# Module: Business Valuation

### Topics

This module includes the following eight topics:

Topic 1: Business Valuation Basics

Topic 2: Income Approach – Dividend Discount Model

Topic 3: Income Approach – Free Cash Flows

Topic 4: Market Multiples Approach – P/E, P/BV, and P/S

Topic 5: Market Multiples Approach – P/CF and EV/EBITDA

Topic 6: Asset-Based Approach

Topic 7: Residual Income Approach

Topic 8: Control Premiums, Marketability Discounts, Private Firms

## Topic 1: Business Valuation Basics

This topic reviews the definitions of value and the different situations when companies need to value a business.

### Readings

Introduction, Sections 1.1 and 1.9

### **Learning Problems**

None

**Answer Keys**

None

## Topic 2: Income Approach – Dividend Discount Model

This topic examines how to value a business using the income approach – dividend discount model.

### Readings

Section 1.2

### **Learning Problems**

Suitability of Income Approach (DDM) at Quesnel

Income Approach (DDM) at Rebel

Income Approach (DDM) With No Growth at Roanoke

Income Approach (DDM) with Negative Growth at Klondike

Estimating Historical Growth Rates

Income Approach (DDM) at Amsterdam

Income Approach (DDM) at Samantha

Income Approach (DDM) at ABC

Implied Growth Rate of Dividends

**Answer Keys**

Suitability of Income Approach (DDM) at Quesnel

Income Approach (DDM) at Rebel

Income Approach (DDM) With No Growth at Roanoke

Income Approach (DDM) with Negative Growth at Klondike

Estimating Historical Growth Rates

Income Approach (DDM) at Amsterdam

Income Approach (DDM) at Samantha

Income Approach (DDM) at ABC

Implied Growth Rate of Dividends

**Topic 3: Income Approach – Free Cash Flows**

This topic examines how to value a business using the income approach – free cash flows.

**Readings**

Section 1.3

### **Learning Problems**

Income Approach (FCFE) at Shelton

Income Approach (FCFE) at Global

Income Approach (FCFE) at Ricco

Income Approach (FCFE) at Quazar

Income Approach (FCFF) at Pulsar

Income Approach (FCFF) at Wellington

Normalizing EBIT (1-t) and Net Income

Income Approach (FCFF) for a Distressed Firm

**Answer Keys**

Income Approach (FCFE) at Shelton

Income Approach (FCFE) at Global

Income Approach (FCFE) at Ricco

Income Approach (FCFE) at Quazar

Income Approach (FCFF) at Pulsar

Income Approach (FCFF) at Wellington

Normalizing EBIT (1-t) and Net Income

Income Approach (FCFF) for a Distressed Firm

## Topic 4: Market Multiples Approach – P/E, P/BV, and P/S

This topic examines how to value a business using the market multiples approach – P/E, P/BV, and P/S.

### Readings

Section 1.4

### **Learning Problems**

Trailing and Leading P/E Ratios

Normalizing EPS

Justified Benchmark Multiples (P/E, P/S, P/BV) at Irwin

Justified Benchmark Multiples (P/E) at Hector

Justified Benchmark Multiples (P/E) for a New Industry

Justified Benchmark Multiples (P/E) Using a 2-Stage Model at Dixon

Market Multiples Approach (P/E) at Hi-tech

Market Multiples Approach (P/BV) at Ballantyne

Market Multiples Approach (P/E) at Regal

Market Multiples Approach (P/E) at Horizon

Market Multiples Approach (P/E) at Maple Leaf

Market Multiples Approach (P/S) at RRJ

Market Multiples Approach (P/BV) at Surefire

Market Multiples Approach (P/E) at Astro

Market Multiples Approach (P/E) Using Multi-Regression at Timmins

Market Multiples Approach (P/E) Using Multi-Regression at Shamrock

Market Multiples Approach (P/E) Using Multi-Regression at Wainwright

Historical Average Multiples Approach (P/E) at Lancaster

**Answer Keys**

Trailing and Leading P/E Ratios

Normalizing EPS

Justified Benchmark Multiples (P/E, P/S, P/BV) at Irwin

Justified Benchmark Multiples (P/E) at Hector

Justified Benchmark Multiples (P/E) for a New Industry

Justified Benchmark Multiples (P/E) Using a 2-Stage Model at Dixon

Market Multiples Approach (P/E) at Hi-tech

Market Multiples Approach (P/BV) at Ballantyne

Market Multiples Approach (P/E) at Regal

Market Multiples Approach (P/E) at Horizon

Market Multiples Approach (P/E) at Maple Leaf

Market Multiples Approach (P/S) at RRJ

Market Multiples Approach (P/BV) at Surefire

Market Multiples Approach (P/E) at Astro

Market Multiples Approach (P/E) Using Multi-Regression at Timmins

Market Multiples Approach (P/E) Using Multi-Regression at Shamrock

Market Multiples Approach (P/E) Using Multi-Regression at Wainwright

Historical Average Multiples Approach (P/E) at Lancaster

## Topic 5: Market Multiples Approach – P/CF and EV/EBITDA

This topic examines how to value a business using the market multiples approach – P/CF and EV/EBITDA.

### Readings

Section 1.5

### **Learning Problems**

Market Multiples Approach (EV/FCFF) at Sunshine

Market Multiples Approach (EV/FCFF) at Ashton

**Answer Keys**

Market Multiples Approach (EV/FCFF) at Sunshine

Market Multiples Approach (EV/FCFF) at Ashton

## Topic 6: Asset-Based Approach

This topic examines how to value a business using the asset-based approach.

### Readings

Section 1.6

### **Learning Problems**

Asset-Based Approach at Willington

Asset-Based Approach at Ambrose

**Answer Keys**

Asset-Based Approach at Willington

Asset-Based Approach at Ambrose

## Topic 7: Residual Income Approach

This topic examines how to value a business using the residual income approach.

### Readings

Section 1.7

### **Learning Problems**

Residual Income Approach at High Mountain

Residual Income Approach at Majestic

**Answer Keys**

Residual Income Approach at High Mountain

Residual Income Approach at Majestic

## Topic 8: Control Premiums, Marketability Discounts, Private Firms

This topic reviews the marketability discounts and control premiums adjustments that are applied when valuing a business. It also examines special considerations when valuing a private firm.

### Readings

Section 1.8

### **Learning Problems**

Marketability Discounts at Adirondack

Valuing a Private Company at Adams River

Valuing a Private Company at Dawson Falls

**Answer Keys**

Marketability Discounts at Adirondack

Valuing a Private Company at Adams River

Valuing a Private Company at Dawson Falls

## Module Summary

In this module, you have learned how to value public and private companies using the income, market multiples, asset-based, and residual income approaches.