~ Creating and Analyzing a Portfolio of Equities ~

A Presentation by Team # 7:

- Yoga Prakasa
- Patrick D. Riordan
- Kyle Robinson
- Yaning Wiriadi
- Jian W. Zhang

Outline

- Selection Process
- Portfolio Characteristics
  - Set-up Cost
  - Portfolio Beta
  - Portfolio Alpha
- Portfolio Performance
  - External Events
  - Internal Events
- Recommendations

The Selection Process

- Optimal Portfolio based on MPT:

• Health Care	Cardinal Health	69.02 %
• Energy	Sunoco	- 1.52 %
• Industrial	ADP	27.68 %
• Utility	Duke Energy	51.02 %
• Consumer Staple	Procter & Gamble	- 20.37 %
• Cons. Discretionary	Disney	- 45.29 %
• Telecommunication	AT & T	- 24.15 %
• Financial	Morgan Stanley	57. 83 %
• Material	US Steel	- 23.73 %
• Info. Technology	EMC	9.50 %

Portfolio Holding

Portfolio Characteristics

- The cost to set up the portfolio as of 4/1/2002

Ticker	*# of Shares*	*Price (3/31/02)*	*Total*
CAH	100	$ 70.86	$ 7,086.00
ADP	40.1061	$ 58.08	$ 2,329.36
DUK	73.9316	$ 37.52	$ 2,773.91
MWD	83.7974	$ 56.40	$ 4,726.17
EMC	13.7597	$ 11.92	$ 164.02

Grand Total **$ 17,079.47**

Portfolio Characteristics

- Beta of portfolio

Ticker	*Beta*	*Weight*	*Weighted Beta*
CAH	0.2061	41.49 %	0.0855
ADP	0.8186	13.64 %	0.1117
DUK	-0.1406	16.24 %	-0.0228
MDW	2.2029	27.67 %	0.6095
EMC	2.2208	0.96 %	0.0213

Total Beta **0.8052**

Portfolio Characteristics

- Portfolio Alpha

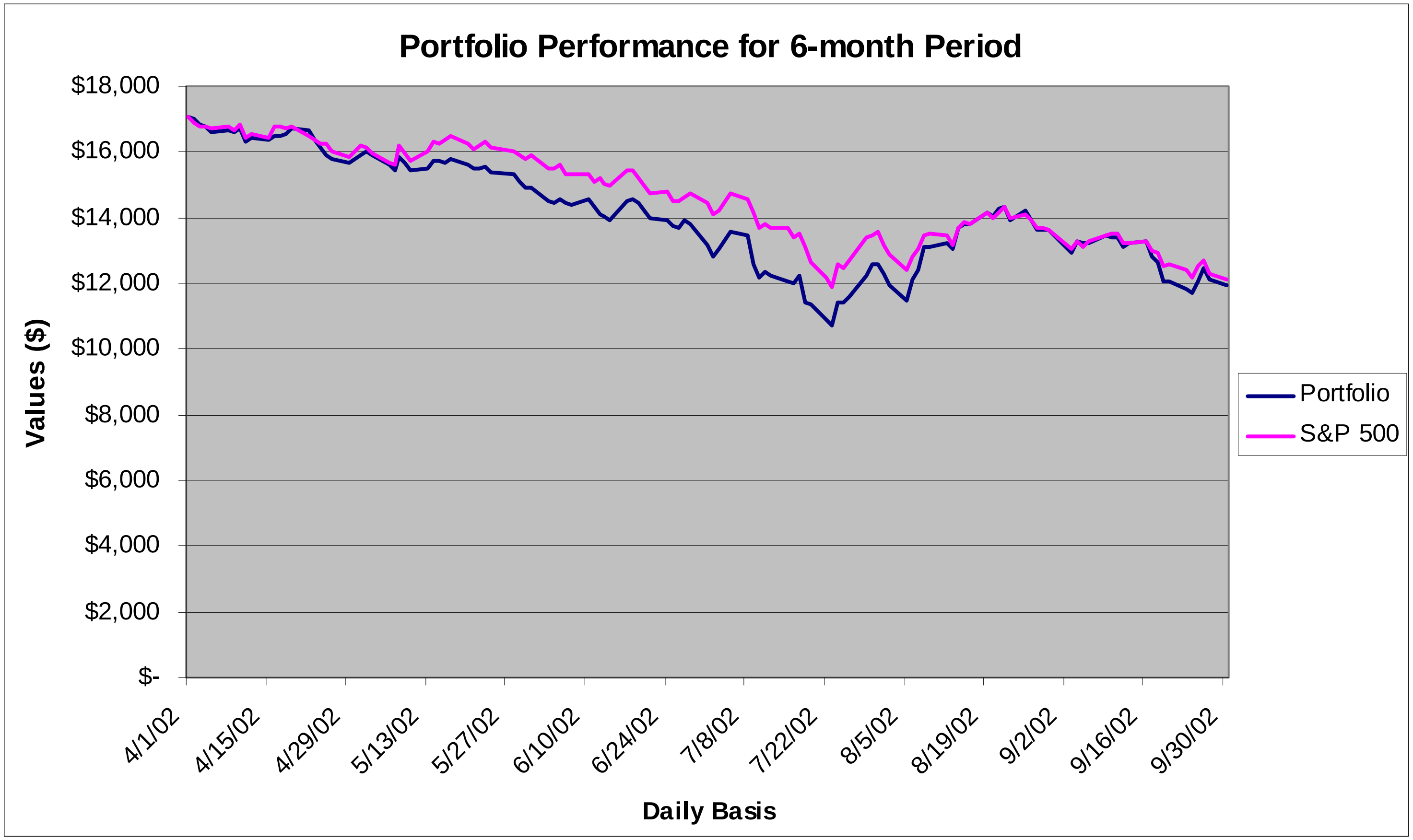
Ticker	*CAPM*	*Actual Return*	*Alpha*
CAH	0.2729 %	2.2405 %	**1.9626 %**
ADP	0.6407 %	1.9760 %	**1.3353 %**
DUK	0.0647 %	1.5226 %	**1.4579 %**
MWD	1.4718 %	3.0279 %	**1.5561 %**
EMC	1.4825 %	3.4303 %	**1.9478 %**

Portfolio Characteristics

- Expected Return based on CAPM
  - With the assumption of 90-day T-Bill Rates of 0.1495 % and market risk rate of 0.7496%, the monthly expected return is 0.2003%

- Expected Return based on MPT
  - With the assumption of the optimal portfolio including the 5 shorted stocks, the monthly expected return is 4.5879%

Portfolio Performance



Highlight of Portfolio Performance

- By the end of Sep. 30, 2002, portfolio value has shrunk to $ 11,943.35 which reflects a 30.07% loss

- External Events
  - Low level of consumers confident
  - Concerns over corporate scandals
  - The uncertain threat of war with Iraq

Highlight of Portfolio Performance

Internal Events

- CAH
  - Announced the acquisition of Syncor International
- DUK
  - Government investigation of purchases and sales of power at the same price
- MWD
  - Third quarter earning below Wall Street estimate
- ADP
  - Increase in unemployment rate
- EMC
  - Announced the acquisition of Prisa Networks

Recommendations

- This portfolio is suited for risk-averse investors with long-term horizon
- This portfolio should be part of investors' more diversified core holdings
- Recommended portfolio allocation is 100% stocks and 0% risk-free instruments

Questions ?