



Tashkent State University of Economics

Household finance

Lecture 7: Information and portfolio choices.

Lecturer: professor Otabek Karshiev




Important Disclosures Regarding Simulated Strategies

The following pages include illustrations of returns for the types of portfolios we design for clients.

The Simulated Strategies may or may not be the actual allocation determined to be appropriate for any individual clients, and a client may or may not follow the Simulated Strategies. Clients with the allocations shown may have different results based on capital flows, timing of rebalancing decisions, fees charged or other factors.

Our investment strategy is based on the principles of Modern Portfolio Theory (MPT). The tenets of MPT provide for a passive, long-term, buy-and-hold strategy implemented through globally diversified portfolios. Mutual funds representing asset classes where academic research has demonstrated higher expected returns for the level of risk taken are combined into a single portfolio. Portfolios are constructed with low-correlating components to provide diversification for the purpose of reducing the risk caused by volatility. Commodities may be added to some client portfolios for the purpose of additional risk reduction and not necessarily to provide higher expected returns in such portfolios. Portfolios are rebalanced to maintain agreed-upon asset allocations.

The historical performance information that follows is provided to demonstrate the methodology used in building portfolios using the aforementioned investment strategy. This information should not be considered as a demonstration of actual performance results or actual trading using client assets and should not be interpreted as such. The results are based on the retroactive application of a back-tested model that was designed with the benefit of hindsight and should not be interpreted as the performance of actual accounts. Past performance is not a guarantee of future results. The Simulated Strategies started in 1996 and have evolved over the years. Commodities, when shown in a portfolio, were added in 2004. Core funds, when shown in a portfolio, were added in 2007. International real estate, when shown in a portfolio, was added in 2008. All should be considered material changes to the Simulated Strategies. The differences in demonstrated returns can be seen by comparing Simulated Strategies with and without each of these. The investment returns and principal value of mutual funds recommended by our firm will fluctuate and may be worth more or less than their original cost when sold. A client may experience a loss when implementing an investment strategy.



In 1999, tax-managed funds became available for several different asset classes. We now use tax-managed funds extensively for taxable entities. While the tax-managed funds are consistent with the passive approach we follow, they should not be expected to regularly track the performance of corresponding taxable funds in the same or similar asset classes. As such, the performance of portfolios using tax-managed funds will vary from portfolios that do not use these funds.

Back-tested data does not represent the impact that material economic and market factors might have on an investment advisor's decision-making process if the advisor were actually advising an investor and should not be considered indicative of the skill of the advisor. The back-testing of performance differs from actual account performance because an investment strategy may be adjusted at any time and for any reason, and can continue to be changed until desired or better performance results are achieved. The back-tested results assume ordinary income and capital gains distributions are reinvested, annual rebalancing and no income taxes. If performance reflects the deduction of an advisory fee (1.85 percent or less) billed quarterly in advance, it is indicated on the page. More information about mutual fund fees and expenses is available in the prospectus for each mutual fund.

Any back-tested data used in creating the Simulated Strategies includes only live funds. All funds are live for 10 years or more except the commodities fund, core funds and the international real estate fund.



Two Theories

Conventional wisdom: Markets are inefficient

- ▶ Add value by stock selection and market timing
- ▶ Winning strategy: identify past persistent alpha

Modern Portfolio Theory: Markets are efficient

- Market price of security is the best *estimate* of the correct price
- Efforts to outperform are unlikely to be productive after expenses
- Winning strategy: focus on diversification of risk, fund construction, costs and tax efficiency



Are Markets Inefficient?

- ▶ If markets are inefficient, we should see evidence of *persistent* ability to outperform *risk-adjusted* benchmarks.
- ▶ Persistence should be *greater than randomly expected*.
- ▶ It is easy to identify past outperformance.
- ▶ But is the past prologue?



The Evidence

- ▶ Mutual funds
 - ▶ Pension plans
 - ▶ Hedge funds
 - ▶ Venture capital
 - ▶ Individual investors
 - ▶ Behavioral finance
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Mutual Funds

“On Persistence in Mutual-Fund Performance”

- ▶ Analyzed 1,892 funds for the period of 1961–93
 - ▶ Average actively managed fund underperformed appropriate passive benchmark by 1.8 percent p.a.¹

“Mutual-Fund Performance: An Empirical Decomposition Into Stock-Picking Talent, Style, Transaction Costs, and Expenses”

- ▶ Analyzed 1,788 funds for the period of 1975–94
 - ▶ Average risk-adjusted underperformance was 2.2 percent p.a.²
- ▶ Both studies found no outperformance beyond the randomly expected.



Mutual Funds

On Mutual Fund Managers

“I have become increasingly convinced that the past records of mutual fund managers are essentially worthless in predicting future success. The few examples of consistently superior performance occur no more frequently than can be expected by chance.”

— Burton G. Malkiel
Author of *A Random Walk Down Wall Street*,
professor of economics at Princeton



Mutual Funds

On Mutual Fund Fees

“Overwhelmingly, mutual funds extract enormous sums from investors in exchange for providing a shocking disservice.”

— David Swensen
CIO of the Yale Endowment Fund



Mutual Funds

“For professional investors like myself, a sense of humor is essential. We are very aware that we are competing not only against the market averages but also against one another. It's an intense rivalry. We are each claiming that, ‘The stocks in my fund today will perform better than what you own in your fund.’ That implies we think we can predict the future, which is the occupation of charlatans. If you believe you or anyone else has a system that can predict the future of the stock market, the joke is on you.”

— Ralph Wanger



Pension Plans

- ▶ Logically, if anyone could beat the market, it should be large pension plans.
 - ▶ Control large sums and pay lower fees than retail investors
 - ▶ Have access to the best performing portfolio managers
 - ▶ Only hire managers with records of outperformance
 - ▶ Most hire gatekeepers (SEI, Russell, Goldman) to perform extensive due diligence



Using Past Performance of Active Managers as a Predictor of Future Performance

U.S. Pension Plans

“Performance of U.S. Pension Plans”

- 716 defined benefit plans (1992–2004) and 238 defined contribution plans (1997–2004)¹

“Selection and Termination of Investment Management Firms by Plan Sponsors”

- 1994–2003: About 3,600 plans and more than 9,000 hiring and firing decisions²



Using Past Performance of Active Managers as a Predictor of Future Performance

U.S. Pension Plans

Findings:

- ▶ Prior to hiring, managers produced large excess returns¹
- ▶ Post-hiring returns relative to benchmarks were about zero (before transition costs)¹
- ▶ No persistence in performance beyond randomly expected²
- ▶ Neither fund size, degree of outsourcing, nor company stock holdings were factors driving performance²
 - ▶ Refutes claim that large pension plans are handicapped by size




Using Past Performance of Active Managers as a Predictor of Future Performance

U.S. Pension Plans

Conclusion:

- ▶ “The striking similarities in net performance patterns over time makes skill differences highly unlikely.”



When Even the “Best” Aren’t Likely To Win

Domestic Funds

1999–2008

SEI Instl Lrg Cap Grth A	−5.4%
Russell US Core Eqty I	−2.1%
DFA US Large Company Portfolio Class I	−1.5%
SEI Instl Sm Cap Grth A	−0.7%
Russell US Sm & Mid Cap I	2.7%
DFA US Micro Cap Portfolio Class I	6.4%
SEI Instl Lrg Cap Val A	0.5%
DFA US Large Cap Value Portfolio III	2.3%
SEI Instl Sm Cap Value A	4.6%
DFA US Small Cap Value Portfolio Class I	7.3%

International Funds

1999–2008

SEI Intl Emg Mkts A	6.7%
Russell Emerging Mkts S	7.4%
DFA Emerging Markets Portfolio Class I	9.5%
SEI Intl Trust Equity A	−1.2%
Russell Intl Dev Mkts I	1.2%
DFA Large Cap International Portfolio Class I	1.3%
DFA International Value Portfolio III	4.9%
DFA International Small Company Portfolio Class I	7.0%
DFA International Small Cap Value Portfolio Class I	9.5%



Hedge Funds



- No persistent outperformance beyond randomly expected
- Risk-adjusted returns similar to Treasury bills
- Highly illiquid
- Tax inefficient
- Lack transparency so investors lose control of risk
- Incentive structure creates agency risk



Hedge Funds

2003–08
Annualized Return (%)

HFRX Index 0.7

Domestic Indexes

S&P 500 Index 2.4

MCSI US Small Cap 1750 Index 6.0

MSCI US Prime Market Value Index 3.9

MSCI US Small Cap Value Index 6.2

Dow Jones Select REIT Index 5.9

International Indexes

MSCI EAFE Index 7.5

MSCI EAFE Small Cap Index 9.7

MSCI EAFE Value Index 8.6

MSCI Emerging Markets Index 14.9

Fixed Income

Merrill Lynch One-Year US Treasury Note Index 3.3

Five-Year US Treasury Notes 5.3

Long-Term Government Bonds 8.8



Private Equity

July 1986–June 2005

Asset Class	Annualized Return (%)
Mezzanine Financing	9.1 ¹
S&P 500 Index	11.2 ²
CRSP Deciles 9-10 Index	11.2 ²
Fama-French US Large Value Research Index	12.4 ²
Later Stage Venture Capital	13.8 ¹
Leveraged Buyouts (LBOs)	13.8 ¹
Private Equity (Average)	13.8¹
Venture Capital	16.0 ¹
Fama-French US Small Value Research Index	16.2 ²
Seed Stage Venture Capital	20.2 ¹



Private Equity



- Investors forgo benefits of liquidity, transparency, broad diversification, daily pricing and ability to harvest losses
- Distributions of returns looks like a lottery ticket — small likelihood of extreme outperformance and large likelihood of underperformance
- To reduce this risk, you need broad diversification
 - Large institutions can achieve this, but it's difficult for individuals