EFFECTS OF RESIDUAL VALUE REVISION ON THE LESSOR'S RESULTS IN THE FINANCE LEASE CONTRACTS

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The finance lease is, from a financial point of view, an alternative to bank loans. The residual value is a basic parameter of the finance lease contract. It is set out according to the depreciation and amortization manner of the asset subject matter of the lease contract. In this article is analyzed the impact held by diminishing the unguaranteed residual value on the financial position and results of the lessor in the finance lease contracts.

Keywords: lease, residual value, accountancy estimation, lessor, lessee.

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1. Conceptual boundaries concerning the finance lease

Given the rapid evolution of technical progress, the finance lease became a necessary element for financing investments and for a real economic growth. The evolution of worldwide lease is connected closely to the requirements of the lease beneficiaries that act in different branches of the economy.

Seen from the point of view of the lessor, the lease operation is "buying a good for renting purposes, followed by renting it for selling purposes" The main problem of lease is "in the opposition between economic and legal" From the point of view of the French authors, Bernard Esnault and Christian Hoarau, accountancy is "a quantitative technique for collecting, processing and analyzing information concerning economic and legal events in the company's life" From a legal point of view, the asset subject matter of the lease operation is a capital for the lessor because it is part of its patrimony. From an economic standpoint, the asset is a technical capital available to the lessee. The finance lease is one of the most eloquent examples for practically applying the principle of substance prevailing over form. Through separating the ownership and exploiting the asset, the lease finances technical capital through income supplied by its exploitation.

An often-encountered form of lease is represented by triangular lease operations⁵⁸³. The initiative of such an operation belongs, usually, to the user that needs a certain good and that proceeds to analyzing the market for identifying a possible supplier and a financer. After the supplier and the user have reached an agreement for concluding a selling-buying contract, the user will supply to the financer a petition comprising data concerning the technical and functional characteristics of the good wanted, its financial status, identifying the supplier and negotiated details as regards the selling-buying contract. If the financer accepts the request, it will become part of the deal, taking over since that time the negotiation with the supplier, on its own name.

⁵⁸⁰ Matis, D., 2003 – Contabilitatea operatiunilor speciale, Editura Intelcredo, Deva, p. 251.

⁵⁸¹ Malciu, L., 2000 – Contabilitate aprofundată, Editura Economică, București, p.178.

⁵⁸² Esnault, B., Hoarau, C., 1994 – Comptabilité financière, Presses Universitaires de France, Paris, p.137.

⁵⁸³ http://www.finantare.ro/ghd-leasing.html.

2. Residual value – an important element of the finance lease contract

The elements of the finance lease must be analyzed from the point of view of International Accountancy Standards because, right now, the accountancy of a company "is marked by two basic facts: on one hand, normalizing and regulating the general accountancy and, on the other hand, developing the accountancy research" For regulating the lease, the International Accounting Standards Board (IASB) has drafted the standard IAS 17 "Lease contracts". The American standard concerning lease is FAS 13 "Lease". The Financial Accounting Standards Board (FASB) drafted it. The two international bodies launched on March 2009 a discussion on defining some common points of view for including in the future the lease in accountancy.

Both standards stated above take into account the residual value for setting out the elements of a finance lease contract. The explication is that, next to lease instalments, the residual value is a potential exit of the user's cash flow. The residual value is "real or estimated market value of the asset taken over in lease at the end of the contract" The residual value must not be mistaken for the recovery value that is "estimated value of a fixed asset at the end of its regulated life span" There must be stated that, as against the international standards the supply a separation of the residual value in guaranteed and unguaranteed, the Romanian standards do not supply this differentiation.

For the lessor, the guaranteed residual value is, according to IAS 17, that part of the residual value that is guaranteed by the lessee or by a third party not affiliated to the lessor that may, from a financial point of view, fulfill the obligations assumed through the guarantee. For the lessee, the guaranteed residual value is that part of the residual value that is guaranteed by the lessee or by a party affiliated to it.

The unguaranteed residual value is that part of the residual value whose achievement by the lessor is not certain or only a party affiliated to the lessor guarantees it. The lessor estimates this value and it is very important for it because the net investment in the lease operation will be recovered up to the level of the unguaranteed residual value. Through subtracting the guaranteed residual value from the residual value estimated by the lessor, results the estimated unguaranteed residual value. In almost all circumstances, the lessor will know the unguaranteed residual value. The unguaranteed residual value occurs when the lessee acquires an insurance policy from an insurance company against the risks remained uncovered through the insurance achieved by the lessee. To the degree the insurance made is aimed at the risk of achieving the residual value of the good, the part in the residual value that surpasses the residual value guaranteed by the lessee or by a party affiliated to it is deemed, for performing accounting calculus, an unguaranteed residual value.

3. Effects of modifications in accountancy estimates achieved by the lessor

The international standard IAS 8 "Accounting policies, modifications in accountancy estimates and errors" states in paragraph 5 that the modifications of accountancy estimates result from new information or evolutions and, consequently, they are not rectifications of errors. From now on will be emphasized the effects of modifications in accountancy estimates made by the lessor as regards the unguaranteed residual value. This value must be revised regularly because it is the basis of determining the net investment in lease.

According to the provisions in paragraph 4 from IAS 17, the net investment in lease is the gross investment in lease updated at the implicit interest rate from the lease contract. The gross

⁵⁸⁴ Colasse, B., 2000 – Comptabilité Générale, 6e Édition, Economica, Paris, p.20.

⁵⁸⁵ http://www.leaseurope.org/uploads/documents/press-releases/pr090320.pdf.

⁵⁸⁶ Achim, M.V., 2005 – Leasingul: o afacere de succes, Editura Economică, București, p. 137.

⁵⁸⁷ Constantinescu, C.C., 2006 – Leasingul financiar: realitate și perspectivă, Editura Economică, București, p. 133.

investment in lease is the sum between minimum lease payments received by the lessor and the unguaranteed residual value.

The minimum lease payments are those payments during the lease period that the lessee must or will be bound to make, excluding the contingent rent, the costs of services and the taxes that the lessor will pay and that will be reimbursed to it together with the following:

- for the lessee any amounts guaranteed by the lessee or by a party affiliated to the lessee;
- for the lessor any residual value guaranteed to the lessor by the lessee, by a party affiliated to the lessee or by an independent third party able from a financial point of view to satisfy this guarantee.

Let us take into account a finance lease contract in which a lessee takes over on 03.01.N., in lease a vehicle from a lessor, for a four-year period. The lessor purchased the vehicle from a domestic supplier, for a purchase price of lei 90 000. At the time of concluding the contract, the lessor collects a down payment of lei 18 000. The interest rate provisioned in the contract is 10%. The guaranteed residual value is lei 14 000. The unguaranteed residual value is lei 3 236. The value of minimum lease payments is set out to lei 19 000. Payments occur annually, at the end of each lease period. We will consider that the unguaranteed residual value is revised at the end of year N+2, the revised value being lei 2 236. We have in view analyzing the evolution of lessor's results following the modification in the unguaranteed residual value.

In table no. 1, the minimum lease payments are divided in two components: reimbursing part of the initial investment and reimbursing the net investment, this being compensating the lessor for its investment and services that represents a financial income. For the lessor, the minimum lease payments made by the lessee will be registered as royalty collected annually.

Table no. 1: The status of the net residual investment according to the unguaranteed residual value estimated initially

Payment date	Royalty	Interest	Reimbursed	Net residual
			capital	investment
(1)	(2)	$(3) = 10\% \times (5)$	(4)=(2)-(3)	(5)
03.01.N – Down payment	18 000	-	18 000	90 000
03.01.N+1	19 000	7 200	11 800	72 000
03.01.N+2	19 000	6 020	12 980	60 200
03.01.N+3	19 000	4 722	14 278	47 220
03.01.N+4	19 000	3 294	15 706	32 942
03.01.N+4 residual value:				17 236
- guaranteed	14 000		14 000	
- unguaranted	3 236		3 236	
Total	111 236	21 236	90 000	-

There must be stated that the lessor does not recover the amount lei 3 236 through the royalty, this amount representing the unguaranteed residual value. The lessor will recover its investment in the lease operation up to the unguaranteed residual value.

According to the estimations made at the time of initiating the lease contract and after analyzing the information in table no. 1, the following data may be determined:

- initial gross investment $Ig_0 = 111 236$ lei;
- uncollected financial income $Ifu_0 = 21\ 236$ lei;
- initial net investment $In_0 = 90~000$ lei.

By keeping the initial estimations, two years after beginning the development of the finance lease contract will be obtained the following data:

- gross investment $Ig_2 = 19\,000 + 14\,000 + 3\,236 = 55\,236$ lei;

- uncollected financial income $Ifu_2 = 8\ 016\ lei$ $Ifru_2 = 55\ 236 - (19\ 000/1, 1 + 19\ 000/1, 1^2 + 14\ 000/1, 1^2 + 3\ 236/1, 1^2) = 8\ 016\ lei;$
- net investment $In_2 = 55\ 236 8\ 016 = 47\ 220$ lei.

After revising the unguaranteed residual value, at the end of year N+2, the following data are obtained:

- revised gross investment $Ig_r = 19\,000 + 19\,000 + 14\,000 + 2\,236 = 54\,236$ lei;
- revised uncollected financial income $Ifu_r = 7842 \text{ lei}$ $Ifu_r = 54236 (19000/1, 1 + 19000/1, 1^2 + 14000/1, 1^2 + 2236/1, 1^2) = 7842 \text{ lei};$
- revised net investment $In_r = 54\ 236 7\ 842 = 46\ 393$ lei.

Data concerning the gross investment, the uncollected financial income and the net investment are registered in table no. 2.

By comparing the values obtained according to the initial estimation to the ones obtained after revising the unguaranteed residual value, adjustment of the gross investment, uncollected income and net investment are obtained that influence that financial status and results of the lessor.

Table no. 2: Adjusting the net investment at the end of year N+2

Element	Values obtained according to the initial estimation		Revision	Adjustment
	Year N	Year N+2	Year N+2	Year N+2
Gross investment (1)	111 236	55 236	54 236	- 1 000
Uncollected financial income (2)	21 236	8 016	7 842	- 174
Net investment $(1-2)$	90 000	47 220	46 394	- 826

The lessor will have to acknowledge the difference of lei 826 as loss. The gross investment in the lease operation is diminished by lei 1 000, and the unachieved financial income diminished by lei 174. All these adjustments are due to modifying the unguaranteed residual value at the end of year N+2.

The value of minimum lease payments is not altered; it is set out in the contract. Modifying the accounting estimations is made only in the structure of minimum lease payments, applying the current and future financial statements according to IAS 8 "Accounting policies, modifications in accountancy estimates and errors".

The new structure of royalties and the new values of the net residual investment, determined after modifying the accounting estimations, are supplied in table no. 3.

The lessor does not recover the amount lei 2 236, representing the unguaranteed residual value, through royalty and that is why it must be taken into account for calculating the net investment.

Table no. 3: The status of net residual investment after modifying the unguaranteed residual value

Payment date	Royalty	Interest	Reimbursed	Net residual
			capital	investment
(1)	(2)	$(3) = 10\% \times (5)$	(4)=(2)-(3)	(5)
03.01.N – down payment	18 000	-	18 000	90 000
03.01.N+1	19 000	7 200	11 800	72 000
03.01.N+2	19 000	6 020	12 980	60 200
03.01.N+3	19 000	4 639	14 361	46 394
03.01.N+4	19 000	3 203	15 797	32 033
03.01.N+4 residual value:				16 236

guaranteedunguaranted	14 000 2 236		14 000 2 236	
Total	110 236	21 062	89 174	-

Adjusting the gross investment, the uncollected financial income and the net investment following the modification of accounting estimations generations modifications in the lease operation's results for the lessor. These modifications are determined according to the data in the tables presented above and they are gathered in table no. 4.

Table no. 4: Effects of modifying the unguaranteed residual value on the lessor's results

Years	Element	Initial variant	Rectified variant	Adjustment
Year	Financial income	7 200	7 200	0
N+1	Gross result	7 200	7 200	0
	Financial income	6 020	6 020	0
Year	Expenses from diminishing	-	826	826
N+2	the net investment in lease			
	Gross result	6 020	5 194	-826
Year	Financial income	4 722	4 639	-83
N+3	Gross result	4 722	4 639	-83
Year	Financial income	3 294	3 203	-91
N+4	Expenses in the	3 236	2 236	-1 000
	unguaranteed residual value			
	Gross result	58	967	909
	Accrued financial income	21 236	21 062	-174
	Accrued expenses	3 236	3 062	-174
	Accrued gross result	18 000	18 000	0

After analyzing the data in table no. 4, can be seen that modifying the unguaranteed residual value after two years since initiating the finance lease contract generates an adjustment of the financial income, as well as of the expenses accrued by the lessor in the four years of developing the contract. In year N+2, the gross result diminishes by lei 826 after recording the expense from diminishing the net investment in lease. In year N+3, diminishing the financial income by lei 83 generates a reduction of the gross result by the same amount. In year N+4, the value by which expenses are diminished is greater than the value by which the income is diminished, and its influence on the gross result is positive. The accrued gross result is the same in both cases because the accrued expenses and the accrued income are adjusted by the same value.

4. Conclusions

The residual value is a key element for calculating lease instalments, as well as the other cost elements of the lease operation. The greater the residual value, the more increases the cost of financing and the risk assumed by the lessor is greater also. The financer can estimate the residual value according to its development strategy and its ability to manage risks.

Unlike IAS 17 that supplies a difference between the guarantees residual value and the unguaranteed residual value, the Romanian standards in the lease area do not supply this differentiation. We believe that according to the provisions of IAS 17, the lessor can revise regularly the unguaranteed residual value. Given the fact that the net investment in lease is recovered up to the level of the unguaranteed residual value, the preferred idea would be for the unguaranteed residual value to be diminished at the time of the revision. Such a modification of

the accountancy estimation, allowed by IAS 8, will allow the lessor to diminish the risk of the residual value and, at the same time, to maintain its financial results and status.

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