MAXIFI®

The Economics Approach to Financial Planning

a Presentation to

The American Association of Individual Investors

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Outline of Talks

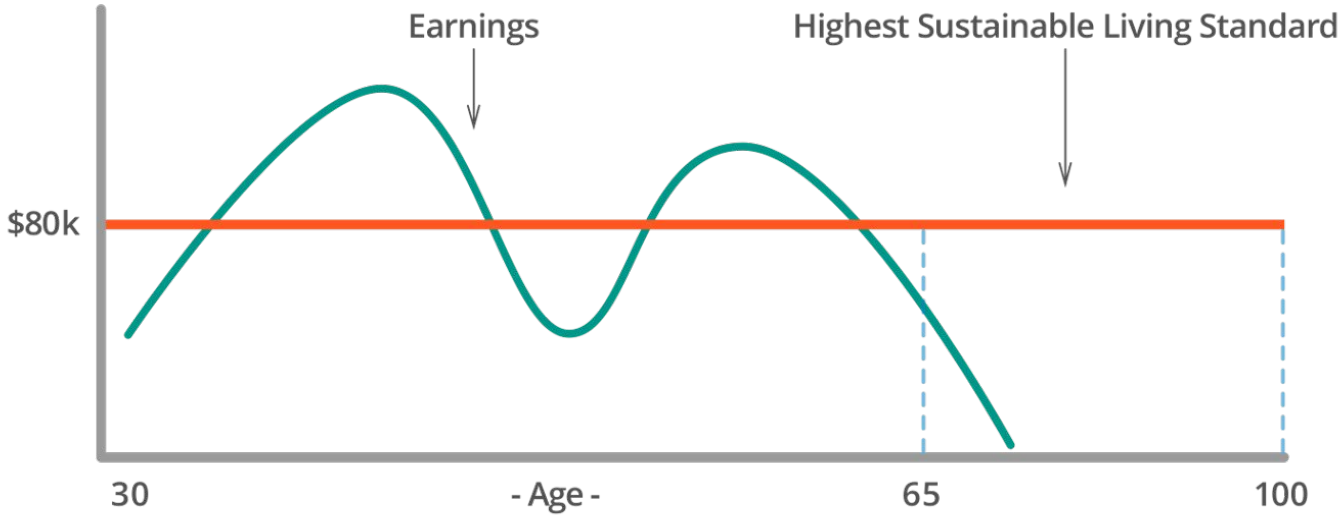
1. Consumption Smoothing
2. MaxiFi Planner – Illustrating the Economics Approach
3 . Pricing Lifestyle Decisions – An Example: When Can I Retire?
4. Secrets to Maximizing Lifetime Social Security Benefits
5. Finding Alpha – Raising Households' Living Standards at No Risk

Economics-Based Financial Planning

- Smooths Your Living Standard
- Raises Your Living Standard
- Protects Your Living Standard
- Prices Lifestyle Decisions

Consumption Smoothing

Achieving a Stable Living Standard



Living Standard is the Bottom Line

- Living Standard – Consumption Per Household Member**
- Households Seek to Maintain their Living Standard or Have it Change Gradually
- Consumption Smoothing Underlies Saving/Spending, Insurance, Portfolio Choice

* * Adjusted for economies in shared living and lower cost of children

Consumption Smoothing
Subject to Two Important Constraints

- Lifetime Budget Constraint
- Annual Cash-Flow Constraints

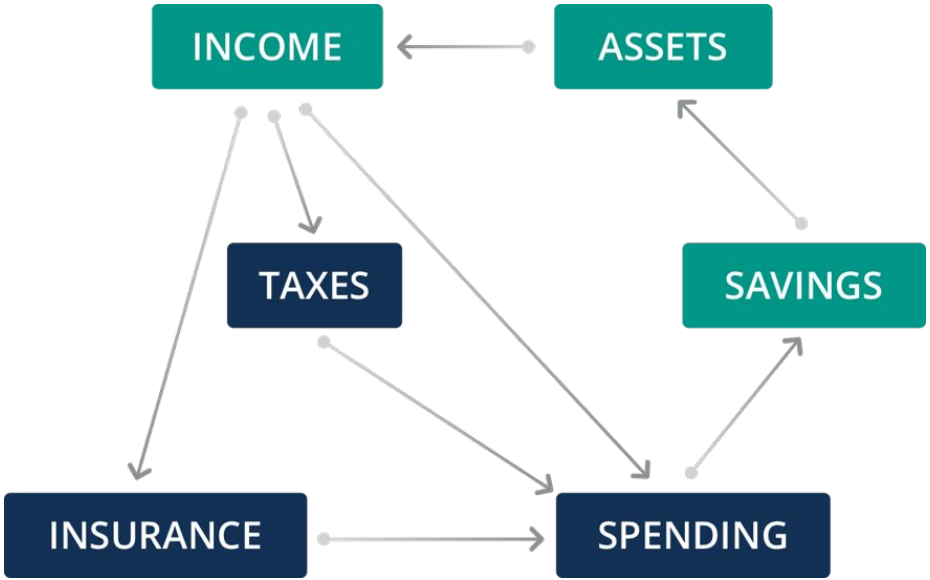
Consumption Smoothing – We All Do It!

Consumption Smoothing – the Physiological Basis

- Satiation – No One Wants to Eat 20 Cupcakes at One Sitting
- No One Wants to Party Today and Starve Tomorrow or Vice Versa
- Squirrels Gather Nuts to Smooth Consumption
- Humans Save, Insure, and Diversify to Smooth Consumption

Consumption Smoothing Is Difficult

Myriad Interconnected Factors



The Disconnect Between Economics-Based and Conventional Financial Planning

- Economics-Based Planning Is at Odds with Conventional Planning
- Economists Don't Teach Conventional Planning
- (Most) Practitioners Don't Employ Economics-Based Planning

Problems with Conventional Financial Planning

- Conventional Planning Produces Consumption Disruption
- Conventional Planning Ignores Lifetime Budget Constraint
- Conventional Planning Ignores Cash-Flow Constraints

No Concern with Consumption Smoothing

- Guesswork – You specify/target desired post-retirement spending
- Mistargeting Is Guaranteed – Ensures consumption disruption
- No Lifetime Budgeting – Spend whatever you'd like
- No Recognition of Cash-Flow Constraints

Case Study

- Dan and Sue age 58. Kids are grown.
- Dan earns $100k. Sarah earns $150k. Will retire and take Social Security at 62.
- Live in Illinois in a $850k home with a $250k mortgage.
- Jack has $750k in retirement accounts. Sarah has $1 million.
- Couple has $50k in regular assets.

Dan and Sue's Lifetime Balance Sheet

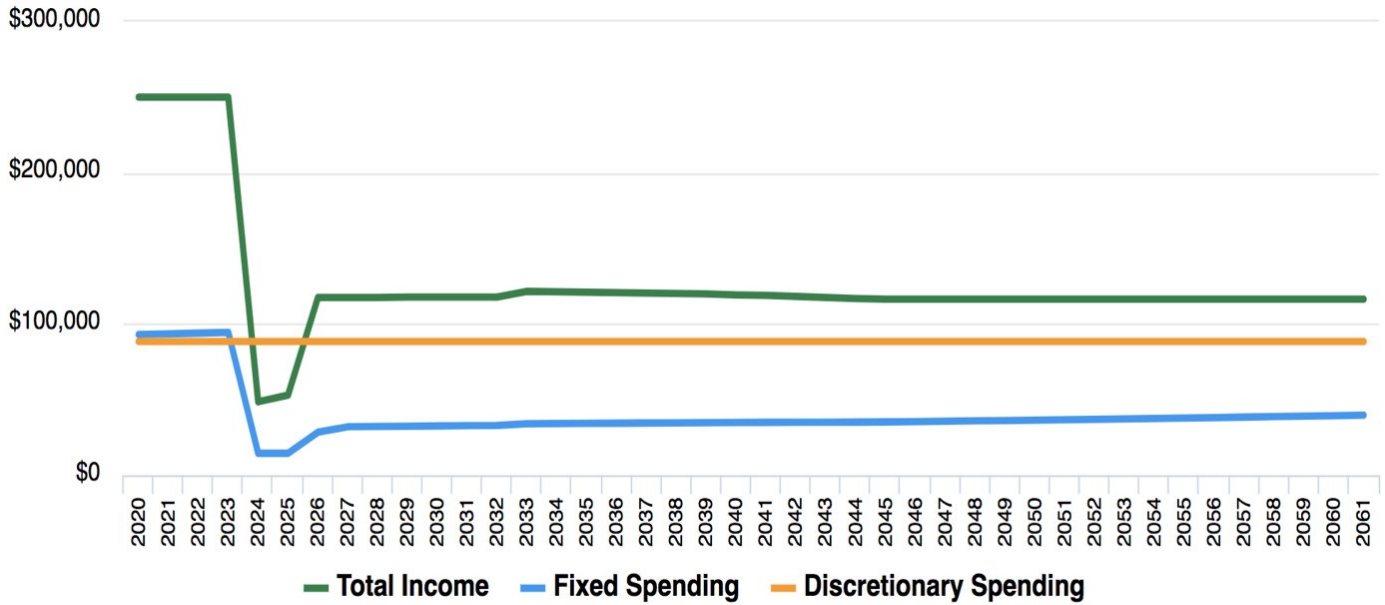
Lifetime Income

Labor Earnings	$1,000,000
Social Security Benefits	$2,019,208
Pensions and Annuities	$0
Retirement Account Withdrawals	$2,322,125
529 Account Withdrawals	$0
Reserve Fund Assets	$0
Real Estate Income	$0
Special Receipts	$0
Regular Assets	$50,625
TOTAL	**$5,391,958**

Lifetime Spending

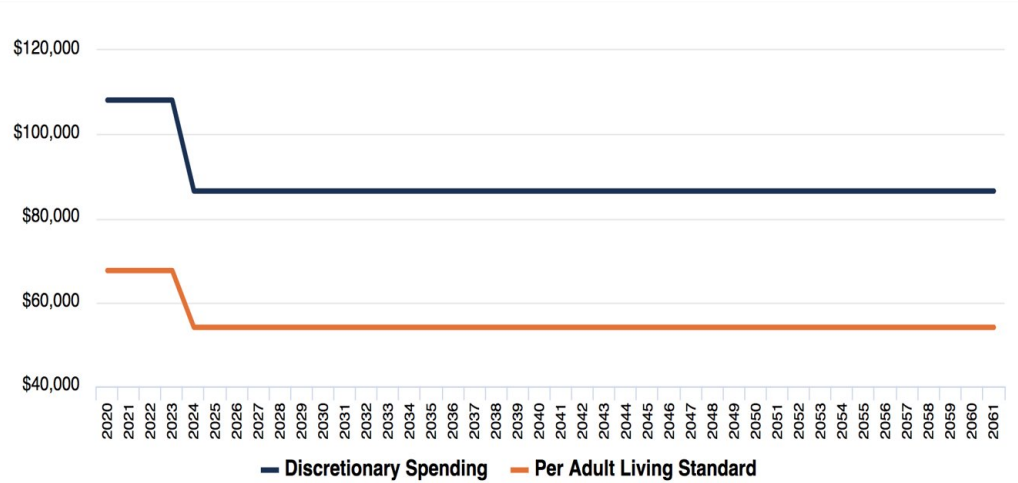
Housing Expenses	$609,000
Other Expenses	$0
Federal and State Taxes	$778,117
Retirement Account Contributions	$32,000
529 Contributions and Expenses	$0
Ending Reserve Fund	$0
Medicare Part B Premiums	$258,752
Life Insurance Premiums	$0
Discretionary Spending	$3,714,088
TOTAL	**$5,391,957**

Consumption Smoothing



Targeting 20 Percent Too Low

Discretionary Spending Drops from $108,102 to $86,482



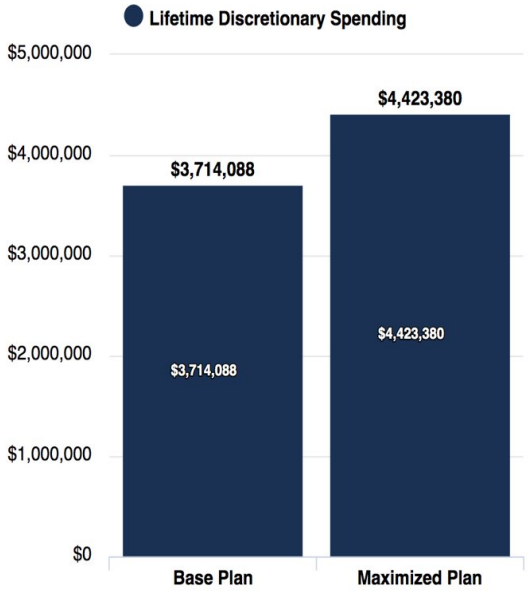
Note: All results are presented in Today's Dollars.

Export as CSV

Maximizing Dan & Sue's Lifetime Discretionary Spending

$709,292

Increase in Lifetime Discretionary Spending Under the Maximized Plan

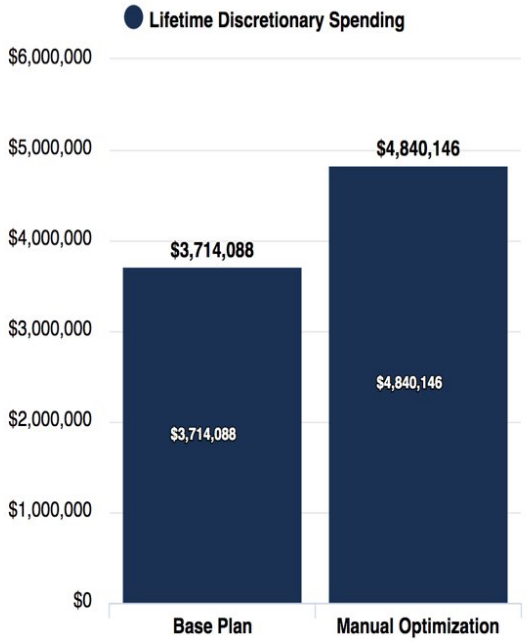


Manually Maximize Dan & Sue's Lifetime Spending

Example: Both Retire at 67

$1,126,058

Increase in Lifetime Discretionary Spending Under the Manual Optimization

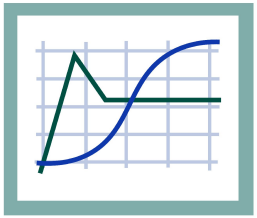


Conventional Investment Advice

- Set a post-retirement spending target
- Assume pre-retirement spending is given
- Simulate plan success probability – dying with money on the table
- Choose portfolio to maximize plan success probability subject to a given level of failure risk
- Advice predicated on
  - Sub-optimal saving pre-retirement
  - Sub-optimal spending post-retirement
  - Assuming no spending adjustment during retirement
- Conventional planning reflects computational ease, not a method grounded in economic science

Economics-Based Investment Advice

- Economics focus is on Expected Lifetime Utility
- Utility in a given year is a mathematical formula based on the household's living standard in that year
- Utility function (formula) depends on key variable – coefficient of risk aversion
- Expected lifetime utility determined by living standard trajectories
- Optimal time-varying investment strategy maximizes expected lifetime utility
- Upside Investing



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