# Relationship Between Firms Propensity To Lease And Its Characteristics

**Mrs.Mandeep Kaur[1], Dr. Pooja Ohri[2]**

[1]Research Scholar, I.K.Gujral Punjab Technical University

[2]Director, A&M Institute Of Management

## ABSTRACT

***Leasing Industry had undergone several phases of booms and busts, undercurrents of growth, periods of excessive optimism, period of regulatory action and so on. A well developed, diversified and efficient financial system can spread risk and provide a sound base for sustainable economic development. Adverse selection and moral hazard problem that arise due to asymmetry of information is often observed in banking sector. The purpose of the paper is to examine the relationship between a firm propensity to lease and several firm characteristics: tax position, financial constraints, ownership structure, growth and size.***

**Keywords:** leasing, optimism, propensity, asymmetry, constraints**.**

## 1. INTRODUCTION

A lease may be defined as a contractual arrangement in which a party owning an asset (lessor) provides the asset, transfers 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. Corporate sector gets a comparatively advantageous source of financing in the form of leasing than of debt financing. For financially struggling companies it seems to be a better source of financing than of buying decision.Although,it has a number of drawbacks with it, still asset based financing attracts corporation to keep their debt taking capacity enhanced and leveraged comparatively low, than of debt financing .the asset based financing industry provides access to capital outside the banking sector.Through,leasing the lessee acquires for a fee over time, but the lessor retain ownership .There are both pros and cons to leasing (Krishnan,V.s and R.C.Moyer,1994)[1].It is of different types like operating, financial ,sale and leases back with residual value and bargain purchase options and a variety of tax benefits as per the tax rules of the particular economy. Leasing is often perceived a more flexible way to finance assets than traditional leasing because it can be custom-tailored in a number of ways. Different types of leasing have different forms of leasing having different accounting tax and legal treatment as a part of financial decision making (M.A and M.Levis1998)[2].leasing helps corporations to use other sources of financing to fulfill their liquidity and capital requirements. Other attractive features of lease financing include the possibility of upgrading equipment during or at the end of a lease contract as well as tax-deferral ( Canadian finance and leasing association ,2006)[3]. On the other hand, whereas a lease may binding until expiration(smith and Walkman,1985)[4].some researchers consider leasing and debt go side by side both with the relevance and irrelevance of taxation issue keeping it an academic and research issue( Ang and Peterson)[5].Interest expenses are typically higher in leasing than traditional bank lending transaction cost can be lower. Leasing has some factors that attract the customers and some factors don’t.

## 2. LEASING INDUSTRY IN INDIA

Leasing industry in India is of recent origin. It was pioneered in 1973 when for the first time ‘Leasing Company of India’ was set up in Madras. For almost seven years in the country, this company was the sole leasing company. In 1980 another leasing company known as “20th Century Leasing” came into existence. Both these leasing companies were promoted by management — qualified professionals from city bank. In 1981 four organizations, viz., Shetty Investment and Finance, ‘Paybharat Credit and Investment’, ‘Motor and General Finance’ and ‘Sundaram Finance’ joined the leasing business essentially for taking tax advantage.

The leasing industry entered the third stage in the growth phase in late 1982 when numerous financial institutions and commercial banks either started leasing or announced plans to do so. ICICI embraced leasing activity in 1983 where-after the trickle soon developed into flood and leasing became the new gold mine. Leasing is by far the fastest growing financing option for construction equipment segment. Cross border leasing is very common now a day due to technological advancements. Construction equipment leasing market offers both operating and finance lease products.

However, the penetration of leasing as a mode of financing in India is low compared to other nations. The major players in this market are banks, NBFCs, and captive financiers. (Construction equipment leasing report 2016 by vinod Kothari consultants P.Ltd.)

## 3. REVIEW OF LITERATURE

Previous studies have examined the decision whether to lease or purchase different types of assets. There is nothing new about leasing, so it might not be possible to establish something totally new. Smith and Wakeman (1985)[4] reasoned that there are differences in the benefits of leasing depending on the concentration of lease in certain industries and for certain assets. They demonstrated that taxes are important to identify potential lessee and lessors. As leasing can reduce the total tax bill when effective marginal tax rate differs between the lessee and lessor. They further identify several non-tax incentives to lease. Myers, Dill and Bautista (1976)[6] and Essien (2013)[7] view leasing and long term debt as capable of reducing profitability. It is priory expectation that increased use of lease financing brings about less reliance on debt financing which call for cursory investigation. Hassan Alam,Ali Raza and MuhammadAkram[8] suggest to allow the leasing companies to execute the business of land and residential apartment and buildings so that they can earn better profits and enable the small entrepreneur with financing.Ezzell and Vora (2001)[9] found that external financing cost related to asymmetric information will reduce leasing. They also examine that direct lease announcement returns were unrelated whereas sale and lease back announcements returns were negatively related to the lease tax rate. Adedeji, A and R.C Slapleton (1996)[10]suggest a negative relationship between the use of finance lease and debt. Furthermore, the growth of firms and their leasing tendency are negatively correlated comparative to the week association of size of the firm. Adams and Hardwick (1998)[11]found that leasing decisions of UK companies was determined by leverage, firm size, ownership structure and investment opportunities set. They reported a negative relationship with size up to a certain threshold and a positive relationship between the propensity to lease and leverage and ownership structure. Anna Bialek,Jaworska,Natalia Nehrebacka (2016)[12]they found that medium sized and large companies are more inclined to finance their assets with capital lease than smaller business and that large companies use more capital lease than small businesses do. They also found that firm leasing is driven by tax saving in Poland with the interest rate addressed in their model. They observed an increased propensity to lease in firm with higher tax liabilities; this was owing to the opportunities of reducing tax obligations through the leased assets depreciation and tax deductible lease interest.

## 4. METHODOLOGY

Mostly firms prefer leasing over buying due to its merits like confronting the scarcity of financing, avoiding the threat of obsolescence and when it is for short duration assets are required and so on .This research is an investigation of the question that firms characteristics and effect on lease. As, discussed above, there is a model that explained whether a firm leasing propensity affect the function of the all characteristics The leasing share ratio varies from 0 to 1,and is calculated as follows:

$$\text{Total Leasing Share} = \frac{\text{Leased asset expensed}}{\text{Leased asset expenses + purchased asset expenses}}$$

Total Leasing Share: $\alpha^0 + \beta_1$ownership structure + $\beta_2$ growth+$\beta_3$ tax position+$\beta_4$ size+$\beta_5$ leverage +€ (error term)

## 5. PROPENSITY TO LEASE MODEL

A statistically based model designed to identify those business attributes that are predictive of likelihood to lease.

**BENEFITS:** A powerful tool to help the companies and its members:
1. Identify their best prospects
2. Reduce marketing cost
3. Improve rate of interest on marketing campaign
4. Utilize resource more efficiently

**The propensity to Lease (PTL) Index generated by D&B's predictive Model keeps identify opportunity.**
1. Businesses that score a higher PTL are those most likely to utilize lease financing thus represent opportunity for leasing companies.

2. The percentage of businesses that lease is another measure of opportunity.

Using these two elements together helps uncover market ripe with opportunity segments with both a high PTL and percentage of businesses that lease represent the greatest opportunity for lessors.

### 5.1 MODEL VARIABLES

**(These are the variables used in the Model, Listed in Descending order of importance)**

**TABLE 1**

| Model Variables | Variable Definition | Impact on Model |
|---|---|---|
| AGE 1 | Company age less than 2 years | Negative |
| SINGLE | Single owner business | Negative |
| SIC_FIR | Financial/Insurance/Real Estate Industry | Negative |
| SIC_SERV | Service industry | Negative |
| SIC_CONS | Construction industry | Negative |
| SUPPORT | DUNS Support Records | Negative |
| OPRESIND | Operate from Residence | Negative |
| PIO_SIC | Bottom Performing10% SIC | Negative |
| Q75_SIC | Top 25% Performing SIC | Positive |
| WEAK | Company Condition Weak | Negative |
| LOWSTATE | Lowest Performing States | Negative |
| PACIFIC | Pacific Region | Positive |
| P90_SIC | Top 10% Performing SIC | Positive |
| HICREDN | High Credit | Positive |
| INQNEW | Number of Regular Enquiries | Positive |
| INTERCEPT | Intercept Term | Negative |

**Negative Impact:** Fewer lessees possess this attribute than the portfolio average.
**Positive Impact:** More lessees possess this attribute than the portfolios average.

### 5.2 The Gain Index is a Measure of the Model Effectiveness

**TABLE 2**

| Model Decile | % of Total population | Cum.%Total Lessees | Gains Index |
|---|---|---|---|
| 1 | 10 | 36.2 | 362% |
| 2 | 20 | 49.2 | 246% |
| 3 | 30 | 59.9 | 200% |
| 4 | 40 | 73.8 | 185% |
| 5 | 50 | 80.8 | 162% |
| 6 | 60 | 88.1 | 147% |
| 7 | 70 | 91.4 | 131% |
| 8 | 80 | 94.3 | 118% |
| 9 | 90 | 98.4 | 109% |
| 10 | 100 | 100 | 100% |

**Without Model:** If 10% of businesses are targeted; only 10% of all prospective lessees can be targeted.
**With Model:**

- If 10% of businesses are targeted, 36.2% of all prospective lessees can be targeted.
- The Model is 362% more effective in identifying lessees than random selection.

**4.3 CASE STUDY**

- The following case studies' demonstrate the effectiveness of D&B 's propensity to Lease Model
- The subject of the case study differ in that:
- They offer different types of equipment
- The average lease ticket sizes vary, ranging from Rs, 5000 to Rs. 100000.

**CASE 1:**

- Self-funding commercial equipment leasing company.
- Specializes in small to medium ticket leasing
- Funds leases on a national basis

**CASE 2:**

• Leases business equipment, including computer hardware & software, Office /technical furniture, material handling equipment and industrial /manufacturing Equipment.

**CASE 3:**

- Specialize in vendor leasing of data processing equipment, including Computers and telecommunications products.
- Provides equipment manufacturers with leasing and marketing programs

**CASE 4:**

- Operates as a truck lease company, leasing and renting all types of trucks, including tractors and trailers, without drivers.
- Its territory is the northeast and mid-western regions.

The Model correctly classified Businesses processing the same Characteristics as Lessees in the Top Deciles.

**TABLE 3**

| Model Decile | % of Total Population | % of Lessees Identified By Model | | | |
|---|---|---|---|---|---|
| | | Case 1 | Case 2 | Case 3 | Case 4 |
| 1 | 10 | 37.9 | 49.0 | 48.4 | 59.3 |
| 2 | 20 | 48.8 | 59.3 | 57.0 | 77.7 |
| 3 | 30 | 57.6 | 67.7 | 65.8 | 83.9 |
| 4 | 40 | 74.6 | 79.6 | 72.0 | 88.6 |
| 5 | 50 | 80.0 | 84.6 | 75.8 | 91.3 |
| 6 | 60 | 88.0 | 90.8 | 80.6 | 94.5 |
| 7 | 70 | 90.1 | 92.9 | 85.9 | 96.7 |
| 8 | 80 | 94.1 | 95.7 | 95.6 | 99.3 |
| 9 | 90 | 99.6 | 99.6 | 99.8 | 99.9 |
| 10 | 100 | 100.0 | 100.0 | 100.0 | 100.0 |

- The model effectiveness is demonstrated by the fact that it scores most actual lessees from the forth case studies.in the top decile.
- In the above chart, the percentage of the total population captured in the top decile ranges from 37.9% to 59.3%.
- The Model Performs well for all cases
- On average, the model scores 48.7% of lessees in the top decile from the fourth firm. The capture rates of the lessees by the top decile ranges from 37% to over 59%.
- On average, the model scores over 64.5% of all lessees in the top two decile, with the individual capture rate ranging between 48.8% to 77.7%.

## 6. DETERMINANTS OF LEASING TENDENCY AND THEIR EFFCTS

### 6.1 OWNERSHIP STRUCTURE

Leasing can help the owner to reduce the risk. Capital asset ownership makes it more difficult for the owner to reduce the risk by diversifying. Mike Adams and Philip Hardwick11study whether leasing decisions of UK companies is determined by four specific characteristics. They find that there is positive relationship between the propensity to lease and both leverage and ownership structure. Smith and Wakeman (1985)4 argue that capital asset ownership makes it more difficult for the owner to diversify the risk .Leasing asset can mitigate this problem. Shareholders of closely held companies can lessen the risk by leasing asset.so the lessor bear some of the risk associated with the lessees use of the asset.

### 6.2 GROWTH

Firms that have growth opportunities always need investments. Growth may be affected by the use of lease financing as they avoid the under investment and growing firm, which would prefer cash holding by selecting lease financing with low down payment rather than buy. The biggest challenge for managers is to find the right opportunities identification. But when firms are faced with the problem of finding the best way to finance investment where it needed to avail that opportunity.

### 6.3 TAX POSITION

Iamnuelid.Mnzava13 analyze in the paper the significance of cooperation tax as one of the factors that influence leasing activities .The results shows that in absence of dummy variable that capture the influence of industry to which the company belongs, debt rate, size, liquidity and growth variables significantly influence the lease rate and also that lease and debt are sensitive. The result show further that tax is an important factor influencing the leasing activities and its influence is significant irrespective of the sector to which the company belongs. He suggests that any effort to promote leasing activities should focus on the tax incentives and the availability of debt financing as alternative to leasing.

According to committee formed by central board of direct taxes or CBDT, in finance lease for tax purposes, no depreciation claim is preferred .Moreover the arrangement is treated as operating lease for tax purpose with a deduction to the lease charge being claimed. For operating lease, income/expenses from leases are recognized over the lease on a straight line basis. However for tax purpose, lease rentals are offered to tax claimed as tax deduction in the year when the contractual liability accrues.

### 6.4 SIZE

The lower the quality of information a firm can operates and future prospects the more costly it will be smaller firms have to lease more assets as the asset substitution problem for smaller firms more than larger firms. Lasfer M (2007)14 reported a negative relation between firm size and leasing while suggesting that smaller firms are much more in need for leasing than larger firms. Sharpe and Nguyen (1995) 15 explained the negative relationship between operating lease share and the total leasing share but they found positive association between the size and the ratio of capital lease to property, plant and equipment. Some authors reported significantly negative relationship between leasing and size .On the contrary some came up with positive relation between total leasing and size .Overall the result on the effect of size on leasing is minded and therefore the predicted relationship is sign of the indeterminate.

### 6.5 FINANCIAL CONSRTAINS/ LEVERAGE

Eisfeldt Andriano Rampini (2007)16 study that benefits 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. They also suggest a model in which leasing increases debt capacity. Debt is the most important ingredient of capital structure and financing decisions. Managing the finance is the priority area for the corporate sector for their smooth running of the business .Leasing has a direct effect on the debt capacity of companies. James Ang and Pamel Peterson5concluded that leases and debt are substitutes. An increase in one should lead to compensating decrease in the other .Leasing could be used to handle the debt situation and can prove fruitful especially for those companies which cannot easily take debt because do not have the right access to debt markets. (Schallhein.J.Kwells and Whitby 2007)17found that there are also some alternative explanations e.g. (Adams and Hardwick 1998) found a positive relationship between the propensity to lease and leverage but they argue that it is due to the off balance nature of leasing.

## 7. CONCLUSION

Leasing industry has shown overall progress in India. The finding suggest that there is a positive relationship between the propensity to lease and both leverage and ownership structure. Qamar UZ zaman, rokaya saeed& muzhar javed (2012)18 revealed through regression analysis that firms size and growth have negative relation with firms leasing tendency.at last concluded that increase in firm size led them to buy assets than of leasing, similarly financial constrained companies take leasing as a complementary source financing as it enhances their debt taking capacity and reduce default risk.

## REFERENCES

[1] Krishnan.V.s and R.C.Moyer., (1994)"Bankruptcy costs and the Financial leasing decision. Financial Management, 23(2):31-42
[2] Lasfer .M.a.,and Levis (1998)" The determinants of the leasing decision of small and large companies".Europeon Financial Management ,Vol.4,No.2,PP-159-84
[3] Canadian Finance and leasing Association (2006)" CFLA backgrounder on the asset based financing equipment & vehicle leasing industry in Canada".avaialable at www. CFLA.acflca/files/public/CFLA_Backgrounder _Jan 06.pdf/(accessed 29Jan 2010)
[4] Smith .c.w and L.M.Wakeman.,(1984)"Determinants of corporate leasing policy".The journal of Finance,40(3):895-908
[5] Ang.J and P.P.Peterson.,(1984)" The Leasing Puzzle.Journal of Finance.39(4):1055-1065
[6] M.yers.S.C.,Dill.D.A and Bartista.A.J(1976)" Valuation of financial Lease Contracts .Journal of Finance.31,799-819
[7] Essien .E.E.,(2013) " The Prospects and Challenges of market segmentation.Practice in the Equipment Leasing Industryof Algeria."Journal of Business theory and Practice.3(c),22-34
[8] Hassan.Alam.,Ali.Raza and Muhammad .Akram.,(2011)" Financial Performance of Leasing Sector:The case of Pakistan".Interdisciplinary contemporary Research in Business,Vol.2,No.12
[9] Ezzell.J.R and Vora.P.,(2001)" Leasing Versus Purchasing direct Evidence on a copropration's motivationas for leasing and consequences of leasing."The Quarterely Review of Economics and Finance.Vol.41,PP.33-47
[10] Adedeji.A and R.C.Stapleton.,(1996)" Lease ,Debt and taxable capacity."Applied Financial Economics,6:71-83
[11] Adams.M and Hrdwick.p.,(1998)" Deteminants of the Leasing decision in United Kingdom Listed Companies". Applied Financial Economics,Vol.8,PP487-94
[12] Anna .Bialek., Jaworska.Ntalia and Nehrebecka.,(2016) " Determinants of polish enterprises (propensity to lease).Working Papers.NO.7/2016(198)
[13] Mnzava.D.Imanueli.,(Jan1,2008)" The significance of Tax as a Determinants of Leasing:Evidence from UK Tax changes".Asia Pacific .Journal of Management Research and Innovation.
[14] Lasfer.M.,(2007)"On the financial drivers and implications of leasing real estate assets: The DonaldsonssLasfers curve."Journal of corporate real estate.9(2):72-96
[15] Sharpe.S.A and Nguyen.H.H.,(1995) " Capital Market imperfections and the incentives to lease.Journal of Financial Economics.Vol.99,PP 271-94
[16] Eisfeldt.A.L and Rampini.A.A.,(2009)" Leasing Ability to Responssess and Debt Capacity". Review of Financial Studies .Vol.22,No.4,PP 1621-48
[17] Schallhein.J.k.Wells and R.Whitby.,(2007)" A test of substitution between debt and leases using sales and lease back transactions"Retrieved December 6 2012,from http://papers.ssrn.com/so13/papers.cfm?abstract-id-1114882/.
[18] Malik .Zaman.UZ.Qamar.,saeed.Rokaya and Javed.Muzhar.,(2012) " Firm Characteritiscs and Leasing tendency of Pakistani Listed Companies".Middle East Journal of Scientific Research .April 2012.