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## EVALUATION OF LEASING AS A METHOD OF FUNDING INVESTMENTS IN GREEK AGRIBUSINESS SECTOR

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### *Abstract*

*Funding for acquiring assets in Greek agribusiness sector is very common and supports Greek agribusiness SME's production. Purpose of this study is evaluation of leasing as a method of financing in order to acquire assets used directly in the production process of a business of secondary Greek agribusiness sector or even vertically integrated business. Thus, research was held in December of 2012, collecting proper data from Greek banking sector and considering Tax Legislation. Selection decision of practices financing in the event of such an investment should be made after taking into consideration several factors. Proper financial evaluation of future investment is necessary, while it's too necessary to be compared the financing choices that are given in Greece. Considering Tax Legislation, Banking Practices, and Law on Leasing, financing methods were compared in reference period. Avoiding generalizations, typical examples are given, showing that leasing preceded against borrowing, considering conditions prevailing in Greece at the time. But decision making for selection of financing method is affected by factors, which may lead to either correct or incorrect conclusions for firm's interests, if evaluation is not correct or there are personal interests of decision-makers in the administration. Consequently, incentives to use leasing for financing a business can be a lot, but quite important are ownership structure, nature of investment opportunities, business risk and tax status.*

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JEL Classification Code: G11, Q14.

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### **Introduction**

Greek agricultural sector is facing multiple problems that are mainly structural and exacerbated in recent decades. Intense structural problems existing in Greek

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agricultural sector can be summarized in topics such as producers' large number associated with a large number of small farms, significant geographic dispersion of production units, small production factors mobility, main characteristics of human resources – low educational level and high average aged – cooperatives' functional problems, and imbalance between crop and livestock production.

Towards improving competitiveness of Greek agricultural production and therefore necessity of agricultural structures' improvement, some investments are essential to be made. However, investment financing is a major problem, particularly in a crisis period, for Greek agribusinesses of secondary sector. Common agricultural structural policy has contributed so far in this direction. Of course, compulsory participation of owner's equity for funding such investments drives owners to external financing, of which bank lending is the most common.

In this study, we examined a different way for financing new investments in Greek agribusiness sector. Thus, we compared leasing to bank loans. A comparative analysis and determination of best financing method was held.

## **Literature Review**

Leasing is a method, but above all, a financing technique that allows business either to obtain use of capital goods without cash flow disbursement, or to utilize any unused funds already invested in capital goods. There are two main categories of leasing that distinguished based on their characteristics: operating leasing and financial leasing. Literature has identified firms' characteristics influencing choice of financing method for acquisition of fixed assets. These are ownership structure, nature of investment opportunities, business risk, and tax status.

Ownership structure consists of elements such as percentage of shares held by top management, and existence of blockholders or not. These elements may affect incentives of top management, and effectiveness of shareholders' control in top management, as described in agency theory and mentioned by Jensen and Meckling (1976). Smith and Wakeman (1985) argued that if management holds a high degree of shares then looks for external financing at a higher degree, either financial leasing or lending. Flath (1980) supported that use of financial leasing is more likely in closely controlled firms.

Firm's investment opportunities, expressed by nature of current and future assets, affect investors' willingness to borrow. Moreover, importance of growth opportunities associated with assets, and firm's specialization affect use of financial leasing and lending. Barclay and Smith (1995) argued that firms with higher growth opportunities rely more on leasing than other lower forms of debt, for a given indebtedness amount. Williamson (1988) supported that easily reusable assets, such as equipment, are more preferable by a lessor or lender as collateral in case of external financing.

The bigger business risk is, the greater chances for conflicts of interest between shareholders and creditors are, and the higher financial distress costs are, too. Financial theory predicts that bigger business risk will tend to reduce use of fixed assets (Gikas and Hyz, 2000). Financial theory argues that firms with small or no tax liabilities are more likely to lease goods than use borrowing, while opposite is valid for fully taxed firms.

Theory of leasing had focused on differences between taxation of the lessee and the lessor as dominant concept for leasing (Bower 1973; Brealey and Young 1980; Brick Fung and Subrahmanyam 1987; Lewellen, Long and McConnell 1976; Miller and Upton 1976; Myers, Dill and Bautista 1976). Finucane (1988) showed that firms in certain industry sectors, including aviation and retail, rely on leasing more than others in various other sectors, while leasing varies relatively more across sectors of industry and relatively less within firms (Graham and Leary, 2011). Vora and Ezzell (1991) identified significant tax difference between lessee and lessor, even though tax rate of each one didn't differ necessarily.

Financial theory suggests that leases and corporate debt are substitutes. Despite this, confusion prevails in empirical level. Leasing and borrowing are two kinds of specific contractual indebtedness that both reduce a firm's potential to further borrowing (debt capacity). Thus, greater use of lease financing relates to reducing use of debt financing.

In every business, financial leasing and borrowing are substitutes, but firms used leasing use indeed higher debt levels compared with those do not use it (Marston and Harris, 1988). Deloof and Verschuere (1999) found a significant negative relationship between long-term debt and proportion Financial Leases/Total Assets known as Lease Ratio, but financial leasing isn't perfect substitute for long-term debt.

As business profitability increases, lease ratio will decrease, since they have a negative correlation. Gavazza (2010) supported that expected costs of external financing decrease with asset liquidity.

Business size has correlated significantly positive with leasing in literature, although Rampini and Viswanathan (2010) supported that business size influences debt structure but not total amount of leverage, since they found that mean debt plus lease ratios are relatively constant across firm size, but debt ratios without leases are positively correlated to business size.

Firm growth seems to have no effect on leasing, while current and fixed assets were significantly negative influenced. Variability and lease ratio had a positive correlation, since the bigger business risk is, the more businesses choose leasing. In case of default, it is rather easier for lessor to regain assets' possession than a lender to acquire collateral. Studies showed that in case of distress, collateral tied to a lease contract is easier to seize than is collateral tied to secured debt, and thus, leasing increases debt capacity (Eisfeldt and Rampini, 2009; Rampini and Viswanathan, 2010). Research conducted with use of dynamic models pointed that mentioned above benefit of leas-

ing is offset by cost of separating asset ownership and control in leasing, and thus, more constrained and less profitable businesses are more likely to lease (Eisfeldt and Rampini, 2009; Rampini and Viswanathan, 2010). Also, businesses with low leverage level are mainly those with few tangible assets, and these firms are significant users of leasing (Rampini and Viswanathan, 2010). Mehran et al. (1999) examined the effect of shareholding by top management on leasing, since theory suggests that ownership structure is an important determinant of lending and financial leasing. Theory suggests that ownership structure affects decision to lease assets. Top management that owns a large number of shares prefers to use leasing as a financing method.

## **Methodology**

Research was held in December of 2012, collecting proper data from Greek banking sector and considering Tax Legislation. Selection decision for financing an assets investment by a Greek agribusiness must be done taking into consideration several factors.

Proper financial evaluation of future investment is necessary, and also comparing financial choices given in Greece is mandatory. Considering Tax Legislation (tax and depreciation rates), Banking Practices (interest rate, discount rate, lease rate), and Law on Leasing, financing methods were compared in reference period.

For study conducted, we obtained data from banking institutions and their affiliates, which are active in leasing, tax office, National Printing Office, European Central Bank, and finally by internet. Particularly, we compare two most common methods of obtaining assets used by Greek agribusiness sector that is financial leasing and borrowing. The choice of a financing method with minimum cash outflows about same financial investment was sought. Using comparison of methods based on net present value (NPV) of cash outflows, conclusions are drawn regarding the most advantageous of financing methods.

A spreadsheet was developed and thus, present value of cash outflows was calculated for both financing methods (financial leasing and borrowing). These cash outflows were calculated using the method of present value so that is comparable, taking into consideration tax rates, depreciation rates, tax saving, interest and lease rates, while discounting was performed using interest rate after taxes.

Thus, we present some patterns, which are as far as possible nearest to Greek agribusiness reality, and we use the most common data for borrowers and lessees received from lessors and tax office. Avoiding generalizations, typical examples are given, considering conditions prevailing in Greece at the time.

## **Evaluation of Financing Methods**

Depreciation rates vary by case, and are 12% - 8% min. and 12% max. - for canning machinery, 15% - 11% min. and 15% max. - for other machinery and equip-

ment of an agribusiness, provided that specific assets used directly in the production process, and finally 20% - 15% min. and 20% max. - for office equipment.

Tax rate for fiscal year 2013 - refers to period from 01/01/2012 to 31/12/2012 - was 20% for all domestic public limited companies, limited liability companies, general and limited partnerships, cooperatives and associations, public and municipal enterprises, and foreign companies and organizations.

Lease rate, for lease payments per quarter, formed of the sum of euro interbank offered rate 3 month and spread amounting to 8.92%. Thus, EURIBOR 3M was at the level of 0.19%, while lease rate at 9.11% in December of 2012. Basic interest rate for asset investment ranged from 8.90 to 9.25%. In pattern, interest rate suitable for amount of funds loaned is considered the percentage of 11.20% (9.10% + 1.5% spread + 0.60% of Law 128/75).

In first pattern, we assume an asset investment in peaches processing firm, which seeks to obtain equipment like a new cutting machine and canning to produce stewed fruit, or a poultry processing plant that goes into obtaining equipment for cutting and packaging of fresh and frozen chicken. The value of investment is suitable for this kind of investments and amounts to € 80,000. For each funding method, we make final calculation of outflows' present value, taking into account above elements. In this calculation, tax saving known as tax shield is included, while discount rate is the after-tax cost of debt capital. The results showed that funding with leasing method was more advantageous (see Appendix Pattern 1).

In second pattern, we refer to equipment for other agribusiness firms and thus depreciation rate is at 15%. It seems that leasing is the most advantageous method in this case, too (see Appendix Pattern 2).

In third pattern, an agribusiness firm invests in office equipment with depreciation rate 20%. We are talking now about generality of specific pattern, due to non-specific use of this equipment, which it makes it more precious for leasing. Financial leasing is a rational choice in particular case (see Appendix Pattern 3).

In all mentioned above patterns, we used as discount rate - in order to find outflows' present value - the borrowing cost corresponding to particular investment, taking into consideration taxation. Therefore, we used the after tax interest rate as discount rate. Also, we ended up to the same conclusions when payments of financial leasing were done either in arrear or in advance. In appendices, we collocated patterns, but due to shortage of space, we showed only table for payments in arrears for financial leasing.

It should be noted that a difference between leasing and borrowing is mainly the time period of assets depreciation, according to Greek Law. In Greece, tax return is sent at the second quarter of each year and thus, tax saving is calculated at the same time.

## Conclusions and Discussion

Decision for funding future investments is an important point for further operation and viability of a Greek agribusiness. Thus, it should not be a rushed action without prior proper financial assessment. Avoiding generalizations, typical patterns are given showing that leasing preceded against borrowing, considering conditions prevailing in Greece at the time. Of course, financial assessment is needed for each investment.

Certainly, financial assessment is not the only factor leading to selection decision of a financing method. It is noted the existence of certain variables that are determinants of use of leasing or borrowing. Consequently, incentives to use leasing for financing a business can be a lot, but quite important are ownership structure, nature of investment opportunities, business risk and tax status.

Top management that owns a large number of shares prefers to use leasing as a financing method, while use of financial leasing is more likely in closely controlled firms.

Firm's investment opportunities, expressed by nature of current and future assets, affect investors' willingness to borrow. Moreover, importance of growth opportunities associated with assets, and firm's specialization affect use of financial leasing and lending.

The bigger business risk is, the greater chances for conflicts of interest between shareholders and creditors are, and the higher financial distress costs are, too. Financial theory predicts that bigger business risk will tend to reduce use of fixed assets.

Financial theory argues that firms with small liabilities are more likely to lease goods than use borrowing, while opposite is valid for fully taxed firms. Also, other reasons play a prominent role for specific choice decision. These reasons don't relate to a proper financial evaluation or rationality in choosing financing method, but either to the particular circumstances prevailing at the time, or to decision concerning specific business goals or management's special purposes. Such reasons may be beautifying balance sheets, listing at stock exchange, national and Community legislation.

Anyway, results of this study showed that financial leasing prevailed against borrowing for financing an investment in Greek agribusiness sector at reference time, if only we insist on proper financial evaluation.

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## PPENDICES

## PATTERN 1

INVESTMENT VALUE € 80,000 (borrowing)								
Investment (€)		80.000,00		Peaches processing firm - canning machinery				
Duration (years)		5						
No. periods per year		4						
No. Payments		20						
Depreciation rate		12%						
Interest rate		11,20%						
Tax rate		20%						
Discount rate		11,20%						
Period	Discount factors	Payments	Depreciation	Interest	Depreciation + Interest	Tax saving	Net Outflows	P.V. of n. o.
1	0,978091	5.278,319	0	2.240,000	2240,000		5.278,319	5.162,675
2	0,956662	5.278,319	0	2.154,927	2154,927		5.278,319	5.049,564
3	0,935702	5.278,319	0	2.067,472	2067,472		5.278,319	4.938,932
4	0,915201	5.278,319	9.600	1.977,568	11577,568		5.278,319	4.830,724
5	0,895150	5.278,319	0	1.885,147	1885,147		5.278,319	4.724,887
6	0,875538	5.278,319	0	1.790,139	1790,139	3.607,994	1.670,325	1.462,433
7	0,856356	5.278,319	0	1.692,470	1692,470		5.278,319	4.520,117
8	0,837593	5.278,319	9.600	1.592,066	11192,066		5.278,319	4.421,085
9	0,819242	5.278,319	0	1.488,851	1488,851		5.278,319	4.324,222
10	0,801293	5.278,319	0	1.382,746	1382,746	3.311,964	1.966,354	1.575,627
11	0,783738	5.278,319	0	1.273,670	1273,670		5.278,319	4.136,817
12	0,766567	5.278,319	9.600	1.161,539	10761,539		5.278,319	4.046,183
13	0,749772	5.278,319	0	1.046,270	1046,270		5.278,319	3.957,534
14	0,733345	5.278,319	0	927,772	927,772	2.981,361	2.296,957	1.684,462
15	0,717278	5.278,319	0	805,957	805,957		5.278,319	3.786,021
16	0,701563	5.278,319	9.600	680,731	10280,731		5.278,319	3.703,072
17	0,686192	5.278,319	0	551,998	551,998		5.278,319	3.621,940
18	0,671158	5.278,319	0	419,661	419,661	2.612,146	2.666,173	1.789,423
19	0,656454	5.278,319	0	283,619	283,619		5.278,319	3.464,971
20	0,642071	5.278,319	9.600	143,767	9743,767		5.278,319	3.389,056
21	0,628004	0	0	0	0,000		0,000	0,000
22	0,614245	0	0	0	0,000	2.199,809	-2.199,809	-1.351,221
23	0,600787	0	0	0	0,000		0,000	0,000
24	0,587624	0	9.600	0	9600,000		0,000	0,000
25	0,574750	0	0	0	0,000		0,000	0,000
26	0,562158	0	0	0	0,000	1.920,000	-1.920,000	-1.079,343
27	0,549841	0	0	0	0,000		0,000	0,000
28	0,537795	0	9.600	0	9600,000		0,000	0,000
29	0,526012	0	0	0	0,000		0,000	0,000
30	0,514487	0	0	0	0,000	1.920,000	-1.920,000	-987,816
31	0,503215	0	0	0	0,000		0,000	0,000
32	0,492190	0	9.600	0	9600,000		0,000	0,000
33	0,481407	0	0	0	0,000		0,000	0,000
34	0,470860	0	0	0	0,000	1.920,000	-1.920,000	-904,050
35	0,460543	0	0	0	0,000		0,000	0,000
36	0,450453	0	3.200	0	3200,000		0,000	0,000
37	0,440584	0	0	0	0,000		0,000	0,000
38	0,430931	0	0	0	0,000	640,000	-640,000	-275,796
TOTAL		105.566,370	80000,000	25566,370	105566,370	21113,274	84453,096	69.991,52



<b>INVESTMENT VALUE € 80,000 (financial leasing)</b>					
ARREAR					
<b>Investment (€)</b>	<b>80.000,00</b>				
<b>Duration (years)</b>	<b>5</b>				
<b>No. periods per year</b>	<b>4</b>				
<b>No. Payments</b>	<b>20</b>				
<b>Interest rate</b>	<b>9,11%</b>				
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<b>Discount rate</b>	<b>11,20%</b>				
<b>Tax rate</b>	<b>20%</b>				
Period	Discount factors	Payments	Tax saving	Net payment	P.V. of n. o.
1	0,978091	5.024,533		5.024,533	4.914,450
2	0,956662	5.024,533		5.024,533	4.806,778
3	0,935702	5.024,533		5.024,533	4.701,465
4	0,915201	5.024,533		5.024,533	4.598,459
5	0,895150	5.024,533		5.024,533	4.497,711
6	0,875538	5.024,533	4.019,627	1.004,907	879,834
7	0,856356	5.024,533		5.024,533	4.302,787
8	0,837593	5.024,533		5.024,533	4.208,516
9	0,819242	5.024,533		5.024,533	4.116,311
10	0,801293	5.024,533	4.019,627	1.004,907	805,225
11	0,783738	5.024,533		5.024,533	3.937,916
12	0,766567	5.024,533		5.024,533	3.851,640
13	0,749772	5.024,533		5.024,533	3.767,253
14	0,733345	5.024,533	4.019,627	1.004,907	736,943
15	0,717278	5.024,533		5.024,533	3.603,986
16	0,701563	5.024,533		5.024,533	3.525,026
17	0,686192	5.024,533		5.024,533	3.447,795
18	0,671158	5.024,533	4.019,627	1.004,907	674,451
19	0,656454	5.024,533		5.024,533	3.298,373
20	0,642071	5.024,533		5.024,533	3.226,108
21	0,628004			0,000	0,000
22	0,614245		4.019,627	-4.019,627	-2.469,035
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TOTAL		100.490,665	20.098,133	80.392,532	65.431,99
P.V. borrowing					69.991,52
P.V. borrowing - P.V. leasing					4.559,53

## PATTERN 2

INVESTMENT VALUE € 80,000 (borrowing)								
Investment (€)		80.000,00		Other equipment used in agribusiness sector				
Duration (years)		5						
No. periods per year		4						
No. Payments		20						
Depreciation rate		15%						
Interest rate		11,20%						
Tax rate		20%						
Discount rate		11,20%						
Period	Discount factors	Payments	Depreciation	Interest	Depreciation +Interest	Tax saving	Net Outflows	P.V. of n. o.
1	0,978091	5.278,319	0	2.240,000	2240,000		5.278,319	5.162,675
2	0,956662	5.278,319	0	2.154,927	2154,927		5.278,319	5.049,564
3	0,935702	5.278,319	0	2.067,472	2067,472		5.278,319	4.938,932
4	0,915201	5.278,319	12.000	1.977,568	13977,568		5.278,319	4.830,724
5	0,895150	5.278,319	0	1.885,147	1885,147		5.278,319	4.724,887
6	0,875538	5.278,319	0	1.790,139	1790,139	4.087,994	1.190,325	1.042,175
7	0,856356	5.278,319	0	1.692,470	1692,470		5.278,319	4.520,117
8	0,837593	5.278,319	12.000	1.592,066	13592,066		5.278,319	4.421,085
9	0,819242	5.278,319	0	1.488,851	1488,851		5.278,319	4.324,222
10	0,801293	5.278,319	0	1.382,746	1382,746	3.791,964	1.486,354	1.191,006
11	0,783738	5.278,319	0	1.273,670	1273,670		5.278,319	4.136,817
12	0,766567	5.278,319	12.000	1.161,539	13161,539		5.278,319	4.046,183
13	0,749772	5.278,319	0	1.046,270	1046,270		5.278,319	3.957,534
14	0,733345	5.278,319	0	927,772	927,772	3.461,361	1.816,957	1.332,456
15	0,717278	5.278,319	0	805,957	805,957		5.278,319	3.786,021
16	0,701563	5.278,319	12.000	680,731	12680,731		5.278,319	3.703,072
17	0,686192	5.278,319	0	551,998	551,998		5.278,319	3.621,940
18	0,671158	5.278,319	0	419,661	419,661	3.092,146	2.186,173	1.467,268
19	0,656454	5.278,319	0	283,619	283,619		5.278,319	3.464,971
20	0,642071	5.278,319	12.000	143,767	12143,767		5.278,319	3.389,056
21	0,628004	0	0	0	0,000		0,000	0,000
22	0,614245	0	0	0	0,000	2.679,809	-2.679,809	-1.646,059
23	0,600787	0	0	0	0,000		0,000	0,000
24	0,587624	0	12.000	0	12000,000		0,000	0,000
25	0,574750	0	0	0	0,000		0,000	0,000
26	0,562158	0	0	0	0,000	2.400,000	-2.400,000	-1.349,178
27	0,549841	0	0	0	0,000		0,000	0,000
28	0,537795	0	8.000	0	8000,000		0,000	0,000
29	0,526012	0	0	0	0,000		0,000	0,000
30	0,514487	0	0	0	0,000	1.600,000	-1.600,000	-823,180
<b>TOTAL</b>		105.566,370	80000,000	25566,370	105566,370	21113,274	84453,096	69.292,29

INVESTMENT VALUE € 80,000 (financial leasing)					
ARREAR					
Investment (€)	80.000,00				
Duration (years)	5				
No. periods per year	4				
No. Payments	20				
Interest rate	9,11%				
Discount rate	11,20%				
Tax rate	20%				
Period	Discount factors	Payment	Tax saving	Net payment	P.V. of n. o.
1	0,978091	5.024,533		5.024,533	4.914,450
2	0,956662	5.024,533		5.024,533	4.806,778
3	0,935702	5.024,533		5.024,533	4.701,465
4	0,915201	5.024,533		5.024,533	4.598,459
5	0,895150	5.024,533		5.024,533	4.497,711
6	0,875538	5.024,533	4.019,627	1.004,907	879,834
7	0,856356	5.024,533		5.024,533	4.302,787
8	0,837593	5.024,533		5.024,533	4.208,516
9	0,819242	5.024,533		5.024,533	4.116,311
10	0,801293	5.024,533	4.019,627	1.004,907	805,225
11	0,783738	5.024,533		5.024,533	3.937,916
12	0,766567	5.024,533		5.024,533	3.851,640
13	0,749772	5.024,533		5.024,533	3.767,253
14	0,733345	5.024,533	4.019,627	1.004,907	736,943
15	0,717278	5.024,533		5.024,533	3.603,986
16	0,701563	5.024,533		5.024,533	3.525,026
17	0,686192	5.024,533		5.024,533	3.447,795
18	0,671158	5.024,533	4.019,627	1.004,907	674,451
19	0,656454	5.024,533		5.024,533	3.298,373
20	0,642071	5.024,533		5.024,533	3.226,108
21	0,628004			0,000	0,000
22	0,614245		4.019,627	-4.019,627	-2.469,035
TOTAL		100.490,665	20.098,133	80.392,532	65.431,99
P.V. borrowing					69.292,29
P.V. borrowing – P.V. leasing					3.860,30

INVESTMENT VALUE € 80,000 (borrowing)	
Investment (€)	80.000,00
Duration (years)	5 Office Equipment
No. periods per year	4
No. Payments	20
Depreciation rate	20%
Interest rate	11,20%
Tax rate	20%
Discount rate	11,20%

## PATTERN 3

Period	Discount factors	Payments	Depreciation	Interest	Depreciation +Interest	Tax saving	Net Outflows	P.V. of n. o.
1	0,978091	5.278,319	0	2.240,000	2240,000		5.278,319	5.162,675
2	0,956662	5.278,319	0	2.154,927	2154,927		5.278,319	5.049,564
3	0,935702	5.278,319	0	2.067,472	2067,472		5.278,319	4.938,932
4	0,915201	5.278,319	16.000	1.977,568	17977,568		5.278,319	4.830,724
5	0,895150	5.278,319	0	1.885,147	1885,147		5.278,319	4.724,887
6	0,875538	5.278,319	0	1.790,139	1790,139	4.887,994	390,325	341,744
7	0,856356	5.278,319	0	1.692,470	1692,470		5.278,319	4.520,117
8	0,837593	5.278,319	16.000	1.592,066	17592,066		5.278,319	4.421,085
9	0,819242	5.278,319	0	1.488,851	1488,851		5.278,319	4.324,222
10	0,801293	5.278,319	0	1.382,746	1382,746	4.591,964	686,354	549,971
11	0,783738	5.278,319	0	1.273,670	1273,670		5.278,319	4.136,817
12	0,766567	5.278,319	16.000	1.161,539	17161,539		5.278,319	4.046,183
13	0,749772	5.278,319	0	1.046,270	1046,270		5.278,319	3.957,534
14	0,733345	5.278,319	0	927,772	927,772	4.261,361	1.016,957	745,780
15	0,717278	5.278,319	0	805,957	805,957		5.278,319	3.786,021
16	0,701563	5.278,319	16.000	680,731	16680,731		5.278,319	3.703,072
17	0,686192	5.278,319	0	551,998	551,998		5.278,319	3.621,940
18	0,671158	5.278,319	0	419,661	419,661	3.892,146	1.386,173	930,341
19	0,656454	5.278,319	0	283,619	283,619		5.278,319	3.464,971
20	0,642071	5.278,319	16.000	143,767	16143,767		5.278,319	3.389,056
21	0,628004	0	0	0	0,000		0,000	0,000
22	0,614245	0	0	0	0,000	3.479,809	-3.479,809	-2.137,455
<b>TOTAL</b>		105.566,370	80000,000	25566,370	105566,370	21113,274	84453,096	68.508,18

<b>INVESTMENT VALUE € 80,000 (financial leasing)</b>					
ARREAR					
<b>Investment (€)</b>		<b>80.000,00</b>			
<b>Duration (years)</b>		<b>5</b>			
<b>No. periods per year</b>		<b>4</b>			
<b>No. Payments</b>		<b>20</b>			
<b>Interest rate</b>		<b>9,11%</b>			
<b>Discount rate</b>		<b>11,20%</b>			
<b>Tax rate</b>		<b>20%</b>			
<b>Period</b>	<b>Discount factors</b>	<b>Payment</b>	<b>Tax saving</b>	<b>Net payment</b>	<b>P.V. of n. o.</b>
1	0,978091	5.024,533		5.024,533	4.914,450
2	0,956662	5.024,533		5.024,533	4.806,778
3	0,935702	5.024,533		5.024,533	4.701,465
4	0,915201	5.024,533		5.024,533	4.598,459
5	0,895150	5.024,533		5.024,533	4.497,711
6	0,875538	5.024,533	4.019,627	1.004,907	879,834
7	0,856356	5.024,533		5.024,533	4.302,787
8	0,837593	5.024,533		5.024,533	4.208,516
9	0,819242	5.024,533		5.024,533	4.116,311
10	0,801293	5.024,533	4.019,627	1.004,907	805,225
11	0,783738	5.024,533		5.024,533	3.937,916
12	0,766567	5.024,533		5.024,533	3.851,640
13	0,749772	5.024,533		5.024,533	3.767,253
14	0,733345	5.024,533	4.019,627	1.004,907	736,943
15	0,717278	5.024,533		5.024,533	3.603,986
16	0,701563	5.024,533		5.024,533	3.525,026
17	0,686192	5.024,533		5.024,533	3.447,795
18	0,671158	5.024,533	4.019,627	1.004,907	674,451
19	0,656454	5.024,533		5.024,533	3.298,373
20	0,642071	5.024,533		5.024,533	3.226,108
21	0,628004			0,000	0,000
22	0,614245		4.019,627	-4.019,627	-2.469,035
<b>TOTAL</b>		<b>100.490,665</b>	<b>20.098,133</b>	<b>80.392,532</b>	<b>65.431,99</b>
<b>P.V. borrowing</b>					<b>68.508,18</b>
<b>P.V. borrowing – P.V. leasing</b>					<b>3.076,19</b>

