# Chapter: Chapter 02: Fundamental Principles of Value Creation 

True/False

1. Since value is based on discounted cash flows, a company or an investor need not analyze growth and return on invested capital (ROIC).

Ans: [False]
Response: [Although the discounted cash flow method gives an estimate of value, the sources of value creation are growth and increasing ROIC. Managers and investors can more readily see the impact of changes in these value drivers on firm value.]
2. Return on invested capital and revenue growth determine how revenues are converted into cash flows, and value is created only when return on invested capital is greater than cost of capital.

Ans: [True]
Response: []

Multiple Choice
3. If the growth rate of a company is 2.1 percent and the ROIC is 9 percent, what is the investment rate?
a) 23.3 percent.
b) 30.4 percent.
c) 45.5 percent.
d) 69.6 percent.

Ans: [a]
Response: [Investment rate $=$ Growth/ROIC $=2.1 \% / 9 \%=0.23333]$
4. If the growth rate of a company is 5 percent and the investment rate is 40 percent, what is the ROIC?
a) 800 percent.
b) 8 percent.
c) 2 percent.
d) 12.5 percent.

Ans: [d]
Response: [ROIC = Growth/Investment rate = 5\%/40\% = 12.5\%]
5. If the investment rate of a company is 10 percent and the ROIC is 20 percent, what is the growth rate?
a) 5 percent.
b) 50 percent.
c) 2 percent.
d) 200 percent.

Ans: [c]
Response: [Growth = Investment rate * ROIC $=10 \%$ * 20\% = 2\%]

True/False
6. Focusing on improving earnings and short-term cash flow will consequently lead to value creation.

Ans: [False]
Response: []

## Multiple Choice

7. When a company has an ROIC greater than its cost of capital, faster growth increases value, but when it has an ROIC less than its cost of capital, what is the effect on value?
a) Faster growth creates value.
b) Faster growth destroys value.
c) Growth doesn't impact value creation.
d) None of the above are true.

Ans: [b]
Response: []

True/False
8. Companies can increase their value by shifting the listing country, as demonstrated by the fact that U.S. companies have had higher valuation multiples than companies based in Asia.

Ans: [False]
Response: []

Multiple Choice
9. For a given incremental increase in revenue from each of the following sources of growth, which source would generally create the most shareholder value?
a) Reducing costs.
b) Acquiring businesses.
c) Expanding an existing market.
d) Introducing new products to market.

Ans: [d]
Response: []

True/False
10. Companies can generally create more value by competing to lure customers away from rivals than by expanding their portfolios by either developing new products or expanding the market.

Ans: [False]
Response: [Expanding the portfolio is generally the best method for creating lasting value, because rivals can retaliate when a firm tries to compete for a larger share of the existing market.]
11. Organic growth often creates more value than growth from acquisitions.

Ans: [True]
Response: [Expanding the portfolio creates more value than acquisitions because acquisitions are usually costly. The acquirer has to pay a premium to stave off other bidders, and value is created only if the acquisition reduces costs, increases revenue growth, and/or improves the use of fixed or working capital.]

Multiple Choice
12. A company with an ROIC of 45 percent and a cost of capital of 8 percent is considering an investment opportunity of similar risk to its existing investments. If the new opportunity would generate a 30 percent ROIC, what should the company do?
a) The company should invest in this project, as 30 percent is pretty close to the 45 percent that the company currently achieves.
b) The company should not invest in the project, since the return is lower than its current return of 45 percent.
c) The company should invest in the project, as its return is greater than the cost of capital.
d) The company should not invest in the project, since it already enjoys a high ROIC and the new investment will dilute the overall returns.

Ans: [c]
Response: []
13. A 10 percent increase in value is most likely to result from a 10 percent increase in which of the following?
a) Growth.
b) ROIC.
c) NOPLAT.
d) WACC.

Ans: [c]
Response: []

True/False
14. Economic profit consists of the spread between ROIC and cost of capital and is useful in determining which business units or investment opportunities would create more value.

Ans: [True]
Response: []

## Multiple Choice

15. For a given company, next year's NOPLAT is $\$ 50$. For the foreseeable future, the growth rate will be 3 percent, the ROIC will be 12 percent, and the weighted average cost of capital (WACC) will be 10 percent. Using the key driver formula, calculate the value of the company.
a) $\$ 536$
b) $\$ 1,667$
c) $\$ 714$
d) $\$ 500$

Ans: [a]
Response: [Value = \$50 * $\{1-(3 \% / 12 \%)\} /(10 \%-3 \%)=\$ 535.71]$
16. For a given company, next year's NOPLAT is $\$ 200$. For the foreseeable future, the growth rate will be 5 percent, the ROIC will be 10 percent, and the WACC will be 8 percent. Using the key driver formula, calculate the value of the company.
a) $\$ 2,500$
b) $\$ 4,000$
c) $\$ 6,667$
d) $\$ 3,333$

Ans: [d]
Response: [Value $=\$ 200$ * $\{1-(5 \% / 10 \%)\} /(8 \%-5 \%)=\$ 3,333.33]$

True/False
17. When ROIC equals the cost of capital, there is no relationship between growth and value.

Ans: [True]<br>Response: [When ROIC = WACC in the constant growth model, value = NOPLAT/WACC.]

Short Answer
18. Explain how the current level of return on invested capital (ROIC) should influence managers' decision concerning their focus on the two sources of value creation.

Ans: [The two sources of value creation are ROIC and growth. In general, companies already earning a high ROIC can generate more additional value by increasing their rate of growth, rather than their ROIC, while low-ROIC companies will generate more value by focusing on increasing their ROIC. Thus, if a company's ROIC is currently high, then the managers should focus on growth. If ROIC is low, then the managers should focus on improving ROIC.]

