

LEASES – BUSINESS OPPORTUNITY OR SOURCE OF RISK? (ANALYTICAL APPROACH TO FINANCIAL SUSTAINABILITY)

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Abstract. The analysis and assessment of financial and corporate sustainability for a large number of companies are based on the information derived from financial statements and related financial indicators. Financial sustainability is a necessary condition to continue a company's activities over a short and a long period. The optimal structure and balance between assets and sources of capital are essential for financial sustainability. In this article leases are considered as a main tool for financing a company's activity. In 2022 changes in the Euribor level and increasing interest rates based on high inflation are presented as a real risk and threat to achieving sustainability. In the article the accounting analytical approach is used as a tool for assessing the impact of lease liabilities in the context of International Financial Reporting Standard 16. This standard is used when accounting for the leases of lessees. On the one hand leases is presented as an essential condition and opportunity for companies to use non-current assets without significant initial investments. On the other hand, lease is considered as a business opportunity which involves risk to the company related to increasing costs from the loan.

Keywords: financial sustainability; leases; lessees; transport companies; interest

1. Introduction

The main purpose of the European Central Bank is to regulate the financial sector through its monetary policy. The impact on the financial sector involves regulating the money supply through a set of instruments, including open market operations, interest policy and alteration of minimal reserve requirements, to maintain a symmetric inflation target and mitigate unemployment. These instruments are designed to support economic activity, prices and financial sustainability [1, 2].

Financial sustainability and stability as a main ingredient of economic sustainability is a necessary macroeconomic tool for companies to carry out activities in the short and long term [3].

Financial sustainability is an important economic characteristic of a company which maintains a good level of solvency and liquidity as an essential factor for the economic development of the company faced with various types of risks. Accomplishing a high level of solvency and liquidity is related to the achievement of optimal structure and balance between resources (assets) and their sources of financing (equity and liabilities). Achieving and maintaining a company's financial sustainability assumes that it will continue to operate in the foreseeable future which is also in accordance with one of the basic principles of accounting for a going concern.

"Small and medium-sized enterprises, by their nature, do not and cannot access financing from a wide range of investors through the conventional capital market." Therefore, many companies, including transport companies, use leases as the main tools of financing their core business with transport vehicles [4].

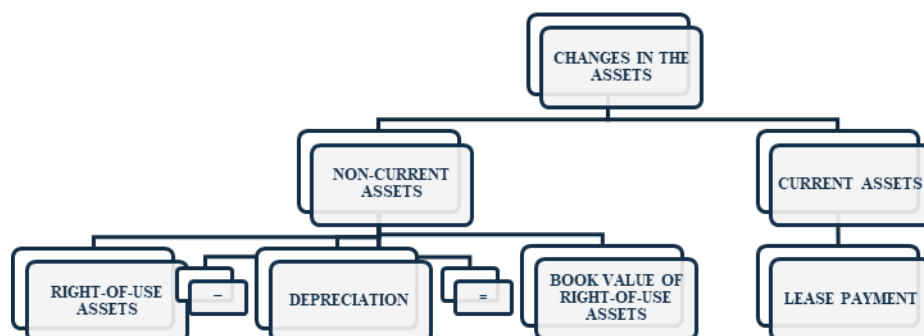
There is a one-way relationship between the financial leverage due to leases obligations of enterprises with external sources of financing, which increases in direct proportion to the growth of interest rates, and in the case of larger transport companies the increase in liabilities can reach around and above one million leva. This has a significant impact on their financial sustainability.

2. Impact of Interest Rate Changes on Financial Indicators of Financial Sustainability

Fluctuations in the European Euribor index—used as an instrument to curb inflation at both European and national levels—interact with the requirements of IFRS 16 regarding the accounting treatment of lease contracts by lessees. These fluctuations induce measurable changes in several categories of financial indicators within the accounting analytical model. The affected indicators can be grouped as follows:

- indicators influenced by changes in the enterprise's assets;
- indicators influenced by changes in liabilities;
- indicators influenced by changes in equity [5].

The first group relates to variations in the carrying amount of right-of-use (ROU) assets in the balance sheet, which affects the financial indicators calculated on the basis of the carrying amount of assets.

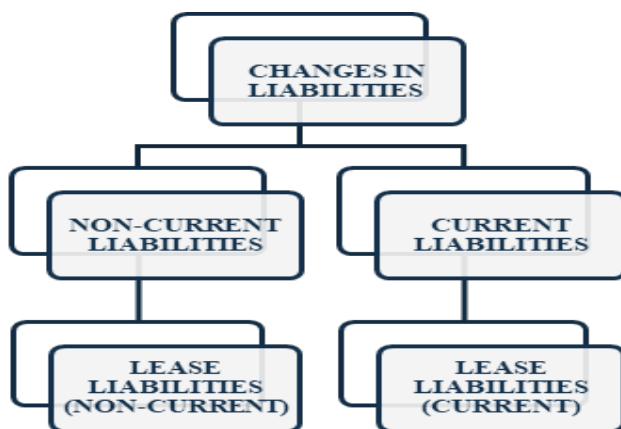


Source: compiled by the author

Figure 1. Alterations in assets due to changes in interest rates based on the accounting treatment of the lease

The main indicators calculated in the information environment of the balance sheet assets, respectively the statement of financial position, are the Autonomy Ratio (R_A), the Financial Dependence Ratio (R_{FD}) and the Financial Sustainability Ratio (R_{FS}). Changes in the amount of assets (including non-current assets) also influence the value of the Financial Leverage Effect Ratio (R_{FLE}) due to the need to calculate asset-based profitability as a component of the indicator itself. In this group of indicators should also be mentioned the Sustainable Growth Rate (R_{SGR}) and Return on Assets (R_{ROA}) as part of the methodology for calculating it. Another key indicator for assessing financial sustainability in this group is the Altman Z-Score Model (R_{ALT}). It forecasts the risk of bankruptcy and contains relatively independent indicators in which the total amount of assets is included. The results of such analysis allow interested parties to determine whether the enterprise is experiencing financial difficulties. The changes in asset values are also related to indicators for Financing Non-Current Assets (R_{FNCA}) and the Structure of Non-Current Liabilities (R_{SNCL}) insofar as the amount of non-current assets is used when calculating these indicators [6, 7].

The changes in the second group of financial indicators are linked to changes in the value of liabilities, respectively lease liabilities. This causes corresponding changes in the borrowed capital of the enterprise and thus affects the indicators for financial sustainability.



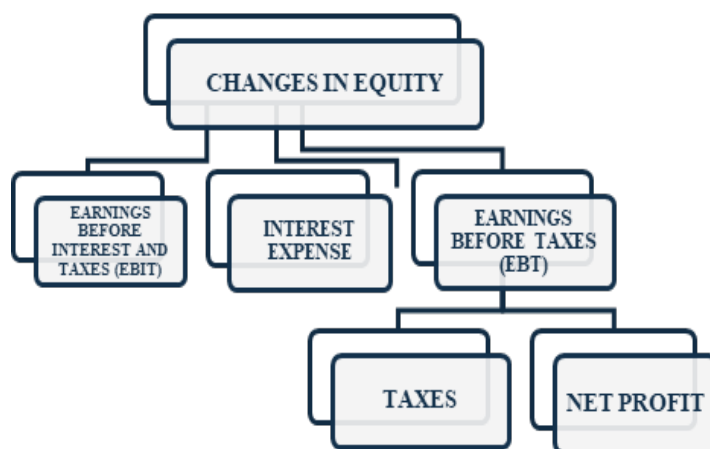
Source: compiled by the author

Figure 2. Alterations in liabilities due to changes in interest rates based on the accounting treatment of the lease

The main indicators for financial sustainability in this group are the indicators for Financial Autonomy (R_{FA}) and the Financial Leverage Ratio or the so-called Debt Ratio (R_{FL}). Financial stability, respectively sustainability, in the economic literature is considered a component of overall (economic) sustainability of the enterprise, related to its solvency and a necessary condition for its development. The level of solvency, related to the enterprise's ability to repay its current obligations, is characterized by the Liquidity Ratios (R_L). Liquidity indicators also change in accordance with IFRS 16 which is related to interest expense and specifically to the short-term portion of interest payments.

Other indicators that change related to changes in the value of the lease liability are mainly related to changes in the structure and content of non-current liabilities (NCL) and current liabilities (CL), respectively the structure of liabilities / borrowed capital (R_{SBC}) and long-term borrowing ratio (R_{LTB}) as shown in Table 1.

The changes in the value of equity (Fig. 3) are above all related to changes in the value of the financial result due to changes in the amount of interest expense as well as depreciation.



Source: compiled by the author

Figure 3. Alterations in equity due to changes in interest rates based on lease accounting treatment

The ratios in which EBIT is included change insofar as the changes in depreciation expense included in the computation are significant for the enterprise. Earnings Before Taxes but after interest (EBT) should also be noted, the amount of which changes in accordance with (inversely proportionally to) the changes in the direction of increasing interest expense (Interest Coverage Ratio – R_{IC}).

Part of the indicators for analysis and assessment of financial sustainability are calculated in the information environment of both the assets and the liabilities of the balance sheet, respectively the statement of financial position. For example, these are the indicators for Maneuverability of Equity (R_{ME}) and Net Working Capital to Current Assets (R_{NWC}). To visualize the influence of the changes in interest rate levels on the indicators for financial sustainability on the basis of the reviewed methods and models for analysis and in accordance with the requirements of IFRS 16 Leases (90% of the analysed enterprises are reported in accordance with international accounting standards), Table 1 is compiled [8].

Table 1. Impact of changes in interest rates on financial sustainability indicators in accordance with IFRS 16 leases

Indicator	R _A	R _{FD}	R _{FS}	R _{FL}	R _{SBC}	R _{SNCL}	R _{LTB}	R _{FLE}	R _{SGR}	R _L	R _{FA}	R _{ME}	R _{IC}	R _{NWC}	R _{FNCA}
Assets Including				-	-	-	-			-	-	-	-	-	-
Non-Cur-rent Assets – Right-of-Use Assets	-	-	-	-	-		-	-	-	-	-	-	-	-	
Current Assets – Cash / cash equivalent, lease payment	-	-	-	-	-	-	-	-	-		-		-		-
Deprecia-tion				-	-		-			-	-	-	-	-	
Interest expense		-			-	-				-				-	
Equity / Financial result (profit or loss)		-			-	-				-				-	
Liabilities / Lease liabilities (non-current / current)	-														

Source: compiled by the author

3. Changes in the Euribor Index and Their Impact on a Lessee Enterprise under IFRS 16 Leases

The main indicators that comply with lease accounting under IFRS 16 and the changes in their values caused by the changes in the levels of the European Euribor index are calculated and presented for one operating enterprise based on information from the Annual Financial Statements.

To calculate the present value of lease payments when lease instalments are paid at the beginning of the period, the following formula is used:

$$(1) PV = S \times \left(1 + \frac{(1+r)^n - 1}{r \times (1+r)^n} \right),$$

where:

PV – present value of lease payments;

S – lease instalment of the period;

r – interest rate of the period;

n – number of periods.

The initial measurement of the lease liability amounts to BGN 30 100.00, equal to the present value of lease payments discounted at the interest rate implicit in the lease (The lease is 5 years. The first lease payment is not included in the assessment of the lease liability, since it was paid on the date of drawing up the contract), set when Euribor was =(-0.572).

Table 2. Lease liabilities at Euribor (-0.572) for a 5-year period (thousand BGN)

(The data used were provided by an analysed company and the Financial Statement for vehicles on lease for a period of 5 years (60 months))

Year	Lease liabilities (opening balance)	Lease payment	Interest expense	Lease liabilities (closing balance)
1.	30 100.00	-	1 054.00	31 154.00
2.	31 154.00	8 195.00	804.00	23 763.00
3.	23 763.00	8 195.00	545.00	16 113.00
4.	16 113.00	8 195.00	277.00	8 195.00
5.	8 195.00	8 195.00	-	0.00
Total:	-	32 780.00	2 680.00	-

Source: compiled by the author based on own calculations using data from the company and the Annual Financial Statements

In accordance with the data presented in Table 2, the lessee must record the following accounting entries:

Account	Debit	Credit
Right-of-use assets	38 295.00	
Lease liabilities		30 100.00
Cash and cash equivalents		8 195.00

For recording the interest on the lease liability and depreciation of the right-of-use asset:

Account	Debit	Credit
Interest expense	1 054.00	
Lease liabilities		1 054.00

Interest is recorded as an increase in the lease liability and no separate interest payable account is used. Due to the effect of the effective interest rate method, interest expense is larger at the beginning of the period and subsequently decrease:

Account	Debit	Credit
Depreciation	7 659.00	
Right-of-use assets		7 659.00

Depreciation is recorded directly as a reduction of the right-of-use asset, without using an accumulated depreciation account. This facilitates the subsequent accounting of remeasurement of the lease liability, since such remeasurement must be reflected as a correction to the carrying amount of the right-of-use asset, especially when there is a change in the amount of lease payments related to a change in an index or interest rate, as is the case here. The amount of the monthly or yearly depreciation charge is calculated based on the straight-line method, established in the enterprise's accounting policy. [9]

Table 3. Lease liabilities at Euribor: 2,132 for a 5-year period (thousand BGN)

Year	Lease liabilities (opening balance)	Lease payment	Interest expense	Lease liabilities (closing balance)
1.	30 040.00	-	1 697.00	31 737.00
2.	31 737.00	8 600.00	1 308.00	24 445.00
3.	24 445.00	8 600.00	895.00	16 740.00
4.	16 740.00	8 600.00	460.00	8 600.00
5.	8 600.00	8 600.00	-	0.00
Total:	-	34 400.00	4 360.00	-

Source: compiled by the author based on own calculations using data from the company and the Annual Financial Statements

The data presented in Table 3 are calculated using the formula for the present value of lease payments given above, and the lessee must record accounting entries identical to those described above but with different values.

To visualize more clearly the changes in the main elements of the financial statements, Table 4 is presented, including data for value deviations (thousand BGN) and percentage deviations.

Table 4. Deviations in the main elements of the financial statements according to IFRS 16

Indicators	Euribor 3-month (-0,572%) (thousand BGN)	Euribor 3-month (2,132%) (thousand BGN)	Deviation	
			thousand BGN	%
Right-of-use assets	38 295.00	38 640.00	345.00	0.90
Lease liabilities	31 154.00	31 737.00	583.00	1.87
Lease payment	8 195.00	8 600.00	405.00	4.94
Lease payment for the entire period	32 780.00	34 400.00	1 620.00	4.94
Interest expense on lease liability	2 680.00	4 360.00	1 680.00	62.69
Interest expense on lease liability for the first year	1 054.00	1 697.00	643.00	61.00
Right-of-use asset depreciation – 1 year	7 659.00	7 728.00	69.00	0.90

Source: compiled by the author based on own calculations

Conclusion

From the data, it can be summarized that financial indebtedness resulting from the lease liabilities of the analyzed enterprise increases annually by a significant amount which inevitably negatively affects the financial sustainability of the enterprise. For the examined period, the increase exceeds half a million BGN, or approximately 583 000.00 BGN, and interest expense on the lease liability increase by 1.620 million BGN. For larger enterprises with lease contracts for a greater number of vehicles and respectively higher value, the increase in lease liabilities reaches about or over 1 million BGN.

It should be noted that for the examined period the increase in the Euribor index, according to the statistics of the European Money Market Institute [10], reaches levels of 3.96 as of December 2023 – an increase of about 1.83 points compared to December 2022 – which financially burdens enterprises, as interest expense for the analyzed enterprise increase by slightly over 1.117 million BGN.

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