

### Student Investment Fund program purpose

The SIF program allows students the opportunity to:

- 1. Analyze and manage an investment portfolio.
- 2. Research and recommend portfolio holdings.
- 3. Analyze economic conditions.
- 4. Maintain accounts and records necessary for an investment portfolio.
- 5. Perform these functions in the context of a unique educational opportunity that will help students better understand financial markets.

The SIF students, with faculty oversight, manage a real portfolio for the University. The portfolio began with \$250,000 in 2010 and as of April 28, 2021 the portfolio is over \$937,000. That's right, we are fast approaching the million dollar mark!

## How the Student Investment Fund is Implemented at Sacramento State University.

### University Enterprises Incorporated (UEI)

- Owner of account.
- Account maintained by Fidelity.
- Account administered by Sand Hill.
- Trades sent by approved account signatory (Craig Barth of UEI) – MOU paragraph III.a.

Memorandum of Understanding (MOU) #MA180441: PDF.

- Between UEI and College of Business.
- Spells out purpose, administration, funding, and management fee of the fund.

### College of Business

- Delivers program via FIN160 (undergraduate students) and MBA299A (MBA students)
- General course content (curriculum) determined by Finance Department and approved by College and University.
- Receives management fee from UEI.
- Determines usage of management fee.

#### Professor of Record

- Implements MOU within context of course as College of Business designee. This includes:
- Course syllabus construction.
- Security selection process.
- Trade approval and transmission to UEI.
- Approval of management fee use.
- General oversight: "with faculty oversight" MOU paragraph I.
- Optional: Serves as faculty advisor for SIF Student Club at the instructor's discretion.

# FIN160/MBA299A – Student Investment Fund (SIF) Semester Overview

Compliance

**Vision Clarity** 

Accounting

Performance Measurement Fundamental Analysis

Portfolio formation

Process review / improvement

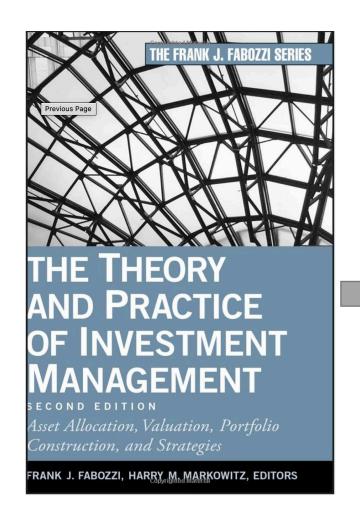
- Read and understand
   Memorandum of Understanding (MOU) / Prospectus.
- Must understand the vision before you can execute the vision.
- Need correct and accurate data in order to determine if we faithfully execute the vision.
- Based on accurate accounting
- Historical and forward-looking risk and return measures relative to our benchmark.
- RIVER process to quantitatively assess and score 14+ fundamental measures.
- Construct
   "Universe": list of
   top fundamental
   picks, existing
   holdings, and
   student add-ins.
- Align Portfolio Configuration parameters with MOU.
- Use Portfolio
   Optimizer tool to
   form portfolio
   based on Universe
   of stocks.
- Did optimized portfolio meet expected return and risk measures? What steps along they way can be improved?

## Fiduciary

"A fiduciary is a person or organization that acts on behalf of another person or persons, putting their clients' interest ahead of their own, with a duty to preserve good faith and trust. Being a fiduciary thus requires being bound both legally and ethically to act in the other's best interests." —Investopedia: <a href="https://doi.org/10.1001/j.j.google-person-organization-that acts on behalf of another person or organization that acts on behalf of another person or persons, putting their clients' interest ahead of their own, with a duty to preserve good faith and trust. Being a fiduciary thus requires being bound both legally and ethically to act in the other's best interests."

However, the processes can be adapted to other objectives (e.g., short-term growth vs. long-term value) using your own money. More on this in a couple slides.

# MOU & "The Theory and Practice of Investment Management"



investment program. The funds' benchmark will be the S&P 500. The return target is to provide

a total return in access of 0.5% above the S&P 500.

### 240

EQUITY ANALYSIS AND PORTFOLIO MANAGEMENT

### **EXHIBIT 9.3** Measures of Management Categories

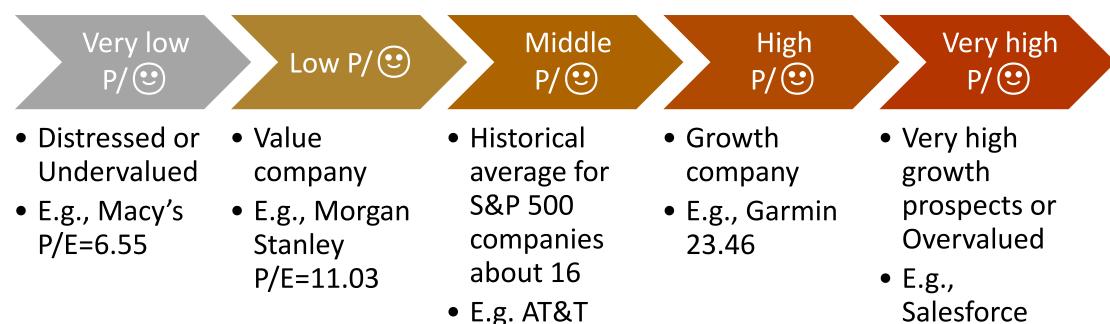
		Active Management	t Enhanced Indexing
Expected alpha 0%		2.0% or higher	0.5% o 2.0%
Tracking error 0%	to 0.2%	4% or higher	0.5% to 2.0%

Source: Exhibit 2 in John S. Loftus, "Enhanced Equity Indexing," Chapter 4 in Perspectives on Equity Indexing, ed. Frank J. Fabozzi (Hoboken, N.J.: John Wiley & Sons, 2000), 84.

minimizing the risk of large losses through extensive and prudent diversification. The risk is to stay in line with that of the S&P 500 when measured by standard deviation formula.

## Detour on your own: If you want to branch off into Class V rafting, do so with your own money (or "paper" trading).

Thought questions: (1) Where does SIF & CSUS sit in this spectrum? (2) How could you modify the SIF process to target a growth portfolio?



#### **Notes**

1. Although I used P/E, could be earnings, sales, book value, or cash flow. Regardless, low P/ suggests low growth in where high P/ suggests high growth in where high P/ suggests high growth in

P/E=16.60

2. These are just examples. If the market is inefficient, Morgan Stanley could be under valued and Garmin over valued. If the market is efficient, Macy's and Salesforce could be properly valued.

P/E=308.77

# Fund management functional areas in addition to security analysis and portfolio formation

### **Accounting**

- Translate monthly account statements into PORT holdings and transactions files.
- Deliver PORT files to Risk & Performance for Fact Sheet update.
- Historical trade entry/exit price info.

### **MOU Compliance**

Works with
 Accounting and Risk &
 Performance to
 ensure compliance
 with sector
 weightings, return
 targets, and risk
 targets.

### Performance Measurement

- Periodically update historical and forwardlooking performance metrics.
- Define performance "alerts" and facilitate communication with MIS & Marketing.
- Take accounting trade data and report historical risk-adjusted performance.

### MIS & Marketing

- Develop process to automate translation monthly excel account statements into Bloomberg PORT file updates and Fund Fact Sheet updates.
- Maintain website and social media.

### General semester flow

- First 1/3<sup>rd</sup> of semester
  - MOU Clarity.
  - Accounting, performance measurement, and reporting.
  - Dr. Moore presents RIVER analysis process and how it connects to the Portfolio Optimization step.
  - Financial, economic, portfolio updates.
- Second 1/3rd of semester
  - Students present portions of RIVER analysis applied to their sector.
  - Financial, economic, portfolio updates.
- Final 1/3<sup>rd</sup> of semester
  - Dr. Moore presents Portfolio optimization usage
  - Students populate central "Universe" list and run Portfolio Optimizer
  - Review optimizer output and place trades if warranted.
  - Financial, economic, portfolio updates.
- Throughout
  - Career action plan development.
  - Guest speakers.

## Copyright Notice

Copyright © 2020, 2021 By David J. Moore Ph.D.

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written consent of the author.

Students enrolled in courses taught by Dr. David J. Moore:

- For academic purposes just be sure to cite your source if you use any part of this presentation.
- For commercial purposes contact the author before using any part of this presentation.