FINANCIAL LEVERAGE

Objective(s):

- The objective of this chapter is to take stock of the concept of leverage and

its use as a principle of choice for the use of company debt

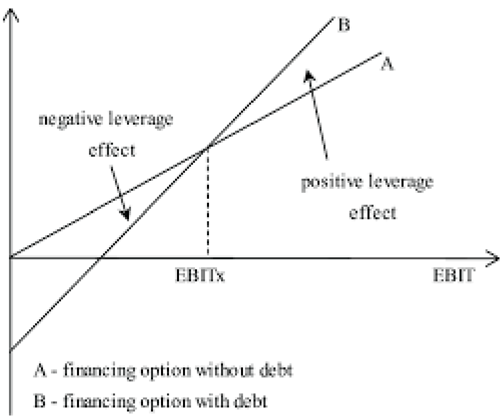
- Impact of debt on the financial profitability of investments.

• Prerequisites:

Mastery of techniques relating to economic efficiency and profitability

investment finance.

https://www.google.com/search?sca_esv=b77251912650b4ae&sxsrf=ADLYWIKf84b9ihI_ML1eOOzwuuSKp



<u>The difference between economic and financial profitability?</u>

The profitability of a company is a concept that is directly related to its financial and operational performance. It is a term that is widely used in the professional environment and generally refers to the relationship between results achieved and the investments needed to achieve this. However, in the field of finance, experts must be much more precise in their analyses. They thus distinguish between the concepts of economic profitability and financial profitability.

Rate of return = Results obtained / Capital invested

Economic and financial returns: definitions and main differences between the two

The two concepts are complementary and allow both an analysis of a company's performance, as well as the relevance of its funding strategy. Economic profitability, or ROCE (Return on Capital Employed)

allows the comparison of overall profits in relation to the invested economic asset, without taking into account the origin of the assets.

Financial profitability, also known as ROE (Return On Equity), allows the analysis of the company's equity efficiency by calculating the ratio between profits realized and invested equity. This indicator can be used to determine whether an organization is profitable on the use of its own funds. This is a ratio particularly suitable for shareholders who want to know if the money invested allows Whether or not to generate profit.

The ROE does not measure the level of risk associated with debt. It would therefore be more sensible to consider ROCE if the objective is to have a global approach to the creation of wealth by a company according to the resources made available to it, whether they come from debt or equity. In practice, the two concepts may be identical when the debt has not been used to finance the activity. A comparison of the two values can also reveal the positive or negative impact of debt use.

What is leverage?

Leverage refers to the use of debt to increase the investment capacity of an economic actor: company, financial institution or individual. The mechanism allows for the acquisition of an asset of a value higher than what the economic actor has in monetary assets.

Although the concept of leverage may appear abstract, the mechanism is known to all. The latter is used for example in the context of a rental investment: if an individual invests through borrowing a property intended for rent, The investor expects that the rents collected will be higher than the borrowing costs and that the value of the asset will allow for an increase in value.

FINANCIAL LEVERAGE Leverage activities with financing activities is called financial leverage. Financial leverage represents the relationship between the company's earnings before interest and taxes (EBIT) or operating profit and the earning available to equity shareholders. Financial leverage is defined as “the ability of a firm to use fixed financial charges to magnify the effects of changes in EBIT on the earnings per share”. It involves the use of funds obtained at a fixed cost in the hope of increasing the return to the shareholders. “The use of long-term fixed interest bearing debt and preference share capital along with share capital is called financial leverage or trading on equity”. Financial leverage may be favourable or unfavourable depends upon the use of fixedcost funds. Favourable financial leverage occurs when the company earns more on the assets purchased with the funds, then the fixed cost of their use. Hence, it is also called as positive financial leverage. Unfavourable financial leverage occurs when the company does not earn as much as the funds cost. Hence, it is also called as negative financial leverage. Financial leverage can be calculated with the help of the following formula:

Financial Leverage Formula

$$\text{Degree of Financial Leverage (DFL)} = \frac{\text{\% Change in Net Inocme}}{\text{\% Change in EBIT}}$$

$$\text{Or, DFL} = \frac{\text{\% Change in EBT}}{\text{\% Change in EBIT}}$$

$$\text{Degree of Financial Leverage (DFL)} = \frac{\text{\% Change in EBIT}}{\text{\% Change in Net Income}}$$

Application:

Source

https://egov.uok.edu.in/eLearningDistance/tutorials/8210_4_2020_240429171345.pdf

Particulars	Plan A	Plan B
Debenture (interest at 10%)	40,000	10,000
Equity share (Rs. 10 each)	10,000	40,000
Total investment needed	50,000	50,000
Number of equity shares	4,000	1,000

The earnings before interest and tax are assumed at Rs. 5,000, and 12,500. The tax rate is 50%. Calculate the EPS

Solution

i. When EBIT is Rs. 5,000

<table>
<tr><th>Particulars</th><th>Plan A</th><th>Plan B</th></tr>
<tr><td>Earnings before interest and tax (EBIT)</td><td colspan="2">5,000</td></tr>
<tr><td>Less : Interest on debt (10%)</td><td colspan="2">5,000</td></tr>
<tr><td>Earnings before tax (EBT)</td><td colspan="2">4,000</td></tr>
<tr><td>Less : Tax at 50%</td><td colspan="2">1,000</td></tr>
<tr><td>Earnings available to equity shareholders.</td><td colspan="2">1,000</td></tr>
<tr><td>No. of equity shares</td><td colspan="2">4,000</td></tr>
<tr><td></td><td colspan="2">500</td></tr>
<tr><td>Earnings per share (EPS) (Earnings/No. of equity shares)</td><td colspan="2">2,000</td></tr>
<tr><td></td><td>Rs.500</td><td>Rs.2,000</td></tr>
<tr><td></td><td>1,000</td><td>4,000</td></tr>
<tr><td></td><td>Rs. 0.50</td><td>Rs. 0.50</td></tr>
</table>

When EBIT is Rs. 12,500

Particulars	Plan A	Plan B
Earnings before interest and tax (EBIT)	12,500	12,500
Less : Interest on debt (10%)	4,000	1,000
Earnings before tax (EBT)	8,500	11,500
Less : Tax at 50%	4,250	5,750
Earnings available to equity shareholders.	4,250	5,750
No. of equity shares	1,000	4,000
Earning per share	4.25	1.44