1FP571
Special seminar – Advanced Corporate Finance

EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání

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Long-Term Solvency

Measures a company's ability to meet interest and principal payments on long-term debt and similar obligations (e.g. long-term leases) when they come due.

Naturally, the best indicator for assessing long-term solvency is a firm's ability to generate earnings over a period of years.

Compare liquidity and solvency .. can it be that a solvent, profitable firm finds itself without liquid assets? And can it be that insolvent firm holds short-term liquid assets?

Long-Term Solvency Ratios

Long-Term Debt Ratio	=	Long-Term Debt / Long-Term Debt + Equity
Debt / Equity Ratio	=	Long-Term Debt / Shareholders' Equity
Long-Term Debt to Assets Ratio	=	Long-Term Debt / Total Assets
Liabilities / Assets	=	Total Liabilities / Total Assets

Interest Coverage Ratios

Measures how many times a firm's net income before interest expense and income taxes exceeds its interest expense

Interest coverage ratios < 2.0 suggest a risky situation

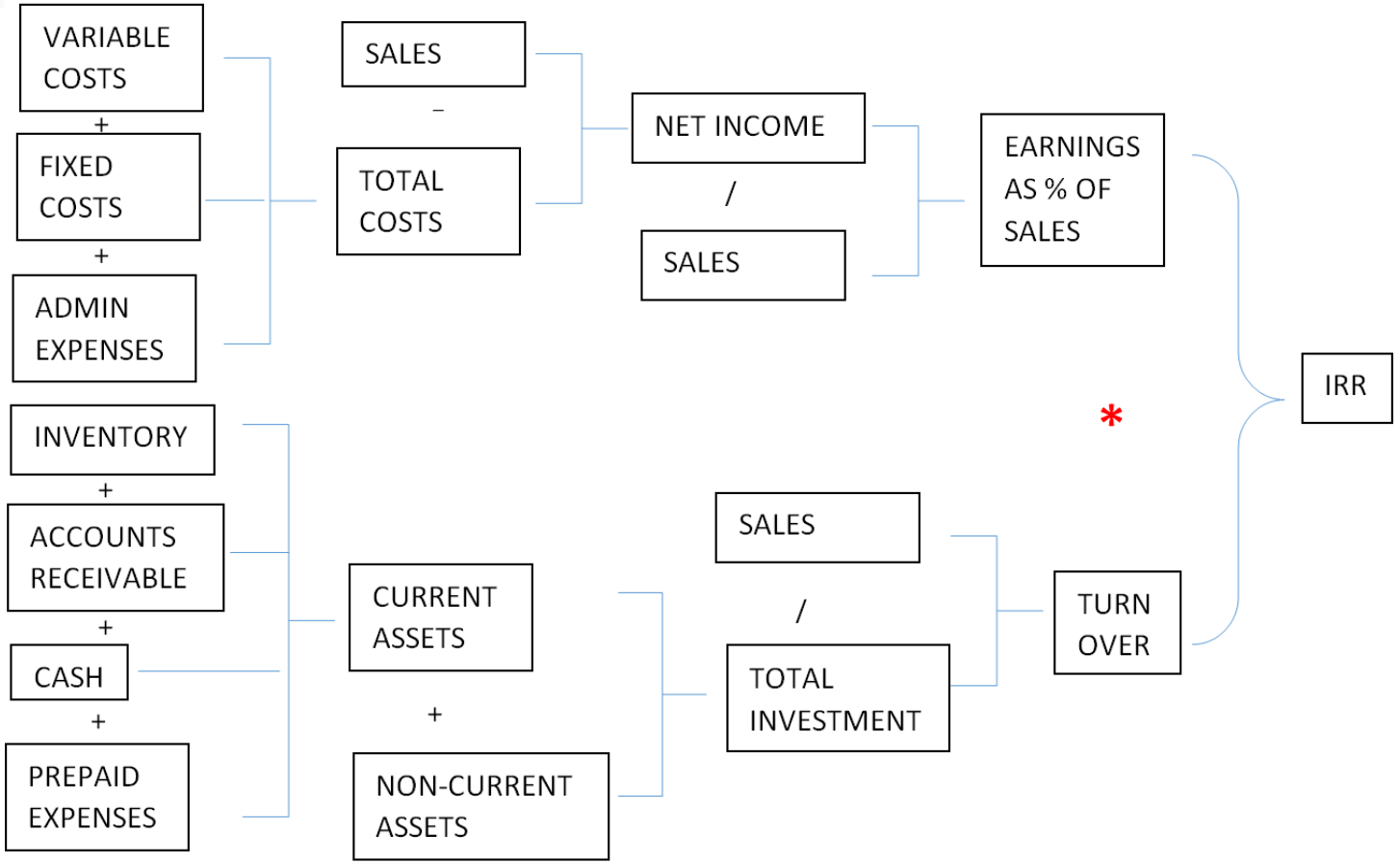
Interest Coverage Ratio = (Net Income + Interest Expense + Income Tax Expense + Minority Interest in Earnings) / Interest Expense

Interest Coverage Ratio

Interest Coverage Ratio using cash flows:

[Cash Flow from Operations + Cash Payments fro Interest + Cash Payments for Income Taxes] /
Cash Payments for Interest

DUPONT FORMULA



DUPONT FORMULA

$$\frac{NET\ INCOME}{\cancel{SALES}} \cdot \frac{\cancel{SALES}}{TOTAL\ ASSETS} = \text{Dupont Formula}$$

$$\frac{NET\ INCOME}{TOTAL\ ASSETS} = \text{Dupont Formula} = \text{ROA (Return on Assets)}$$

"Sales" in the numerator and denominator cancel out and the Dupont Formula arrives at the formula for ROA.

ROA by other names

ROA (Return on Assets)
ROAA (Return on Average Assets)
ROGA (Return on Gross Assets)
ROTA (Return on Total Assets)
ROI (sometimes ROI refers to ROA)
ROAGA (Return on Average Total Assets)
ROTA (Return on Total Assets)
ROAI (return on Average Investment)

Return on Productive Assets (ROAE)

Basic ROA is sometimes modified to exclude assets that are not currently being used in operations (e.g. unexploited land for speculation); excluded for a more accurate performance measure of Return on Assets Employed (ROAE):

ROAE = Net Income / Average Productive Assets

ROE by other names

ROSE (Return on Stockholders' Equity)

RONA (Return on Net Assets) (from standard accounting equation A=L+E, asset value not reflected by liabilities is reflected by equity and called "net assets")

ROI (sometimes ROI is interpreted in error as ROE)

ROASE (Return on Average Stockholders' Equity)

ROANA (Return on Average Net Assets)

ROANE (Return on Average Net Equity)

RONE (Return on Net Equity)

Return on Invested Capital

Most organizations report long-term debt as a layer of borrowed capital that is rarely retired (instead, as it matures it is rolled over into perpetuity and becomes a sort of permanent layer of "borrowed" equity). Because of this, many organizations include it into performance analysis and the ROIC becomes:

ROIC = Net Income / Average Invested Capital

ROIC = Net Income / Average (Equity + Interest Bearing Debt)

ROIC = Net Income / Average (Assets – Non-interest Bearing Debt)

Departmental and Divisional Measures

Return on Sales (ROS)

ROS = Earnings as % of Sales = Net Income / Sales

Return on Current Assets (ROCA)

ROCA = Net Income / Average Current Assets

also ROLA (Return on Liquid Assets), ROLA (Return on Leveraged Assets), ROLI (Return on Leveraged Income)

Return on Working Capital (ROWC)

WC = Current Assets – Current Liabilities

ROWC = Net Income / Average Working Capital

ROCWC (Return on Change in Working capital) = Net Income / (Beginning Working Capital – Ending Working Capital)

VALUATION BASICS

The value of a firm (or its shares) must relate to the (net) cash flows returned to the firm's owners (e.g. shareholders).

Expected future vs actual future cash flows

"Relate" means after discounting, accounting for risk, etc.

VALUATION BASICS

REFERENCES

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