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Mitigating Asymmetric Information Problem in the Local Loan Markets

Fakrul Ahmed, Md. Fazlul Huq Khan

ABSTRACT:

The paper tries to investigate the existence of asymmetric information and adverse selection problem in the Islamic banking sector. Primary and secondary data has been collected from 35 banks in 16 developing countries for 8 years period. The data collection procedures include survey, interviews, observations, publications, and existing research reports. The results revealed that there exists significant asymmetric information problem in the banking sector that leads to adverse selection in loan disbursements. The existing methodology of collection, analyzing and verifying information doesn't mitigate the informational barriers and lead to wrong client selection for the banks. The borrowers also found to misuse the existing process and underestimate the risk-return relationship. Due to the limitation of fund, it was hard to collect and verify data regarding the loan usage by the borrows.

KEYWORDS: Asymmetric Information, Adverse selection, loan markets, developing countries

Introduction

With the rapid expansion of globalization and advancement of technology, banking activities are becoming complex day by day. Banks collects deposit from customers and invest those in productive sectors. In these two sectors there raises problem of asymmetric information. Borrowers hide different information for different purposes. From here there arises problem of adverse selection. Sometimes some customers show false creditworthiness, ultimate they default in payment of loan. Default prone culture is very common in our country. Some reputed default prone customers manage loan from bank by political backing. For this sometime worthy customer don't get loan. Sometimes borrowers take loan for higher investment where higher risk is involved. This leads to moral hazard. So, this study tried to identify sources of moral hazard, information asymmetry in the local loan market. This study was conducted on Islamic Banking sectors of developing countries by analyzing the investment criteria.

Information Economics

Information economics or the economics of information is a branch of microeconomic theory that studies how information and information system affect an economy and economic decisions. Information has special characteristics. It is easy to create but hard to trust. It is easy to spread but hard to control. It influences many decisions. These special characteristic affects many standard decisions. Information economics is formally related with game theory as to different types of games that may apply including games with perfect information, symmetric information and incomplete information. Experimental and game theory methods have been developed to model and test theories of information economics, including potential public policy applications such as mechanism design to elicit information sharing and otherwise welfare enhancing behavior. Information sharing is important issue because lack of information creates adverse selection which leads to moral hazard.

Information asymmetry, Moral hazard & Adverse Selection

In contract theory and economics, information asymmetry deals with the study of decisions in transactions where one party has more or better information than the other. In contrast to neo-classical economics which assumes perfect information, this is about "What We Don't Know". This creates an imbalance of power in transactions which can sometimes cause the transactions to go awry, a kind of market failure in the worst case. Examples of this problem are adverse selection moral hazard, and information monopoly. Most commonly, information asymmetries are studied in the context of principal–agent problems. Information asymmetry causes misinforming and is essential in every communication process.

Adverse selection, anti-selection, or negative selection is a term use in economics, insurance, risk management, and statistics. It refers to a market process in which undesired results occur when buyers and sellers have asymmetric information (access to different information); the "bad" products or services are more likely to be selected. For example, a bank that sets one price for all of its checking account customers runs the risk of being adversely selected against by its low-balance, high-activity (and hence least profitable) customers. Two ways to model adverse selection are to employ signaling games and screening games.

In economic theory, a moral hazard is a situation where a party will tend to take risks because the costs that could result will not be felt by the party taking the risk. In other words, it is a tendency to be more willing to take a risk, knowing that the potential costs or burdens of taking such risk will be borne, in whole or in part, by others. A moral hazard may occur where the actions of one party may change to the detriment of another after a financial transaction has taken place.

Moral hazard arises because an individual or institution does not take the full consequences and responsibilities of its actions, and therefore tends to act less carefully than it otherwise would, leaving another party to hold some responsibility for the consequences of those actions.
Economists explain moral hazard as a special case of information asymmetry, a situation in which one party in a transaction has more information than another. Moral hazard may occur if a party that is insulated from risk has more information about its actions and intentions than the party paying for the negative consequences of the risk. More broadly, moral hazard occurs when the party with more information about its actions or intentions has a tendency or incentive to behave inappropriately from the perspective of the party with less information.

Asymmetric Information in Banking System

Although it is known that the bank must have information about the borrower before taking its credit granting decisions, there is no guarantee that the borrower will give all the information about itself. Some, borrowers may have some vital information which could have helped the bank when taking the credit granting decisions but refused to give them because they think that it will act as a barrier of the loan being granted to them or may reduce their credit limit. This type of information which is known only to the borrower and hidden from the bank about a customer it has already financed is called asymmetric information (Shibata & Tian, 2010). The theory of asymmetric information is a new development in the Economics of uncertainty brought forward by Kenneth Arrow, Gerard Debreu and many others in the first decades of the postwar period (Sandmo, 1999). Their emphasis was on exogenous uncertainty, the sources of which were found outside the economic system itself. They talked of uncertainty in the case where individuals had different types of information, with the typical situation being that they had private information about their own characteristics that was not directly available to other people, like those responsible for the design of public policies. To make this clearer, they used two examples. Firstly, they talked of a situation between an employer and his or her employees, where the employees have information about their own preferences and skills that are not observable by the employer. Another example is where buyers and sellers have different information about the good to be traded. The provider of a good for example a public good, will always like to have information about the willingness to pay of the consumers who will benefit from it, but of which the consumers are the ones who possess this information for themselves. FIs (in this case banks), can also face this problem because of the positive role they play of channeling funds from savers to borrowers. Lack of enough information about these people (especially the borrowers) can be very detrimental. Mahmoudi (2022) in the paper explains that proper informational flow can save lives and allow the authorities to handle the situation efficiently. He analyzed the informational flow in the Covid-19 situation persists in the US and identified moral hazard problem as barrier to the free flow of information. Another research by Mahmoudi (2022) reveals that oil market is subject to informational asymmetry problems, and global informational transparency barrier can contribute to sharp rise in the oil price volatility.
Asymmetric information between the bank and borrower exists when either the borrower or the bank has better information about the financial circumstance and prospects of a project or firm than their counterpart (Bruns, 2004). If the bank fails to have enough information about a borrower's potentials to repay the loan and goes ahead to grant loans (without a good collateral security), it will lead to problems on the banks which can even go as far as affecting the savers should they turn up for cash withdrawals or even bankruptcy. It should be noted that information asymmetry does not only imply when a borrower refuses to give information about itself to the bank. It also refers to a case where the bank can hide certain information about itself or its management forecast from the borrower just because they want the deal to be favorable but to them. Information problems can also arise from information differences and conflicting incentives between the banks, the savers, and borrowers (Healy & Palepu, 2001). So, for good credit risk management to take place, it is always good for both parties to have adequate information about each other.
Ahmed (2021) tries to find the interaction of corporate disclosure and governance within the organization, focused stakeholders, and shareholders representation with internal information in the board. The paper investigates seven governance variables as the willful release of information proxy concentrated on organizational structure and functioning. The regression results show that informational barrier can be higher for the organizations with low transparent corporate disclosures and governance. In another paper Ahmed (2021) finds that removing asymmetry in information and moral hazard capital market can function efficiently and effectively. In the economic theory it is stated that inflation is based on based on the future uncertain inflationary issues. When the stakeholders do not receive proper information about the macroeconomic variables and doubt on the existing data, foreign currency prices started to rise and contribute to the volatility. Khan (2021) identified the informational miscommunication as a cause of exchange ratefluctuation and significant contributor to the devaluation of domestic currency. Ahmed and Khan (2022) try to find out the impact of investors demographic variables on the return from the stock market. The research covers the period from 2009 to 2021 and have a decade long enough to identify the trend. The regression results suggest that demographic variables affect the investment pattern and beta return for the investors. the demographic variables such as education, location and experience have positive links with the beta whereas age and income show negative association. The education, income and experience variables are also found to be significant in the empirical analysis.

Moral Hazards in the banking system

A moral hazard occurs when a party to a transaction has not entered into the contract in good faith. This can occur when a party provides misleading information or has an incentive to take unusual risks. But despite its name, moral hazard doesn't really concern the moral compass or ethics of the parties involved.Moral hazard has been used in conjunction with concepts such as adverse selection, information asymmetry and the agency problem. In each of these instances, there is a relationship between two parties, one of which may be privy to more information and/or less risk than the other. The problem with such a situation is that when one party in a transaction is insulated from risk, he or she may behave differently (and more carelessly) than expected. Moral hazard can be found in financial, insurance and management circumstances. Here we take a look at this phenomenon and how it affects both parties in a transaction.

The relationship between borrowers and lenders entails a delicate balance of risk and returnfor both parties. Borrowers seek affordable financing for projects and investments in the hope of using the borrowed money to reap returns well over the cost of financing. On the other hand, lenders need loans of all risk profiles to be repaid. Loan terms must be reasonable enough to attract borrowers, yet worthwhile enough for the lenders to profit from the

interest.For borrowers, the penalty of making losing investments or not repaying their debts is somewhat predictable: either sky-high interest rates on subsequent loans or total inability to obtain additional loans, either of which could lead them to go out of business. But, for lenders, the prospect of going out of business may not be as certain. Banks are linked to central banks, which are often viewed as the "lender of last resort". This extra insurance can create a moral hazard if banks allow the presence of this extra insurance as an incentive to assume more risk. Aside from risky lending, banks can increase their risk using leverage. Many firms use leverage because it magnifies the range of returns, making positives more positive and negatives more negative. Leverage can be good if it is used to purchase return-building assets, but too much leverage canprove detrimental to an entity's stability.Leverage and risky lending can prove beneficial to a bank's bottom line, but in moderation. Too much risk can lead to loan losses, devaluation of assets, and in some cases, insolvency.

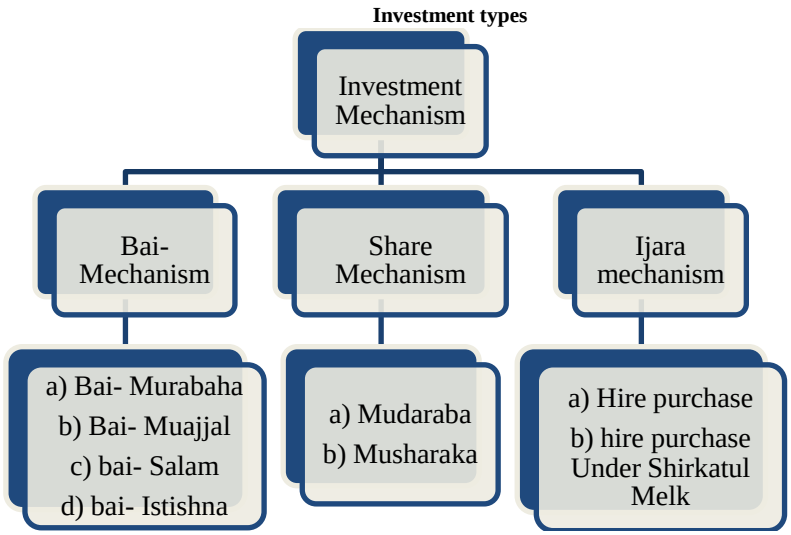
One possible method of decreasing the likelihood of moral hazard is to increase regulation. Through more oversight, regulators can impose and enforce rules to discourage risky behavior. Those rules may include higher capital requirements or heightened transparency. News of more regulation is typically met with opposition, but lack of appropriate supervision can lead to bank failure. If a bank is big enough, its failure could pose a threat to financial markets worldwide. Asymmetric information arises from deposit collection and loan disbursement. In case of the banks the scenario is not different. The study will give attention on how the problem arises, what they do to solve and best practices to solve this. First of all, it is necessary to know that the banksruns on Islamic Shariah. Islami Shariah based bank differs from conventional baking system.

Investment Operations

The investment portfolio of the bank is well diversified and covers a broad spectrum of businesses and industries including readymade garments, textile, edible oil, ship scraping, steel & engineering, chemicals, pharmaceuticals, cement, telecommunication, construction, health care, real estate, education, transport and investment under consumer schemes.

The objectives & principles of investment operations of the banks are:

- The investment fund strictly in accordance with the principles of Islamic Shariah.
- To diversifies its portfolio by size of investment, by sectors (public & private), by economic purpose, by securities & by geographical area including industrial, commercial & agricultural.
- To ensure mutual benefit both for the bank & the investment client by professional appraisal of investment proposals, judicious sanction of investment, close & constant supervision &monitoring, therefore.
- To make investment keeping the socio-economic requirement of the country in view.
- To increase the number of potential investors by making participatory & productive investment.
- To invest in the form of goods & commodities rather give out cash money to the investment clients.



Data

While determines the sources of information that would be required for the study, we have used both primary and secondary data to conduct the Study from 35 banks in 16 developing countries for 8 years. In addition, interviews and observationshave been included as a valuable and firsthand source while describing the performance and the evaluation of the bank regarding Investments. The data has been collected by contacting with the employees of banks where the interviewees explain the practical work exposures on different banks and Informal conversation with the clients or customers.Data were collected from the Annual reports of the banks for the years under the review. Official scheme, brochure, web site paper that helped to gather data and the accuracy of the data has also been verified. We have tried to analyze and evaluate of Investment performance based on adequate information contained in documents and interviews of banking officers to handle information asymmetry.

Findings

The research finds that 78% of the borrowers try to take advantage of informational asymmetry and require higher loans with minimum credentials. 66% of the borrowers in the Asia and African region tries to ditch the bank through inflating the valuation of the collateral. In the South American economy, the rate is around 48%. In case of business operations, 57% of the borrowers tend to hide losses and exhibit the financial statements that show high profit margins. The cash flow statements reveal inconsistency with the income's statements by a wide margin. 39% of the borrowers are not willing to go for the credit rating reports from an independent organization. Financing against the financial securities also revealed that the highest point of the value has been used to borrow money from banks. The banks in the developing countries lacks methods to identify the fraudulent acts by the borrowers and due to lack of informational flow it is hard to reach a conclusive decision. The survey also finds that 77% of the time bank employees have very idea about the informational gap, 17% of the time has some informational gap and 6% of the time they have the proper information with no errors. Due to this reason the non-performing loans are seems quite higher in the banks of developing countries. The Islamic system the banks rely on the integrity of the borrowers and 63% of the time, the lenders don't receive return for good faith. 45%borrowersdon't disclose the riskiness of the project and tend to understate risk through falsified matrices. The political involvement in the credit disbursed decisions also creates moral hazard for the stakeholders and beneficiaries. 28% of the time banks put restrictions in loan to prevent borrower from engaging in risky activity. Restrictions on what the money can be used for - only certain investments are allowed. Encourage desirable behavior. Require insurance and taxes to be paid to the mortgage company. Require high net worth - example 20% down for house. Requirement to maintain certain asset bases for businesses. Require a sinking fund.For secured loan, Requirement to keep collateral in good condition, Property or equipment. *Example:* collision insurance is required for car loans. Home: keep house in saleable condition, maintain insurance.Requirement to provide information to bondholders or bank on a regular basis so they can be monitored. *Example:* small company has to provide quarterly income statements to bank; company may have to provide quarterly financial statements to bondholders.

Remedies to Information Asymmetry and Adverse Selection

Due to the secrecy which has continued to shroud our banking system, at times there are red flags all over about serial defaulters, but banks miss them simply because they consider immaterial information about their customers as classified. Thus, a person may become unable to repay a loan on a bad investment idea (which he won't drop because of his single-mindedness) and get his property auctioned but walk over to a different bank and secure financing for the same bad project, probably using a different product. If all bank's IT systems could get partially integrated, this is a problem which can be quite easily eliminated.Due to the vulnerability and corruption in our administration systems, there has been instances of forgery of collateral documents such as title deeds. Governmentsare already helping by establishing a CIB which is very helpful for the banks. Political backing for default prone customers should be removed.

In some commercial banks, loan underwriters are basically data entry clerks. They simply key in information from an application form without paying due attention to material facts which could be evident right on the application form. Underwriting is the entry point of risk in any financial services firm and some risks could be avoided if this initial process could be carried out meticulously. There is always an essence of evaluating the proposed project's cash generation potential, its SWOT analysis and its history before acceptance.In order to counter these problems, the banks may seek to acquire more detailed information on the conduct of the insured agents and to employ measures to discourage and combat these phenomena, bySegmenting customers into homogeneous risk classes, Group lending and investigating.

Conclusion

In this competitive era, information is money, wealth, knowledge everything. A party wants to hide information for his positive sum game and try to make other party to play a negative sum game. It creates an unequal platform for the players which ultimately lead to loss to other party. Then other part will gradually stay aside from game. To ensure a win-win situation information asymmetry needs to remove first. This is equally applicable for banks. In the study attention had given on what typesof asymmetry information takes place in the local loan market. Sometimes banks create different charges for investment to their how or low value customers. When this information is disclosed to customers it creates adverse selection. Sometimes customers don't disclose information about where they will invest their money taken form bank because of high profit potentiality along with high risk. So, banks need to investigate their investment source properly, otherwise borrowers may face difficulty to repay the loan. Central bank always keeps sharp vigilant to monitor the issue. If any problem arises in a bank this might bring a false impression in overall banking industry. So central bank is much more concern on the issue.

Banks have highly efficient investment management team to handle the issue. Their non-performing loan is quite satisfactory, around 1.63%, where industry average hovers at 3-5%.The study also mentioned some other possible ways to solve information asymmetry, moral hazard and adverse selection. The study wrapped up with some major findings on the issue related with the banks and some possible way out. This study also extends further scope of thorough research on the issue for the future researchers. The study hopes with better performance appraisal method and with more sophisticated initiative to deal information asymmetry and improve the informational biasness.

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