“Retirement is a meaty topic. It’s meaty because there are no obvious solutions. There’s no ah-ha moment, where the answer is “x”.”

“The only way you can look at the retirement problem is through probability. You can’t look at it not with probability. Everywhere you turn there are probabilities: of inflation, of market performance, or mortality. It’s true that you don’t know the range of possible outcomes for next year, let alone 40 years from now. But you try to come up with the most credible set of probabilities that you can.”

William Sharpe
1990 Nobel Prize in Economic Sciences
Professer of Finance, Emeritus  Stanford University
Focus on What Can Be Controlled

- Policy
- Health
- Longevity
- Portfolio
- Risk
- Inflation
- Investment
- Returns
- Employment
- Saving
- Spending

CONTROL

Less

More
Policy: Understand Risks – Social Security Benefits

Optimize lifetime Social Security benefits

- Primary
- Full Retirement Age
- Early

[Graph showing life expectancy and Social Security benefits]
Spending: Understand Your Budget

The concept of essential and discretionary expenses:
• A continuum – not 2 distinct buckets
• Flexibility provides higher levels of sustainable spending over long-periods
Spending: Understand Changes Over Time

Source: Estimating the True Cost of Retirement, Morningstar
Spending: Understand Risks – Longevity

Life Expectancy Graph - Non-Smoker

- 50% Probability Either Lives to age 92
- 30% Probability Either Lives to age 95
Spending:
Understand Risks – Healthcare

Source: Consumer Expenditure Survey, Morningstar
Spending: Understand Risks – Long Term Care

Average Duration of Nursing Home Care:

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robinson</td>
<td>1.30</td>
<td>0.88</td>
</tr>
<tr>
<td>CRR</td>
<td>0.85</td>
<td>1.44</td>
</tr>
<tr>
<td>HRS</td>
<td>1.37</td>
<td></td>
</tr>
</tbody>
</table>

Likelihood of Long Term Care Use:

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robinson</td>
<td>44%</td>
<td>58%</td>
</tr>
<tr>
<td>CRR</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>HRS</td>
<td>27%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Center for Retirement Research at Boston College, “Long Term Care: How Big a Risk?”
Spending: Understand Risks – Portfolio Volatility

Final Result

Probability of Success
94%
Above Confidence Zone
(75% - 90%)
## Spending: Financial Projection – Scenario Analysis

<table>
<thead>
<tr>
<th></th>
<th>Base Scenario</th>
<th>Alternate Scenarios</th>
<th>Options 0% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retire Age 52</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retirement Age / Year</td>
<td>52/58 2016</td>
<td>55/61 2019</td>
<td>52/58 2016</td>
</tr>
<tr>
<td>Retirement – “Safe”</td>
<td>$80,000</td>
<td>$90,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Spending</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retirement – Discretionary Spending</td>
<td>$40,000</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>Retirement – Total Spending</strong></td>
<td><strong>$120,000</strong></td>
<td><strong>$140,000</strong></td>
<td><strong>$100,000</strong></td>
</tr>
<tr>
<td>College</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Separation Payment</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>P&amp;G Price Appreciation</td>
<td>5%</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

[Probability of Success: 77% In Confidence Zone, 77% In Confidence Zone, 78% In Confidence Zone]
Investment Management

“I’d compare stock pickers to astrologers but I don’t want to bad mouth astrologers.”

– Eugene Fama, Nobel laureate in Economics and University of Chicago Finance Professor
Focus on What Can Be Controlled

- Policy
- Inflation
- Investment
- Health
- Longevity
- Employment
- Saving
- Spending
- Portfolio
- Risk

CONTROL

Less

More
There’s No Free Lunch

Many Choices
- Don’t invest at all
- Cash
- Bonds
- Annuities
- Alternatives
- Stocks

...and Tradeoffs
- Longevity and inflation risk
- Longevity and inflation risk
- Credit and interest rate risk
- Liquidity and credit risk
- Liquidity, credit, and market risk
- Market risk
It’s a Balancing Act

Source: JP Morgan 4Q15 Guide to the Markets
Gambling is for the Casino, Not the Portfolio

Attempting to identify “winners” can be a losing strategy

Compound average annual returns: 1994–2014

- All stocks: 7.5%
- Excluding the top 10% of performers each year: 3.2%
- Excluding the top 25% of performers each year: -6.0%
Concentrated Position Test

Retire Age 52

<table>
<thead>
<tr>
<th>Security Symbol</th>
<th>$ Value</th>
<th>% of Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG</td>
<td>$1,618,127</td>
<td>37.64%</td>
</tr>
</tbody>
</table>

- Single stocks carry *idiosyncratic risk* that as an investor, you are not compensated for.
- The markets reward *diversified risk*. 
Timing is Everything

Missing only a few days of strong returns can drastically impact overall performance.

<table>
<thead>
<tr>
<th></th>
<th>Annualized Compound Return</th>
<th>Growth of $1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Period</td>
<td>10.47%</td>
<td>$88,454</td>
</tr>
<tr>
<td>Missed 1 Best Day</td>
<td>10.21%</td>
<td>$79,322</td>
</tr>
<tr>
<td>Missed 5 Best Single Days</td>
<td>9.42%</td>
<td>$57,513</td>
</tr>
<tr>
<td>Missed 15 Best Single Days</td>
<td>8.11%</td>
<td>$33,400</td>
</tr>
<tr>
<td>Missed 25 Best Single Days</td>
<td>7.01%</td>
<td>$21,070</td>
</tr>
<tr>
<td>One-Month US T-Bills</td>
<td>5.05%</td>
<td>$9,193</td>
</tr>
</tbody>
</table>
Employee Stock Options

You don’t need a crystal ball, but you might need to change your strategy.
Focus on What Can Be Controlled

- Policy
- Health Longevity
- Portfolio Risk

- Inflation
- Investment Returns
- Employment
- Saving Spending

CONTROL

Less More
Historical Marginal Tax Rates: Why Should You Care?

Historically speaking, our top federal marginal rate is low…
Why Does Type Matter?

Current rate – 15% for most / 20% for high income taxpayers
Surtaxes – An Alarming Trend

How to increase tax revenue without increasing the tax rate...

The 3.8% Medicare Surtax

<table>
<thead>
<tr>
<th>Prior Tax Rates</th>
<th>2013 Tax Rates</th>
<th>2013 Tax Rates with Surtax</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>25%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>28%</td>
<td>31%</td>
<td>34.8%</td>
</tr>
<tr>
<td>33%</td>
<td>36%</td>
<td>39.8%</td>
</tr>
<tr>
<td>35%</td>
<td>39.6%</td>
<td>43.4%</td>
</tr>
</tbody>
</table>

This chart assumes that the 3.8% Medicare surtax wouldn’t apply until a taxpayer’s taxable income reaches the 31% tax bracket (based on certain net investment income and itemized deduction assumptions). There are times, however, when the 3.8% could apply to a taxpayer in a 15% or 28% tax bracket. There are also times when taxpayers in the 31%, 36% and 39.6% tax brackets are not subject to the 3.8%.

Source: AICPA Personal Financial Planning Section
Surtaxes – An Alarming Trend

This is not the only ‘surtax:’

Medicare surtax: 0.9%
• On ‘excess’ wage/self employment income

Itemized deduction / exemption phase-out: 1.9%
• When income exceeds thresholds

Actual top marginal tax bracket is in excess of 45%
Let’s Add in Quasi-Means Testing

Medicare premiums dependent upon taxpayer income

<table>
<thead>
<tr>
<th>Income thresholds</th>
<th>Single</th>
<th>Married</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;$85,000</td>
<td>&lt;$170,000</td>
</tr>
<tr>
<td></td>
<td>$85,000-$107,000</td>
<td>$170,000-$214,000</td>
</tr>
<tr>
<td></td>
<td>$107,000-$160,000</td>
<td>$214,000-$320,000</td>
</tr>
<tr>
<td></td>
<td>$160,000-$214,000</td>
<td>$320,000-$428,000</td>
</tr>
<tr>
<td></td>
<td>&gt;$214,000</td>
<td>&gt;$428,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016 - Held harmless</th>
<th>2016 - Not held harmless</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$104.90</td>
<td>$104.90</td>
<td>$159.30</td>
</tr>
<tr>
<td>Married</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$146.90</td>
<td>$223.00</td>
<td>$318.60</td>
</tr>
<tr>
<td></td>
<td>$209.80</td>
<td>$318.60</td>
<td>$414.20</td>
</tr>
<tr>
<td></td>
<td>$272.70</td>
<td>$414.20</td>
<td>$509.80</td>
</tr>
</tbody>
</table>

Sources: Centers for Medicare and Medicaid Services (2015a, b).
What One Hand Giveth...

The Alternative Minimum Tax continues to thrive...
Alternative Minimum Tax By State

Ten states with highest % of total tax filers subject to AMT

Source: Internal Revenue Service, Tax Foundation calculations.
What You Can Control

Timing of Income
- Bonus deferrals
- Option exercise
- P&G lump sum distribution
- Roth IRA conversions
  - Roth “Two Step”
  - Outright conversions
- IRA withdrawals
What You Can Control

Type of Income

• Long term capital gain income
  – Line 9b
  – Line 13

• Tax free income
  – Line 8b
  – Line 15a
Identifying Timing Opportunities

*Shift / defer higher taxed income into lower tax years:*

<table>
<thead>
<tr>
<th>Portfolio Value</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Dollars</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning Value</td>
<td>589,809</td>
<td>5,795,727</td>
<td>6,010,186</td>
<td>6,233,616</td>
<td>6,466,066</td>
<td>6,649,153</td>
</tr>
<tr>
<td>Cash Surplus/Deficit</td>
<td>205,918</td>
<td>214,460</td>
<td>223,429</td>
<td>232,450</td>
<td>183,087</td>
<td>184,814</td>
</tr>
<tr>
<td>Investment Asset Additions</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Dollars</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending Value</td>
<td>441,942</td>
<td>4,472,143</td>
<td>4,503,297</td>
<td>4,535,169</td>
<td>4,527,750</td>
<td>4,518,058</td>
</tr>
<tr>
<td>Cash Surplus/Deficit</td>
<td>157,819</td>
<td>159,578</td>
<td>161,410</td>
<td>163,036</td>
<td>124,673</td>
<td>122,184</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taxes</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Taxes</td>
<td>9,663</td>
<td>9,322</td>
<td>8,934</td>
<td>8,879</td>
<td>64,720</td>
<td>69,039</td>
</tr>
<tr>
<td>Tax Penalty</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Federal Marginal Tax Rate</td>
<td>15.00%</td>
<td>15.00%</td>
<td>15.00%</td>
<td>15.00%</td>
<td>28.00%</td>
<td>28.00%</td>
</tr>
<tr>
<td>State Marginal and Local Tax Rate</td>
<td>5.00%</td>
<td>5.00%</td>
<td>5.00%</td>
<td>5.00%</td>
<td>5.00%</td>
<td>5.00%</td>
</tr>
</tbody>
</table>
**Significant Arbitrage Opportunity**

**Profit Sharing Trust and Savings Plan Distribution Choices**

- **Leave none in the Plan**
  - Individual annuity
  - Lump sum distribution – taxed or rolled

- **Leave all in the Plan**
  - Use Retirement Plus feature of the Plan for investments
  - Must maintain 40% of Plus account in P&G stock
  - Take annuity, lump sum, or other form of distribution later

- **Leave some in the Plan**
  - Take partial distributions
  - Use Retirement Plus feature of Plan for investments
  - Must maintain 40% of Plus account in P&G stock
  - Annual distributions
  - Monthly distributions
  - Ad hoc distributions

**Conversion of Marginal Tax into Capital Gain Tax**
Proper application of 60-day rollover of fair market value of P&G stock equal to or exceeding trustees’ cost may result in zero federal or state tax on qualified lump sum distribution.