

**Financial Management 8th Edition**

**김용석 CPA/CFA**

**Errata**

**2025.09.10**

☞ p.64 문제12 정답 수정

B ⇨ D

☞ p.88 상9~10

상9와 상10 줄붙이기 (해석에 유의할 필요가 있다.)

☞ p.130 solution 텍스트 수정

option 1 --> step 1

option 2 --> step 2

☞ p.182 Example 5-5 풀이 수정 (곱하기를 나누기로 수정)

Bond price =  $\$80 \times 8.21\% = \$974$

⇨ Bond price =  $\$80 \div 8.21\% = \$974$

☞ p.184 상3 문구 수정 (리스기간 5년 문구 추가)

\$20,000 per year

⇨ \$20,000 per year on a five-years lease

☞ p.198 상1 공식 문구 수정 (EBIT를 Sales로 수정)

DTL = percentage change in EPS  $\div$  percentage change in EBIT

⇨ DTL = percentage change in EPS  $\div$  percentage change in Sales

☞ p.232 문제 33 문제 및 문항 a (띄어쓰기 수정)

~the cost assigned to retained earnings should be zero ⇨

~ the cost of capital, the cost assigned to retained earnings should be

a. zero

☞ p.298 문제32 문항 a와 c 수정 (숫자에 마이너스 추가)

a. \$316,920 ⇨ a. (-) \$316,920

c. \$265,460 ⇨ c. (-) \$265,460

☞ p.329 그림 7-3의 윗그림 오타 수정

+ Call option ⇨ + Put option

☞ p.363 (3)의 오타 수정

= all temporary current assets and a part of permanent current assets

☞ = all temporary current assets and a **part** of permanent current assets

☞ p.379 그림 8-3의 X축 문구 수정

Total Permanent ☞ Order Quantity

☞ p.389 예제 8-11 해설 숫자 오타 수정

$$= 7\% \times \frac{10}{\$100,000 - \$20,000} \quad \Rightarrow \quad = 7\% \times \frac{\$100,000}{\$100,000 - \$20,000}$$

☞ p.395 문제 14 자료 표의 마지막 줄 오타 수정

1,500 units    0    ☞ 2,000 units    0

☞ p.408 예제 9-1 해설 숫자 오타 수정

$$= (\$20 \div 0.10) - (\$21 \div 0.10) \quad \Rightarrow \quad = (\$21 \div 0.10) - (\$20 \div 0.10)$$

☞ p.433 그림 10-8 (b)의 가로축 텍스트 오타 수정

4 Quantity demanded ☞ 4 Quantity supplied

10 Quantity supplied ☞ 10 Quantity demanded

☞ p.451 그림 10-11 마지막 박스 오타 수정

Long-Run ategic Plan ☞ Threat of substitute products

## Solution

1	2	3	4	5	6	7	8	9	10
B	A	C	C	A	D	B	B	C	B
11	12	13	14	15	16	17			
C	D	B	B	A	D	D			

- 총이자수익 = Inflows - outflows =  $5,009 \times 5 - 19,485 = \$5,560$
- Annuity in advance 이므로  $PV = \$60,000 \times (4.36 + 1) = \$321,600$
- Annuity in advance 이므로  $PMT = \$1,000,000 \div 5.11 = \$195,695$
- $FV = \$75,000 \times 1.26 + \$4,000 \times 3.25 = \$107,500$
- Annuity in advance 이므로  $PMT = \$323,400 \div (3.99 \times 1.08) = \$75,049$   
총이자수익 = Inflows - outflows =  $75,049 \times 5 - 323,400 = \$51,845$
- Ordinary annuity 이므로  $PMT = \$323,400 \div 3.99 = \$81,053$   
총이자수익 = Inflows - outflows =  $81,053 \times 5 - 323,400 = \$81,865$
- $PMT = (\$323,400 - 5,000 \times 0.68) \div (3.99 \times 1.08) = \$74,260$   
총이자수익 = Inflows - outflows =  $74,260 \times 5 + 5,000 - 323,400 = \$52,900$
- $\$60 = \$5 \div R \rightarrow R = \$5 \div \$60 = 0.0833$
- $PV = (\$1,000 \times 0.422) + (\$1,000 \times 6\% \times 6.418) = \$807$
- $PMT = (\$100,000 - 20,000 \times 0.57) \div 3.60 = \$24,611$
- $FV = \$50,000 \times 1.469 = \$73,450 \rightarrow PV = \$73,450 \times 0.57 = \$41,867$
- $PV = (\$50,000 \times 0.57) + (\$50,000 \times 8\% \times 3.60) = \$42,900$
- 액면이자율 < 시장이자율(단기수익률) : 할증발행  
다른 조건이 변하지 않고, 시간이 경과하면 할증금액은 감소
- 채권이나 주식의 가격은 요구수익률이 감소하면 증가한다.
- 채권의 액면이자율이 감소하면 현금흐름이 감소하여 가격은 감소한다.
- $EAR = 12 \div (100 - 12) = 0.1364$
- $Re = (1 + \frac{0.08}{4})^4 = 8.24\%$

### (3) Inventory Turnover and Days Inventory Outstanding (DIO)

재고자산회전율은 매출액을 재고자산으로 나눈 비율로서 재고자산의 회전속도, 즉 재고자산이 현금 등 당좌자산으로 변화하는 속도를 나타낸다. 일반적으로 이 비율이 **높을수록** 상품의 재고손실 방지 및 보험료, 보관료의 절약 등 **재고자산의 관리가 효율적**으로 이루어지고 있음을 의미한다. 이 비율이 낮다는 것은 재고자산이 과다하다는 것을 의미하며, 이 비율이 높다는 것은 생산 및 판매활동이 효율적으로 수행되고 있다는 의미이다. Just-in-time (JIT) system을 도입한 기업은 재고자산 회전율은 높아지고, 재고자산 회전기간은 짧아진다.

그러나 재고를 정상적인 영업활동에 필요한 적정수준 이하로 유지하여 수요변동에 적절히 대처하지 못하는 경우에도 이 비율은 높게 나타날 수가 있으므로 해석에 유의할 필요가 있다.

또한 원재료의 가격이 상승추세에 있는 기업이나 재고자산의 보유수준이 크게 높아지는 기업들의 경우에는 주로 후입선출법(LIFO)에 의해 재고자산을 평가함으로써 재고자산회전율이 높게 나타나는 경향이 있다.

따라서 재고자산회전율에 대한 상대적인 차이에 대해서는 실제로 재고자산이 효율적으로 관리되었는지, 생산기간이 단축되어 재공품이 감소하였는지, 기업의 재고보유 방침이 바뀌었는지, 또 한 재고자산 평가방법을 다르게 채택하고 있는지를 비교 분석하여 판단하여야 할 것이다.

inventory turnover	$\frac{\text{cost of goods sold}}{\text{average inventory}}$
days inventory outstanding (DIO)	$\frac{365}{\text{inventory turnover}}$
	$\frac{\text{average inventory}}{\text{COGS per day}}$
	$\frac{\text{ending inventory}}{\text{COGS per day}}$

For KIM, the Year 2

$$\text{average inventory} = (393 + 422) \div 2 = \$408$$

$$\text{inventory turnover} = \$1,144 \div \$408 = 2.8 \text{ times}$$

## Example 4-3

One-year Treasury securities yield 5%. The market anticipates that 1 year from now, 1-year Treasury securities will yield 6%. If the pure expectation theory is correct, what should be the yield today for 2-year Treasury securities?

## Solution

step 1:

Buy a one-year security, hold it for one year, and then at the end of the year reinvest the proceeds in another one-year security.

$$\text{FV at end of Year 2} = \$1 \times (1.05) \times (1.06) = \$1.113$$

step 2:

$$\text{FV at end of Year 2} = \$1 \times (1 + R)^2 = \$1.113 \rightarrow R = 5.5\%$$

기대이론에 따르면 만기 2년의 국채수익률은 시장에서 5.5%로 결정된다.

## Example 5-5

An 8 percent semiannual coupon bond matures in 5 years. The bond has a face value of \$1,000 and a current yield of 8.21 percent. What are the bond's price and YTM?

## Solution

$$\text{Bond price} = \$80 \div 8.21\% = \$974$$

[EXCEL] 함수선택 RATE

$$N_{\text{per}} = 10, \text{Pmt} = 40, \text{Pv} = -974, \text{Fv} = 1000 \rightarrow \text{Rate} = 4.33\%$$

$$\text{YTM} = 4.33\% \times 2 = 8.66\%$$

## Example 5-6

The Henderson Company's bonds currently sell for \$1,275. They pay a \$120 annual coupon, a par value of \$1,000 and have a 20-year maturity, but they can be called in 5 years at \$1,120. What is their YTM and their YTC, and which is "more relevant" in the sense that investors should expect to earn it?

## Solution

[EXCEL] 함수선택 RATE

$$N_{\text{per}} = 20, \text{Pmt} = 120, \text{Pv} = -1275, \text{Fv} = 1000 \rightarrow \text{Rate} = 8.99\% \text{ (YTM)}$$

[EXCEL] 함수선택 RATE

$$N_{\text{per}} = 5, \text{Pmt} = 120, \text{Pv} = -1275, \text{Fv} = 1120 \rightarrow \text{Rate} = 7.31\% \text{ (YTC)}$$

YTC is more relevant.

## (2) Comprehensive example

On January 1, Year 1, United Airlines enters into a lease contract with annual payments of \$20,000 per year on a five-years lease. The first payment will be made December 31 and the interest rate implicit in the lease is 8%. The present value of ordinary annuity of \$1 at 8% for five years is 3.99. The present value of a \$1 at 8% for five years is 0.68.

### 1) Amortization table

$$\text{present value of lease payments} = 3.99 \times 20,000 = \$79,800$$

Year	A	B	C	D	E
	Beginning Balance	PMT	Interest	Payment of Principal	Remaining Balance
1	79,800	20,000	6,384	13,616	66,184
2	66,184	20,000	5,295	14,705	51,479
3	51,479	20,000	4,118	15,882	35,597
4	35,597	20,000	2,848	17,152	18,445
5	18,445	20,000	1,555	18,445	0
Total		100,000	20,200	79,800	

$$C1 = A1 \times 0.08, D1 = B1 - C1, E1 = A1 - D1, A2 = E1$$

### 2) Operating lease

Date	Accounts	Dr	Cr
1/1/Year 1	Right-of-use asset	\$79,800	
	Lease liability		79,800
12/31/Year 1	Lease expense	20,000	
	Cash		20,000
	Lease liability	13,616	
	Accumulated amortization		13,616

$$\begin{aligned} \text{DTL} &= \text{percentage change in EPS} \div \text{percentage change in Sales} \\ &= \text{contribution margin (CM)} \div \text{EBT} \\ &= \text{DOL} \times \text{DFL} \end{aligned}$$

if) DTL = 6

✓ 매출액이 1% 증가한다면 EPS는 6% 증가

✓ 매출액이 1% 감소한다면 EPS는 6% 감소

#### Example 5-7

The following information is available for Home Depot Inc.  
Budgeted income statement

	<u>100,000 units</u>	<u>105,000 units</u>
Sales	\$3,000,000	\$3,150,000
EBIT	\$200,000	\$240,000
EPS	0.20	0.27

What is Home Depot Inc.'s DOL, DFL and DTL?

#### Solution

$$\text{Percentage change in Sales} = (3,150,000 - 3,000,000) \div 3,000,000 = 5\%$$

$$\text{Percentage change in EBIT} = (240,000 - 200,000) \div 200,000 = 20\%$$

$$\text{Percentage change in EPS} = (0.27 - 0.20) \div 0.20 = 35\%$$

$$\text{DOL} = 20\% \div 5\% = 4$$

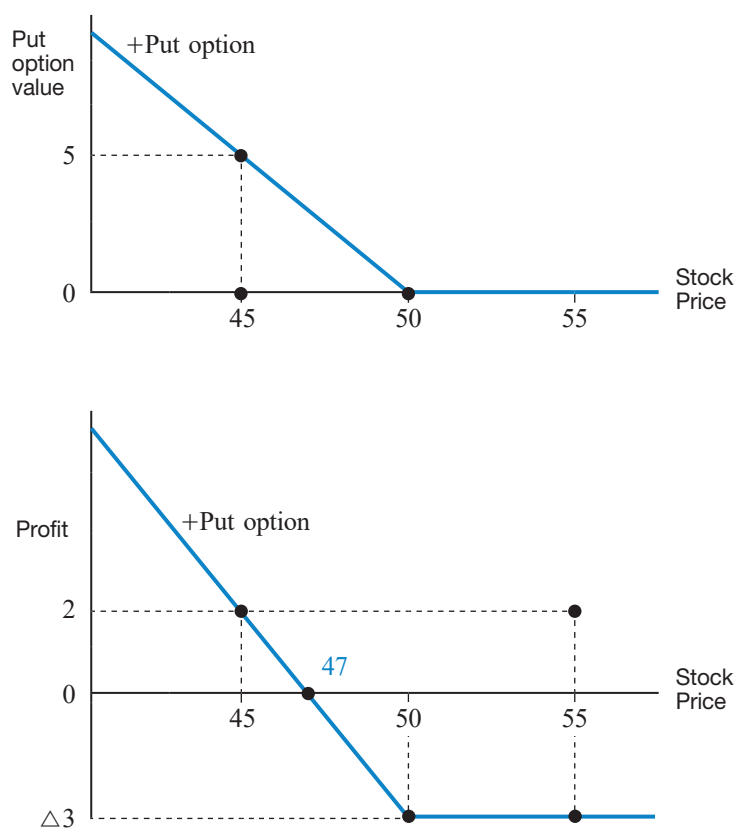
$$\text{DFL} = 35\% \div 20\% = 1.75$$

$$\text{DTL} = 35\% \div 5\% = 7$$

$$\text{DTL} = \text{DOL} \times \text{DFL} = 4 \times 1.75 = 7$$

- 31.** Which of the following statements is not true if management decides to accept Alternative 1?
- a. Alternative 1 is the more conservative capital structure.
  - b. Alternative 1 provides the greatest amount of financial leverage.
  - c. Net income will be less variable under Alternative 1.
  - d. Total interest expense will be less under Alternative 1.
- 32.** Which of the alternatives has the lowest weighted average cost of capital and how much is the differential?
- a. Alternative 1 by 1.5%
  - b. Alternative 2 by 0.59%
  - c. Alternative 1 by 0.167%
  - d. The alternatives have equal WACC.
- 33.** When calculating the cost of capital, the cost assigned to retained earnings should be
- a. zero.
  - b. lower than the cost of external common equity.
  - c. equal to the cost of external common equity.
  - d. higher than the cost of external common equity.
- 34.** Which one of the following statements accurately compares bond financing alternatives?
- a. A bond with a call provision typically has a lower yield to maturity than a similar bond without a call provision.
  - b. A convertible bond must be converted to common stock prior to its maturity.
  - c. A call provision is usually considered detrimental to the investor.
  - d. A sinking fund prohibits the firm from redeeming a bond issue prior to its final maturity.





[Figure 7-3] put option payoff

$$\begin{aligned}
 & \text{Profit/Loss from a short put} \\
 & = \text{Initial cash flow} - \text{Cash flow at expiration} \\
 & = - \text{Profit/Loss from a long put}
 \end{aligned}$$

### 3 Current Asset Financing Policies

#### (1) Current assets

##### 1) Permanent current asset

Current assets that a firm must carry even at the low point of its cycle.

계절적 요인이나 일시적 요인과 관계없이 영업활동에 따라 일정한 추세로 유지되는 유동자산

##### 2) Temporary current asset

Current assets that fluctuate with seasonal or cyclical variations in sales.

계절적 요인이나 일시적 요인에 의해서 변동성을 보이는 유동자산

#### (2) Maturities matching (= Moderate policy)

A financing policy that matches asset and liability maturities.

short-term, non-spontaneous debt financing = all temporary current assets

#### (3) Aggressive approach

short-term, non-spontaneous debt financing

= all temporary current assets and a part of permanent current assets

#### (4) Conservative approach

short-term, non-spontaneous debt financing = a part of temporary current assets

### (3) Inventory management

#### 1) Trade-off in inventory management

inventory levels  $\uparrow$  : shortage costs  $\downarrow$  vs carrying costs  $\uparrow$

#### 2) The goal of inventory management

minimize the sum of carrying costs and shortage costs.

## 2 Economic Order Quantity (EOQ)

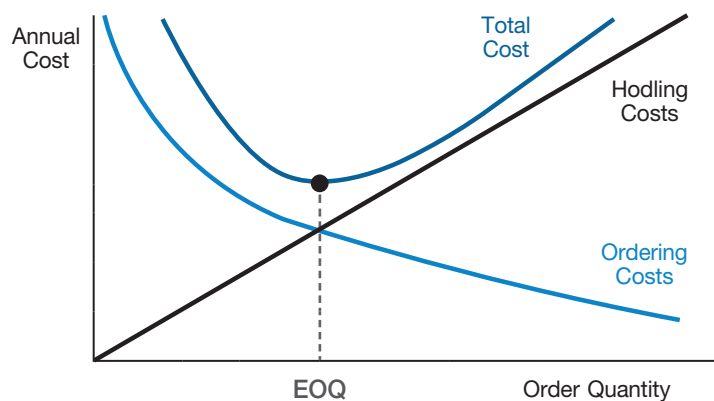
Economic order quantity (EOQ) is the order quantity that minimizes the total holding costs and ordering costs. (주문비용과 재고유지비가 최소가 되게 하는 1회 주문량)

### (1) Total costs (총재고비용)

$$\text{Total costs} = \text{carrying costs} + \text{ordering costs}$$

Order size  $\uparrow$  : ordering cost  $\downarrow$  vs carrying costs  $\uparrow$

Order size  $\downarrow$  : ordering cost  $\uparrow$  vs carrying costs  $\downarrow$



[Figure 8-3] Total cost

## 2 Bank Loans

### (1) Promissory note

A document specifying the terms and conditions of a loan, including the amount, interest rate, and repayment schedule.

### (2) Interest rate

- Interest rate can be either fixed or floating.
- Floating
  - indexed to the bank' prime rate, to the T-bill rate, to the LIBOR,
- Bank uses a 360- or 365-day year for purposes of calculating interest.
- The indicated rate is a nominal rate, and the effective annual rate is generally higher.

### (3) Compensating balance

A minimum checking account balance that a firm must maintain.

#### Example 8-11

Dior Company's bank requires a compensating balance of 20% on a \$100,000 loan. If the stated interest on the loan is 7%, what is the effective cost of the loan?

#### Solution

$$\text{Effective interest} = 7\% \times \frac{\$100,000}{\$100,000 - \$20,000} = 8.75\%$$

**13.** Carnes Industries uses the Economic Order Quantity (EOQ) model as part of its inventory control program. An increase in which one of the following variables would increase the EOQ? (CMA)

- a. Carrying cost rate
- b. Purchase price per unit
- c. Ordering costs
- d. Safety stock level

**14.** Ferndale Distributors is reviewing its inventory policy with respect to safety stocks of its most popular product. Four safety stock levels were analyzed and annual stock-out costs estimated for each level. (CMA)

Safety Stock	Stockout Costs
1,000 units	\$3,000
1,250 units	2,000
1,500 units	1,000
2,000 units	0

The cost of this product is \$20 per unit, holding costs are 4% per year, and the cost of short-term funds is 10% per year. What is the optimal safety stock level?

- a. 1,000 units
- b. 1,250 units
- c. 1,500 units
- d. 2,000 units

**15.** Which one of the following is not explicitly considered in the standard calculation of Economic Order Quantity (EOQ)? (CMA)

- a. Level of sales
- b. Fixed ordering costs
- c. Carrying costs
- d. Quantity discounts

# Business Combinations and Divestitures



## 01 Merger & Acquisition (M&A)

### 1 Motivations

#### (1) Synergy

- The condition wherein the whole is greater than the sum of its parts.
- The post-merger value exceeds the sum of the separate companies' pre-merger values.

#### (2) Diversification

#### (3) Tax benefits

#### (4) Purchase of assets below their replacement cost

#### (5) Personal benefits for managers

#### (6) Achieving more rapid growth

#### (7) Increased market power

#### Example 9-1

Firms A and B are competitors with very similar assets and business risks. Both are all-equity firms with aftertax cash flows of \$10 million per year forever, and both have an overall cost of capital of 10 percent. Firm A is thinking of buying Firm B. The after-tax cash flow from the merged firm would be \$21 million per year. Does the merger generate synergy?

#### Solution

$$\text{Synergy} = (\$21 \div 0.10) - (\$20 \div 0.10) = \$10 \text{ million}$$

#### 4) 수요의 감소 & 공급의 감소

균형가격 불분명, 균형거래량 감소

### (5) Supply, Demand and Government Policies

#### 1) 가격통제 (controls of prices)

##### ① 가격상한제(price ceiling)

어떤 재화 판매가격의 법정 최고치

예 주택시장의 임대료 규제

시장가격 < 가격상한 → 실효성 없음

시장가격 > 가격상한 → 실효성 있음, 물량부족(shortage) → 판매자들은 다수의 잠재적인 고객 중에서 일부를 선별하여 희소한 재화를 배당

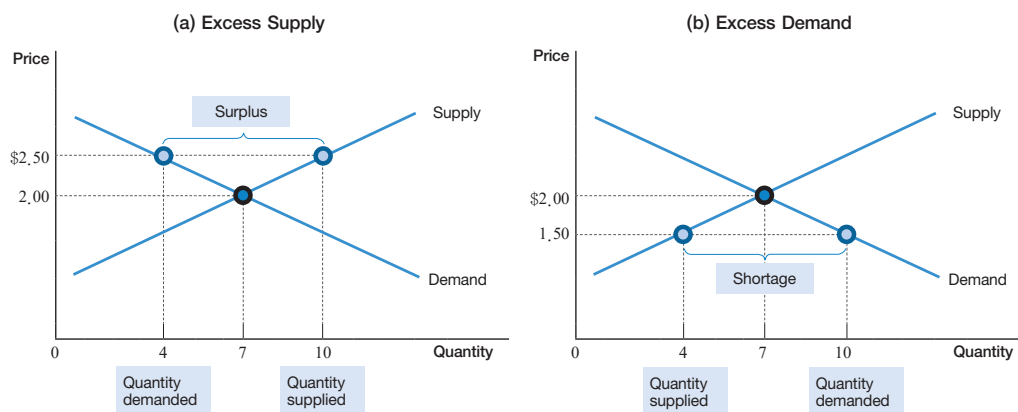
##### ② 가격하한제(price floor)

어떤 재화 판매가격의 법정 최저치

예 최저임금제

시장가격 > 가격하한 → 실효성 없음

시장가격 < 가격하한 → 실효성 있음, 공급과잉(surplus) → 판매자들이 인종적 유대나 가족관계에 호소하면서 판매



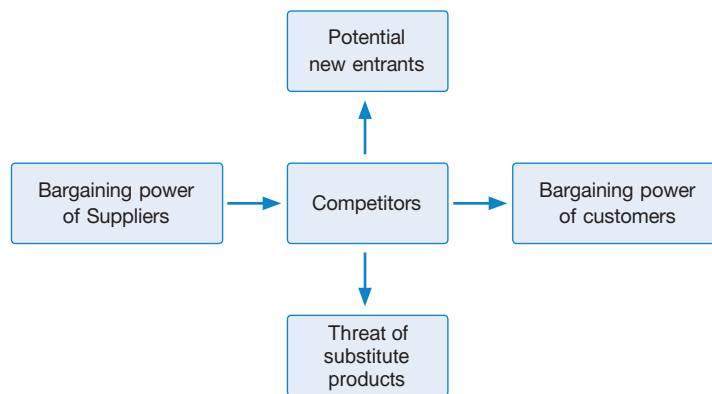
[Figure 10-8] Markets Not in Equilibrium

### 3) Focus strategy

집중화 전략은 특정 고객, 특정 제품, 특정 지역 등 한정된 영역에 기업 경영자원을 집중하는 전략이다. 이 전략은 세분화된 고객 중 어느 특정 층을 겨냥하여 비용우위나 차별화를 통해 집중적으로 공략한다.

### (5) Five competitive forces

마이클 포터(M. Porter)는 기업의 경쟁적 환경 및 경쟁적 우위를 결정하는 요인을 다음과 같이 5가지로 제시하였다.



[Figure 10-11]

- 1) Competition in the industry : 산업 내 경쟁기업과의 경쟁강도
- 2) Potential of new entrants into the industry : 신규 진입자의 위협
- 3) Power of suppliers : 공급자와의 교섭력
- 4) Power of customers : 구매자와의 교섭력
- 5) Threat of substitute products : 대체제의 위협