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**LEASING: A SOLUTION TO CREDIT RATIONING****MANDEEP KAUR****RESEARCH SCHOLAR****I. K. GUJRAL PUNJAB TECHNICAL UNIVERSITY****JALANDHAR****DR. POOJA MISHRA****DIRECTOR****A & M INSTITUTE OF MANAGEMENT AND TECHNOLOGY****PATHANKOT****ABSTRACT**

*"Leasing is one of the last financial resorts". Finance forms the most important resources for any organization. There are various methods through which such finance is being raised. It is still not resolved in financial literature that leasing could act as a substitute or not. A leasing is a contract by which one party conveys land, property, service etc. to another for a specified time, usually in return for a periodic payment whereas banks used credit-rationing mechanism in order to mitigate the losses that arise due to asymmetric information. The question still arises about the relationship between leasing and credit rationing. Over the years, lease finance has been consented as one of the cornerstone of modern economy. In this paper, we are going to discuss two things: first, what are the factors that influence credit rationing and secondly, to study relationship between them. We compare the lease rentals with the monthly payments of loan. The results shows that we pay less in leasing as compare to banking loan.*

**KEYWORDS**

asymmetric information, century, credit rationing, leasing, mechanism.

**INTRODUCTION**

Finance forms the most important resource for any organization. The main objective of any organization is to maximize their profits. According to E. Chandraiah (2004)<sup>1</sup> when leasing business grew and met with initial success, and then there was a mushroom growth of institutions offering leasing services in India. Globally leasing is the second most powerful source of financing next to the banks. Leasing in India started in 1973 with the first leasing company named "First Leasing Company Of India Ltd". Since, a number of medium to large sized companies, financial institutions like IRCL, ICICI AND GIC have also entered the field of leasing. Leasing is an attractive form of financing because of its flexibility that's why approximately one-third of all equipment acquisitions are now financed by leases. Another significant phase in the development of Indian leasing was the Dahotre Committee's recommendations based on which the RBI formed guidelines on commercial bank funding to leasing companies. The growth of leasing in India has distinctively been assisted by funding from banks and financial institutions. Apart from these, there are Sale & lease back and direct lease, Single investor lease & leveraged lease and Domestic & international lease. Though in foreign countries people are getting more advantage of the leasing but in India it is not popular as compared to other countries. The lack of regulatory supervision, particularly with regard to lease accounting practices where lease transactions were used as a means for deferring tax liability, finally brought the industry under scrutiny from the RBI in the mid-1990s. In fact, the number of lessors and the total volume of leased assets continued to fall until around 2008/2009. In Global Competitiveness Report 2012-2013 produced by the World Economic Forum (WEF), India is ranked at 59th position out of 144 in the Global Competitiveness Index (GCI). Leasing started quite late in India and the penetration level is not that high. Currently, only a limited number of players operate in this business. (T.T. Srinivasaraghavan, Managing Director of Sundaram Finance). The market is segmented with clear asset focus. Hence, the impact of the current economic situation on the leasing market is quite marginal (White Clarke Group India Asset and Auto Finance Country Survey 2013). Credit Rationing is referring to the situation where lenders limit the supply of additional credit to borrowers who demand funds, even if the latter are willing to pay higher interest rates. There are two working definitions of credit rationing in the literature. The first focuses on situations in which increase in the interest rate cannot clear excess demand in the loan market, whether this excess demand reflects a single borrower (who would like a larger loan amount) or many. Under this definition, rationing would exist if every potential borrower received a loan but smaller one than that desired at the equilibrium interest rate. The second definition restricts its attention to situations in which some borrowers are completely rationed out of the market, even though they would be willing to pay an interest rate higher than the prevailing in the market. Both of these definitions focus on the supply side of the market.

**CONCEPT OF LEASING**

There are various methods through which finance is being raised. Leasing is unique commercial activity in this century. A Lease may be defined as a contractual arrangement in which a party owning an asset (lessor) provides the asset and transfer the right to use the equipment to the user (lessee) over a certain agreed period of time, for consideration in the form of return for periodic payment (rentals) with or without a further payment. Andrea Eisfeldt, Adriano Rampini (2007)<sup>2</sup> study that benefit of leasing is that repossession of a leased asset is easier than foreclosure on the collateral of a secured loan, which implies that leasing has higher debt capacity than secured lending. Marie Christine and Eric Severin (16 June 2008)<sup>3</sup> conduct a study to better understand the relationship between leasing and credit rationing. Kampumure Joseph (2009)<sup>4</sup> reviews that leasing is an attractive form of financing because of its flexibility. There are two types of leasing: Financial lease and Operating lease. A financial lease is that lease in which all the risks and rewards transferred incidental to the lessee except the title of ownership. An operating lease is a lease whose term is short compared to the useful life of the asset or the equipment being leased.

**CONCEPT OF CREDIT RATIONING**

Credit rationing is a situation where lenders limit the supply of additional credit to borrowers who demand funds even if the latter are willing to pay higher interest rates. It's an example of market imperfection or market failure. Hodgman (1960)<sup>5</sup> was the first to try and explain how credit rationing can persist in a rational equilibrium framework. Miller (1962)<sup>6</sup> argued that Hodgman's analysis could be made consistent with rational expectations between the borrowers and lenders by incorporating bankruptcy costs that would be incurred by the lender upon the borrowers default. There is a situation where the interest rate is deemed too high. It means at the prevailing market interest rates, demand exceeds supply but lenders are not willing to either loan more funds or raise the interest rate charged, as they are already maximizing profits. Manfred Zeller (1994)<sup>7</sup> study that formal groups obtain and use information about the creditworthiness of the credit applicant in a similar way than informal lenders do. In the SME's sector story in 1993 includes another four factors that are related with the rationing of credit.

1. The high fixed cost of information research.
2. The variety in credit conditions (interest and terms and conditions) used by banks to compete.
3. The variety of attitudes, skills and motivations that entrepreneurs presents.
4. The high mortality rate the SMEs presents.

**RESEARCH OBJECTIVES**

The research paper addresses the philosophical as well as practical approach to explain the concept of leasing and credit rationing. The main objectives are:

1. To render a better understanding of the concept of leasing and credit rationing.
2. To compare both options of sources of finance.

**REVIEW OF LITERATURE**

With the help of these literatures, we can understand the concepts of leasing and credit rationing more briefly.

Andrada-maria georgescu (2010)<sup>9</sup> examine that if leasing is a solution to credit rationing, considering that the limiting of the bank credit supply will determine the orientation of enterprises towards leasing. Slotty.F(July 2009)<sup>9</sup> conclude that the principal agency problems in joint ventures between lessors and banks that can arise if banks – on the basis of commission or on their own account also offer leasing to their customers. Eisfeldt Andera, Rampini Andriano (2007)<sup>2</sup> study that repossession of a leased asset is easier than foreclosure on the collateral of a secured loan, which implies that leasing has higher debt capacity than secured lending. Dowla Ud Asif (1998)<sup>10</sup> revealed in his study that Grameen bank has plans to introduce leasing to rehabilitate problem centers. Christine Marie, Severin Eric (16 June 2008)<sup>11</sup> conduct a study to better understand the relationship between leasing and credit rationing. They suggest that SME use leasing so when they are young, leveraged and less solvent and that they present an small size and an important failure probability. Grenadier R. Steven (1996)<sup>12</sup> found a model that was flexible enough to be applied to a wide variety of real –world leasing structures, including security deposits, required up- front prepayments, embedded lease options, leases indexed to use and lease credit insurance contracts. Callimaci Antonello, Fortin Anne, Landry Suzanne (2011)<sup>13</sup> examine the relationship between a firm's propensity to lease and several firm characteristics: tax position, financial constraint, ownership structure, growth and size. Cosci Stefania, Guide Roberto, Meliciane Valentine (March 2015)<sup>14</sup> this paper investigate the relationship between financial constraints and leasing decision for a sample of Italian firm. It investigates the determinants of firm leasing decision, the degree of substitutability between leasing and debt and the impact of leasing on the profitability of the firms feeling credit rationed. The results support the hypothesis that leasing preserves capital, thus helping to relieve credit constraints. De Sankar, Singh Manpreet (Sep. 2010)<sup>15</sup> conclude that creditors ration credit at high rates of interest. They also observed that creditors ration credit at lower rate of interest and ration a larger proportion of the pool of borrowers. Choudhary Ali M, Jain Anil (Dec. 2016)<sup>16</sup> they conclude that well-functioning of credit market is crucial for the effective allocation of resources and in turn, economic growth. However, shocks to financial intermediaries can hide their effectiveness.

**CREDIT RATIONING: FOCUSING ON ASYMMETRIC INFORMATION**

One of the most accepted problem in credit rationing is the asymmetric information. Credit rationing explained on the basis of asymmetric information. One of the reasons for this considerable attention is the implication that credit rationing has the transmission mechanism of monetary policy. The incidence of every factor is affected by the lack of information or by the quality of available one:

1. High fixed cost of information: This cost is independent from the amount of the loan to grant. The small projects will be more affected, thus this difficulty to reach economies of scale in the assignment of loan. Loan Portfolio will be discriminate a prior to the smaller firms.
2. Incentive effect: It has the direct relation with the information available. The less the monitoring of the project, higher the probability that borrower would deviate from the original objectives agreed.
3. Variety of credit condition: The diversity of business is not a problem but to manage the information in effective way is difficult. So banks will be forced to make more efforts and increase cost of evaluation and monitoring.

**STRENGTH AND WEAKNESS OF LEASING****STRENGTH**

- a) Shifting the risk of technological obsolescence: In business sector where there is a high risk of technology obsolesce, leasing yields great returns and save the business from the risk of investing in a technology that might become outdated soon.
- b) Easy source of finance: It is a very easy source of finance.
- c) Enhances liquidity.
- d) Conserves borrowing capacity through OFF-THE-BALANCE-SHEET financing: As lease expenses get same treatment as that of interest expense, leasing is classified as an off-balance sheet debt and does not appear on company balance sheet.
- e) Tax-benefit
- f) Hedge against inflation
- g) Low monthly payments

The leasing pros list may not be very long however, the list carries a lot of weight. The low monthly payments can be up to 60% lower than your monthly payments purchasing the same vehicle. The warranty is also a huge plus point. E.g. it can be extremely frustrating when the newly purchased vehicle has a major mechanical problem shortly after the warranty run out; but with a lease there is no need to worry about that.

**WEAKNESS**

- a) Risk of being deprived of the use of equipment
- b) Alteration in the asset
- c) Terminal value of the asset
- d) Problem of evaluating credibility of lease-customers
- e) Consistent maintenance of the asset/equipment properly.

Paying a constant payment does not require a stable predictable lifestyle. Any mis-happening or a major medical expense can really upset the finances. When we go for lease, it is hard to get out of the contact as compare to selling your purchased equipment.

**RELATIONSHIP BETWEEN LEASING AND CREDIT RATIONING**

When there is large flow of money in the market, RBI always takes action to control it. To control the money flow in the market, Monetary policy is the process by which the monetary authorities of a country controls the supply of money, often targeting an inflation rate or interest rates to ensure price stability and general trust in the currency. The limiting of the bank credit supply will determine the orientation of enterprises towards leasing.

**EXAMPLE****LEASE Vs. LOAN (PAYMENT OF MONTHLY INSTALLMENTS)****FOR LEASE**

For example, let's say the negotiated selling price of the car is Rs. 26,00,000. Subtract a down payment of Rs. 1,00,000 and a trade-in value of Rs. 3,00,000 = Rs.22,00,000. The dealer then agrees to pay off the balance of the loan on your existing car at Rs. 5,00,000. So that equals a Rs. 27,00,000 net capitalized costs.

➤ Calculating the depreciation portion of the lease payment

Net capitalized cost = Negotiable selling price + down payment and other credits +loan B/s  
 = 2600000 - (100000 + 300000) + 500000  
 = 2600000 – 400000 + 500000  
 = 2700000

➤ Determine the residual value of the car at the end of the lease

= sticker price \* residual price

= 300000 \* 55%

= 300000 \* 0.55

= 165000

➤ **Calculate the monthly payments on the lease**

= Net capitalized cost- residual value

Number of monthly payments

= 2600000-(300000+100000)-3000000\*55%

3 years \* 12 months

= 2200000-1650000

36 months

= 550000

36

= **15277.7 (Monthly payment on lease)**

**FOR BANK LOAN**

Same example on the loan from bank. We take 2600000 loan from the bank at 11% rate of interest for 10 years.

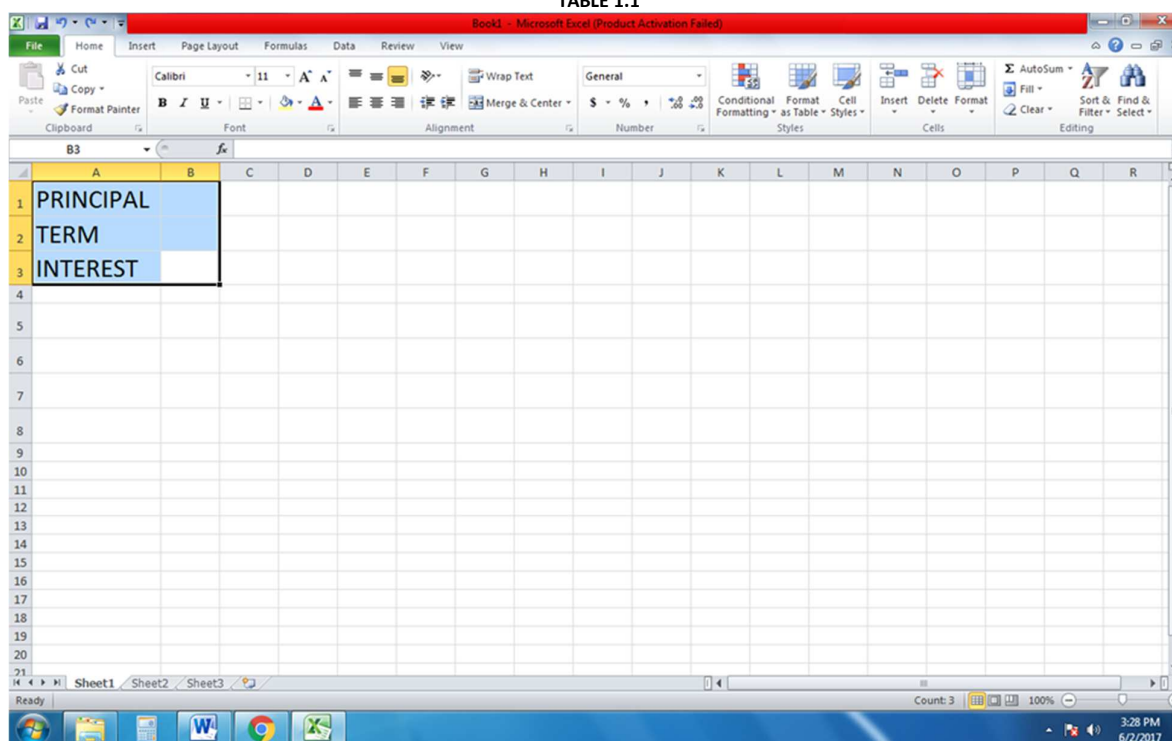
Payment= Principal\*  $i(1+i)^n$

$(1+i)^{n-1}$

- For example, imagine a person took out a loan at 11 percent, and the loan required making payments on a monthly basis.
- Since the payments are monthly, we need to divide the interest rate by 12. 11 percent (0.11) divided by 12 equals 0.00916.

**CALCULATE THE MONTHLY PAYMENT WITH EXCEL**

TABLE 1.1



1. Write the principal, term and interest from the loan in one column. Fill separate boxes with the amount of the loan, the length in which you have to pay and the interest and excel can calculate the monthly payments.
  - Like a person take home loan of Rs. 2600000 and have 10 years to pay it off at 11% annual interest rate.
  - Write the principal in as negative number, determine the number of payments and convert the interest rate to fit the number of payments.
  - In excel we have to write the principal amount in negative to tell excel that we are paying a debt.

Principal= -2600000

- Most of the payments are paid monthly, so simply multiply the number of years by 12 to get total number of payments

10 years x 12 = 120 no. of payments

- We are paying monthly interest; so we need to know what is monthly rate of interest? So 11% is for 12 months, simply divide by 12 to get one month interest.

11% =  $\frac{11}{12}$  = 0.00916 monthly interest

100

TABLE 1.2

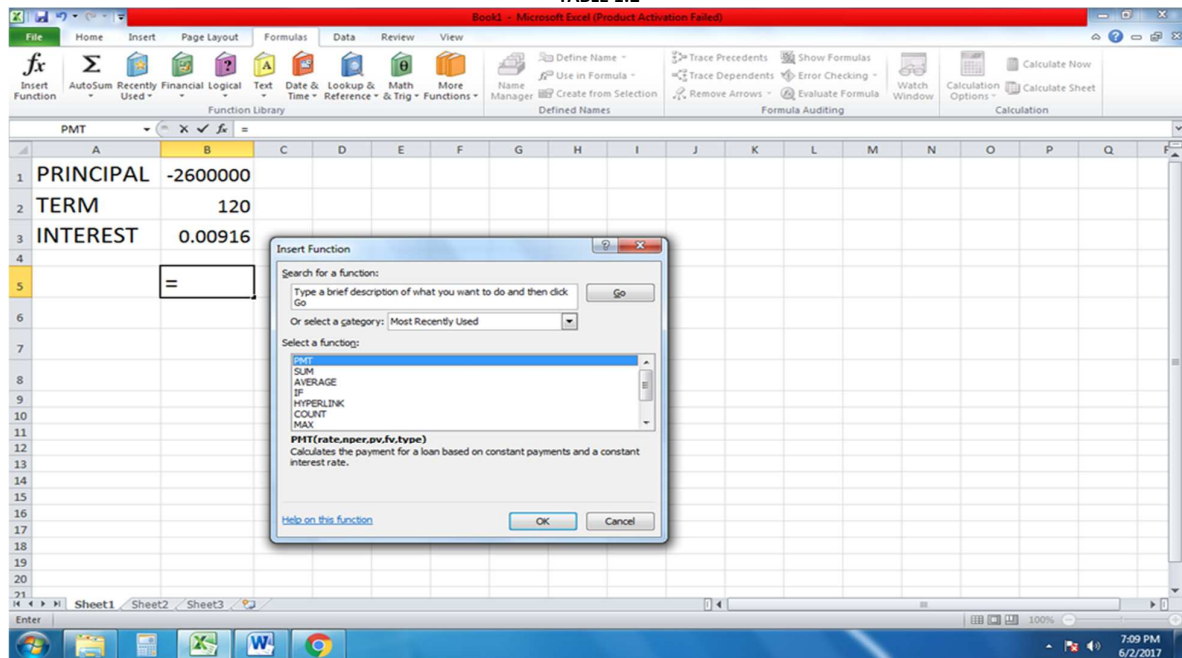


TABLE 1.3

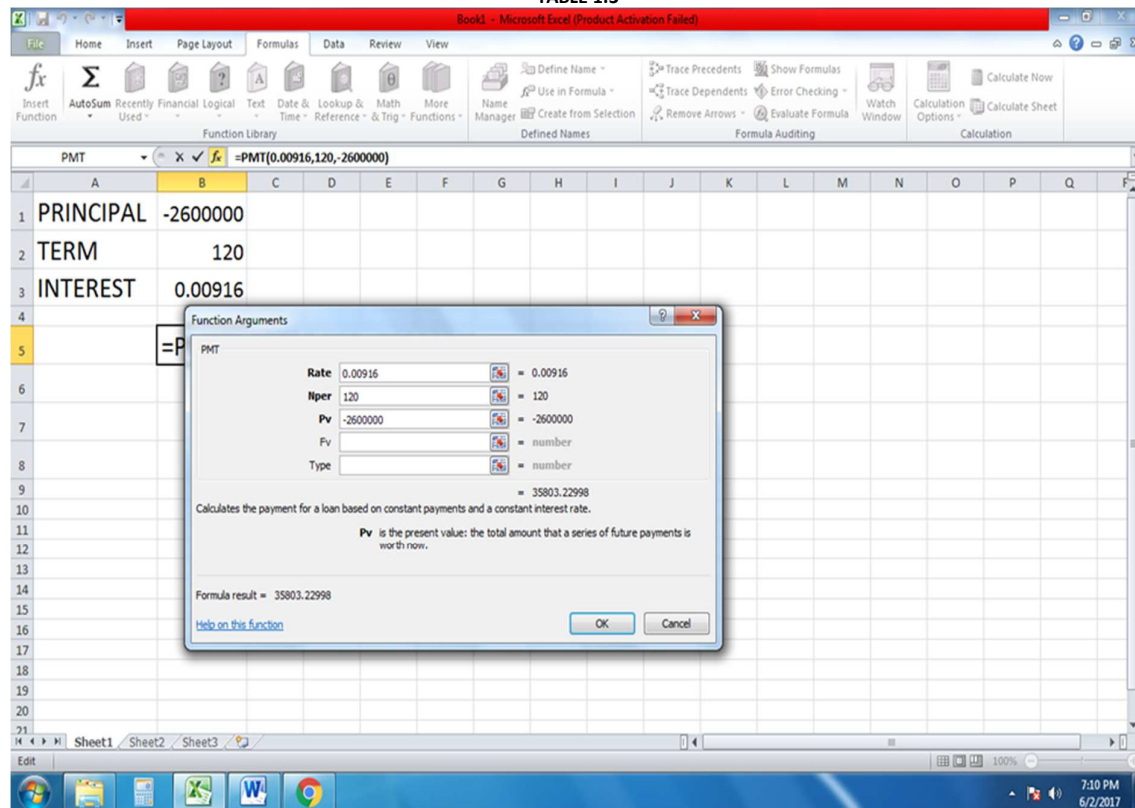


TABLE 1.4

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	PRINCIPAL	-2600000															
2	TERM	120															
3	INTEREST	0.00916															
4																	
5		\$35,803.23															

The monthly interest on loan is Rs. 35803.23

**Monthly payment on loan is 35803.23.**

The difference between the monthly payments of lease is 15277.7 and loan is 35803.23. So it is clear from the example that a person opting for lease has to pay less as compared to loan.

### BANKS RUNS AS CREDIT RATIONING

The theoretical literature on credit rationing in the deposit market (bank runs) has some features that distinguish it from the literature on credit rationing in the loan market. The ultimate causes of deposit market rationing can be similar to, or very different from, the causes of loan market rationing. Loan market rationing can reflect either information or incentive problems in the loan market or exogenous regulations. In the case of the deposit market, rationing can result either from incentive and information problems relating to the depositor-bank relationship or from exogenous liquidity needs of depositors. An alternative cause of credit rationing in the deposit market is a shock to the liquidity needs of depositors, which forces depositors to demand their funds from their banks irrespective of the portfolio performance of the banks. Diamond and Dybvig (1983)<sup>17</sup> is an example of a model of this phenomenon. Bank depositor runs are but one specific example of how financial intermediaries may be credit rationed due to creditor risk intolerance and/or liquidity shocks.

### CONCLUSION

This study has revealed that both leasing and credit rationing are two sides of a coin. Both have their own advantages and disadvantages which we had discussed in paper. When we talk about financing, banks generally lend a portion (60-80%) of the equipment or vehicle cost exclusive of soft costs such as shipping, installation etc. On the other hand, in leasing 100% financing is available including all extra costs. From the above example we also conclude that on lease we have to pay less as compare to bank loan. There are numbers of factors that affect the choice between lease and debt such as size, taxes, nature of assets and financial constraints. Lease end to be more prevalent in some industries than in others and companies tend to lease assets that are less specific, of more general usage and more liquid.

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