

Bank Intermediation

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INTRODUCTION

During the last decade, banking activity has known an increasing mutation due, particularly to financial liberalisation policies that were among the principle causes of diverse financial and bank crisis.

According to the above sense, we may consider that the bank activity endures constantly different risks to high degrees and particularly the credit risk, which obliges the bank:

- to delimit the different forms of granted credits in the same time keeping them in guard against risks that can affect the bank and reduce it to perpetual incertitude.
- To establish adequate systems and procedures in managing the risks of credit during all the phases of a banking activity and the divers functions of audit and control which are becoming more than ever, a reel obligation inside the banking institution.
- To establish architecture of global framework of supervision by means international norms application in terms of management and prudential surveillance.
- And finally, develop prevision techniques for decision taking.

Thus, in the present study, we tend to apply the quantitative methods susceptible to minimise the risks and consequently, to make in favour adequate decision taking in terms of granting credits inside the bank

Among the major theories that are mutually reinforcing, the theory of the great American economist "Irving Fisher," the cycle of debt and debt liquidation, which advocates the concept of over-indebtedness in a decentralized capitalist economy. On the other hand, the "screening - the lemons Akerlof and Spence signal effect" theory of market failure and imperfect information "Josef Stiglitz," Nobel economics prize in 2001, reinforces the deflation mechanism debt Fisher, and that explains the inevitability of over indebtedness, on investment and on producing the accompanying and subsequent implosion in debt in the investment and in following the production.

I- FINANCIAL INTERMEDIATION

The issue of financial intermediation is both old and new. Old, insofar long monetary theories, such as that of Gurley and Shaw that dates back forty years, the study by distinguishing direct finance and indirect finance. New, because the current financial globalization is governed by a rule that the "4D" can be called: deregulation of markets, deregulation and disintermediation of financing activities and State withdrawal. The financial revolution of the 80s and the acceleration of economic globalization in the 90s so we justify the question of the place of financial intermediation across the financial system and reality of the process of disintermediation.

Noting disintermediation of financing, some announce the disappearance of financial intermediaries or at least irreversible decline: then imposes the question of the need for financial intermediaries.

I-1- INTERMEDIATION AND FINANCING WAY

In an economy, we distinguish different funding see:

- The way of internal financing, which corresponds to that of self-financing.
- The way of external financing, which passes directly through the market or indirectly through institutions

market financing, direct or finance, brings agents in need of financing to offer in return for the capital they require, primary securities for the benefit of agents who are looking for investments - "long" and for the Risk- their funding capacity.

Intermediated financing, or indirect finance, by definition involves ad hoc institutions - financial institutions - to mediate between agents in need of financing and those with financing capacity. Financial institutions issue subordinated debt in favor of the latter (the financing capacity to agents looking for acquisition of securities - "short" and little or no risk - to maximize their cash savings) to collect the necessary resources to finance primary securities offered the first (agents in need of financing).

I-2- INTERMEDIATION AND FINANCIAL ECONOMY TYPES

The monetary analysis are several types of financial economics, as the relative weight in the national economy that have seen the different funding streams.

Since the work of Gurley and Shaw (1960) and especially Hicks (1975), it is customary to oppose the economies of debt and savings capital markets depending on whether the center of gravity of the economy financing is rather the side of intermediated finance or otherwise of direct finance side.

To clarify the principles for financing and monetary process and monetary policy, it is very important to talk about the limits of money creation by banks.¹

Indeed the process of money creation by primary banks fades by the intervention of the Central Bank to prevent the money supply exceeds the real needs of the economy.

he Issue Institute develops standards it imposes on the primary banks.

As the distribution of credit is the source of money creation, the Central Bank puts an arsenal of means to control it.

This allows it to act on both the cost of credit, the ability of banks to offer this credit on their volume and their orientation.

I-3-The role of financial intermediaries:

John H. Boyd and Edward C. Prescott (1986)² develop a study of a primitive environment in which financial intermediaries emerge endogenously by introducing into their model of financial intermediary coalitions on five famous characteristics of financial intermediaries.

These five features are:

Financial intermediaries into debt to a sub set of agents and lend to another. These two subsets consist of a large number of lenders and borrowers in order to diversify their portfolio asset side and the liability.

Borrowers are holders of better information on their own credit risk, financial intermediaries. In other words, intermediaries have different information on their creditors.

¹ M .TAOULI , « Cohérence Du Système Productif Et Financier Cas De L'Algérie » , Thèse De Doctorat, Université De Tlemcen , 2006-2007.

² John H. Boyd et Edward C. Prescott, " Financial intermédiation coalitions ", Journal of Economic Théory, 38, pp 211-232

Financial intermediaries produce an expensive information on their relationships. This information is used to finalize the loan.

Financial intermediaries issue debt, including the states of quotas refunds are not similar to those of debt issued by borrowers.

According to these authors, these characteristics are that of the real world, however, intermediaries are here in the broad sense. That these agents are not necessarily banking financial institutions. They may be non-banking institutions, joint ventures, or cooperatives. The endogenous emergence of financial intermediation, in the model of Boyd and Prescott is borrowed from the work of Townsend³.

Thus, the intermediate coalitions appear in the trading system, as it offers the induced gains in the sharing of risks, against part of the connection costs. In addition to the use of Townsend, the authors call for the Diamond Approach⁴, incorporating the problem of imperfect information.

Another supplement is added to the model of Boyd and Prescott, and this time with an article published in 1987 entitled "Recent Developments in Modeling Financial Intermediation" Stephen Williamson⁵ developing a model which, using advances in theories intermediation, allows him to answer three fundamental questions.

Indeed, to this author and other theorists, theory of financial intermediation remains the cornerstone and therefore Williamson insists on the causes of the existence of financial intermediaries, their special role and finally their interaction with the rest of the economic system.

For this author, the existence of financial intermediaries is due to their ability to minimize the costs of borrowers controls in an environment where the relevant information about specific borrowers is not freely available to lenders.

This ability gives financial intermediaries a special role. This role is expressed through contractual arrangements⁶ that allow lenders and borrowers to have finer relations and effective if these agents were to begin directly with each other.

In his model, Williamson believes that financial intermediaries are able to have a very diverse customer base, to have a different asset portfolio folio door of their liabilities, to process the information generated by the control they carry on borrowers and the use of debt instruments for signing contracts especially in the case of banks. Finally, it is important to present ties the work of Marie Odile Yanelle⁷ on the strategic analysis of financial intermediaries.

It is important to note that this study is a critical analysis of almost all models of financial intermediaries.

For this author, the theory of intermediation requires a theoretical analysis of specific games, because according to his vision, many designs designed meadows on the foundations of standard microeconomic theory are false.

³ R.M. Townsend, 1979, "Optimal Contracts and Competitive Markets with Costly State Verification", Journal of Economic Theory, 21, pp 265-293.

⁴ D.W. Diamond, 1984, "Financial Intermediation and Delegated Monitoring", Review of Economic Studies, 51, pp 393-414

⁵ S. D. Williamson, 1987, "Recent Development in Modelling Financial Intermediation", Federal Reserve Bank of Minneapolis Quarterly Review, Summer, vol 11, n° 3, pp 19-28.

⁶ A. Chenini, Modélisation de l'Intermédiation Financière Dans Une Economie De Développement Et En Transition : cas de l'Algérie, Thèse de Doctorat d'Etat, Université d'Oran, 2003-2004, p 91.

⁷ M.O. Yanelle, 1989, "The Strategic Analysis Of Intermediation", European Economic Review, 33, pp 294-301.

Its added value in the analysis is devoted to consideration of the problem of competition among intermediaries.

I-4- ASYMMETRY OF the INFORMATION

The concept of market failure⁸ is linked to the existence of financial intermediaries. In addressing the problem of asymmetric information in financial intermediation, one is forced to raise any issues relating to the financial intermediary relationship - partner in an incomplete or imperfect information context.

In this context, Gary Gorton and George Pennachi⁹ highlight the role played by financial intermediaries, to weaken the effect of information asymmetry on small investors through liquidity creation.

The banking sector, which represents a particular aspect of the lending business, is the fact that neither the risk nor the profitability of feasible operations are identical. Each credit transaction is unique, the result is a large variability component risk and profitability. The credit risk assessment problem originates in the imperfection of information and information asymmetry that makes difficult the assessment of customer risk. Uncertainty and covers both the quality of the borrower to implement the success of his project and the investment project itself. Asymmetries of information related to various commitments can be grouped into two categories reflecting the information phenomena and hidden share (P.A. Chiappori Yanelle and M. O., 1996).

I-4-1- INTERNAL HAZARDS: adverse selection and HASARD MORAL adverse

The concept of adverse selection has been introduced in the work of G. Akerlof (1970)¹⁰, also known as adverse selection, whereby the possibility of fraud is the result of uncertainty about the quality of the object, that the fact that they can be anticipated, lead to complex strategies to protect themselves.

According to the dean of the informational economy, adverse selection is the effect produced by the existence of the credit market, many borrowers with various credit repayment probabilities.

Through this approach, it is clear that the banking firm, through the distinction between the behavior of borrowers (those who are able to pay and those who are not), comes with actual selection of instruments (screening devices).

In this context, adverse selection is the inability to obtain comprehensive information on the characteristics of apparently identical goods.

Adverse selection reflects¹¹ the difficulty and inability for investors to specify and separate the best projects.

In fact, the problem of opportunism is an innate consequence that individuals possess private information not available to the other party.

Regarding the banking sector, the adverse selection occurs when the borrower retains, even after careful consideration by the debtor of the available information, an informational advantage over his partner. The illegal sharing of knowledge about the risk of non-repayment or default risk attached to the requested competition poses a problem to identify the best relationship bank (J.

⁸ COASE R.H., [1937], "The nature of the Firm", *Economica*, novembre 1937, pp. 386-405 (traduction française in *Revue Française d'Economie*, vol 2, Hiver 1987, pp. 135-157)

⁹ G.Gorton, G.Pennachi, 1990, "Financial Intermediaries and Liquidity Creation", *The Journal Of Finance*, Vol XLV, n° 01, March, pp 49-71

¹⁰ G.Akerlof, "The Market For Lemmons: Quality Uncertainty And The Market Mecanism", *Quaterly Journal Of Economics*, 1970, N° 84, pp 488-500.

¹¹ M.Chérif, « Asymétrie d'Information Et Financement des PME Innovantes Par Le Capital Risque », *Revue d'Economie Financière*, 1999, N° 54, pp 163-178.

Stiglitz and A. Weiss, 1981)¹². Thus, failing to fix an interest rate that corresponds to the real risks of project finance, the bank applies a rate representing the average quality of borrowers.

This practice then leads to benefit agents holding risky projects, and conversely penalize individuals whose project is low risk by charging a higher risk premium than their actual risk; the risk premium charged is less than the actual risk of the borrower.

It is important to note that the bank's risk by increasing its rate to select the most risky projects (adverse selection) or encourage borrowers, after obtaining their loan, choose more risky projects increase gain if successful (moral hazard), and that when it is not possible to assess the likely failures associated with credit applications of potential borrowers.

MORAL HAZARD

Moral hazard, also called moral hazard is a situation where the information incompleteness comes just after signing the contract.

In other words, this informational incompleteness stems unobservable actions and behaviors that may be undertaken by officers. It is a form of post contractual opportunism that occurs when shares implementations can not be discerned. Thus, individuals may pursue their personal interests at others' expense (P. Milgrom and J. Roberts, 1997)¹³.

The problems related to moral hazard occur when an individual undertakes ineffective action, or provide inaccurate information because its individual interests are incompatible with the collective interests and because neither the information provided nor the actions can not be controlled. The concept of moral hazard leads to focus on strategic behavior resulting from unobservability certain actions and resulting in non-compliance (K. Arrow, 1963)¹⁴.

Regarding the financial sector, moral hazard refers to any situation in which the results of the credit relationship depend on actions by the borrower after signing the contract and imperfectly observed by the creditor. Thus, a company contracting a credit can engage more or less strong way in the success of the project. Leaders will perform unnecessary expense to the development of the company by diverting their profit part of the project results in the form of benefits in kind or excessive compensation. Similarly, an excessive debt can be analyzed as a choice jeopardizing the solvency of the company to the detriment of creditors.

The success of the funded project will then depend on the control that the creditor will exercise. In this context, the market may not be able to establish an effective monitoring system for financing through the issuance of real estate values in the stock market, which leads to reduce the control function in the hands of many people, is likely to show extreme behavior. The public choice school has indeed demonstrated the ability of individuals to adopt a free rider behavior when they know that their choices do not affect significantly and measurably the final result. Thus, some creditors may prefer to leave the cost of control to others, while benefiting from the effects of it. In this context, only the financial intermediary, by its size and the high amount of the debt, will have both the means and the motivation to exercise a control function. Moral hazard is therefore a problem of information. These are the challenges and costs of detection and appropriate behavior control that generates the problem of moral hazard.

I-4-2-the opportunism

¹² J. Stiglitz et A. Weiss, "Credit Rationing In Market With Imperfect Information", The American Economic Review, 1981, Vol 71, N° 03, pp 93-410.

¹³ P. Milgrom et J. Roberts, « Economie, Organisation Et Management », Grenoble, PUG, 1997, 827 pages.

¹⁴ K. Arrow, "Uncertainty And Welfare Economics Of Medical Care", American Economic Review, 1953, N° 53, pp 941-973.

Opportunism suggests an attitude that is characterized by the lack of honesty in the transactions, the search for self-interest by cunning and non-compliance with rules of use. It is usually accompanied with a private manipulation of information and is opposed to this effect to behavior based on relationships of trust where the promise of one is synonymous with commitment.

Opportunistic behavior is related to bounded rationality and incomplete information. The risks are the risks that will weigh on the transaction and that may form and distorted information.

The difficulty lies in the fact that this is not a behavior that affects all individuals and it is expensive to recognize those opportunists who are not (WG Ouchi and OE Williamson, 1981).

The role of intermediation can not be understood in response to market imperfections and especially to information asymmetries in the credit market.

I-4-3- ASSESSMENT OF CREDIT RISK: informational advantage of the bank

The bank would have different advantages to the consolidation of funded projects (risk diversification), specialization of its business and its financial strength, enabling it to invest in powerful statistical tools. But if the statistical tools actually are of considerable assistance in the analysis and selection of projects (credit scoring techniques), the real benefit available to banks is an informational advantage¹⁵ that resides in the use of information generated by long-term relationships that the bank establishes with its customers and allowing it to create information. To understand what the banks have such an advantage, we propose to analyze assessment-related information costs of an investment project

CONCLUSION

When credit is rationed in the economy, the commitment of a bank in relationships with companies requires it to pay in the second period to the bad business at the expense of news that, on average, are less risky.

Without its commitments, the bank audits the company late in the first period when she announces that she is failing.

As theoretically, the audit is the type of business and the bad relations are too risky to be profitable for the bank, the bank will lend in the second half as old relationships successful in the first period or those unlucky but recognized audit as good risks.

Thus failing firms will not be refinanced, improving the average quality of borrowers. In case of credit rationing, that tighter control firms in difficulty makes efficient reallocation of credit.

Indeed, after this observation on some theoretical foundations that have led us to explore the different microeconomic aspects of the banking firm and more broadly to financial intermediation with a theoretical justification of the credit crunch which is one of the functions fundamental to the financial intermediary, it is very important to reconstruct the concept of credit, types and especially all the risks inherent in the engagement function as a whole in a credit market in full emergence.

¹⁵ Emmanuelle NYS, « La production de services bancaires et les marges d'intermédiation , Une approche en termes de sélection contraire et effet sur le risque des banques de l'Union Européenne » , Doctorat d'Etat , l'Université de Limoges (France), Décembre 2003.

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