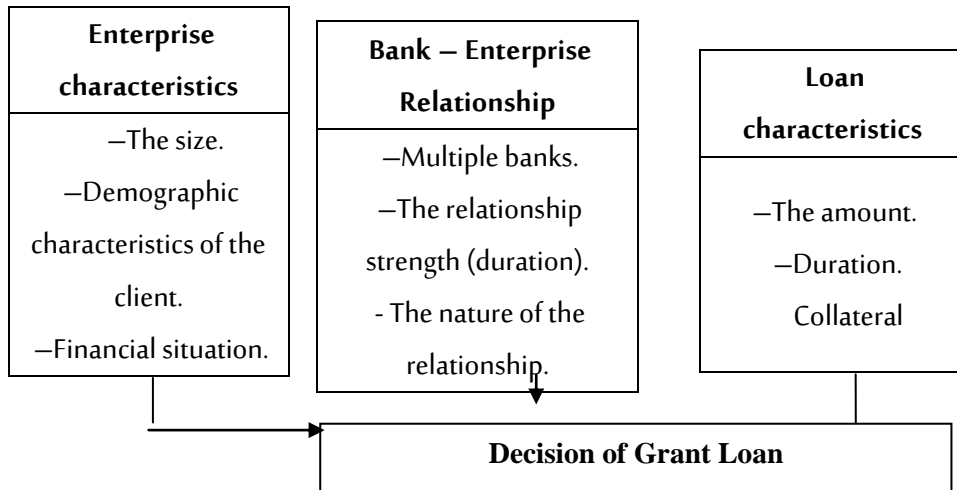**What are the factors affecting the decision to grant bank loans for economic institutions in the Algerian banks?**

In order to answer to the problem of searching and sub – questions we propose the following two hypotheses:

H 1: (Enterprise/bank relationship with the institution properties) have the direct impact on the decision-making bank.

H 2: (Enterprise/bank relationship with the characteristics of the institution) have the indirect impact on the decision-making bank-brokered loan characteristics.

CONCEPTUAL FRAMEWORK OF RESEARCH :

The purpose of this subject is to study the each effect of characteristic enterprise bank's relationship to the organization's decision – making. It was directly or the mediation for the loan and the problem characteristics of asymmetric information, as shown in Figure:

Enterprise characteristics	Bank — Enterprise Relationship	Loan characteristics
—The size. —Demographic characteristics of the client. —Financial situation.	—Multiple banks. —The relationship strength (duration). - The nature of the relationship.	—The amount. —Duration. Collateral

Decision of Grant Loan

I.   The characteristics of the firm.

It can be defined as the criteria that the bank paid to the trust in the organization and granting the loan package, as it is what determines the validity of the client to get the desired loan:

1- **The size**: It represents the total assets of the institution, where many studies have confirmed. There is a close relationship between the size of the enterprise and the granting of the loan (stigliz, Weiss. 1981)[1] and an important factor in the approval of the loan granting. While there are a range of studies have suggested that a small — sized enterprises are more likely to reject loan applications submitted, as well as the rejection of loan applications submitted linked inversely with the size of the founder (levenson, Willard.2000) [2]. This confirms the fact that large enterprises enjoy the ease in obtaining loans — Gertler —Gilchrist, (1994) [3].

2- **Demographic characteristics of** the **client**: Le Petit Larousse (2004) defines the profile as 'a set of traits that characterize someone from its ability to function, a job'[4].

We can say that the demographic characteristics of the client are sex, age, education level; years of experience … etc. can be relied upon in the type's classification of private manager's age and educational levels. Moreover, their impact on personal competence. As the charismatic fair and good reputation in the financial community, and committed to all its obligations in order to persuade the bank required credit granting.

3- **Financial situation Enterprise:** it can be considered as the health status of the institution, as the Bank based in his study of the loan file (Udell.1998) [5]. The reliability of the financial information provided is a prerequisite to making the right decision, but it is linked to overall transparency of the latter, only (Berger & Udell. 2002) [6.] The dependence on the financial situation of the institution is mainly directed at the institutions that a transparent, as it is linked positively with the size of the enterprise. Thus owning the customer good financial position to cover the loan granted to him as collateral in the event of not being able to repay what it has.

 II.   The bank – Enterprise relationship

This variable includes number of factors that indicate the bank's relationships with the organization are:

1. Multiple banks "Multi-banking": This represents a variable number of banks, such as those dealing with the institution in the request for the loan, as it represents an important factor in determining the relationship between the parties. Nevertheless, there are studies to say that the multiplicity of banks reduces the likelihood of reject the loan rejected (Detragiache, Garella, Guiso, 2000) [7]. However, there is the opposite of the first studies say that because of the variety of

banking institution becomes unable to give a positive picture of its financial position. From Point of decision — making can be a variety of banks that make it harder to negotiate the terms of the loan — Bolton &Scharfstein.1996)[8]. In this case, banks impose on institutions guarantees used as a pressure tool that is what makes the bank in a strong position.

(Mann.1997)[9]. It is also to avoid banks granting loans have multiple sources of funding. Because it limits the use of information (Call, 1998) [10] in addition to the enterprise deal with one bank generates an atmosphere of trust and cooperation between with the passage of time (Foglia, Laviola &Maruello, 1998) [11.]

2.   Duration of the relationship (strength of the relationship): There are several parameters to measure the strength of the relationship, but the most commonly used factor is **duration.** Where the strength relationship between the bank and the borrowers affect the loan rate and extent of availability (Berger &Udell, 2002) [12]. There are other factors to measure the strength of the relationship, including term. In addition, the number of banks that deal with the institution (Udell.2008) [13.] Only a set of studies that can force the relationship to replace the collateral in order to obtain the loan (Steijvers &Voordeckers.2009) [14,] and many studies have confirmed this idea. (Berger &Udell , 1995' [15], Chakraborty & H, 2006' [16,] Jiménez &Al ' 2006' [17], Brick & Palia .2007, [18])

"They can replace beings."

3. The nature of the relationship: The basis for the continuation of the relationship between the bank and the institution is trust. Where you play a big role in creating a favourable environment for communication between them through the exchange of information, as is one of the most effective ways to limit the problem of information (Berge.2002) [19]. Where it expresses the nature of this

relationship through a number of banks that deal with the organization, duration of the relationship, the loan amount (Peltniemi.2004) [20,] Interest rate (Bolton &Freixas, 2000) [21] and banking services (Degryse &Cayseele, 2000) [22]. It is the results of the study carried out by the (Ludovic vigneron, 2008) [23]. In the framework of relational financing, the bank can minimize the risk of asymmetric information, and then be able to distinguish between the entrepreneurs and the quality (minimization of the risk of adverse selection). The exchange of information for the duration of the relationship would reduce the likelihood of dispelling the assets value granted in the form of guarantees.

The model of Stiglitz and Weiss (1981) is based on the existence of ex-ante information asymmetry.

The model of Williamson (1986) is based on the existence of asymmetric information ex-post.

III. The Characteristics of the Loan

Used loan characteristics are usually guarantees and interest rates, which are considered as substitutes (can one compensate the other) (Bester, 1985) [24].

1- **Amount required:** The study (Berger &Udell.1992)[25] among the first to integrate the loan size in the granting of the loan. There are two theories opposing, on the part of the loan leads to a rejection of the size, and the other helps the size of credit to cover Loan costs and increases the chances of getting it.

2- **Interest rates:** An interest rate of profit or surplus loan can be produced, and is at the same time represents the interest that the organization paid for the loan **rate.** In previous experimental studies, most contributions consider that the loans granted size is linked largely with interest followed the price policy of the party **banks. (**Bernanke &Blinder.1992 [26,] Anari & al.2002 [27,] Suzuki [28),] banks prefer

rejected loan applications to raise interest rates (Stiglitz &Weiss.1981 [29,] Steijvers &Voordeckers.2009 [30]).

3. **collaterals:** collaterals are considered as an organizer of the supply and demand for loans, can be used as a mechanism to separate or distinguish between different clients (Besanko &Thakor [31];1987; Bester.1985 [32]); as the acceptance of the borrowers to provide important safeguards gives a positive signal about their financial situation, and the largest annexation n m to recover the loan amount granted in the case of failure.

In fact, credit guarantees contracts that are used as a means to choose between projects and as a stimulus enabling them to eliminate the problem of adverse selection, and balancing

(Bester; 1985' [33] Steijvers &Voordeckers K.2009 [34]). While others are opposed to the wealth effect on the decision – making (Besanko &Thakor, 1987' [35]). Because it cannot reduce the problem of adverse selection in the case of whether the original wealth changed (Preliminary) (i.e. time to get the loan and the time to maturity). (Steiglitz & Weiss, 1987.)
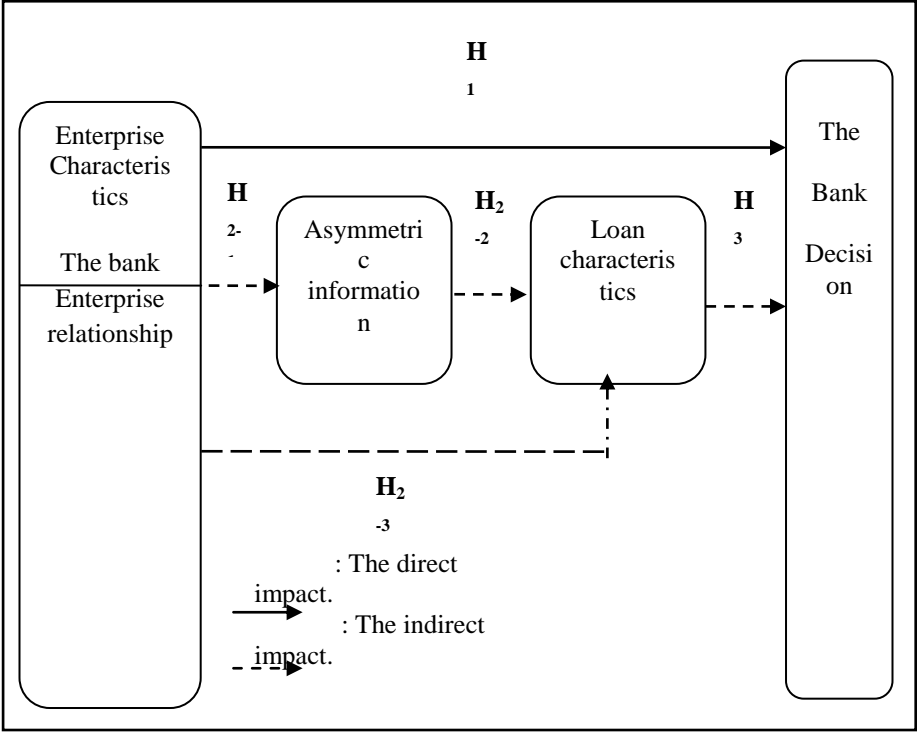
Conceptual framework:

Fig. 02: Conceptual model

Source: Elaborated by authors

Hypotheses of the study:

This model puts the hypotheses of the influence both the institution and the bank's relationship the organization's decision − making banks from two different perspectives; ❖Each of the global institution characteristics/bank − Enterprise relationship two variables **independent** explain the impact on the decision − making bank as the **dependent** variable.

❖Each the global institution characteristics/bank-Enterprise relationship two variables **independent** affect the decision − making bank as the **dependent**

variable based on the mediation of asymmetry information and loan characteristics.

❖ **The practical side:**

In order to address this problem we have adopted and the verification of hypotheses, completed a study on all public banks, including foreign and Arab represented in 12 banks; through direct delivery to form the survey of credit officers and charged with studying the loan files, and to answer a series of questions related to the variables of the study staff and the nature of their impact on decision — making in banks.

Analysis of the results:

To make sure health or the assumptions set error in the search will use the way **One Way AN**OVA, with analysis of variance (ANOVA) for experimental data analysis and determine the effect of variables.

First: the **direct have an impact of (Enterprise characteristics/bank-Enterprise relationship) on** the **decision — making bank.**

Based on previous studies and surveys after the literary and theoretical study, we assume that there is a statistically significant relationship between the characteristics of the institution and the nature of their relationship with the bank.

Hypothesis 1: the **direct effect of workers (Enterprise/bank relationship properties) on** the **decision — making bank**

❖**H $_{1-1}$:** Enterprise characteristics have a direct positive impact on the decision — making bank.

Enterprise characteristics = size + demographic characteristics client + the institution financial situation.

Knowing that the demographic characteristics of the client represented by sex, age, education level, and years of experience. the results were as follows:

Table No. 2: The variance analysis ANOVA

	Sum Squares	df	Average squares	F	Sig
Size variation between groups Variation within groups	3.569 4.737	2 33	1.784 0.1 44	12.431	0.000
The contrast Customer properties Variation between the groups variation within groups	7.823 220 927	2 33	3.911 0.6 95	5.630	0.008
Positivism Finance variation between groups variation within groups	.511 7.795	2 33	.256 0.2 36	5.556	0.040

Source: Depending on the results of the study program (SPSS 17)

Analysis of the **results:**

✓ **Effect Size:** Note that Sig = 0.00, it is smaller than 0.05. F = 12.43 is greater than the calculated F Driven, therefore we can say that there is a very close relationship between the size of the organization and decision − making bank.

✓ **Effect demographic characteristics of** the **client:** Note that Sig = 0.008, it is smaller than 0.05. F = 5.63 greater than the calculated F Driven, therefore we can say that there is a close relationship between the demographic characteristics of the client and decision − making bank.

✓ **Impact** of **the institution financial situation:** note that Sig = 0.00, it is smaller than 0.05. F = 12.43 is greater than the calculated F Driven, therefore we can say

that there is a close relationship between the financial institution and decision – making bank.

Statistical decision:

variable	Hypotheses	Test the relationships
the size	H_0: the size of the institution does not affect the decision – making bank	Rejected
	H_1: Enterprise size affects the decision – making bank	Acceptable
Demographic characteristics of the client	H_0: Demographic characteristics of the client does not affect the decision – making bank	Rejected
	H_1: Demographic characteristics of the client affect the decision – making bank	Acceptable
Financial situation	H_0: the financial situation of the institution does not affect the decision – making bank	Acceptable
	H_1: the financial situation of the institution affect the decision – making bank	Rejected

Hence it can be said that the premise

1-1 **INQUIRER.**

❖**H $_{1-2}$:** Bank relationship with the institution has a direct positive impact on the decision – making bank.

Bank relationship organization = multiple banks + nature of the relationship (duration)

Results of the study were as follows:

Table No. 5: The variance analysis ANOVA

	Sum Squares	Df	Average squares	F	Sig
Multiple banks variation between groups Variation within groups	19.485 14.737	2 33	9.743 .447	21.817	0.000
Duration The contrast Relationship Variation between the groups variation within groups	8.742 19.814	2 33	4.371 0.600	7.280	0.002

Source: Depending on the results of the study program (SPSS 17)

Analysis of the **results:**

✓ **Effect** of **multiple banks:** Note that Sig = 0.00, it is smaller than 0.05. F = 21.81 is greater than the calculated F Driven, therefore we can say that there is a close relationship between the multiple banks of the institution and the decision – making bank.

✓ **Influence** the **relationship between** the **bank and** the **enterprise:** Note that Sig = 0.002, it is smaller than 0.05. F = 7.28 greater than the calculated F Driven, thus can be said that the nature of the relationship between the bank and the institution important impact on the decision – making bank.

Statistical decision:

variable	Hypotheses	Test the relationships
Multiple banks	$H_{0:}$ multiple banks of the institution does not affect the decision $-$ making bank	Rejected
	$H_{1:}$ multiple banks of the institution affect the decision $-$ making bank	Acceptable
The nature of the relationship	$H_{0:}$ The nature of the relationship between the bank and the institution does not affect the decision $-$ making bank	Rejected
	$H_{1:}$ The nature of the relationship between the bank and the institution affect the decision $-$ making bank	Acceptable

Hence, it can be said that the premises 1-2 unrealized and from it, the premise the direct effect of the global (Enterprise characteristics/bank-Enterprise relationship) on the decision $-$ making bank is uncertain.

Second: the indirect effect of the global (Enterprise characteristics/Bank-Enterprise relationship) on the decision $-$ making bank $-$ mediated (asymmetry of information/characteristics of the loan).

❖ **$H_{2-1:}$ factors affecting (Enterprise/bank relationship** with the **institution) properties on** the **problem asymmetric information**

$H_{2.1.1:}$ **There** is a **statistically significant relationship between one of characteristic enterprise and** the **problem of asymmetric information.**

Knowing that the demographic characteristics of the client represented by: sex, age, education level, years of experience, the client's reputation results of the study were as follows:

Table No. 5: The variance analysis ANOVA

	Sum Squares	df	Average squares	F	Sig
Size variation between groups Variation within groups	3.353 4.952	1 34	3.353 0.146	23.02 1	0.0 00
The contrast properties Customer variation between the groups variation within groups	8.750 22,000	1 34	8.750 .647	13.52 3	0.0 01
Financial situation variation between groups variation within groups	0.020 8.286	1 34	0.020 0.244	0.081	.77 7

Source: Depending on the results of the study program (SPSS 17)

Analysis of the results:

✓**Moral effect Size:** Note that Sig =.777, it is a size of 0.05. F = 0.081 Smaller than the calculated F Driven, therefore we can say that there is no close relationship between the enterprise size and the asymmetric information problem.

✓ The **demographic characteristics of** the **client:** Note that Sig = 0.00 and it is smaller than 0.05; and F = 13.523 is greater than the calculated F Driven and therefore we can say that there is a close relationship between the demographic characteristics of the client and the problem of asymmetric information.

✓ The **financial situation of** the **institution:** note that Sig = 0.00, it is smaller than 0.05. F = 23.021 Greater than the calculated F Driven, therefore we can say

that there is a close relationship between the financial situation of the institution and the problem of asymmetric information.

Statistical decision:

Variable	hypotheses	Test the relationships
the size	H_0: **There is** no statistically significant relationship between the enterprise size and asymmetry information.	Acceptable
	H_1: No statistically significant relationship between the enterprise size and asymmetry information.	Rejected
Demographic characteristics	H_0: **There is** no statistically significant relationship between demographic characteristics of the client and the asymmetry of information.	Rejected
	H_1: No statistically significant relationship between demographic characteristics of the client and asymmetry of information.	Acceptable
Financial situation	H_0: **There is** no statistically significant relationship between the financial situation of the institution and asymmetry of information.	Rejected
	H_1: no statistically significant relationship between the financial situation of the institution and asymmetry of information.	Acceptable

Hence, it can be said that the impact of a single property, at least from the institution properties hypothesis on the problem of asymmetric information is **unrealized hypothesis.**

❖ **A statistically significant relationship between one property of** the **bank**'s **relationship** with the **institution**, **at least**, **and** the **problem** of **asymmetric information.** /Bank relationship Corporation = Multiple banks + The nature of the relationship (Length)

Results of the study were as follows:

Table No. 5: The variance analysis ANOVA

	sum Squares	Df	Average squares	F	Sig
Multiple banks The contrast between the groups Variation within groups	15.556 18. 7	1 34	15.556 .549	28.3 33	0.00 0
Duration Relationship The contrast between the groups Variation within groups	8.742 19.814	2 33	4.371 0.600	7.28 0	0.00 2

Source: Depending on the results of the study program (SPSS 17)

Analysis of the results:

✓**Moral influence** of the **multiplicity** of **banks**: Note that Sig = 0.000, it is smaller than 0.05, and. Greater than the calculated F Driven and therefore we can say that there is a close relationship between the multiple banks of the institution and the problem of asymmetric information.

✓ **Moral influence** of the **nature** of the **relationship between** the **bank and** the **institution**: Note that Sig = 0. 951 Which Larger From 0.05, and   A calculated Formulate T of F Driven and therefore we can say that there is not the nature of the relationship between the bank and the institution a significant impact on the problem of asymmetric information.

Test the relationships:

variable	Hypotheses	Test the relationships
Multiple banks	H_0: No statistically significant relationship between the multiple banks of the institution and the asymmetry of information.	Rejected
	H_1: No statistically significant relationship between the banks and the multiplicity of asymmetric information.	Acceptable
Duration of the relationship	H_0: **No** statistically significant relationship between the duration of the relationship between EB And asymmetry of information.	Acceptable
	H_1: No statistically significant relationship between the duration of the relationship between EB And asymmetry of information.	Rejected

Therefore we can say that **a statistically significant relationship between one property of** the **bank**'s **relationship** with the **institution**, **at least**, **and** the **problem** of **asymmetric information.**

H$_{2-2}$: The **problem** of **asymmetric information has** a **negative effect on** the **characteristics** of the **loan**

Results of the study were as follows:

Table No. 5: The variance analysis ANOVA

	Sum Squares	Df	Average squares	F	Sig
The contrast between the groups	.179	1	.179	1.000	.324
Variation within groups	6.071	34	.179		

Source: Depending on the results of the study program (SPSS 17)

Analysis of the results:

✓**Moral influence** of the **asymmetric information problem on** the **characteristics** of the **loan**: Note that Sig = 0.324. It is the largest of 0.05, smaller than the calculated F Driven and therefore we can say that there is no significant impact to the asymmetric information problem on the characteristics of the loan.

Statistical decision:

Hypotheses	Test the relationships
H $_0$: No statistically significant relationship between the problem of asymmetric information and loan characteristics.	Acceptable
H $_1$ No statistically significant relationship between the problem of asymmetric information and loan characteristics.	Rejected

Moreover, it could be argued that the impact of the problem of asymmetric information on the loan unrealized property hypothesis.

H $_{2-3}$: The impact of factors (Enterprise properties/Bank relationship − Enterprise) on the loan characteristics.

❖**H $_{2.3.1}$:** Enterprise properties have a positive indirect effect on the characteristics of the loan.

Using One Way ANOVA:

Results of the study were as follows:

Table No. 5: The variance analysis ANOVA

	Sum Squares	DF	Average squares	F	Sig
the size The contrast between the groups Variation within groups	4.406 3.900	2 33	2.203 0.118	18.6 39	0.00 0
Demographics Characteristics The contrast between the groups Variation within groups	10,900 19.850	2 33	5.450 .602	9.06 0	0.00 1
Financial situation The contrast between the groups Finance Variation within groups	.806 7.500	2 33	.403 0.227	1.77 2	0.18 6

Source: Depending on the results of the study program (SPSS 17)

Analysis of the results:

✓**Effect size:** Note that Sig = 0.000, it is the largest of 0.05, smaller than the calculated F Driven and therefore we can say that there is a close relationship between the institution and the size of the loan characteristics.

✓**Influence** of the **demographic characteristics of** the **client:** Note that Sig = 0.001, it is smaller than 0.05, greater than the calculated F Driven and therefore we can say that there is a close relationship between the demographic characteristics of the client and loan characteristics.

✓**Impact** of the **financial situation of** the **institution**: Note that Sig = 0.186, it is the largest of 0.05, it is Smaller than the calculated F Driven and therefore we can say that there is no close relationship between the financial situation of the institution and the loan characteristics:

variable	Hypotheses	Test the relationships
the size	H_0: No statistically significant relationship between the size of the enterprise and the characteristics of the loan.	Rejected
	H_1: No statistically significant relationship between the size of the enterprise and the characteristics of the loan.	Acceptable
Characteristics Demographic	H_0: No statistically significant relationship between demographic characteristics of the client and loan characteristics.	Rejected
	H_1: No statistically significant relationship between demographic characteristics of the client and loan characteristics.	Acceptable

Financial situation	H_0: No statistically significant relationship between the financial situation of the institution and the loan characteristics.	Acceptable
	H_1: No statistically significant relationship between the financial situation of the institution and the loan characteristics.	Rejected

Therefore, we can say that the impact of the organization on the characteristics of the loan characteristics hypothesis is the hypothesis relatively unrealized.

❖$H_{2.3.2}$: Bank – Enterprise relationship has a positive indirect effect on the characteristics of the loan

Results of the study were as follows:

Table No. 5: The variance analysis ANOVA

	Sum Squares	Df	Average squares	F	Sig
Multiple banks The contrast between the groups Variation within groups	20.622 13.600	2 33	10.311 .412	25.0 20	0.000
Duration Relationship The contrast between the groups Variation within groups	3.756 24.800	2 33	1.878 .752	2.49 9	0.098

Analysis of the results*:*

——Influence of the multiplicity of banks: Note that Sig = 0.000, it is smaller than 0.05, and.   Greater than the calculated F Driven and therefore we can say that

there is a close relationship between the multiple banks of the institution and the loan characteristics.

—Influence of the nature of the relationship between the bank and the institution : Note that Sig = 0.098 And it is the largest of 0.05, and. Smaller than the calculated F Driven and therefore we can say that there is the nature of the relationship between the bank and the institution a significant impact on the characteristics of the loan.

Variable	Hypotheses	
Multiple banks	H_0: No statistically significant relationship between the multiple banks of the institution and the loan characteristics.	Rejected
	H_1: No statistically significant relationship between multiple banks and loan characteristics.	Acceptable
Duration of the relationship	H_0: No statistically significant relationship between the duration of the relationship between E-B and the characteristics of the loan	Acceptable
	H_1: No statistically significant relationship between the duration of the relationship between E-B and the characteristics of the loan	Rejected

Therefore, we can say that the impact hypothesis Enterprise characteristics of the loan characteristics relatively unrealized

Conclusion:

The aim of this study is to find out the factors affecting the decision to grant bank loans and economic institutions. This hypothesis by studying the impact of each of the characteristics of the institution and the bank's relationship to the organization's decision — making banks from two different perspectives.

❖ Each of the global institution/bank relationship of two variables you will institution properties <u>Independent</u> Explain the impact on the decision − making bank as a variable Follows.

❖Each of the global institution/bank relationship between two variables you will institution properties <u>Independent</u> Affect the decision − making bank as a variable Follow Proceeding from the mediation of asymmetry information and loan characteristics.

 Results of the study were as follows:

➤Enterprise characteristics have a direct positive impact on the decision − making bank

➤Bank-Enterprise relationship have a direct positive impact on the decision − making bank

Therefore, we can say that the first hypothesis unrealized this means that there is a direct positive impact for each of the workers (the institution/bank relationship properties) on the decision − making bank.

➤A statistically significant relationship between one characteristic of the institution and the characteristics of at least a problem asymmetric information.

1. The lack has a strong relationship between the enterprise size and the asymmetric information problem.

2. No statistically significant relationship between demographic characteristics of the client and the problem of asymmetric information.

3. No statistically significant relationship between the financial situation and the asymmetric information problem

➤A statistically significant relationship between one property of the bank's relationship with the institution, at least, and the asymmetric information problem.

1. There is a relationship statistically significant between multiple banks of the institution and the asymmetric information problem.

2. There is no statistically significant relationship between the bank and the institution and the asymmetric information problem.

➢No statistically significant relationship between the characteristics of the loan and the bank take the decision hypothesis therefore the impact of the loan on the characteristics of the decision − making bank confirmed.

References:

1. Stiglitz, J. E. & Weiss, A. (1981). Credit rationing in markets with imperfect information. The American economic review, 71(3), 393-410.

2. Levenson, A. R. & Willard, K. L. (2000). Do firms get the financing they want? Measuring credit rationing experienced by small businesses in the US. Small Business Economics, 14(2), 83-94.

3. Gertler, M. & Gilchrist, S. (1994). Monetary Policy, Business Cycles and the Behaviour of Small Scale Firms. Quarterly Journal of Economics, 109.140.

4. Andriamanohisoa, L. (2006). Relation entre le profil du propriétaire dirigeant de l'entreprise manufacturière québécoise et ses conditions d'accès au financement bancaire (Doctoral dissertation, Université du Québec à Trois-Rivières).

5. Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. Journal of banking & finance, 22(6), 613-673.

6. Berger, A. N. & Udell, G. F. (1998). Bis.

7. Detragiache, E., Garella, P. & Guiso, L. (2000). Multiple versus single banking relationships: Theory and evidence. The Journal of Finance, 55(3), 1133-1161.

8. Bolton, P. & Scharfstein, D. S. (1996). Optimal debt structure and the number of creditors. Journal of Political Economy, 1-25.

9. Mann, R. J. (1997). Explaining the pattern of secured credit. Harvard Law Review, 625-683.

10. Cole, R. A. (1998). The importance of relationships to the availability of credit. Journal of Banking & Finance, 22(6), 959-977.

11. Foglia, A., Laviola, S. & Retz, P. M. (1998). Multiple banking relationships and the fragility of corporate borrowers. Journal of Banking & Finance, 22(10), 1441-1456.

12. Berger, A. N. & Udell, G. F. (2002). Small business credit availability and relationship lending: The importance of bank organizational structure. The economic journal, 112(477), F32-F53.

13. Udell, G. F. (2008). What is in a relationship? The case of commercial lending. Business Horizons, 51(2), 93-103.

14. Steijvers T. & Voordeckers W. (2009). 'Collateral and credit rationing: a review of recent studies as a guide for future research,' Journal of Economic Surveys, 23 (5 S1). pp. 924-946.

15. Berger, A. N. & Udell, G. F. (1995). Relationship lending and lines of credit in small firm finance. Journal of business, 351-381.

16. Chakraborty, A. & Hu, C. X. (2006). Lending relationships in line-of-credit and nonline-of-credit loans: Evidence from collateral use in small business. Journal of Financial Intermediation, 15(1), 86-107.

17. Jimenez, G., Salas, V. & Saurina, J. (2006). Determinants of collateral. Journal of financial economics, 81(2), 255-281.

18. Brick, I. E. & Palia, D. (2007). Evidence of jauntiness in the terms of relationship lending. Journal of Financial Intermediation, 16(3), 452-476.

19. Berger, A. N. & Udell, G. F. (2002). Small business credit availability and relationship lending: The importance of bank organizational structure. The economic journal, 112(477), F32-F53.

20. Peltoniemi, J. (2004). The Value of Relationship Banking: Empirical evidence on small business financing in Finnish credit markets. University of Oulu.

21. Bolton, P. & Freixas, X. (2000). Equity, Bonds, and Bank Debt: Capital Structure and Financial Market Equilibrium under Asymmetric Information. Journal of Political Economy, 108, 324-351. http://dx.doi.org/10.1086/262121.

22. Degryse, H. & Cayseele, PV (2000). Relationship lending within a Bank-Based System: Evidence from European Small Business Data. Journal of Financial Intermediation, 9, 90-109. http://dx.doi.org/10.1006/jfin.1999.0278.

23. Ludovic vigneron. (2008).Conditions de financement de la PME et relations bancaires. Etude doctoral en science de gestion. Université de LILLE-2. France.

24. Bester, H. (1985). Screening vs. rationing in credit markets with imperfect information. The American Economic Review, 75(4), 850-855.

25. Berger, A. N. & Udell, G. F. (1992). Some evidence on the empirical significance of credit rationing. Journal of Political Economy, 1047-1077.

26. Bernanke, B. S. & Blinder, A. S. (1992). The federal funds rate and the channels of monetary transmission. The American Economic Review, 901-921.

27. Anari, A., Kolari, J., Pynnönen, S., & Suvanto, A. (2002). Further evidence on the credit view: the case of Finland. Applied Economics, 34(3), 267-278.

28. Suzuki, T. (2004). Credit channels of monetary policy in Japan: resolving the supply versus demand puzzle. Applied economics, 36(21), 2385-2396.

29. Stiglitz, J. E. & Weiss, A. (1981). Credit rationing in markets with imperfect information. The American economic review, 71(3), 393-410.

31. Besanko, D. & Thakor, A. V. (1987). Collateral and rationing: sorting equilibria in monopolistic and competitive credit markets. International economic review, 671-689.

32. Bester, H. (1985). Screening vs. rationing in credit markets with imperfect information. The American Economic Review, 75(4), 850-855.

33. Bester H. (1985). Bis.

34. Steijvers T. & Voordeckers W. (2009). Bis.

35. Besanko, D. & Thakor, A. V. (1987). Collateral and rationing: sorting equilibria in monopolistic and competitive credit markets. International economic review, 671-689.