What is your Investment IQ?

Jason Smith, CFA — Nationwide Investment Management Group
This material is NOT, and should not be construed as INVESTMENT ADVICE.

Principal Risks
Investing in mutual funds involves risk, including the possible loss of principal. Investors’ shares, when redeemed, may be worth more or less than their original cost.

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Foundations
Investments 101
Investments 101

Stock is…

a. The basis of a good Chicken Noodle Soup.
b. Ownership in a company or corporation.
c. Inventory of a store.
d. Cattle, sheep and other farm animals.
e. All of the above.
Investments 101

• Stock
  – Ownership (Equity) of a company.

• Bonds
  – Debt issued by an entity.
Investments 101

• Markets
  – A place where stocks and bonds are traded.
    •NYSE, AMEX, Nasdaq
  – A representation of the overall trading of a specific segment of stocks or bonds (i.e. domestic markets vs. foreign markets)
Investments 101

• Indexes or Indices (same thing)
  – A list of stocks and/or bonds that is used to represent a specific market or market segment.
    • Dow Jones Industrials
    • S & P 500
    • Nasdaq
    • Wilshire 5000
    • Dax/FTSE/Nikkei
• Diversification
  – Selecting multiple investments within a portfolio. (more later)

• Asset Allocation
  – Intentionally selecting different investments based on their characteristics to achieve a specific goal. (more later, too)
Mutual Funds Investments 201
A Mutual Fund is

a) An investment vehicle that pays returns to its investors from their own money or the money paid by subsequent investors rather than from profit earned by the fund.

b) A place where we all have fun together.

c) An investment vehicle that is made up of a pool of funds collected from many investors for the purpose of investing in securities based off of criteria defined in the fund’s prospectus.
Investments 201

Types of Mutual Funds
- Stock, Bond, Hybrid
- Active vs. Passive
- Specialty Funds
# Investments 201

## Stock Funds

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# Investments 201

## Bond Funds

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Hybrid Funds

• Balanced Funds
  – Usually a static stock/bond mixture

• Target Risk Funds
  – Fund of funds approach to achieve various risk profiles

• Target Date Funds
  – Fund of funds that change the risk profile to get more conservative over the life of the fund
Mutual Fund Costs

- Expense Ratio
- Sales Charges
- Investment Minimums
Risk is...

a) A board game by Parker Bros.
b) Rapid Integrated Survival Kombat (police defensive tactics system).
c) Potential for an undesirable outcome.
d) All of the above
Investments 301

• **Financial Risks (Loss of principal)**

Past performance is no guarantee of future results. The investment return and principal value of an investment will fluctuate so that, your shares, when redeemed may be worth more or less than their original cost. Investments in non-US securities may be more volatile because of political, regulatory, market and economic uncertainties associated with such securities. Fluctuations in currency exchange rates may negatively affect the value of the investment or reduce returns. These risks are magnified in emerging or developing markets.
• Non-Financial Risks:
  – Longevity Risk
  – Inflation Risk
  – Reinvestment Risk
Advanced Investments 401
Alpha is…
a) First letter of the Greek alphabet
b) A borough in New Jersey
c) A class of Russian fast attack nuclear submarines
d) The excess return of the fund relative to the return of the benchmark index
Investments 401

Five Modern Portfolio Statistics
1. Standard Deviation
2. Sharpe Ratio
3. Beta
4. Alpha
5. $R^2$
Standard Deviation

A description of the variation or dispersion that exists of observed data points from the mean of that data.

A low standard deviation means that the dispersion is close to the mean, a high standard deviation means that the dispersion covers a larger range of values.

\[ \sigma = \sqrt{\frac{1}{N} \sum_{i=1}^{N} (x_i - \mu)^2} \]
Sharpe Ratio

Measures the excess return of a fund above the risk free rate of return per unit of risk.

The higher the Sharpe ratio, the more return that an investment generates per unit of risk.

\[ S = \frac{E[R - R_f]}{\sigma} \]
Beta

Illustrates the relationship between the returns of an investment with the returns of an index.

Investments with a beta greater than 1 will generally have higher returns and higher losses than the comparative index, while investments with a beta less than 1 will have the inverse.

\[ \beta_a = \frac{Cov(r_a, r_p)}{Var(r_p)} \]
Alpha or Jensen’s alpha

Describes the abnormal return of an investment over the theoretical expected return.

Positive alpha generally means a fund manager is adding value to the fund through security selection.

$$\alpha_J = R_i - [R_f + \beta_{iM} \cdot (R_M - R_f)]$$
R² – “R Squared”

R-Squared, also called the coefficient of determination, describes how much of an investment’s return is explained by an index.

Index funds would be expected to have a high R², where an actively managed fund would have a slightly lower R².

\[ R^2 \equiv 1 - \frac{SS_{err}}{SS_{tot}} \]
It is important for me to understand financial terms so that I am…
a) Better prepared to make my own investment decisions
b) More comfortable participating in my defined benefit or deferred compensation plan
c) Able to better understand financial journalists
d) All of the above
Questions

and maybe a few answers