



# SACRAMENTO STATE

**Introducing yourself, Dr. David J. Moore and Finance**

# Introduce yourself

1. Your name
2. Your major & concentration
3. Have you lived outside of the U.S.? (more than one continuous month)
4. Do you speak another language? (can get by in another country)
5. Have you ever played a musical instrument or been a vocalist?
6. Do you currently play a musical instrument or are a vocalist?
7. What are two things interesting about yourself?

# INTRODUCTION TO ME

# My life on one slide

- I was born in Hammond Indiana (between Chicago and Gary).
- My father was a high school math and science teacher in the south side of Chicago. My mother was busy taking care of eleven of us.
- I was home schooled for high school and obtained my B.S.E.E. from Purdue University in 1994 at age 19.
- I went to work for Motorola immediately afterwards. There I worked on imaging satellites and data encryption projects. I obtained a MBA from Arizona State University in 1999.
- Next I went to Silicon Valley to work for a number of startup, small, and medium size companies.
- I struck gold once but did not hit the sell button soon enough.
- I went back to school and obtained a Ph.D. in Finance from the University of Tennessee in 2008.
- That was bad timing with the financial crisis. I had to work as a “Visiting” professor at the University of Memphis a few years.
- Now I am here!

# INTRODUCTION TO FINANCE

# The four major areas of finance

- Corporate finance
  - What do the financial statements tell us about efficiency?
  - Which projects do I choose and why?
  - Do I fund those projects with cash, debt, or equity?
  - What do I do with the profits?
- Investment finance
  - What are the available investment options?
  - Which investments do I choose and why?
- Financial institutions
  - What functions do they serve?
  - How do I measure and manage risk?
- Financial markets
  - What are the mechanics of stock markets, bond markets, foreign exchange, commodities markets, etc?

# CORPORATE FINANCE OVERVIEW

## Part 1: Fundamental Concepts

- Introduction
- Corporate governance
- Time value of money
- Bond valuation (calculation of YTM to be used later on as  $r_d$  in WACC)
- Stock valuation (calculation of  $E[r]$  to be used later on as  $r_s$  in WACC)
- Understanding and calculating risk and return

## Part 2: Corporate valuation - how to improve value

- Managerial accounting
  - How to extract FCF, MVA, EVA from financial statements
  - Taxes
- Financial statement analysis
  - Asset, liquidity, profitability and other firm performance-related measures; benchmarking
- Cost of capital
  - Using  $r_d$  and  $r_s$  from prior chapters to calculate WACC
  - Tax implications
  - Risk adjustment

## Part 3: Project selection

- Selection criteria
  - NPV, IRR, MIRR, payback period, etc.
- Estimating project cash flows
  - Incremental cash flows
  - Tax implications
- Project risk analysis
  - Sensitivity analysis
  - Scenario analysis
  - Monte Carlo analysis (maybe)
  - Decision trees