## Module 1 - Home

## THE TIME VALUE OF MONEY AND FINANCIAL STATEMENT ANALYSIS

### **Modular Learning Outcomes**

Upon successful completion of this module, the student will be able to satisfy the following outcomes:

- Case
- Make calculations concerning present and future value.
- SLP
- Calculate and analyze various financial ratios.
- Discussion
- o Evaluate the concepts of present and future value.

#### **Module Overview**

This first module introduces time value of money and financial ratio analysis.

# Module 1 - Background

The time value of money is an important, fundamental concept in finance. Time value of money refers to present value and future value. It is used in various areas of finance, including capital budgeting, bond valuation, and stock valuation. It is very important that you understand the time value of money so that you are prepared to study more advanced topics in the future.

Time lines are important to understand future value and present value problems. If you are having difficulty understanding a time value of money problem, start with a time line. With an annuity due, the cash flows at the beginning of the period. With an ordinary annuity, the cash flows occur at the end of the period. If an annuity problem doesn't state if the cash flows occur at the beginning or the end of the period, by default the cash flows occur at the end of the period.

When cash flows continue on forever, they are known as perpetuities. To find the present value of a perpetuity, you simply divide the cash flow by the discount rate in decimal notation.

Review these videos that focus on the time value of money:

<u>Valuation of Money Podcast</u>. (n.d.). Pearson Learning Solutions, New York, NY.

<u>Valuation of Money Interactive Video</u>. (n.d.). Pearson Learning Solutions, New York, NY.

JohnFinance (2014). Compound Annual Growth Rate. Retrieved

from http://www.youtube.com/watch?v=Vp7HqfRifXo

JohnFinance (2014). Present Value of a Perpetuity. Retrieved

from <a href="http://www.youtube.com/watch?v=o2FvRiRJ6zM">http://www.youtube.com/watch?v=o2FvRiRJ6zM</a>

JohnFinance (2014). Present Value of a Growing Perpetuity. Retrieved from

http://www.youtube.com/watch?v=ikRczqx-al4

JohnFinance (2014). The Time Period in a Future Value of a Lump Sum.

Retrieved from <a href="http://www.youtube.com/watch?v=\_TwPBazoywg">http://www.youtube.com/watch?v=\_TwPBazoywg</a>

Review these website links that focus on the time value of money:

McCracken, M., (n.d.). The time value of money. Retrieved

from <a href="http://www.teachmefinance.com/timevalueofmoney.htm">http://www.teachmefinance.com/timevalueofmoney.htm</a>

Getobjects.com (2002). Future value. Retrieved from <a href="http://www.getobjects.com/Components/Finance/TVM/f">http://www.getobjects.com/Components/Finance/TVM/f</a> v.html

Financial statement analysis is very important for securities analysts. Securities analysts recommend to portfolio managers what stocks should be bought and sold. Financial statement analysis involves analyzing various financial ratios for a company over time and comparing those to the appropriate industry average. For example, it is important for a company's ROE to be increasing over time and greater than the industry average. Although it's very important for a firm to have strong liquidity, it's a negative sign if a firm's quick or current ratios are excessively high. There are five main categories of ratios: liquidity, asset management, debt management, profitability, and market value.

# Review these videos that focus on some financial ratios:

JohnFinance (2014). Debt-to-Equity Ratio. Retrieved from <a href="http://www.youtube.com/watch?v=0Gk-YIUfpmQ">http://www.youtube.com/watch?v=0Gk-YIUfpmQ</a>

JohnFinance (2014). Times Interest Earned Ratio. Retrieved

from <a href="http://www.youtube.com/watch?v=UYua0yHGadY">http://www.youtube.com/watch?v=UYua0yHGadY</a>

Review this website link which focuses on financial ratios:

NetMBA (n.d.). Financial ratios. Retrieved from <a href="http://www.netmba.com/finance/financial/ratios/">http://www.netmba.com/finance/financial/ratios/</a>

## **Optional Resources**

Bookboon.com. (2008). Corporate Finance. Retrieved from <a href="http://bookboon.com/en/economics-and-finance-ebooks">http://bookboon.com/en/economics-and-finance-ebooks</a>

Welch, Ivo. (2014). Corporate Finance (3<sup>rd</sup> Ed.). Chpts 2 and 13. Retrieved from <a href="http://book.ivo-welch.info/ed3/toc.html">http://book.ivo-welch.info/ed3/toc.html</a>