Aspects Regarding the Leasing Cost

Teodor HADA* a
a1 Decembrie 1918 University, Alba Iulia, Romania,

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ABSTRACT

The paper aims to present legal aspects regarding leasing in Romania, and to take a look at the characteristics of the operational and financial leasing. The costs of the financial and operational leasing are also analyzed, as is the case study that approaches the cost of a bank loan. By using three examples of a real company, we wish to identify the components for each type of leasing and for the bank loan. The actuarial cost of leasing is determined with the help of an Excel method, which was adapted for this type of equation. By the end of the article, we wish to prove that leasing is beneficial for economic agents.

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1. Introduction

The current paper approaches leasing in its first section where the global leasing market is presented, as are the provisions of IAS 17 and the Romanian legal framework regarding leasing. Other tackled themes include the types of leasing and their identification elements. The article continues with the presentation of the financing decision through leasing with the help of the actuarial cost of leasing criterion. We will determine the costs of operational leasing, of financial leasing and of the long term bank loan. At the end, we will compare these three types of costs, making the financing decision in accordance with the lower actuarial cost.

Regarding the current state of decision-making in terms of leasing, after conducting a research at economic agents and leasing companies, we noticed that decisions were made in accordance with the actual costs, without taking into account the actuarial cost of leasing.

The paper is structured in two parts, namely aspects regarding leasing and the leasing cost. The scientific contribution of this article lies in the fact that three real cases of a company are presented, for which we have identified the components of the costs for each type of leasing, as well as for the bank loan. The method of solving equations for the actuarial costs of leasing is the Excel method, which was adapted for this type of equation. It is recommended to make the financing decision through the actuarial cost of leasing, and not by taking into consideration the actual leasing costs and the costs of the long term bank loan.

Regarding the bibliography used for this article, we turned to Romanian authors and books that revolve around the reality in our country, but, on a global level, there are many books and studies published on this subject because the practice of leasing is well established in most countries of the world, and its benefits vary widely depending on the national accounting standards and tax regulations.

2. Leasing

The current economic crisis in Romania influenced the reduction of financing through leasing. However, leasing remains an important source of long-term financing. Thus, “the global leasing market” generates 570 billion USD annually from new lease agreements, of which 240 billion USD are generated on the North American market and 230 billion USD on the European market [Cornel Coca Constantinescu, Financial Leasing. Reality and Perspective, Economică Publishing House, Bucharest, 2006, p. 23].

In finances, leasing is defined as: a contract technique of medium-term credit used by a firm – called leasing company (lessor) – to purchase at the request of a client (lessee) property assets with the purpose of renting these assets to the client for a determined period of time and in exchange of a payment of royalties (rent). When the contract expires, the lessee may choose to return the asset to the leasing company, to buy it at a price (residual value) determined by the contract or may ask to renew the leasing contract.

* E-mail addresses: teohadauab@yahoo.com (T. Hada)
The International Accounting Standards 2001 cover the main changes of IAS17 revised in 1997 [revised is written by the International Accounting Standards Committee and it regulates the leasing operations] regarding the definition of leasing, which states that leasing is a contract used by the lessor to grant the lessee the right to use an asset in exchange of a rent paid by the lessee. IAS17 (revised) changes the definition, replacing the term "rent" with "payment or a series of payments".

In Romania, leasing was regulated by Government Ordinance no. 51/1997, republished in Official Gazette of Romania no. 9/12.1.2000 and the Tax Code.

Article 1 stipulates that through leasing operations, a party called financer/lessor grants for a determined period of time at the request of a second party, called user, the beneficial ownership for an asset in exchange for a periodic payment called leasing rate. At the end of the leasing period, the lessor has to oblige with the right of the user to purchase the asset, to extend the leasing contract or to terminate the contractual relations. The user has the opportunity to choose between buying the asset before the end of the leasing period if the sides agree to this and if the user pays all the obligations under the contract.

Law no. 99/1999 defines the leasing operations in two ways: financial leasing and operational leasing.

- The risks and benefits associated with ownership rights pass to the user when the leasing contract is signed;
- The parties have expressly stipulated that at the end of the leasing contract the ownership rights for the asset go to the user;
- The user may choose to buy the asset, and the purchasing price will represent 50% of its entry or market value at the time the option is expressed;
- The use period of the asset within the leasing system covers at least 75% of the normal period of use of the good (leasing contracts can’t be signed for a period of less than a year), even if the ownership right is not transferred at the end.

Operational leasing is the operation of leasing that doesn’t meet any of the conditions mentioned above. This type of leasing has a cancellation clause that provides the user with the opportunity to give up the rent and to return the good before the leasing contract expires.

The identification elements for financial leasing are the leasing rate, which represents a share of the value of the purchased good, and the leasing interest. In this type of financing the acquisitions of fixed assets are treated as investments, being subjected to depreciation (art. 20 of Government Ordinance no. 51/1997, republished).

The depreciation rate calculated according to the legal norms in force and the benefit established between the contracting parties are the identification elements for operational leasing (art. 20 of Government Ordinance no. 51/1997, republished).

The leasing contract is signed between parties and includes the elements established by articles 6, 7 and 8 of Government Ordinance no. 51/1997 with subsequent amendments. Leasing companies, which are Romanian legal entities, are founded and function according to Law no. 31/1990 republished and are required to have a minimum capital of 500 million lei subscribed and fully paid-in at the time the company is started.

Chapter VII of Government Ordinance no. 51/1997 stipulates the following:
- The provisions of the current ordinance are applied even when a legal person sells its industrial equipment to a leasing company in order to use it in a leasing system with the stipulation of a mandatory repurchase;
- In Romania, in the case of financial or operational leasing contracts, the incomes earned by non-residents as interest or royalty are taxed in the system pay-as-you-earn;
- The insurance expenses for a good under a leasing contract are deductible for the party forced by contract to pay the insurance premium.

3. The leasing cost

The decision to turn to leasing is made with the help of the leasing cost. The leasing cost represents the amount the lessee is willing to pay in exchange for the right to use the acquired good. The elements of the leasing cost depend on the type of leasing.

Therefore, the cost element for operational leasing is the royalty, which includes rent and maintenance and insurance expenses included in the rent. In terms of depreciation, it is covered by the lessor and the lessee covers the opportunity cost "equal with the financial loss of depreciation". The calculus formula for the operational leasing cost is [Ion Stancu, Finances, Fourth Edition, Economică Publishing House, Bucharest, 2007, p. 635]:

\[
E = \sum_{i=1}^{n} \frac{(1 - i)Red + i \cdot A + VR}{(1 + d)^t} \quad (1)
\]
This formula is based on the principle of equality of the financing amount’s current values for the payment of royalties (RED) and the depreciation influenced by taxation and the residual value (VR).

Where:  
- E = the acquisition and installation cost for the rented equipment;  
i = the income tax rate;  
d = the leasing cost for the lessee, or the internal rate of return for the lessor;  
t = time (whole years)

For financial leasing, the calculus formula of the financial leasing cost is given by the value of d in the formula [Ion Stancu, Finances, Fourth Edition, Economică Publishing House, Bucharest, 2007, p. 635]:

\[
E = \sum_{i=1}^{n} \frac{(1-i)RED_t}{(1+d)^i} + \frac{VR}{(1+d)^n} \quad (2)
\]

where \((1-i)RED_t = (1-i)(A+RL_t) = A(1-i)+RL(1-i)\)

In this case, the royalties paid annually are an operating expense deductible from the profit tax, including the depreciation of the equipment paid by the lessee.

After an investigation to a bank and to an economic agent, we are considering the purchasing price of a truck with a total value of 56,100.00 lei for a period of 5 years, total profitability 12,207.83 lei, residual value of 2,640.00 lei and an administration fee 42.00 lei.

Regarding the level of other operational leasing taxes, these amounts may be: the insurance premium, pollution taxes etc., as well as the administration fee that is paid at the beginning and is not the object of the operational leasing’s actuarial cost.

We should also mention that an advance is usually paid when signing a leasing contract and it reduces the expense with the interest of the operational leasing’s actuarial cost. If the leasing contract is signed in a foreign currency, the payment rates may vary in accordance with the exchange rate and these variations are recorded in accounting as differences of currency.

The profit tax level is 16% and the depreciation period is 5 years (annual rate 11220). The profitability established by the lessor for operational leasing could be assimilated to the interest in the case of financial leasing [Victor Dragotă et al., Practical Approaches of Business Finance, IRECSON Publishing House, Bucharest, 2005, p. 361], which, together with the depreciation established by the lessor, compose rent or royalty and is in accordance with the profitability wanted by the investor for an average rate of return on the market plus the risk premium granted to those who invested in this field.

The bills payable book for operational leasing may be drawn up depending on the method used for the calculus of instalments. Thus, three calculus methods could be used: reimbursing the loan in equal annuities, reimbursing in equal series and the method of sole depreciation.

From the presented data it results that the company is reimbursing the loan in equal annuities, which has advantages in terms of not covering the financial expenses. The level of the reimbursed capital is the same as in the first month and the interest level decreases monthly.

Another reimbursing method of the loan is equal series, which implies reimbursing an equal amount each year and the interest decreases yearly, meaning the financial expenses will be higher at the beginning of the period.

The method of sole depreciation is characterized by the fact that at the end of each year the creditor pays interests for the total volume of the loan, and the credit is reimbursed each year. A feature of this method is the fact that the financial effort of the final year is high, which is why companies open a sinking fund in order to set aside money to pay loans.

The bill payable book for equal annuities is:

<table>
<thead>
<tr>
<th>Credit simulation - bills payable book (generated at 06-09-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total borrowed: 56,100.00 RON</td>
</tr>
<tr>
<td>Start date: 06-09-2010</td>
</tr>
<tr>
<td>Maturity date: 06-09-2010</td>
</tr>
<tr>
<td>Real annual interest rate 13.75%</td>
</tr>
<tr>
<td>instalment+ interest (for an exact number of days) equal .15 % of average balance days/year</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Payment Date</th>
<th>Instalment</th>
<th>Interest</th>
<th>Fee</th>
<th>Instal+Intere.+Fee</th>
<th>Account balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>06-10-2010</td>
<td>710.01</td>
<td>514.25</td>
<td>84.15</td>
<td>1308.41</td>
<td>55,389.99</td>
</tr>
<tr>
<td>2</td>
<td>08-11-2010</td>
<td>665.74</td>
<td>558.52</td>
<td>83.08</td>
<td>1307.34</td>
<td>54,724.25</td>
</tr>
</tbody>
</table>

63
The data presented above show us the following:

The method used for reimbursement is constant annuity for instalments and interest, as follows:

- first instalment: 710,01+514,25=1224,26
- second instalment: 665,74+558,52=1224,26

The interest and the fees are calculated for the current account balance (ex. Interest
56100*0,11/12=514.25)

Annuity is calculated with the formula:
\[ A = \frac{K \cdot D}{1 - (1 - D)^t} \]

Where:
- A - annuity (consisting of amount + interest);
- D - interest level;
- t - number of years;
- K - the amount to be reimbursed;

Example:
\[ A = \frac{56100 \cdot 0.11}{1 - (1 - 0.11)^{12}} = \frac{6171}{1 - (1-0.11)^{12}} = \frac{6171}{1 - 0.59345} = \frac{6171}{0.40655} = 15178.75 \times 12 = 1264.9 \text{ compared to } 1224.26, \text{ the difference comes from the methodology or from approximations made by the bank.} \]

The actuarial cost of operational leasing calculated according to formula (1) is:
\[ \frac{56100 + 2640}{(1 + d)^2} \]
\[ = \frac{562640 (1 - 0.16) + 11220 \times 0.16 + 15460.93(1 - 0.16) + 11220 \times 0.16}{(1 + d)^2} + \]
\[ = \frac{15273.17(1 - 0.16) + 11220 \times 0.16 + 15063.07(1 - 0.16) + 11220 \times 0.16}{(1 + d)^2} + \]
\[ = \frac{14828.22(1 - 0.16) + 11220 \times 0.16 + 2640}{(1 + d)^2} + \]
\[ By solving the equation, we determine the value of d=8.935% \]

For operational leasing we may also use the calculus method of reimbursement through equal instalments, therefore, the instalment is determined by dividing the amount 56100:5:12=935, and the interest is calculated for the initial balance 56100*11:12=514.25 and so on.

Bills payable book:
Credit simulation - bills payable book (generated at 06-09-2010)

Total borrowed: 56,100.00 RON  
Start date: 06-09-2010  
Maturity date: 06-09-2010  
Real annual interest rate: 13.75%  
in instalment+interest (for an exact number of days) equal .15 % of average balance 
days/year

No. | Date       | Instalment | Interest | Fee   | Instal+Inter.+Fee | Account balance |
--- |------------|------------|----------|-------|-------------------|-----------------|
1   | 06-10-2010 | 935.00     | 514.25   | 84.15 | 1,533.4           | 55,165.00       |
2   | 08-11-2010 | 935.00     | 556.25   | 82.75 | 1,574.00          | 54,230.00       |
3   | 06-12-2010 | 935.00     | 463.97   | 81.35 | 1,480.32          | 53,295.00       |
4   | 07-02-2011 | 935.00     | 511.96   | 78.54 | 1,525.50          | 51,425.00       |
5   | 07-03-2011 | 935.00     | 439.97   | 77.14 | 1,452.11          | 50,490.00       |
6   | 06-07-2015 | 935.00     | 24.00    | 4.21  | 963.21            | 1,870.00        |
58  | 06-08-2015 | 935.00     | 17.71    | 2.81  | 955.52            | 935.00          |
60  | 06-09-2015 | 935.00     | 8.86     | 1.40  | 945.26            | 0.00            |
Total |          | 56,100.00  | 15,914.02 | 2,566.65 | 74,580.67     |

According to formula (1), the cost of operational leasing is given by the equality:

\[
56100 + 2640 = \frac{17820.55(1-0.16) + 11220*0.16}{(1+d)^1} + \frac{16378.4(1-0.16) + 11220*0.16}{(1+d)^2} + \frac{14914.53(1-0.16) + 11220*0.16}{(1+d)^3} + \frac{13467.24(1-0.16) + 11220*0.16}{(1+d)^4} + \frac{11999.93(1-0.16) + 11220*0.16}{(1+d)^5} + 2640
\]

with the help of the Excel application [the author developed an application in Excel to solve the equation with the help of teaching assistant PhD Waimberg Dorin] it results d=8,867% is lower than 8,935% - the operational leasing cost through constant annuities.

For financial leasing, the actuarial cost is determined by relation (2), having two reimbursement methods: constant annuities or equal instalments. The bills payable book is the same. Thus,

\[
56100 + 2640 = \frac{15629.16(1-0.16) + 11220(1-0.16)}{(1+d)^1} + \frac{15460.93(1-0.16) + 11220(1-0.16)}{(1+d)^2} + \frac{15257.17(1-0.16) + 11220(1-0.16)}{(1+d)^3} + \frac{15063.07(1-0.16) + 11220(1-0.16)}{(1+d)^4} + \frac{14828.22(1-0.16) + 11220(1-0.16)}{(1+d)^5} + 2640
\]

where \(d=-22.847\%\)  
and

\[
56100 + 2640 = \frac{29040.55(1-0.16)}{(1+d)^1} + \frac{27598.4(1-0.16)}{(1+d)^2} + \frac{26134.53(1-0.16)}{(1+d)^3} + \frac{24687.24(1-0.16)}{(1+d)^4} + \frac{23219.93(1-0.16)}{(1+d)^5} + 2640
\]

where \(d=-23.567\%\)

The financing decision is favourable through financial leasing, which is cheaper because in the case of operational leasing the lessee can’t deduct the depreciation expenses due to the fact that he is not the owner of the acquired asset.

Next, the analysis must be extended, making a comparison between financing through leasing and credit financing.
For a bank credit with a 12% interest, the bills payable book for a reimbursement through annuities for the source and interest is:

### Credit simulation - bills payable book (generated at 06-09-2010)

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Instalment</th>
<th>Interest</th>
<th>Fee</th>
<th>Instal+Interest+Fee</th>
<th>Account balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>06-10-2010</td>
<td>691.90</td>
<td>561.00</td>
<td>84.15</td>
<td>1,337.05</td>
<td>55,408.10</td>
</tr>
<tr>
<td>2</td>
<td>08-11-2010</td>
<td>643.41</td>
<td>609.49</td>
<td>83.11</td>
<td>1,336.01</td>
<td>54,764.69</td>
</tr>
<tr>
<td>3</td>
<td>06-12-2010</td>
<td>741.76</td>
<td>511.14</td>
<td>82.15</td>
<td>1,335.05</td>
<td>54,022.93</td>
</tr>
<tr>
<td>4</td>
<td>06-01-2011</td>
<td>694.67</td>
<td>558.23</td>
<td>81.03</td>
<td>1,333.93</td>
<td>53,328.26</td>
</tr>
<tr>
<td>5</td>
<td>07-02-2011</td>
<td>684.06</td>
<td>568.84</td>
<td>79.99</td>
<td>1,332.89</td>
<td>52,644.20</td>
</tr>
<tr>
<td>6</td>
<td>07-03-2011</td>
<td>761.56</td>
<td>491.34</td>
<td>78.97</td>
<td>1,331.87</td>
<td>51,882.64</td>
</tr>
<tr>
<td>7</td>
<td>06-04-2011</td>
<td>734.07</td>
<td>518.83</td>
<td>77.82</td>
<td>1,330.72</td>
<td>51,148.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>08-06-2015</td>
<td>1,199.17</td>
<td>53.73</td>
<td>7.33</td>
<td>1,260.23</td>
<td>3,685.75</td>
</tr>
<tr>
<td>58</td>
<td>06-07-2015</td>
<td>1,218.50</td>
<td>34.40</td>
<td>5.53</td>
<td>1,258.43</td>
<td>2,467.25</td>
</tr>
<tr>
<td>59</td>
<td>06-08-2015</td>
<td>1,227.41</td>
<td>25.49</td>
<td>3.70</td>
<td>1,256.6</td>
<td>1,239.84</td>
</tr>
<tr>
<td>60</td>
<td>06-09-2015</td>
<td>1,239.84</td>
<td>12.82</td>
<td>1.86</td>
<td>1,254.52</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>56,100.00</td>
<td>19,073.76</td>
<td></td>
<td>77,993.66</td>
<td></td>
</tr>
</tbody>
</table>

The actuarial cost of the credit is determined by relation (1):

\[
56100 = \frac{15974(1-0.84)}{(1+d)^2} + \frac{15809.30(1-0.84)}{(1+d)^3} + \frac{15622.96(1-0.84)}{(1+d)^4} + \frac{15412.35(1-0.84)}{(1+d)^5} + \frac{15174.5(1-0.84)}{(1+d)^6}
\]

And the solution of \(d\) is: \(d=5.454\%\).

For a bank credit with a 12% interest, a credit granting fee of 15% of the balance with a reimbursement in equal instalments, the bills payable book is:

### Credit simulation - bills payable book (generated at 06-09-2010)

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Instalment</th>
<th>Interest</th>
<th>Fee</th>
<th>Instal+Interest+Fee</th>
<th>Account balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>06-10-2010</td>
<td>935.00</td>
<td>561.00</td>
<td>84.15</td>
<td>1,580.15</td>
<td>55,165.00</td>
</tr>
<tr>
<td>2</td>
<td>08-11-2010</td>
<td>935.00</td>
<td>606.82</td>
<td>82.75</td>
<td>1,624.57</td>
<td>54,230.00</td>
</tr>
<tr>
<td>3</td>
<td>06-12-2010</td>
<td>935.00</td>
<td>506.15</td>
<td>81.35</td>
<td>1,522.50</td>
<td>53,295.00</td>
</tr>
<tr>
<td>4</td>
<td>06-01-2011</td>
<td>935.00</td>
<td>550.71</td>
<td>79.94</td>
<td>1,565.65</td>
<td>52,360.00</td>
</tr>
<tr>
<td>5</td>
<td>07-02-2011</td>
<td>935.00</td>
<td>558.51</td>
<td>78.54</td>
<td>1,572.05</td>
<td>51,425.00</td>
</tr>
</tbody>
</table>
The value of \( d \) is determined by relation:

\[
56100 = \frac{1320.04(1-0.84)}{(1 + d)^3} + \frac{1320.04(1-0.84)}{(1 + d)^4} + \frac{1320.04(1-0.84)}{(1 + d)^5} + \frac{1320.04(1-0.84)}{(1 + d)^6} + \frac{1320.04(1-0.84)}{(1 + d)^7} + \frac{1320.04(1-0.84)}{(1 + d)^8} + \frac{1320.04(1-0.84)}{(1 + d)^9} + \frac{1320.04(1-0.84)}{(1 + d)^{10}}
\]

where \( d = -0.388\% \)

For a credit with a 6.5% interest, 0 fees and reimbursed in equal series, the bills payable book will look like this:

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Instalment</th>
<th>Interest</th>
<th>Fee</th>
<th>Instal+Interest+Fee</th>
<th>Account balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>06-10-2010</td>
<td>796.29</td>
<td>303.88</td>
<td></td>
<td>1,100.17</td>
<td>55,303.71</td>
</tr>
<tr>
<td>2</td>
<td>08-11-2010</td>
<td>770.66</td>
<td>329.51</td>
<td></td>
<td>1,100.17</td>
<td>54,533.05</td>
</tr>
<tr>
<td>3</td>
<td>06-12-2010</td>
<td>824.47</td>
<td>275.70</td>
<td></td>
<td>1,100.17</td>
<td>53,708.58</td>
</tr>
<tr>
<td>4</td>
<td>06-01-2011</td>
<td>799.55</td>
<td>300.62</td>
<td></td>
<td>1,100.17</td>
<td>52,909.03</td>
</tr>
<tr>
<td>5</td>
<td>07-02-2011</td>
<td>794.48</td>
<td>305.69</td>
<td></td>
<td>1,100.17</td>
<td>52,114.55</td>
</tr>
<tr>
<td>6</td>
<td>07-03-2011</td>
<td>836.70</td>
<td>263.47</td>
<td></td>
<td>1,100.17</td>
<td>51,277.85</td>
</tr>
<tr>
<td>7</td>
<td>06-04-2011</td>
<td>824.47</td>
<td>277.76</td>
<td></td>
<td>1,100.17</td>
<td>50,455.44</td>
</tr>
</tbody>
</table>

Total: 56,100.00  9,909.60  66,009.60
For a bank credit of 56100 lei, with an interest of 6.5%, without fees and reimbursed in equal instalments, the bills payable book is:

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Instalment</th>
<th>Interest</th>
<th>Fee</th>
<th>Instal+Interest+Fee</th>
<th>Account balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>06-10-2010</td>
<td>935.00</td>
<td>303.88</td>
<td></td>
<td>1,238.88</td>
<td>55,165.00</td>
</tr>
<tr>
<td>2</td>
<td>08-11-2010</td>
<td>935.00</td>
<td>328.69</td>
<td></td>
<td>1,263.69</td>
<td>54,230.00</td>
</tr>
<tr>
<td>3</td>
<td>06-12-2010</td>
<td>935.00</td>
<td>274.16</td>
<td></td>
<td>1,209.16</td>
<td>53,295.00</td>
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<tr>
<td>4</td>
<td>06-01-2011</td>
<td>935.00</td>
<td>298.30</td>
<td></td>
<td>1,233.30</td>
<td>52,360.00</td>
</tr>
<tr>
<td>5</td>
<td>07-02-2011</td>
<td>935.00</td>
<td>302.52</td>
<td></td>
<td>1,237.52</td>
<td>51,425.00</td>
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<tr>
<td>6</td>
<td>07-03-2011</td>
<td>935.00</td>
<td>259.98</td>
<td></td>
<td>1,194.98</td>
<td>50,490.00</td>
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<tr>
<td>7</td>
<td>06-04-2011</td>
<td>935.00</td>
<td>273.49</td>
<td></td>
<td>1,208.49</td>
<td>49,555.00</td>
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<td>...</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>08-06-2015</td>
<td>935.00</td>
<td>22.28</td>
<td></td>
<td>957.28</td>
<td>2,805.00</td>
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<tr>
<td>58</td>
<td>06-07-2015</td>
<td>935.00</td>
<td>14.18</td>
<td></td>
<td>949.18</td>
<td>1,870.00</td>
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<tr>
<td>59</td>
<td>06-08-2015</td>
<td>935.00</td>
<td>10.47</td>
<td></td>
<td>945.47</td>
<td>935.00</td>
</tr>
<tr>
<td>60</td>
<td>06-09-2015</td>
<td>935.00</td>
<td>5.23</td>
<td></td>
<td>940.23</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>56,100.00</td>
<td>9,403.73</td>
<td></td>
<td>65,503.73</td>
<td></td>
</tr>
</tbody>
</table>

For the calculus of \( d \):

\[
56100 = \frac{4578.31(1-0.84)}{(1+d)^5} + \frac{13845.48(1-0.84)}{(1+d)^2} + \frac{13099.82(1-0.84)}{(1+d)^2} + \frac{12363.91(1-0.84)}{(1+d)^5} + \frac{11616.21(1-0.84)}{(1+d)^5}
\]

and the value of \( d = -0.688\% \).

4. Conclusion

The main purpose of this paper was to present aspects regarding leasing in Romania and to compare three types of leasing costs, namely the operational leasing cost, the financial leasing cost and the long term loan cost, a comparison that will determine which type of leasing is the most beneficial for economic agents.

After taking a look at the characteristics of the operational and financial leasing and analyzing the costs of the financial and operational leasing, and the cost of a bank loan, we turned to three examples of credit stimulation for a loan obtained by a company through leasing, aiming to identify the components for each type of leasing and for the bank loan. The actuarial cost of leasing was determined with the help of an Excel method, which was adapted for this type of equation. By analyzing the three financing options, it resulted that the most favourable in terms of the actuarial cost is financial leasing. Although the economic crisis in Romania is not over yet and the leasing companies are mostly busy trying to recuperate goods sold through leasing, we believe financing through leasing is beneficial for economic agents.

References