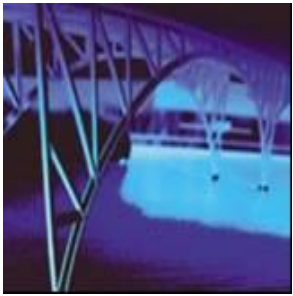


Accounts Receivable Management



After studying this theme, you should be able to:

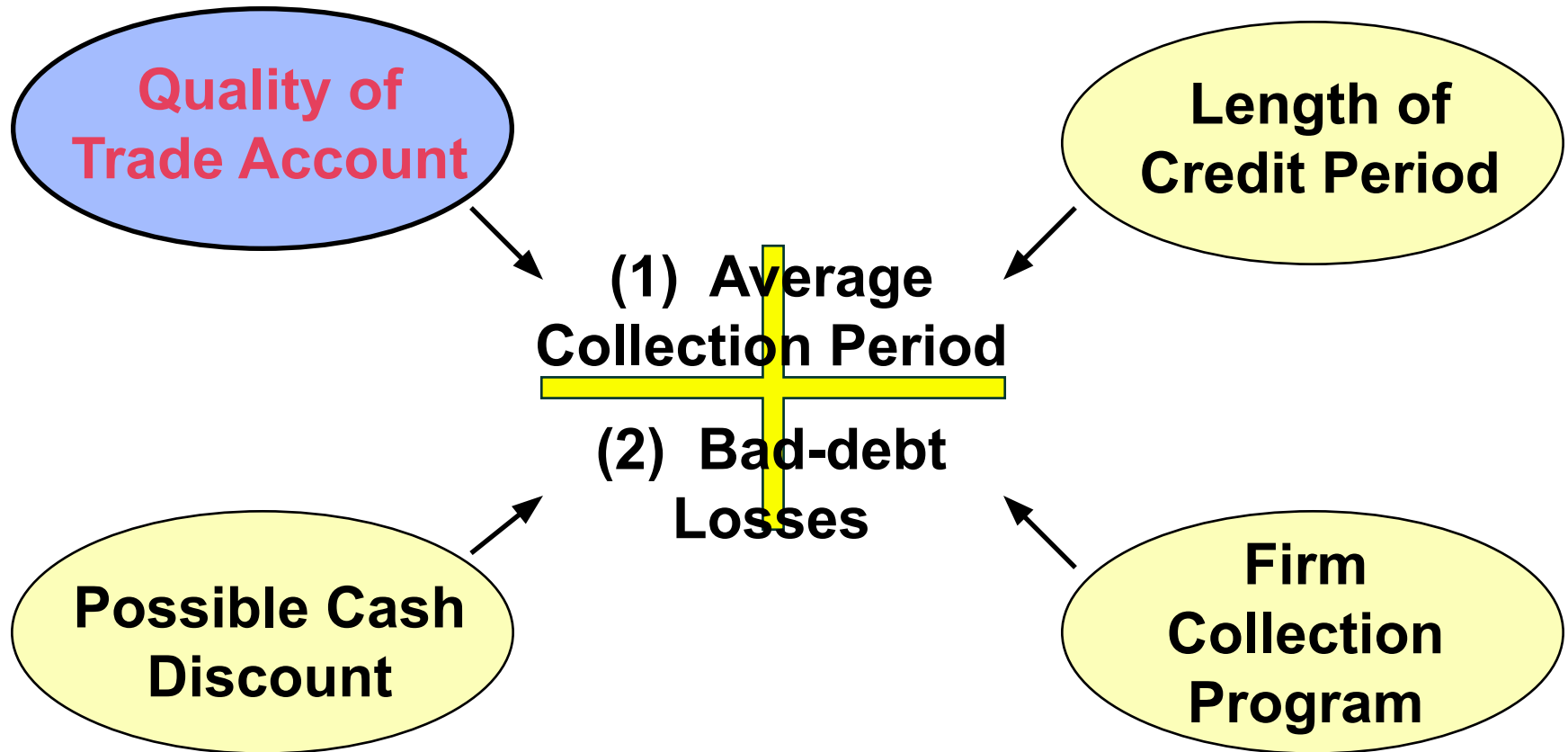
- **List the key factors that can be varied in a firm's credit policy and understand the trade-off between profitability and costs involved.**
- **Understand how the level of investment in accounts receivable is affected by the firm's credit policies.**
- **Critically evaluate proposed changes in credit 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



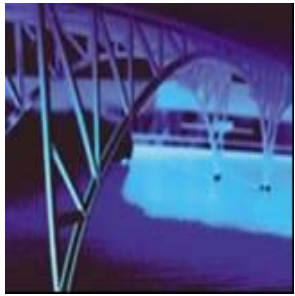


Credit Standards

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 contribution) x (4,800 units) =**
\$24,000

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

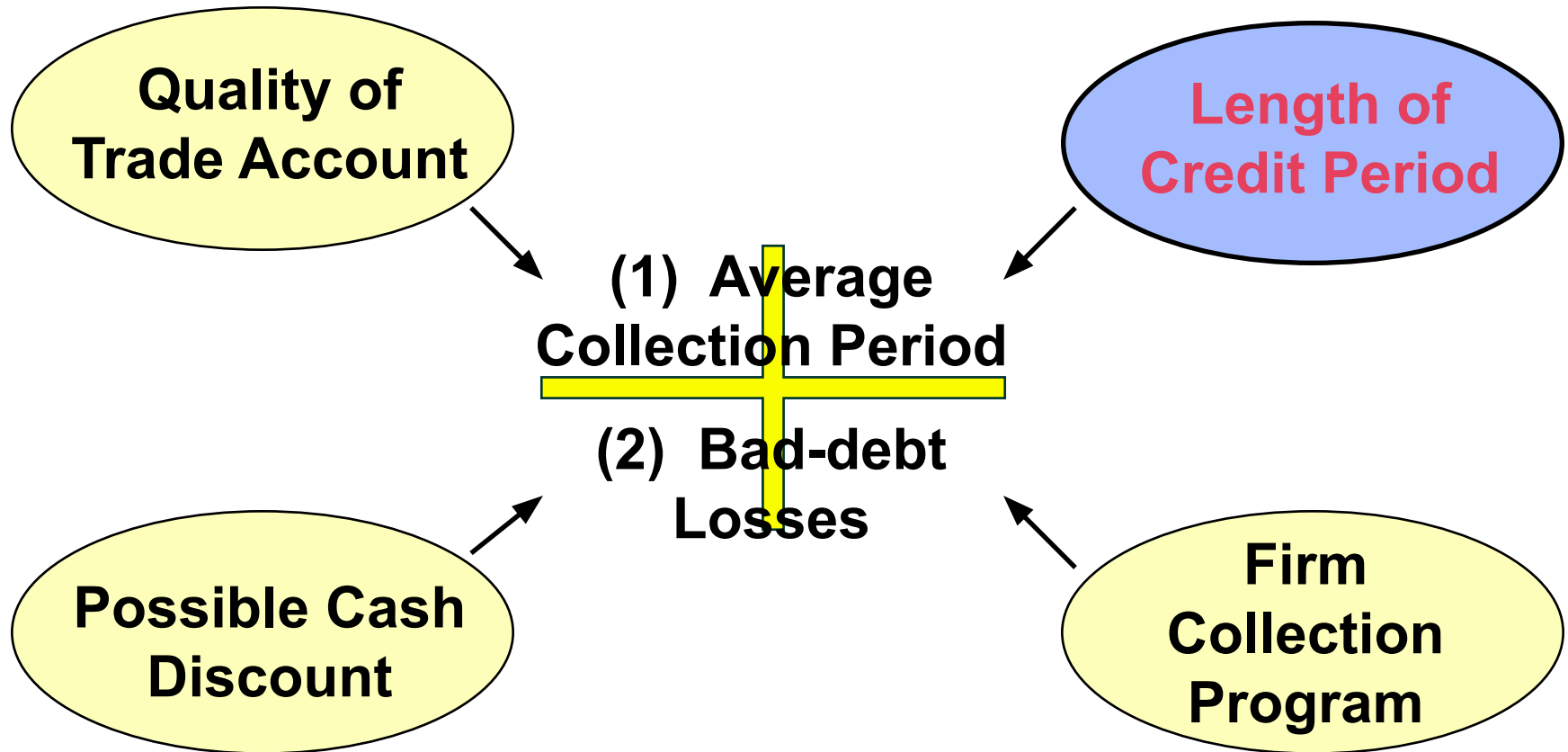
Investment in add. receivables **(\$20/\$25) x (\$30,000) =**
\$24,000

Req. pre-tax return on add. investment **(20% opp. cost) x \$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) $\$333,333 - \$166,667 =$
 $\$166,666$

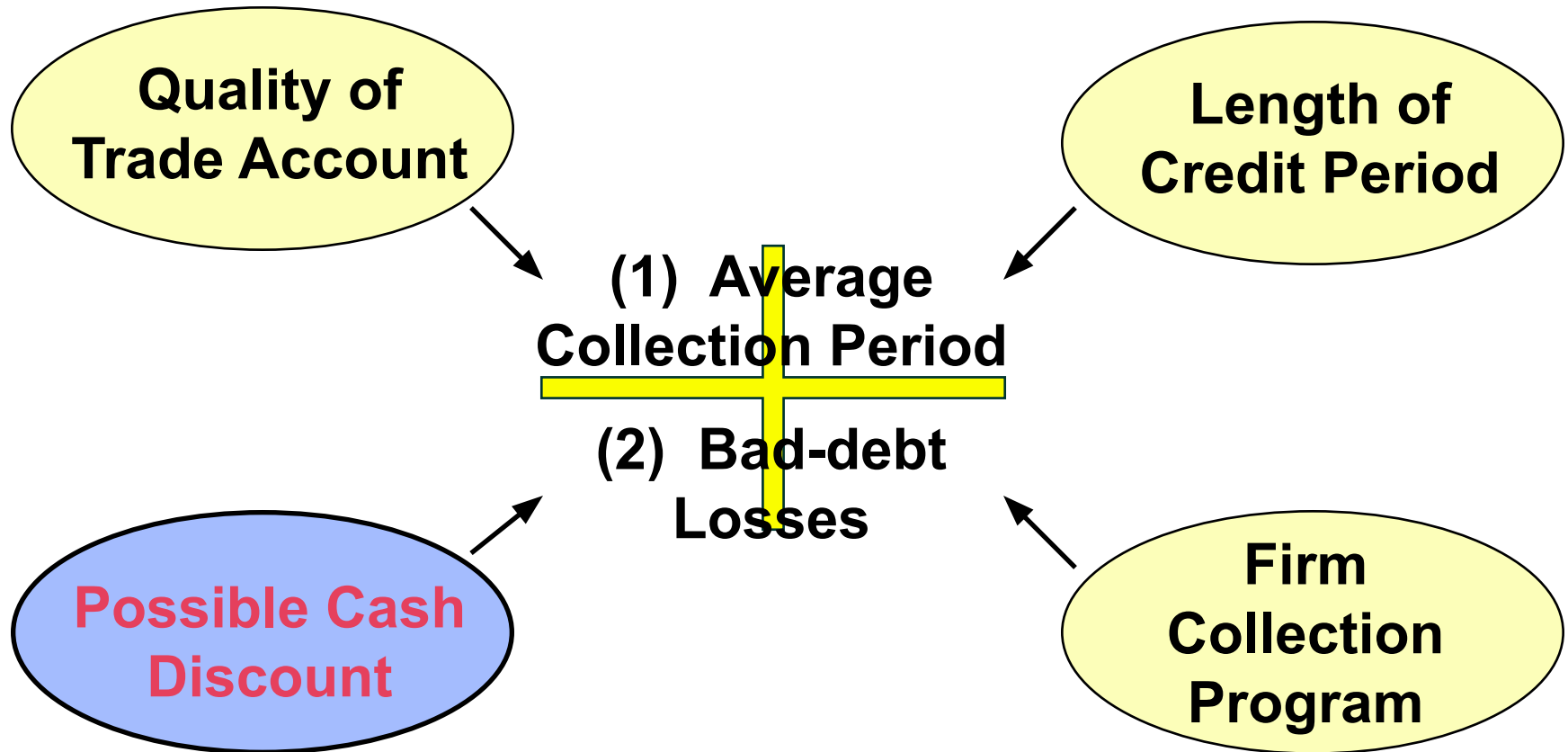
Total investment in add. receivables $\$33,334 + \$166,666 =$
 $\$200,000$

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**



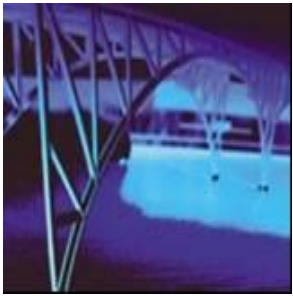
Example of Using the Cash Discount

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.



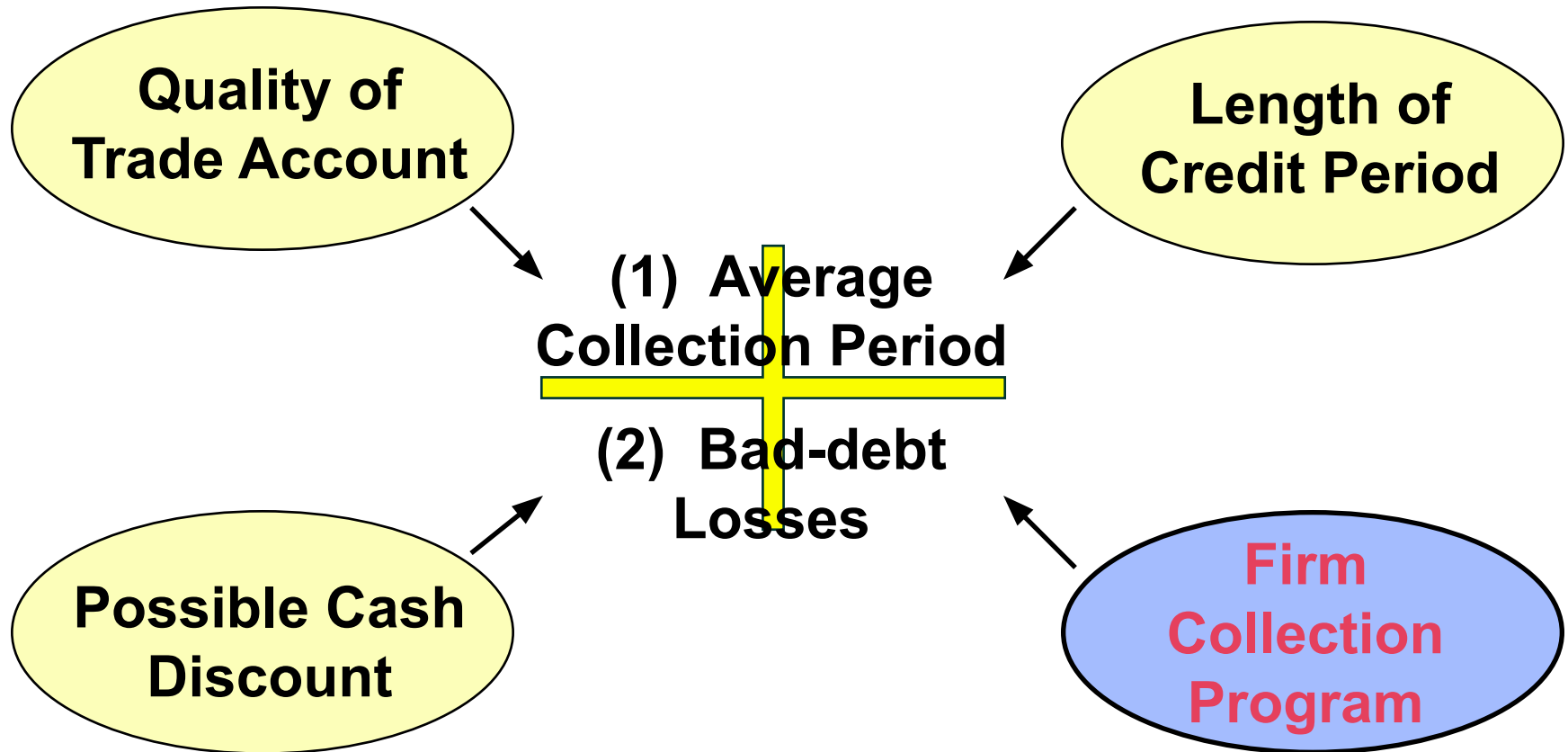
Seasonal Dating

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.

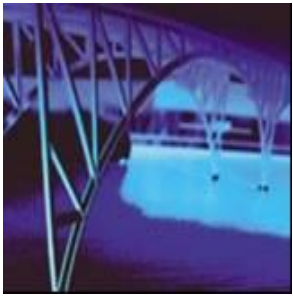
- **Avoids carrying excess inventory and the associated carrying costs.**
- **Accept dating if warehousing costs plus the required return on investment in inventory exceeds the required return on additional receivables.**



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)	44,000	(6,000)

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.

