

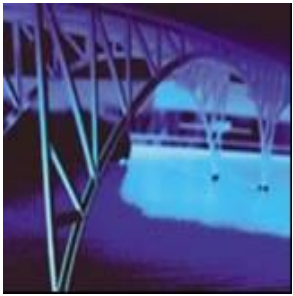
# *Accounts Receivable Management*



# ***After studying this theme, you should be able to:***

---

- **List the key factors that can be varied in a firm's credit policy and understand the trade-off between profitability and costs involved.**
- **Understand how the level of investment in accounts receivable is affected by the firm's credit policies.**
- **Critically evaluate proposed changes in credit policy, including changes in credit standards, credit period, and cash discount.**
- **Describe possible sources of information on credit applicants and how you might use the information to analyze a credit applicant.**

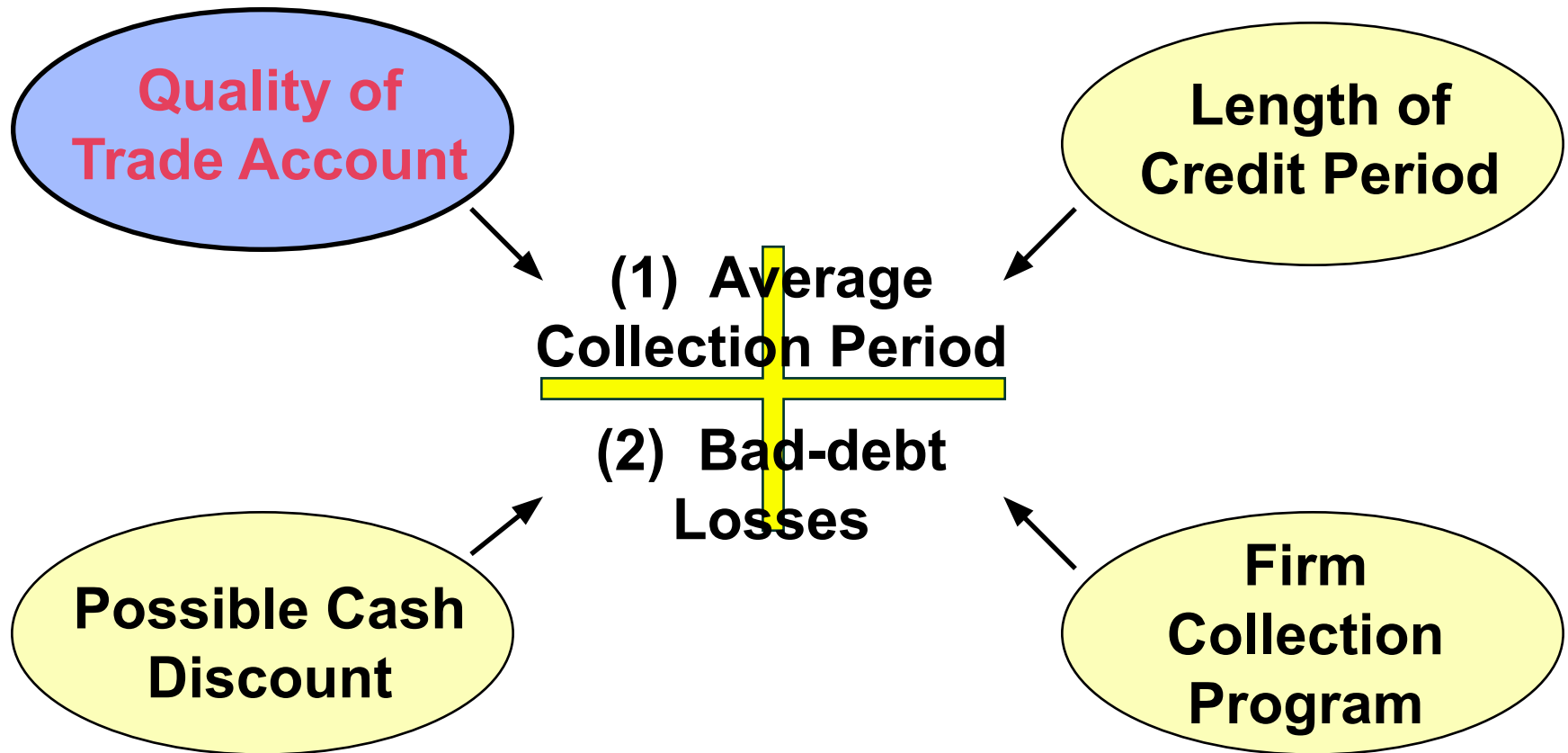


- 
- **Credit and Collection Policies**
  - **Analyzing the Credit Applicant**



# ***Credit and Collection Policies of the Firm***

---





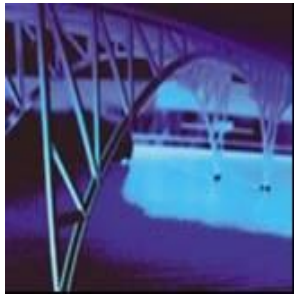
# ***Credit Standards***

---

**Credit Standards** -- The minimum quality of credit worthiness of a credit applicant that is acceptable to the firm.

## **Why lower the firm's credit standards?**

The financial manager should continually lower the firm's credit standards as long as profitability from the change exceeds the extra costs generated by the additional receivables.



# ***Credit Standards***

---

## **Costs arising from relaxing credit standards**

- **A larger credit department**
- **Additional clerical work**
- **Servicing additional accounts**
- **Bad-debt losses**
- **Opportunity costs**



# ***Example of Relaxing Credit Standards***

---

**Basket Wonders is not operating at full capacity and wants to determine if a relaxation of their credit standards will enhance profitability.**

- The firm is currently producing a single product with variable costs of \$20 and selling price of \$25.**
- Relaxing credit standards is not expected to affect current customer payment habits.**



# ***Example of Relaxing Credit Standards***

---

- **Additional annual credit sales of \$120,000 and an average collection period for new accounts of 3 months is expected.**
- **The before-tax opportunity cost for each dollar of funds “tied-up” in additional receivables is 20%.**

**Ignoring any additional bad-debt losses that may arise, should Basket Wonders relax their credit standards?**





# ***Example of Relaxing Credit Standards***

---

**Profitability of  
additional sales**       **$(\$5 \text{ contribution}) \times (4,800 \text{ units}) =$**   
**\$24,000**

---

**Additional  
receivables**       **$(\$120,000 \text{ sales}) / (4 \text{ Turns}) =$**   
**\$30,000**

---

**Investment in  
add. receivables**       **$(\$20/\$25) \times (\$30,000) =$**   
**\$24,000**

---

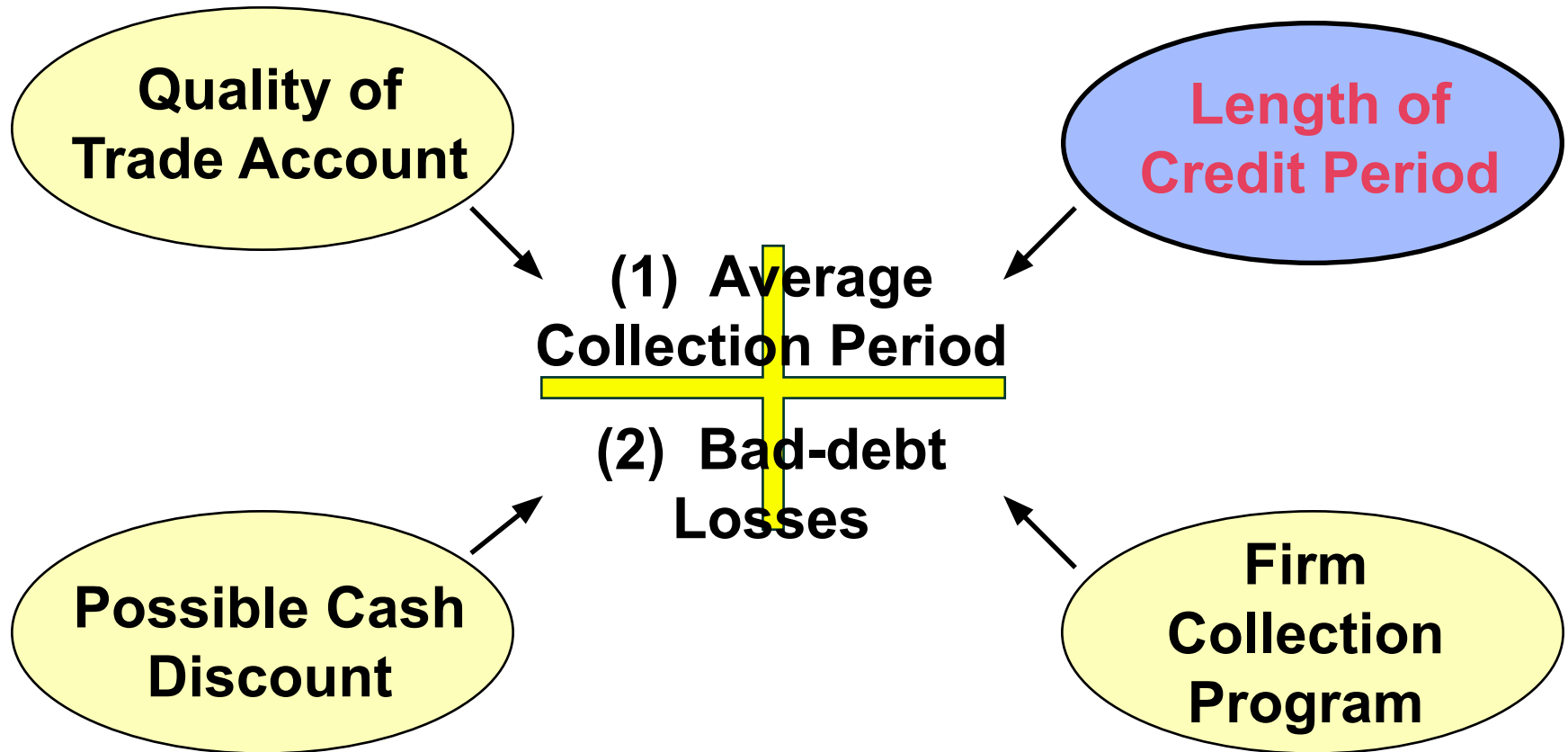
**Req. pre-tax return  
on add. investment**       **$(20\% \text{ opp. cost}) \times \$24,000 =$**   
**\$4,800**

**Yes!**      **Profits > Required pre-tax return**



# ***Credit and Collection Policies of the Firm***

---





# ***Credit Terms***

---

**Credit Terms** -- Specify the length of time over which credit is extended to a customer and the discount, if any, given for early payment. For example, *“2/10, net 30.”*

**Credit Period** -- The total length of time over which credit is extended to a customer to pay a bill. For example, *“net 30”* requires full payment to the firm within 30 days from the invoice date.



# ***Example of Relaxing the Credit Period***

---

***Basket Wonders*** is considering changing its credit period from “*net 30*” (which has resulted in 12 A/R “Turns” per year) to “*net 60*” (which is expected to result in 6 A/R “Turns” per year).

- The firm is currently producing a single product with variable costs of \$20 and a selling price of \$25.
- Additional annual credit sales of \$250,000 from new customers are forecasted, in addition to the current \$2 million in annual credit sales.



# ***Example of Relaxing the Credit Period***

---

- **The before-tax opportunity cost for each dollar of funds “tied-up” in additional receivables is 20%.**

**Ignoring any additional bad-debt losses that may arise, should Basket Wonders relax their credit period?**



# ***Example of Relaxing the Credit Period***

---

**Profitability of additional sales**       **$(\$5 \text{ contribution}) \times (10,000 \text{ units}) =$**   
**\$50,000**

---

**Additional receivables**       **$(\$250,000 \text{ sales}) / (6 \text{ Turns}) =$**   
**\$41,667**

---

**Investment in add. receivables (new sales)**       **$(\$20/\$25) \times (\$41,667) =$**   
**\$33,334**

---

**Previous receivable level**       **$(\$2,000,000 \text{ sales}) / (12 \text{ Turns}) =$**   
**\$166,667**



# *Example of Relaxing the Credit Period*

---

New receivable level  $(\$2,000,000 \text{ sales}) / (6 \text{ Turns}) =$   
 $\$333,333$

---

Investment in add. receivables (original sales)  $\$333,333 - \$166,667 =$   
 $\$166,666$

---

Total investment in add. receivables  $\$33,334 + \$166,666 =$   
 $\$200,000$

---

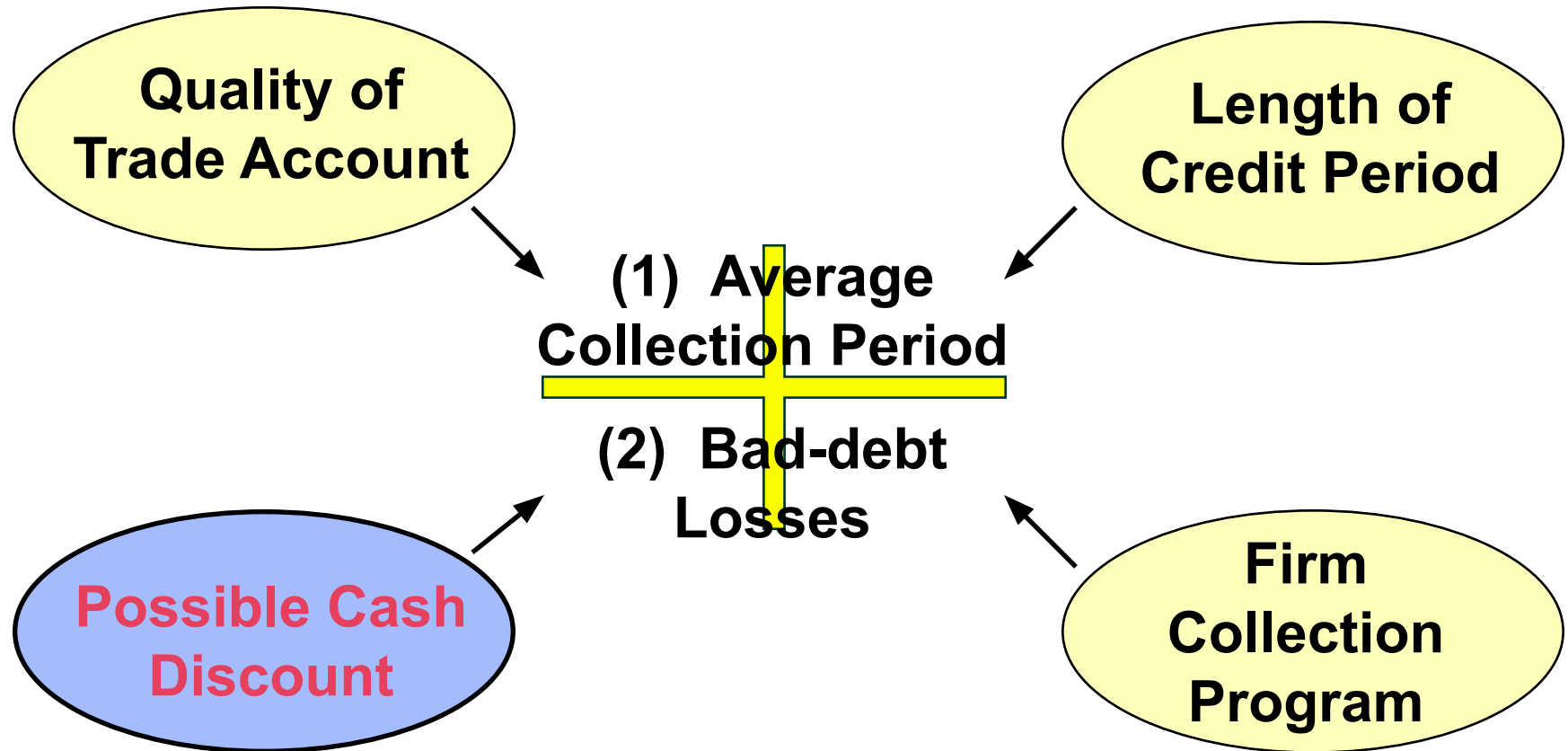
Req. pre-tax return on add. investment  $(20\% \text{ opp. cost}) \times \$200,000 =$   
 $\$40,000$

10-15 **Yes!**    **Profits** > **Required pre-tax return**



# ***Credit and Collection Policies of the Firm***

---







# ***Credit Terms***

---

**Cash Discount Period** -- The period of time during which a cash discount can be taken for early payment. For example, “2/10” allows a cash discount in the first 10 days from the invoice date.

**Cash Discount** -- A percent (%) reduction in sales or purchase price allowed for early payment of invoices. For example, “2/10” allows the customer to take a 2% cash discount during the cash discount period.



# ***Example of Introducing a Cash Discount***

---

**A competing firm of Basket Wonders is considering changing the credit period from “*net 60*” (which has resulted in 6 A/R “Turns” per year) to “*2/10, net 60.*”**

- **Current annual credit sales of \$5 million are expected to be maintained.**
- **The firm expects 30% of its credit customers (in dollar volume) to take the cash discount and thus increase A/R “Turns” to 9.**



# ***Example of Introducing a Cash Discount***

---

- **The before-tax opportunity cost for each dollar of funds “tied-up” in additional receivables is 20%.**

**Ignoring any additional bad-debt losses that may arise, should the competing firm introduce a cash discount?**



# ***Example of Using the Cash Discount***

---

**Receivable level**            **(\$5,000,000 sales) / (6 Turns) =**  
**(Original)**                    **\$833,333**

---

**Receivable level**            **(\$5,000,000 sales) / (9 Turns) =**  
**(New)**                         **\$555,556**

---

**Reduction of**                **\$833,333 - \$555,556 =**  
**investment in A/R**            **\$277,777**



# *Example of Using the Cash Discount*

---

Pre-tax cost of the cash discount  $.02 \times .3 \times \$5,000,000 =$   
\$30,000.

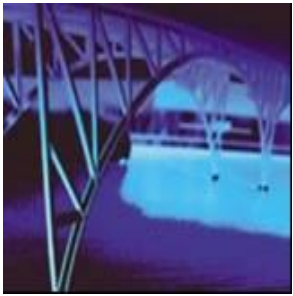
---

Pre-tax opp. savings on reduction in A/R  $(20\% \text{ opp. cost}) \times \$277,777 =$   
\$55,555.

---

**Yes! Savings > Costs**

**The benefits derived from released accounts receivable exceed the costs of providing the discount to the firm's customers.**



# ***Seasonal Dating***

---

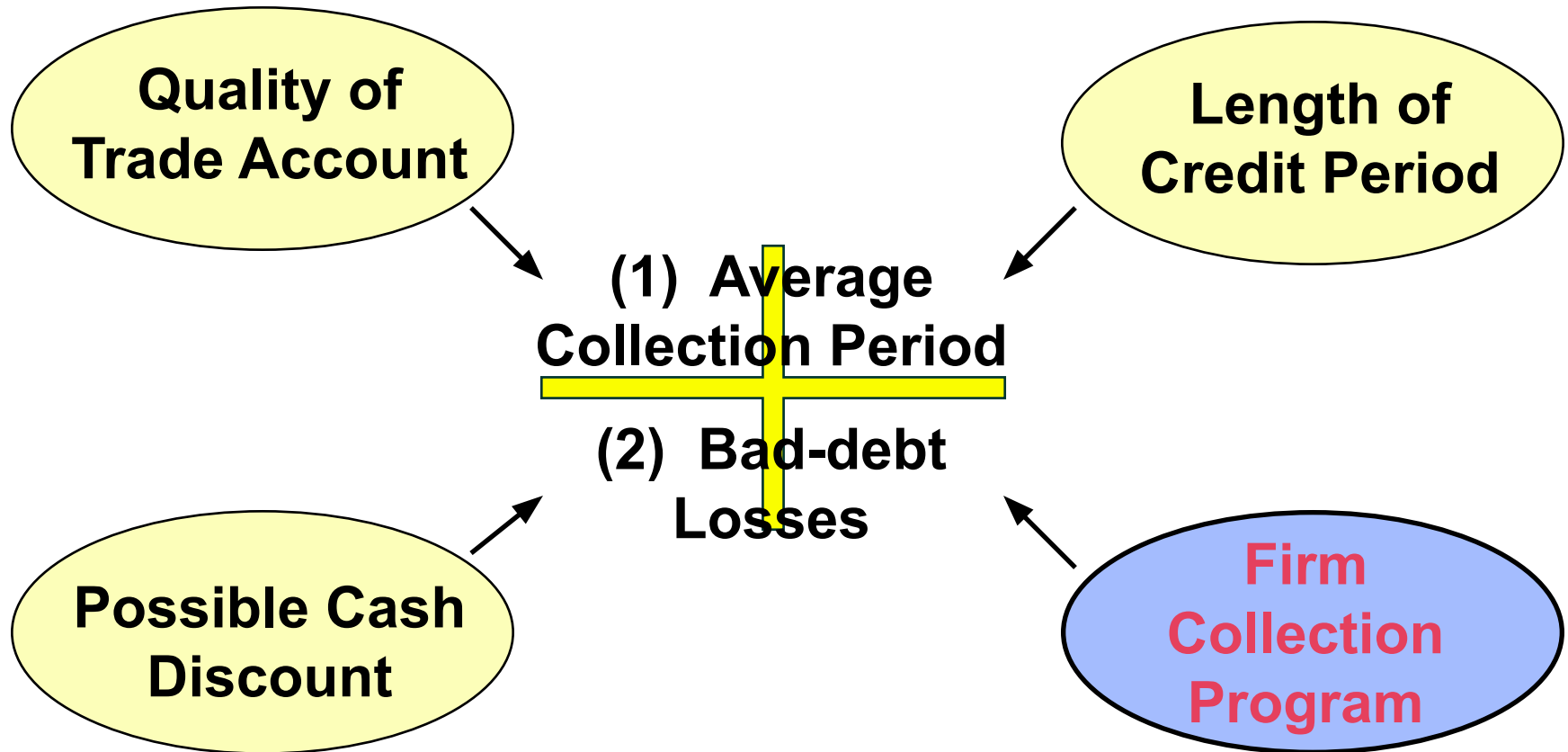
**Seasonal Dating -- Credit terms that encourage the buyer of seasonal products to take delivery before the peak sales period and to defer payment until after the peak sales period.**

- **Avoids carrying excess inventory and the associated carrying costs.**
- **Accept dating if warehousing costs plus the required return on investment in inventory exceeds the required return on additional receivables.**

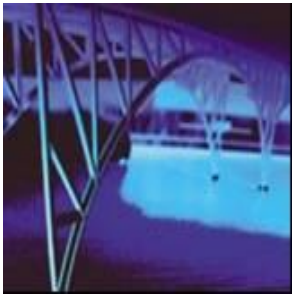


# ***Credit and Collection Policies of the Firm***

---



# Default Risk and Bad-Debt Losses



Present Policy	Policy A	Policy B	
Demand	\$2,400,000	\$3,000,000	\$3,300,000
Incremental sales		\$ 600,000	\$ 300,000
<u>Default losses</u>			
Original sales	2%		
Incremental Sales		10%	18%
<u>Avg. Collection Pd.</u>			
Original sales	1 month		
Incremental Sales	2 months	3 months	





# Default Risk and Bad-Debt Losses

	Policy A	Policy B
1. Additional sales	\$600,000	\$300,000
2. Profitability: (20% contribution) x (1)	120,000	60,000
3. Add. bad-debt losses: (1) x (bad-debt %)	60,000	54,000
4. Add. receivables: (1) / (New Rec. Turns)	100,000	75,000
5. Inv. in add. receivables: (.80) x (4)	80,000	60,000
6. Required before-tax return on additional investment: (5) x (20%)	16,000	12,000
7. Additional bad-debt losses + additional required return: (3) + (6)	76,000	66,000
8. Incremental profitability: (2) - (7)	<u>44,000</u>	<u>(6,000)</u>

**Adopt Policy A but not Policy B.**



# Collection Policy and Procedures

## Collection Procedures

---

- Letters
- Phone calls
- Personal visits
- Legal action

The firm should increase **collection expenditures** until the marginal reduction in **bad-debt losses** equals the marginal outlay to collect.

