

BANKRUPTCY PREDICTION
(AKA ALTMAN'S Z - SCORE)

$$Z = 1.2X1 + 1.4X2 + .6X4 + 1.0X5 + 3.3X3$$

WHERE:

$$X1 = (\text{CURRENT ASSETS} - \text{CURRENT LIABILITIES}) // \text{TOTAL ASSETS}$$

$$X2 = \text{RETAINED EARNING} // \text{TA}$$

$$X4 = \text{MARKET VALUE OF EQUITY} // \text{TOTAL LIABILITY}$$

$$X5 = \text{NET SALES} // \text{TA}$$

$$X3 = \text{EARNINGS BEFORE TAXES} + \text{INTEREST} // \text{TA}$$

STRATEGIC FUNDS PROGRAMMING

INTERNAL SOURCES =

PROFIT AFTER TAXES - DIVIDENDS + RETAINED EARNINGS + DEPRECIATION + OTHER
NON-CASH EXPENSES = CASH FLOW FROM OPERATIONS

AUGMENTED DEBT =

RETAINED EARNINGS X CURRENT TOTAL DEBT-TO EQUITY RATIO =

FUNDS FROM WITHIN CURRENT STRUCTURE

EXPANDED DEBT CAPACITY =

NEWLY NEGOTIATED LONG-TERM DEBT/EQUITY RATIO - CURRENT LONG-TERM
DEBT/EQUITY RATIO = (UNUSED DEBT FACTOR) X SHAREHOLDERS EQUITY = EXPANDED
DEBT CAPACITY

TOTAL FUNDS AVAILABLE (MAXIMUM) = CASH FLOW FROM OPERATIONS + FUNDS
FROM WITHIN CURRENT STRUCTURE + EXPANDED DEBT CAPACITY

OPERATING CAPITAL

1. TOTAL TRADING CYCLE - ESTIMATED NUMBER OF DAYS FROM DATE OF PURCHASE OF MATERIALS TO BE SOLD TO THE DATE OF THE COLLECTION FOR SALES MADE.

$$TTC = \text{CASH} + \text{RECEIVABLES} + \text{INVENTORY} // \text{AVERAGE SALES PER DAY}$$

2. NET CASH CYCLE - NUMBER OF DAYS THAT CASH IS TIED UP IN CONDUCTING BUSINESS

$$NCC = TTC - \text{PAYABLES} // \text{ASPD}$$

DEGREE OF OPERATING CASH LEVERAGE

THE DOLLAR AMOUNT OF ADDITIONAL SALES REQUIRED TO PUT A DOLLAR OF CASH "IN THE BANK."

$$DOCL = S // [S - V - (CE + A/R + I - A/P)](1 - T)$$

WHERE:

S = TOTAL SALES

V = VARIABLE COSTS

CE = CASH & EQUIVALENTS

A/R = ACCOUNTS RECEIVABLE

I = INVENTORY

A/P = ACCOUNTS PAYABLE

T = INCOME TAX RATE

STRATEGIC PROFIT MODEL (AKA THE DU PONT CHART)

RATE OF RETURN ON NET WORTH =

NET PROFIT MARGIN = NET PROFIT BEFORE TAX // NET SALES X

RATE OF ASSET TURNOVER = NET SALES // TOTAL ASSETS X

LEVERAGE RATIO = TOTAL ASSETS // NET WORTH

RORNW = NPM X RATO X LR = NPM // NET WORTH

INDEX OF SUSTAINABLE GROWTH (G*)

IF THE PLANNED GROWTH RATE OF SALES EXCEEDS G*, THEN EXTERNAL CAPITAL MUST BE SOUGHT TO FUND THE DESIRED GROWTH RATE.

$$G^* = [P(1-D)(1+L) // T - P(1-D)(1+L)] \times 100$$

WHERE:

P = (NET PROFIT BEFORE
TAX // NET SALES) X 100

D = TARGET DIVIDENDS // PROFIT
AFTER TAX

L = TOTAL LIABILITIES // NET WORTH

T = (TOTAL ASSETS // NET SALES) X 100