Use of Pro Formas

- Financial Analysis
- Forecasting
- Assessing Risk
- Assessing Performance

The Cases

- Clarkson Lumber
  - mechancs of calculating “Long Term” pro formas
  - effect of growth on financing need
  - financial analysis and pro formas
- Toy World
  - Pro Formas and seasonal borrowing need
  - evaluating riskiness of loans
  - trading off financing costs and efficiency gains

Cases

- SureCut
  - Evaluating Performance relative to plan
  - Assessing Riskiness
  - Guidance for future plan

Financial Analysis

- Evaluate historical profit margins
  - compare with comparable companies
  - Look for added efficiencies
- Evaluate historical uses of Funds
  - A/R and Inv management
  - compare with comparables
  - Take account of strategy

Financial Analysis

- Evaluate automatic sources of funds
  - discounts?
  - relationships with suppliers, etc..
  - can they be increased
- Determine appropriate relation between income statement items and sales
- Determine appropriate relation between balance sheet items and sales

Pro Forma

- Income Statement

Sales	=	S
COGS	=	cogs*S
Gross	=	(1-cogs)*S = gm*S
OE	=	oe*S
OI	=	(1-cogs-oe)*S = om*S
INT	=	int on avg balance or 0
EBT	=	OI - INT

Pro Forma

taxes	=	t*EBT
NI	=	EBT - taxes
RE	=	NI - dividend

Pro Forma

- Balance Sheet

Cash	=	rc*S
A/R	=	DOAR*S/365
INV	=	COGS/ITO = cogs*S/ITO
OCA	=	oca*S
PPE	=	S/PPETO
OLTA	=	S/OLTATO
TA	=	S/TATO

Pro Forma

A/P	=	DAP*Purch/365 = DAP*p*S/365
A/T	=	at*S
A/E	=	ae*S
NW	=	NW(0) + RE
Req Funds	=	TA - NW - CL

Pro Forma

- If “Req. Funds” is negative--excess cash
- If “Req. Funds” is positive--debt or other financing
- “

“Req. Funds” Interpretation

- Req. Funds” is total external financing needed
  - if positive and increases, the increase is the new borrowing required
  - if positive and decreases, principle can be paid off (amount of decrease)
  - if negative and increases (moves toward zero) represents reduction in excess cash
  - if negative and decreases, more excess cash

Growth and Financing

- A simpler Form of the balance sheet

NWC	=	Sales/NWCTO
Fixed	=	Sales/FATO
Total net Assets	=	Sales/TNATO
NW	=	NW(0) + RE
Debt	=	TNA - NW

Growth

- Suppose no dividends or new equity
- Net Asset side grows at the rate of sales growth--g
- Net Worth grows at the rate of ROE'
  - ROE' = NI(1)/NW(0)--I.e.. this years net income over beginning of year net worth
  - ROE' = ROE/(1-ROE)

Leverage

- LR = Debt/NW = [TNA - NW]/NW

[1+LR(2)]/[1+LR(1)] =

[TNA(2)/NW(2)]/[TNA(1)/NW(1)]

= [TNA(2)/TNA(1)]*

[NW(1)/NW(2)]

=(1+g)/(1+ROE’)

Growth and ROE

- If g > ROE', then debt grows faster than NW--leverage increases
- If g < ROE' then NW grows faster than debt--leverage decreases
- If g > ROE' increase leverage, or may eventually need new equity issue
- If g < ROE' can reduce leverage or distribute cash to shareholders--dividend, repurchase

Asset Risk

- Pro Formas show where funds are tied up
- Leads to analysis of riskiness of the debt and risk of bankruptcy
  - industry and product analysis
  - competitive environment
  - susceptibility to cyclical variations

Pro Formas and Planning

- Pro Forma indicates future financing problems
  - leverage ratios
  - internal v. external funds needs
  - required access to capital markets

Pro Formas and Performance

- Compare actual with previous pro formas
  - Where are unanticipated cash-use build ups?
  - Lags in profitability?
  - Unanticipated Growth?
  - Unanticipated slumps?