# Advanced Credit Policy Module 1

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### I. Introductory Material

- A. For whom this course is intended
- B. Texts and Excel files for the course
- C. Themes of each of the modules
- D. Course procedures
- E. Formulating credit policy: costs and revenues

### II. Chapter Notes for Chapter 1 of Decisions

- A. The credit/sales conflict
- B. Budgeting: monitoring policy outcomes
- C. Types of costs affected by credit policy
  - 1. Costs of sales
  - 2. Credit Investigation costs
  - 3. Cash discount expense
  - 4. Bad debt expense
  - 5. Accounts receivable carrying cost
  - 6. Collection and administration costs

### II. Chapter Notes for Chapter 1 (con't)

- D. Principles of modern finance
  - 1. The principle of marginality
  - 2. The principle of valuation
- E. The income statement method of evaluating costs and revenues
  - 1. Estimating the effect on sales
  - 2. Direct costing vs. full costing
  - 3. Calculating bad debt expense
  - 4. Accounts receivable carrying cost as an opportunity cost

- II. Chapter Notes for Chapter 1 (con't)
  - F. Introduction to present value

# III. Chapter Notes for Chapter 2 of Decisions

- A. Focus: how much credit investigation to perform
- B. What credit investigation does
- C. Policy implications of costly investigation
  - 1. Tradeoff against bad debt expense
  - 2. Full investigation isn't optimal

# III. Chapter Notes for Chapter 2 (con't)

- D. Review of the Mathematical Model of Credit Investigation
  - 1. Small order sizes and bad debt expense
  - 2. Larger order sizes and investigation level
  - 3. Credit investigation and order size
  - 4. Why a customer can get a small initial order approved but not a large one
  - Profit margin and credit investigation policy

# III. Chapter Notes for Chapter 2 (con't)

- E. Order size, credit investigation budgets, and bad debt expense budgets
- F. Budgets and the assignment of debtors to analysts
- G. When credit investigation expenses are important and when they are not

# IV. Chapter Notes for Chapter 3 of Decisions

- A. Focus of chapter: how to make credit decisions using the results of credit investigation
- B. Credit standards analysis for customers with small order volumes
  - revenue/cost analysis:
     cutoffs based on credit rating
  - 2. computing bad debt expense

- IV. Chapter Notes for Chapter 3 (con't)
  - C. A present value under for large customers under full credit investigation
    - 1. Basics of model structure
    - 2. Cash flows in this model
    - 3. Review of the model's formula for expected present value
    - 4. A numerical calculation example

### IV.C. (continued)

- 5. Parameter estimation
  - a. Sources for S, V, a, b, T, k, and d
  - b. Estimating R (recovery in default)
  - c. Estimating c (time to pay)
  - d. Estimating X (default probability)
    - 1. Benchmarks for X
    - 2. Adjusting X based on financial analysis
- 6. Sensitivity analysis and breakeven X

- IV. Chapter Notes for Chapter 3 (con't)
  - D. Situations that complicate creditgranting decision making
    - 1. The possibility of future sales and when this is relevant
      - a. Changes in creditworthiness over time
      - b. The role of brand loyalty
    - 2. Potential synergistic benefits from credit-granting

# You may now pause to do the problem

- If your webinar connection times out as you are doing the problem, refresh your web browser.
- To do this click the button on your web browser that looks like a circle with arrows
- The webinar will reload and you may fast forward to this point.

## I. Analysis of Meritorious Molders

- A. Alternatives in making credit-granting decisions
- B. Analysis by the traditional judgmental method (5 Cs)
- C. Analysis by the one-order E(PV) model

A Present Value Analysis of Meritorious Plastics Parameters:

Symbol		ol Meaning Est	imate
	S	Sale in dollars \$30	0,000
	V	Cost of Sale in dollars \$25	5,500
	а	Time until V is paid (days)	20
	Т	Tax rate	35%
	b	Time until tax is paid (days)	45
	С	Customer's time to pay (days)	120
	k	Seller's yearly cost of capital	15%
	R	Recovery rate	5%
	d	Time until recovery (years)	1.5
	Χ	Probability of Nonpayment	13%

Benchmark X: 10%(120/360) = 3.33%

### A Present Value Analysis of Meritorious Plastics

Value of Term 1: -V/(1+k)^a	(\$25,303)
Value of Term 2: -(S-V)T/(1+k)^b	(\$1,548)
Value of Term 3: (1-X)S/(1+k)^c	\$24,912
Value of Term 4: XRS/(1+k)^d	\$158
Value of Term 5: XT(1-R)S/(1+k)^d	\$1,052
Present Value of Granting Credit	(\$729)

#### A Present Value Analysis of Meritorious Plastics Sensitivity Analysis of X

```
E(PV)
 X
0.0%
     $1,784
2.5% $1,301
        $817
5.0%
     $334
7.5%
10.0%
     ($149) Breakeven X
                          9.23%
        ($632)
12.5%
15.0%
     ($1,116)
     ($1,599)
17.5%
20.0% ($2,082)
22.5% ($2,565)
25.0%
      ($3,048)
```

Is R estimate correct?

If R = 0, E(PV) = (\$832), Breakeven X = 8.87%