Investing Observations:
Things I Wish I’d Known Sooner

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Disclaimer
• I am not a trained investment advisor
• Not all of my investment decisions have worked out well
• This presentation contains mostly generalizations – there are always exceptions
• This presentation contains mostly simplifications – learn more before you invest
• Don’t make any investment decisions based solely on this presentation
• Become more informed, then decide for yourself

Outline
• Taxes
• Risk / Reward
• Asset Classes:
  – Stocks
  – Bonds
  – Real estate
• Regular vs. Retirement accounts
• Diversity

Taxes
• The U.S. has a progressive tax system
• Marginal tax rate is tax paid on last dollar taxed; nearly always higher than mean tax rate
• Marginal tax rate, not mean tax rate, is what matters for investments
• Combining federal and state, most will have a marginal tax rate between 25% and 50%
• Investment performance after tax effects is what matters
Risk vs. Reward

• Every investment choice has both risk and reward
• Bury cash in the backyard
  – reward: can’t (easily) lose principal
  – risk: no income, so inflation reduces value over time
• Junk bonds
  – reward: high interest rate (can be > 10%)
  – risk: significant chance of principal loss if bond holder defaults

Stocks

• A share of stock represents a (tiny) fractional ownership of a company
  – Primary benefits: dividends and growth
• Three dimensions to categorize stocks:
  – American vs. international
  – Large company vs. small
  – Growth (stock price goes up) vs. value (pays dividends)
• Over long periods of time, the bold categories tend to have greater, total returns
  – American and international stocks perform similarly over the long term
  – Foreign exchange costs and currency volatility make international stocks slightly less attractive

Stocks (cont’d)

• Stock mutual funds and Exchange Traded Funds (ETFs) offer ownership of large “baskets” of stocks
• Good to have stocks in every one of the 8 combinations of categories
• Good to have more stocks in bold categories
• Many mutual funds/ETFs cover more than one of the 8 combinations
• Nobody beats the stock market over long periods
• Passively managed, index funds/ETFs are best
  – passage management means low fees
  – index means minimal, realized capital gains each year

Bonds

• Bonds are loans; they typically pay interest twice a year
• Long term for bonds is 20-30 years
• Corporate bonds
  – loans to corporations
  – interest received is taxed at marginal rate
  – rates now 5% - 8% on low risk, long term bonds
• Municipal bonds
  – loans to cities, counties, states
  – if issued in local state, interest is usually federal and state tax-free
  – rates now 3% - 5% on low risk, long term California bonds
• Treasury bonds
  – loans to federal government
  – state tax free
  – rates now 2.31% - 2.71% on nearly zero risk, long term bonds
Bonds (cont’d)

- Par value of a bond is $1,000; bond prices are listed as though par value is $100
- Minimum of 5 ($5000)
- Many bonds are callable; borrower may redeem them prior to maturity
- If there is no default, you get par value ($1000) at maturity; if bond is called you get par value or more
- Bond values move in the opposite direction of interest rates; effect is greater for longer term bonds
- You can sell bonds at any time, but may have gain or loss due to above
- To avoid loss, plan to hold bonds to maturity or call
- When held to maturity, will lose part of investment if bond was purchased at a premium; this is compensated by the fact that you benefitted from above market interest rate

Buying Bonds

- Yield takes into account bond cost, interest rate, and time
- Worst case yield is most important measure
- Higher risk (poorer credit rating) has higher yield
- Longer term has higher yield
- Bond mutual funds/ETFs must buy and sell bonds to manage cash flows
- In a rising interest rate environment (e.g. now), bond mutual funds/ETFs will go down in value, i.e. you’ll lose principal
- While interest rates are rising (e.g. now), buy individual bonds, not bond mutual funds/ETFs
- In any environment, bond mutual funds/ETFs will reduce your income due to their fees
- Several agencies rate bonds based on risk of default
- To keep risk low and income high, buy individual, investment grade bonds (specific rating depends on rating agency) with high, worst case yield

Real Estate -- Why?

- Income – tenants pay rent/lease
- Appreciation – real estate goes up in value
- Leverage
  - Purchase with 25% down (your investment), 75% from loan
  - Your tenants pay off the loan
  - Property appreciates 5% in a year
  - Your investment went up 20% (5% / 25%)
  - Caution: leverage works both ways
- Tax treatment
  - Income offset by depreciation
    - Depreciate building only
    - Offsets approx. 2-3% of purchase price /year for approx. 30 years
    - Taxes are deferred, not necessarily eliminated
  - Loan interest is tax deductible
  - Capital gains have a lower tax rate
  - Tax-free (1031) exchanges

Types of Real Estate

- Real estate investment measure: capitalization rate
  - assume purchase with all cash
  - capitalization rate is (income – expenses)/purchase price
- Bare land
  - expenses, e.g. taxes, with no income (risky)
  - capitalization rate < 0%
- Residential (apartments)
  - capitalization rate very roughly 3% - 6% locally
  - vacancies common but short
- Commercial (retail, warehouse)
  - capitalization rate very roughly 5% - 10% nationally
  - vacancies uncommon but long
Real Estate Income and Expenses

- Income:
  - Tenant(s) paying rent or lease
    - Reduced by vacancies
- Expenses:
  - Loan payments
  - Property taxes
  - Maintenance
  - Management fees
  - Insurance
  - Utilities
- 20% - 40% downpayment for breakeven (income >= expenses)

Investing in Real Estate

- A single apartment unit in Silicon Valley is $150K and up. You can’t buy just one.
- Bigger complexes have lower per unit cost.
  - Less land / unit
- Use leverage – get a loan.
- Buy with other people to reduce individual investment.
- Pay experts to manage property.

Ways to Own Real Estate

- Tenants-in-Common
  - Despite name, TICs are owners, not typically tenants
  - Multiple parties pool funds to buy real estate
  - Self-organized
  - Typically high minimum investment
  - Illiquid (can’t sell when or how much you want)
- Limited Partnership
  - Multiple parties pool funds to buy real estate
  - Organized by general partner
  - Typically medium to high minimum investment
  - Illiquid
- Real Estate Investment Trusts (REITs)
  - Organized by REIT manager
  - REIT buys multiple properties
  - For many REITs, shares on bought and sold like stock mutual funds
  - Very liquid
  - Typically low minimum investment
  - For many REITs, significant variable rate loan risk
- Typical, relative returns: TIC > P’ship > REIT

Real estate risks

- Variable rate loans
  - In rising interest rate environment (e.g. now), loan payments on these loans will go up
  - Many REITs mostly or solely use these loans
  - Risk level depends on loan details which may constrain rate increases
  - Fixed rate loans are safe but initially more expensive
- Vacancies
- Reduction of property value
- Famine, Pestilence, Earthquake
  - Insurance
  - Superior construction
Regular vs. Retirement Accounts

• Contributions to SRI’s retirement accounts are tax-deferred
• Distributions from any retirement account are taxed at marginal tax rates, regardless of how the funds were generated
• Therefore, best investments for retirement accounts are those that generate income that is not tax-advantaged

Regular vs. Retirement Accounts (cont’d)

• Ideal retirement account holding: individual corporate bonds
• Ideal regular account holding: everything else
• Can’t hold individual corporate bonds in SRI 403b accounts by law
• What to do?

An approach for an SRI retirement account:

1. Now, hold Vanguard Total Market Index Fund
   Low fee, stock index fund
2. When interest rates peak, move to a bond fund/ETF that invests in corporate bonds
3. When you turn 62 (or leave SRI), move funds to IRA and buy individual corporate bonds

Diversity

• Diversity – good in workforce, good in investment portfolio
• Different asset classes perform better under different circumstances
• Nearly everyone should have stocks, bonds, and real estate in their investment portfolio
Diversity (cont’d)

• Over long periods of time, stocks do better than bonds
• Over short periods of time, investment grade bonds held to maturity are safer than stocks
• An old rule of thumb for investing for retirement: your age as a percentage in bonds, the rest in stocks
  – As you get closer to retirement, you want to reduce risk, especially of large losses
  – 30 year old would have 30% bonds, 70% stocks
• Probably too conservative (i.e. too much in bonds); doesn’t include real estate
• A more modern approach for investing for retirement
  – decide on real estate fraction, say 35%
  – divide remaining fraction (65%) between bonds and stocks based on (age / 2): 30/2 = 15; 15%
    * 65% = 10% bonds
  – Overall: 55% stocks, 35% real estate, 10% bonds for 30 year old
  – Adjust annually
• Some will say:
  – too much in bonds
  – too much in stocks
  – too much in real estate
  – just right

Conclusion

• Learn more about investing
  – Ask questions
  – Read up on the topics
    • “Investing for Dummies” (actually, for beginners)
  – Consult trusted, investment advisor
    • Fixed fee, not percentage
    • Not just a hammer (stocks)
    • Also need a stapler (bonds) and a shovel (real estate)
  – May need more than one advisor
  – Decide for yourself

Extras

Real Estate Limited Partnership

• Dearborn Park Commerce Center:
  • 118,350 square feet on 9.3 acres
  • 18 tenants (100% leased)
  • 7% Yield (paid monthly)
  • 8% Preferred Return (paid before general partner is significantly compensated)
  • 14% Targeted Total Return (speculative estimate of total monthly payments plus capital gains on sale)
  • 1.89x Multiple -- $189,000 return on every $100,000 invested (also speculative)
  • Expected 3-5 year hold (sell property in 3-5 years and dissolve p’ship)
  • $50,000 minimum investment
  • 7 total units still available ($50,000 per unit)
  • Closing in June 16, 2016
Everything Goes Down When Interest Rates Go Up

• Other investments must compete with very safe CDs offering high interest rate
• Buying stocks on margin (leveraged) is more expensive
• New bonds offer higher interest rate than existing bonds
• Buying real estate with leverage is more expensive

Interest Rate History

Tax-Free Exchange Example

<table>
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<th>Party</th>
<th>Has</th>
<th>Wants</th>
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<tr>
<td>Buyer</td>
<td>BuyerCash</td>
<td>LittleProp</td>
</tr>
<tr>
<td>Trader</td>
<td>LittleProp + TraderCash</td>
<td>BigProp</td>
</tr>
<tr>
<td>Seller</td>
<td>BigProp</td>
<td>cash</td>
</tr>
</tbody>
</table>

• Trade benefits only Trader, who defers paying cap gain on LittleProp
• Trader trades LittleProp + TraderCash for BigProp with Seller
• Seller sells LittleProp to Buyer for BuyerCash
  – Seller now has TraderCash and BuyerCash
• Seller usually has cap gains; Trader and Buyer do not have cap gains at this time