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When Can I Retire?

And, What's My "Number?"

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AGENDA

- When can I retire?
- What's my "Number?"
- How can I tell if I'm "on track"?
- Does it matter how long I live?
- Does it matter
    - When I claim Social Security benefits?
    - If Social Security benefits are reduced?

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Background and Introduction

- Rick Miller
  - Founder and CEO Sensible Financial (SF)
  - Ph D Economics University of Chicago
  - Taught at Johns Hopkins
  - Consulting and financial services
- Using Maxifi / ESPlanner since SF founding in 2002
  - Best planning software I could find, then and now

Executive Summary

- You have an implicit retirement plan
- You can retire once your assets will fund post-retirement spending
- Funding a year of retirement requires a calculable amount of assets ("Number")
- Longer life spans require later retirement, lower spending, or both
- Claiming Social Security benefits at 70 ➔ earliest feasible retirement

When Can I Retire?

Superficially, a very easy question

- You can retire anytime if you don't care about living standard
- Most people mean:
  - When I have enough income and assets
  - To live the way
    - I want to live; or
    - I have become accustomed to living

When Can I Retire?

Many implicit questions and worries

- Modern retirement lasts many years
- The future is risky and unpredictable:
  - Investments
  - Health
  - Family issues

When Can I Retire?

Thirty years (from 65-95 or 70-100) is a long time

- In 1990, who predicted?
  - 9/11
  - Rise of the Internet: Amazon, Google, etc.
  - Great Financial Crisis
  - President Barack Obama, then Donald Trump
- Think of unexpected events in your own life

When Can I Retire?

We're going to answer the "easy" question today

- The easy question is hard enough
- Illuminates basic concepts and issues
- Introducing risks & uncertainties can cloud thinking

When Can I Retire?

Everyone has an implicit retirement plan

- Let's think about an impossibly simple world
  - No taxes
  - No Social Security
  - No stock market
  - Zero interest rates

When Can I Retire?

- Bob and Charlie, both 55
- Both earn $100,000 per year

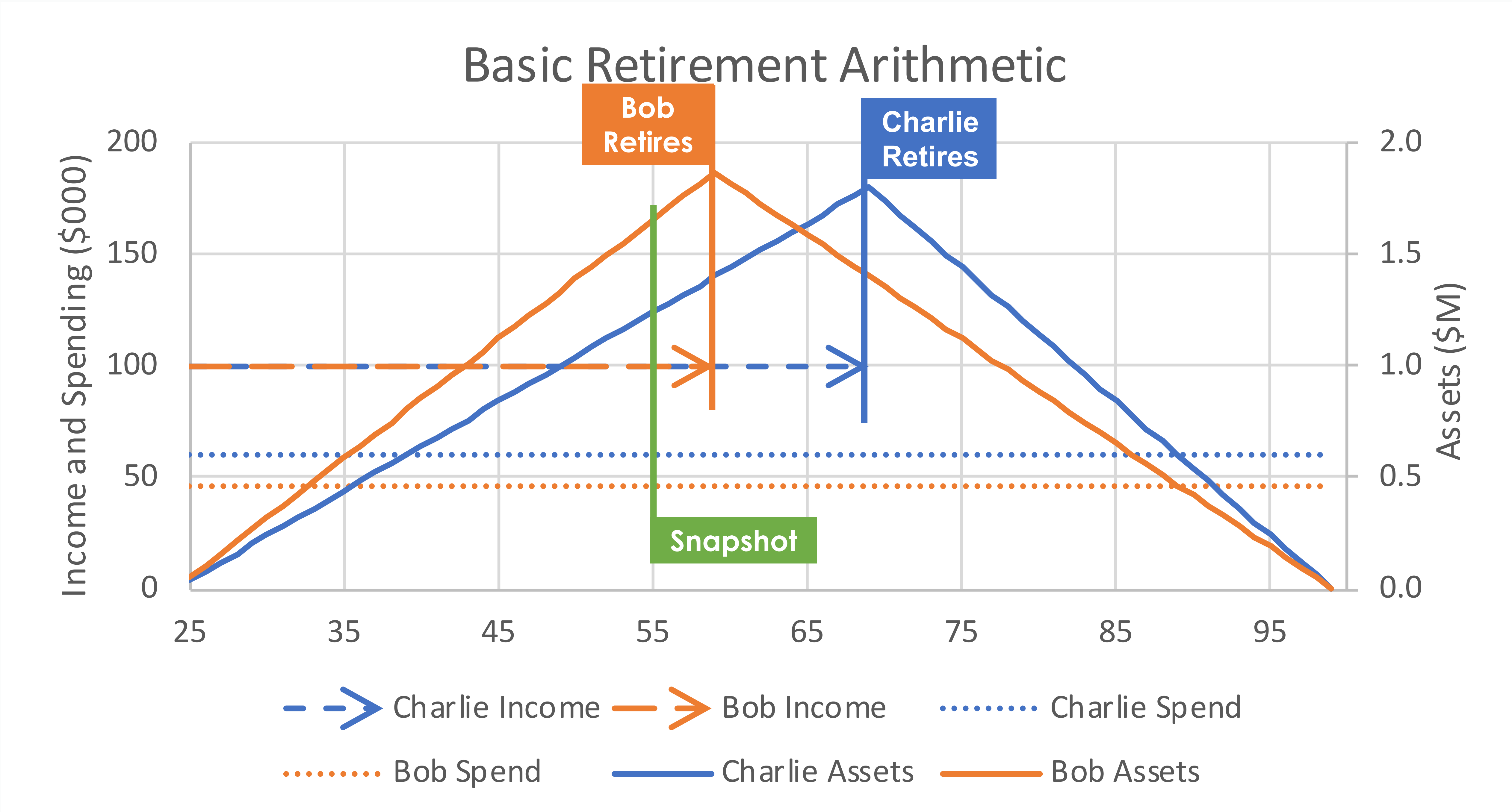
Status Snapshot

	Charlie	Bob
Spending	$ 60,000	$ 46,667
Savings ($M)	$ 1.24	$ 1.65

Who is the better saver, Charlie or Bob?

When Can I Retire?

*Charlie and Bob are **both** right on plan*



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When Can I Retire?

- Meet Tina and SteveYall:

	Tina	Steve	Total
Age	55	55	
Profession	Therapist	Personal Trainer	
Income	82,620	41,310	123,930
401(k) Assets	151,000	75,500	226,500
Other Savings	150,000	75,000	225,000
Social Security Earnings History (% of Wage Base)	60% since 1987	30% since 1987	

When Can I Retire?

- Selected model assumptions:

Item	Assumption	Comment
Social Security		Fix allocates half of solvency restoration cost to each of benefits and taxes
Change Year	2035	Projected insolvency year
Benefit Reduction	11%	
Tax Increase	12%	from 12.4% to 13.8%
Life Insurance	Ends at 70	Simplification
Nominal Rate of Return	2.78%	Adjusted Annually in January
Inflation Rate	2.13%	
Real Rate of Return	0.64%	

When Can I Retire?

- When can the Yalls retire?
- Let's ask Maxifi!

Scenario	1	2	3	4
	Retire now (55)	Retire soon (60)	Retire "average" (65)	Work 'til Social Security retirement benefits start (70)
Retirement Age	55	60	65	70

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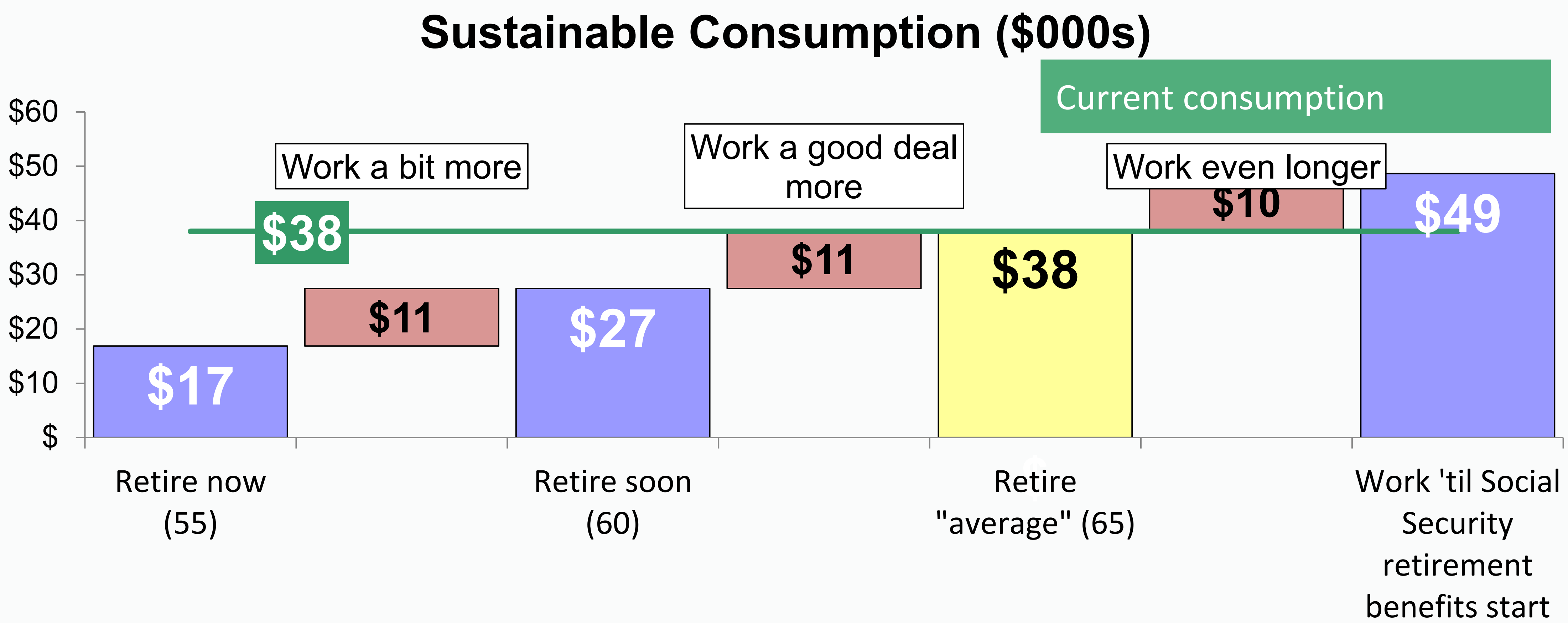
When Can I Retire?

- They can retire at 65
- Each 5 more work years supports about $10k in discretionary spending



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What's my "Number?"

- Lee Eisenberg made "<u>The Number</u>" famous in 2006
  - Net worth
  - Enough to retire on
  - In the style you desire

And, What's My "Number?"

- There is no single "Number"
- Retiring earlier, you
  - Must cover more spending years
  - Need more assets for the same living standard; or
  - Live at a lower living standard with the same assets

And, What's My "Number?"

- Adjusting assets helps the Yalls retire at any age
- Need more brokerage assets at 55 to retire before 65
- Can manage with fewer assets at 55 to retire at 70

	Assets at 55 ($000)				
Retirement Age	401(k)	Brokerage	Total	Extra (vs Retire at 65)	Spend ($000)
55	227	1,150	1,377	925	38
60	227	675	902	450	38
65	227	225	452	-	38
70	227	(225)	2	(450)	38

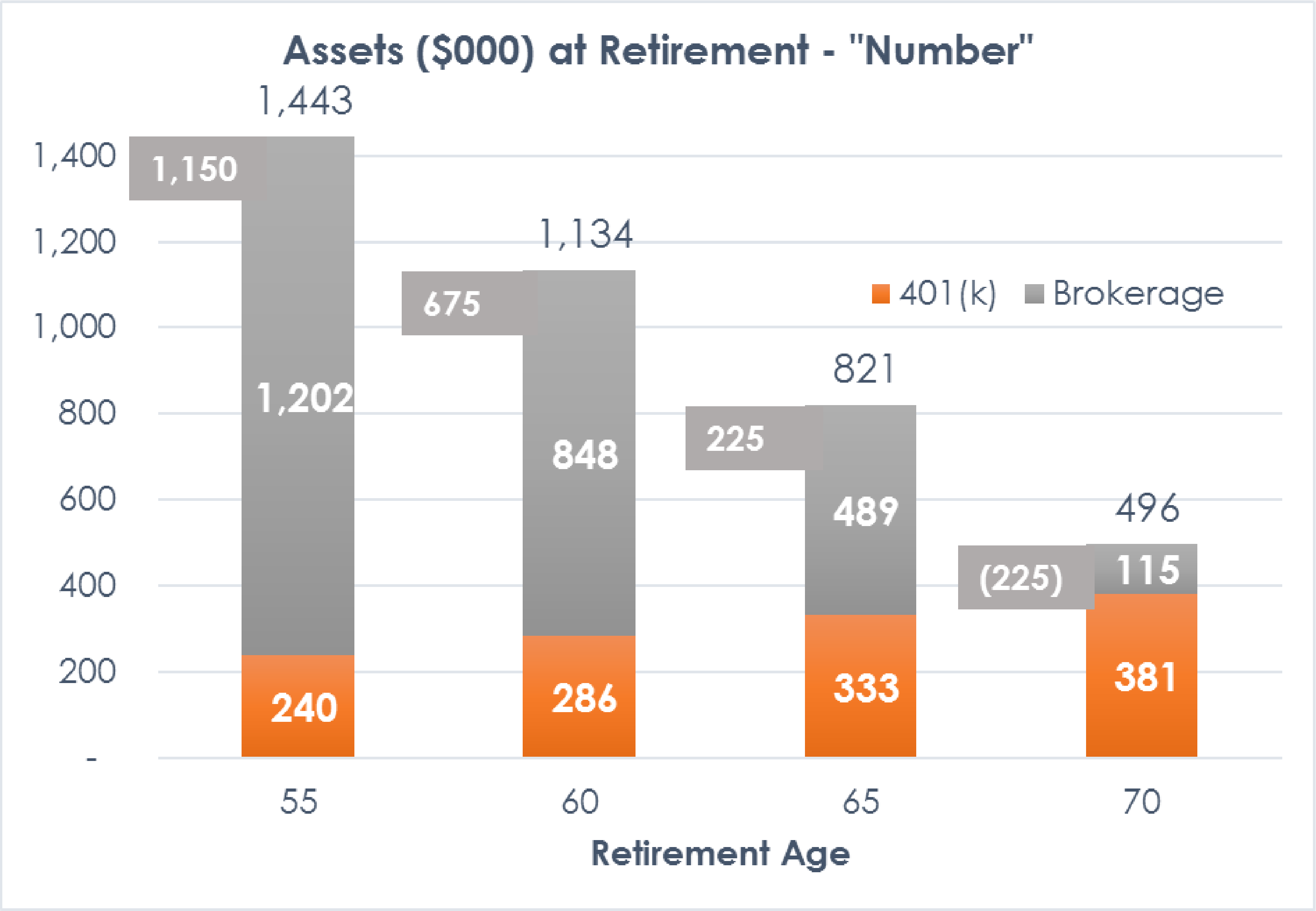
And, What's My "Number?"

A little intuition

- The Yalls need about ***$450,000*** more assets **<u>at 55</u>** if they want to retire at 60 instead of at 65.
  - Retiring at 60 with no extra assets reduces annual spending about $11,000 for 45 years – 45 times $11,000 is ***$495,000***.
  - Income on extra assets reduces amount needed.

And, What's My "Number?"

The Yalls' "Number" is larger for earlier retirement, and smaller for later retirement



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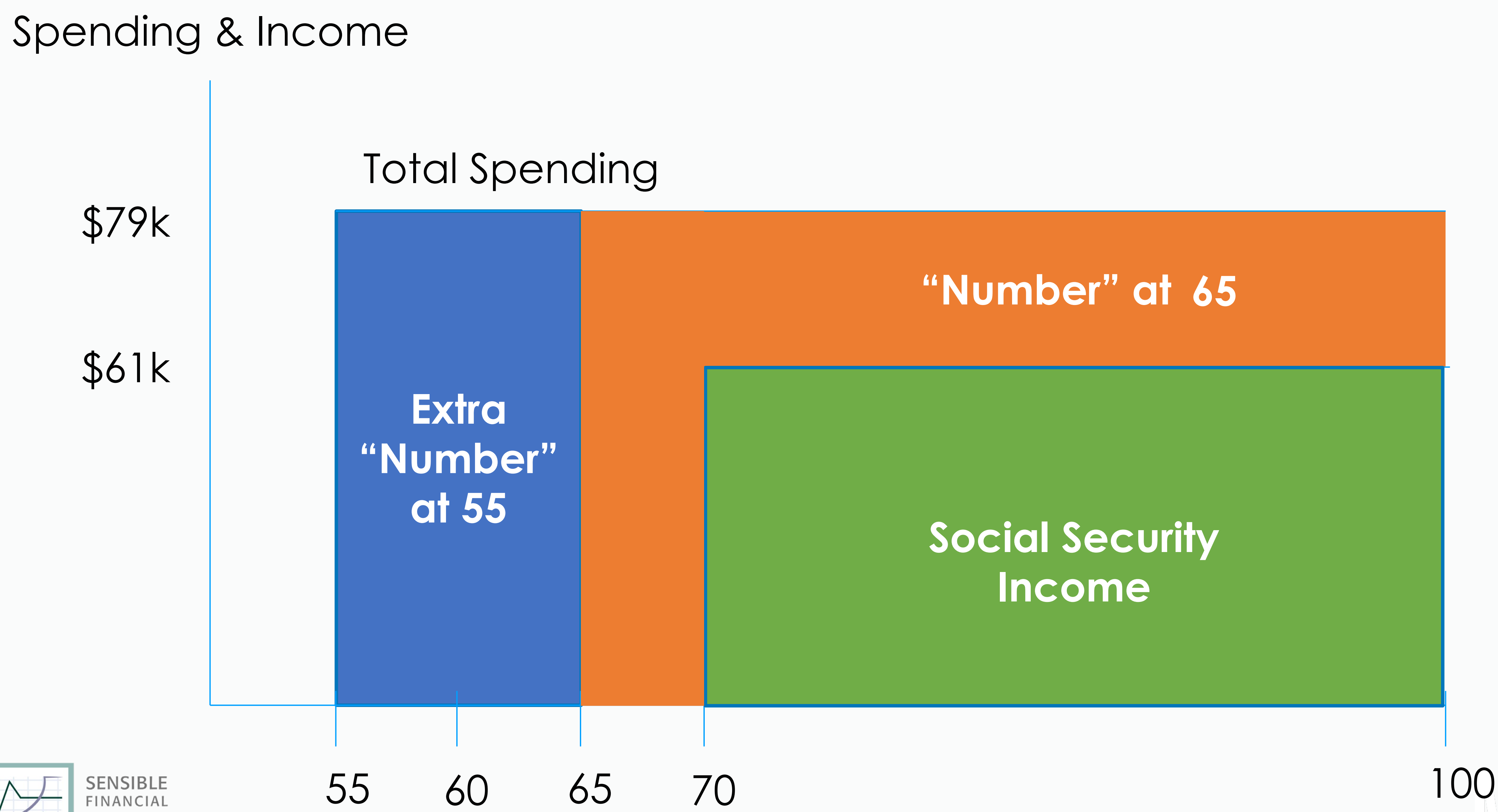
And, What's My "Number?"

- The "Number" (retirement assets) must cover total spending

Retirement Spending		Family
Discretionary Spending	$	38,000
Housing (Rent)	$	30,000
Income Taxes (Average)	$	1,800
Medicare Part B Premiums (Average)	$	8,800
Total Retirement Spending	**$**	**78,600**

And, What's My "Number?"

More intuition



How can I tell if I'm "on track"?

- Run a Maxifi plan using
  - Your data – income, assets, Social Security history
  - Your plans for
    - Retirement
    - Housing, education and other fixed expenses
  - Reasonable assumptions for taxes, rates of return, inflation
- Or, review asset growth each year versus prior plan

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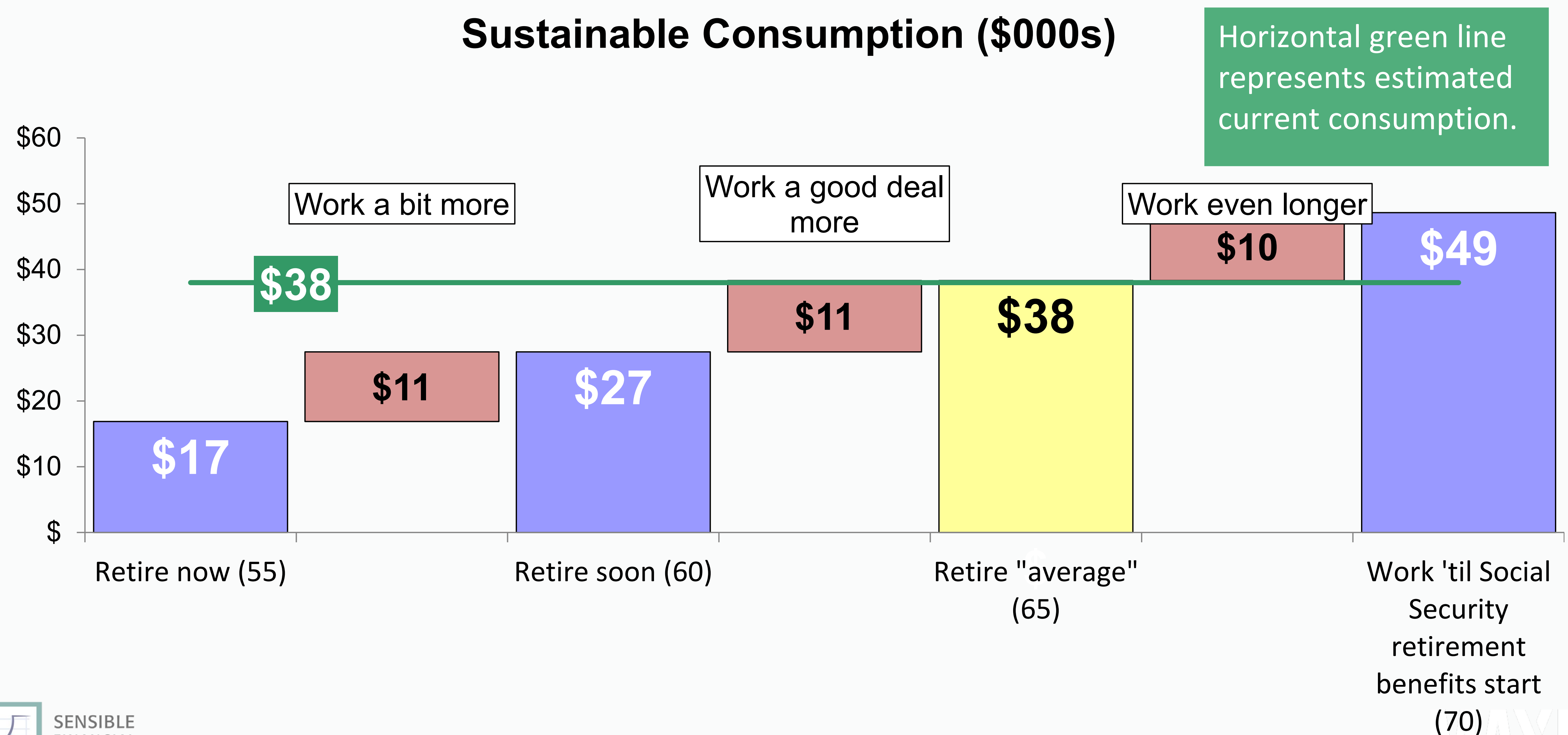
How can I tell if I'm "on track?

- With current plan:
  - Sustainable discretionary spending should match current discretionary spending, more or less
  - Surplus, or excess of sustainable over current discretionary spending provides cushion
- With prior plan:
  - Adjust assets for inflation to plan year
  - Asset growth then matches plan, more or less

How can I tell if I'm "on track"?

The Yalls are on track if they plan to retire at 65, but not if they want to retire now



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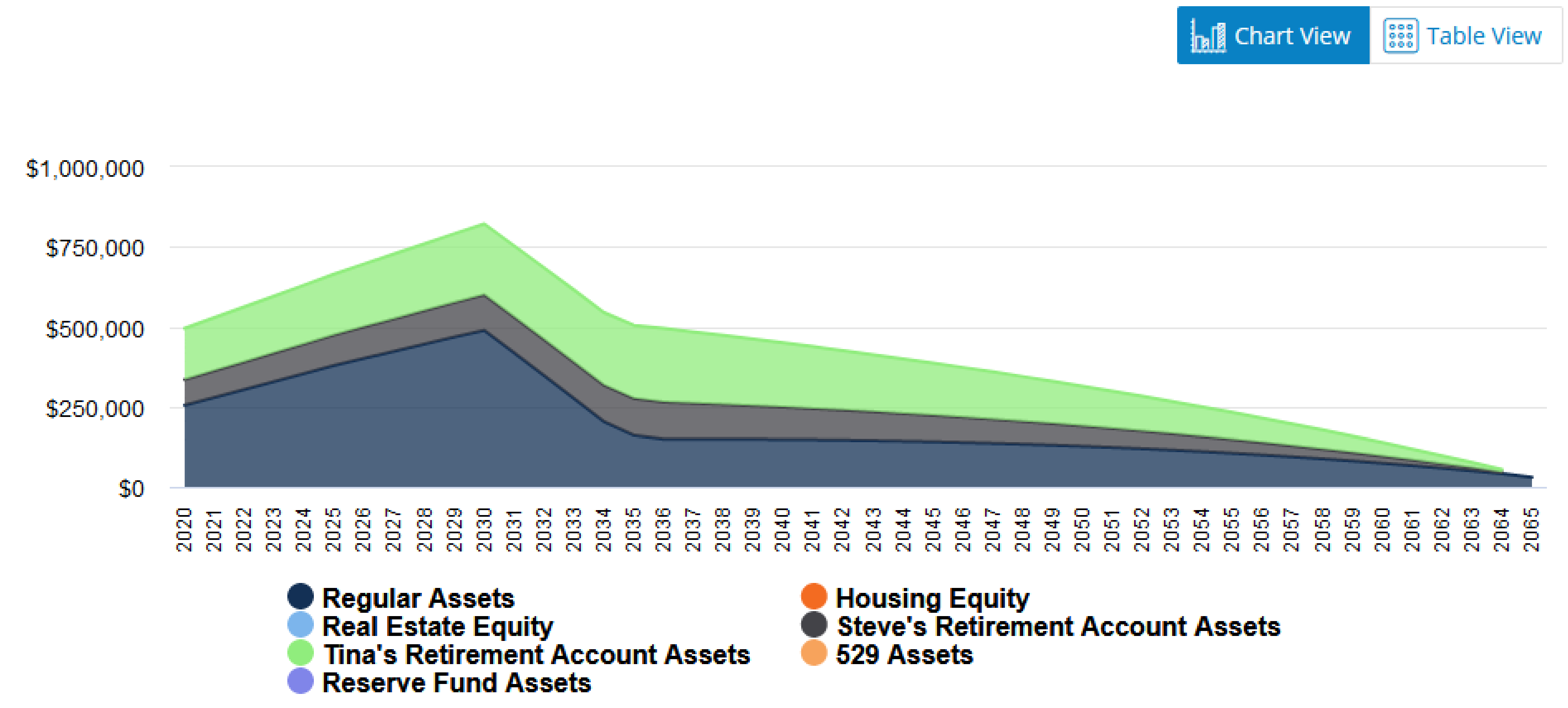
How can I tell if I'm "on track?

- Are your assets following the plan?
  - Adjust for inflation!

Net Worth



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

Export as CSV

This chart reflects your total Net Worth based on your Regular Assets, Housing Equity (after any mortgage is repaid), Retirement Accounts, Real Estate Equity and any 529 educational account assets. MaxiFi Planner uses all household assets -- except housing equity -- to support Annual Fixed and Discretionary Spending through the last year of life.

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Does it matter how long I live?

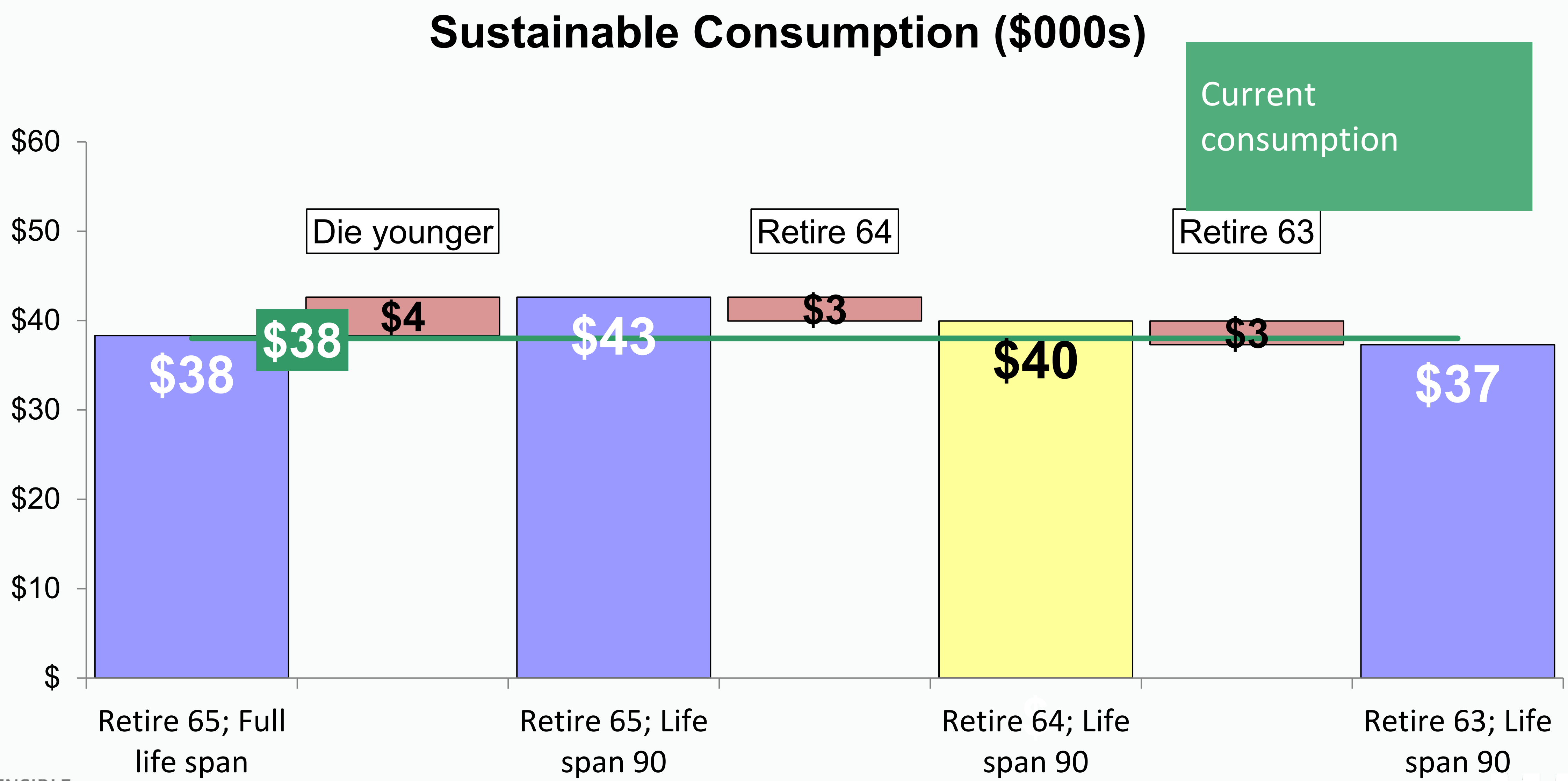
What is the impact of a shorter life span?

Scenario	1	2	3	4
	Retire 65; Full life span	Retire 65; Life span 90	Retire 64; Life span 90	Retire 63; Life span 90
Retirement Age	65	65	64	63
Life span	100	90	90	90

Does it matter how long I live?

- Retiring at same age with shorter life span spreads resources over fewer years, allowing higher spending

- Alternatively, could retire earlier with same spending



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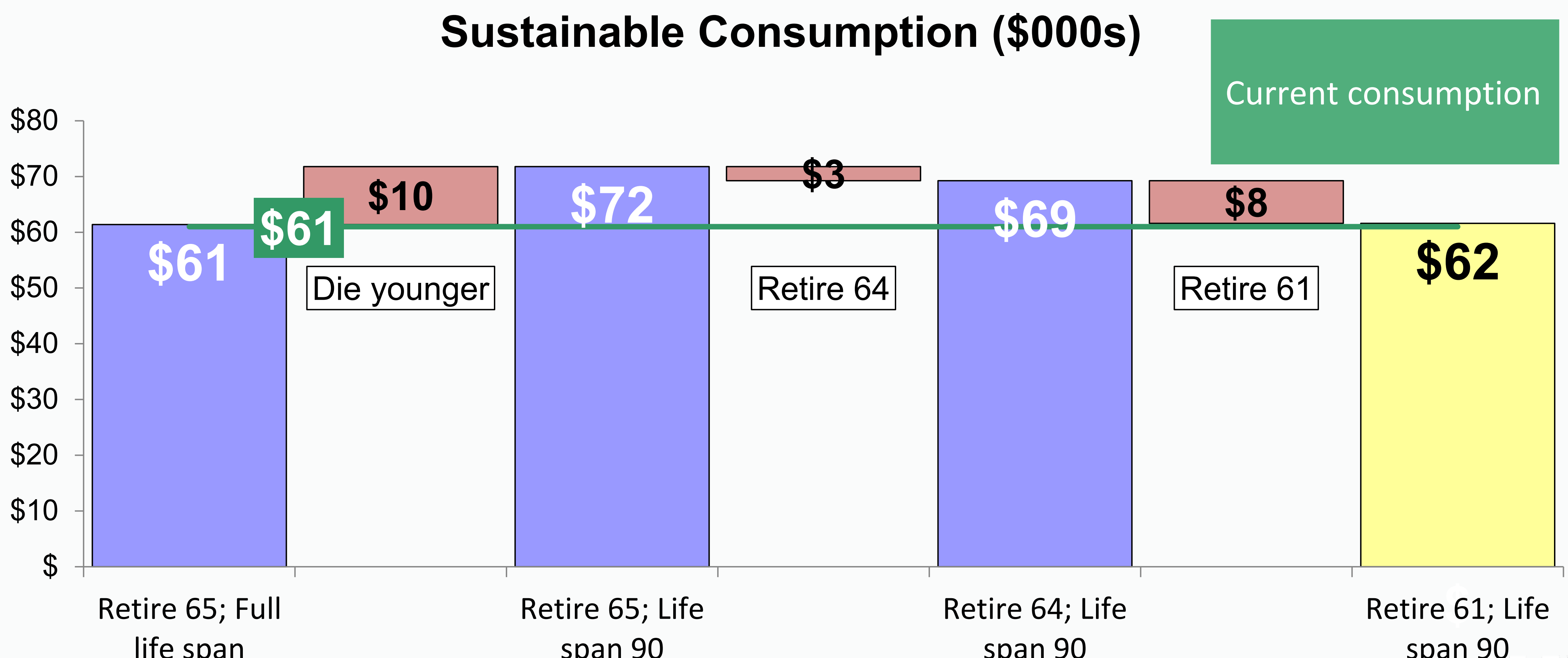
Does it matter how long I live?

- If Social Security is sole resource, longevity is irrelevant
- Larger assets [here, $1M more at 55] enhance the effect – Social Security is relatively less important



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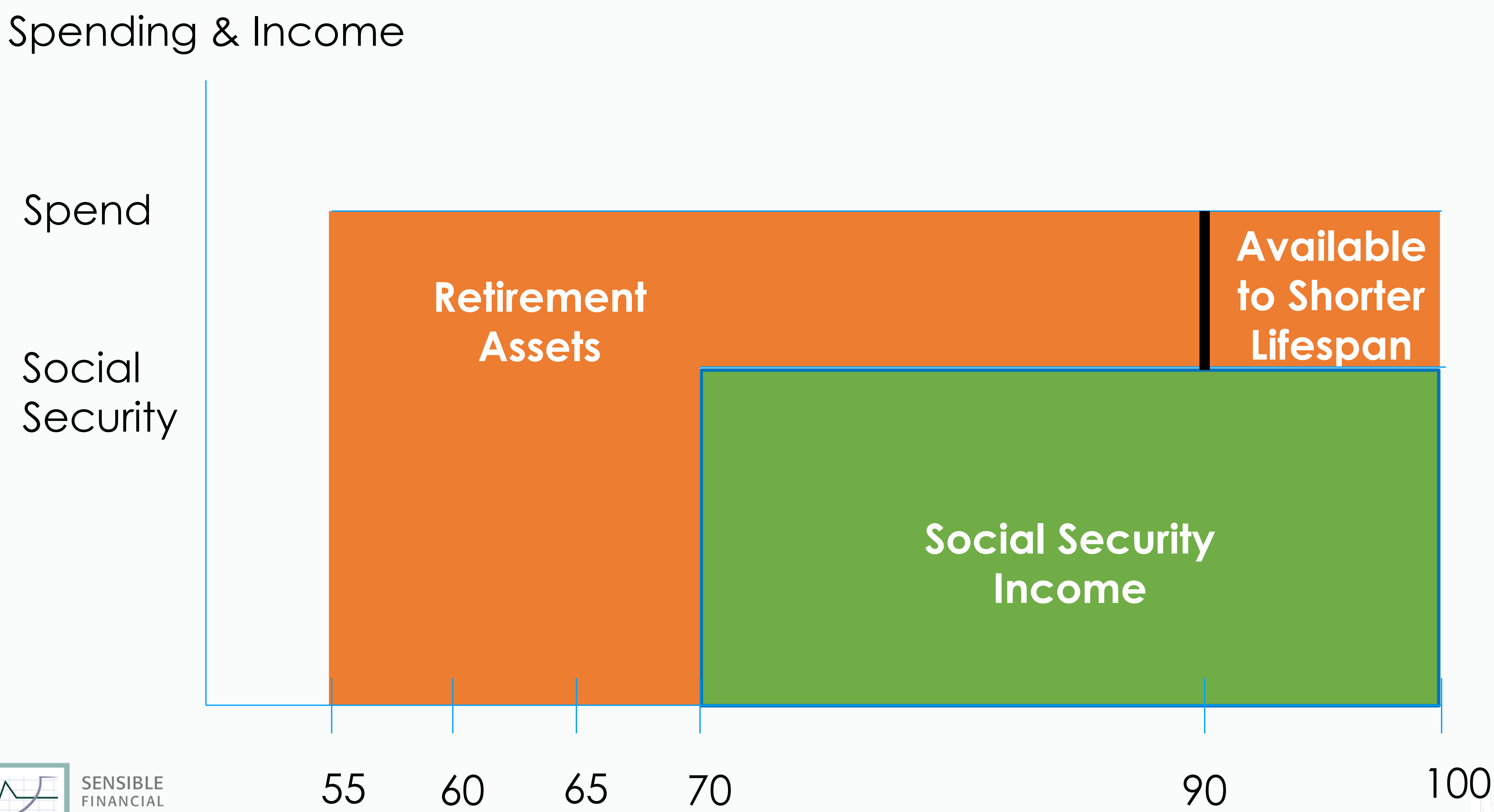
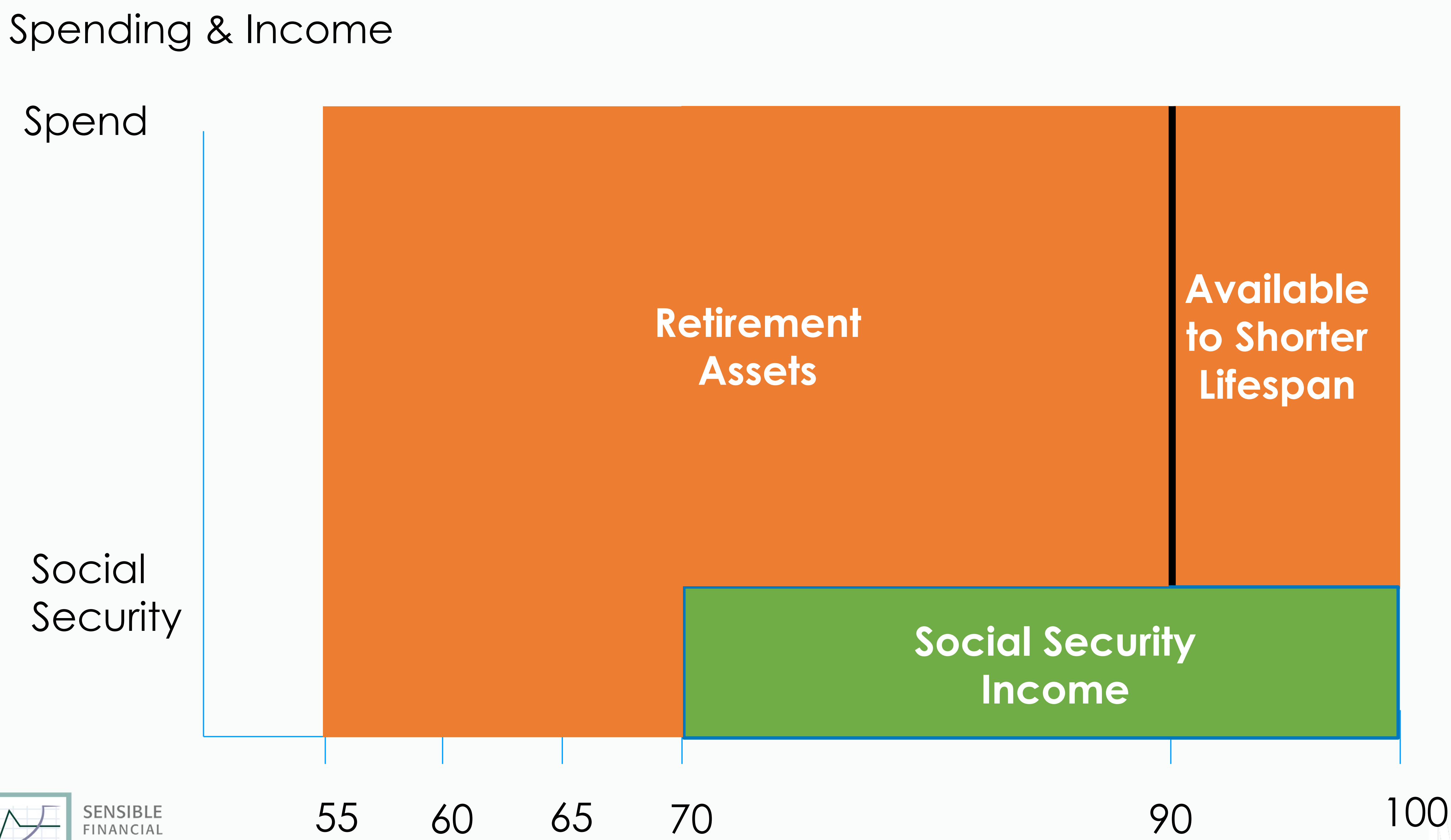
Does it matter how long I live?

Last bit of intuition



Does it matter how long I live?

Last bit of intuition (cont'd)



Does it matter how long I live?

- We discourage reducing life span to make your plan "work"
  - "Life expectancy" is the **<u>mean</u>** of the probability distribution, **<u>not</u>** the maximum
  - People tend to underestimate their longevity
  - Longevity has been increasing ➔ judgements based on family experience are risky
  - Ability to add resources post-retirement very limited

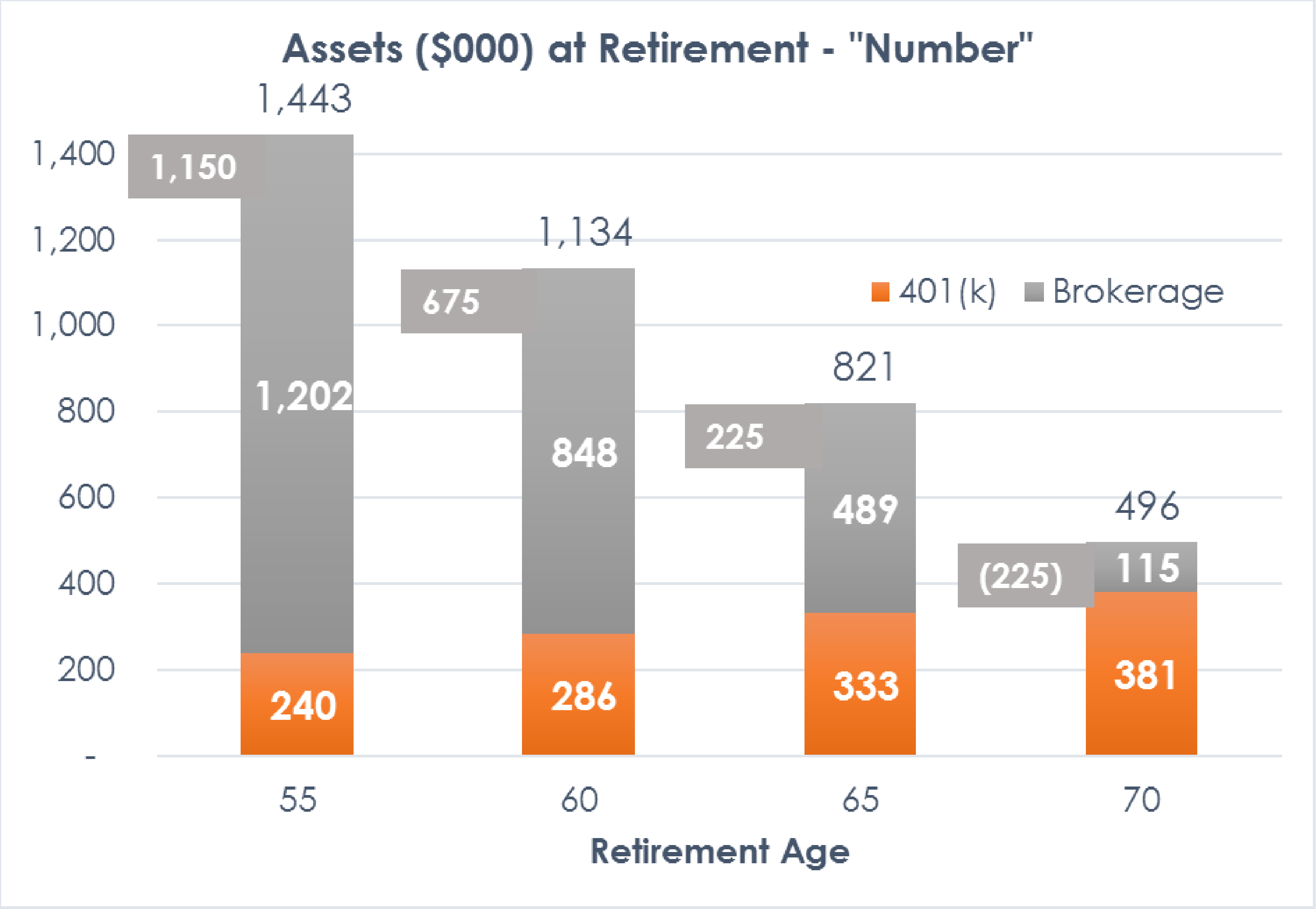
If I claim Social Security benefits later, can I retire earlier?

The Yalls can retire at 60 if they claim at 70, but not if they claim at 62.

- To allow the Yalls to retire at 60 (claiming at 70), we gave them $450k.
- If we have them claim at 62
  - They give up $380k present value of Social Security retirement benefits.
  - $450k extra isn't close to enough to afford them $38k spending.

And, What's My "Number?"

Quick reminder: Yalls need more assets to retire at 60



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If I claim Social Security benefits later, can I retire earlier?

- The Lifetime Balance Sheet provides a clue
- Claiming at 70, Social Security represents nearly half of the Yall's assets at 55!...

Lifetime Balance Sheet

Lifetime Income		Lifetime Spending	
Labor Earnings	$731,922	Housing Expenses	$1,200,672
Social Security Benefits	$1,536,618	Other Expenses	$22,549
Pensions and Annuities	$0	Federal and State Taxes	$216,848
Retirement Account Withdrawals	$276,725	Retirement Account Contributions	$21,964
529 Account Withdrawals	$0	529 Contributions and Expenses	$0
Reserve Fund Assets	$0	Ending Reserve Fund	$0
Real Estate Income	$0	Medicare Part B Premiums	$241,307
Special Receipts	$0	Life Insurance Premiums	$0
Regular Assets	$693,764	Discretionary Spending	$1,535,688
TOTAL	**$3,239,029**	**TOTAL**	**$3,239,028**

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If I claim Social Security benefits later, can I retire earlier?

- …much less if they claim at 62
- Claiming early greatly reduces benefits

Lifetime Balance Sheet

Lifetime Income		Lifetime Spending	
Labor Earnings	$731,922	Housing Expenses	$1,200,672
Social Security Benefits	$1,157,712	Other Expenses	$22,549
Pensions and Annuities	$0	Federal and State Taxes	$221,249
Retirement Account Withdrawals	$276,725	Retirement Account Contributions	$21,964
529 Account Withdrawals	$0	529 Contributions and Expenses	$0
Reserve Fund Assets	$0	Ending Reserve Fund	$0
Real Estate Income	$0	Medicare Part B Premiums	$240,842
Special Receipts	$0	Life Insurance Premiums	$0
Regular Assets	$693,764	Discretionary Spending	$1,152,846
TOTAL	**$2,860,123**	**TOTAL**	**$2,860,122**

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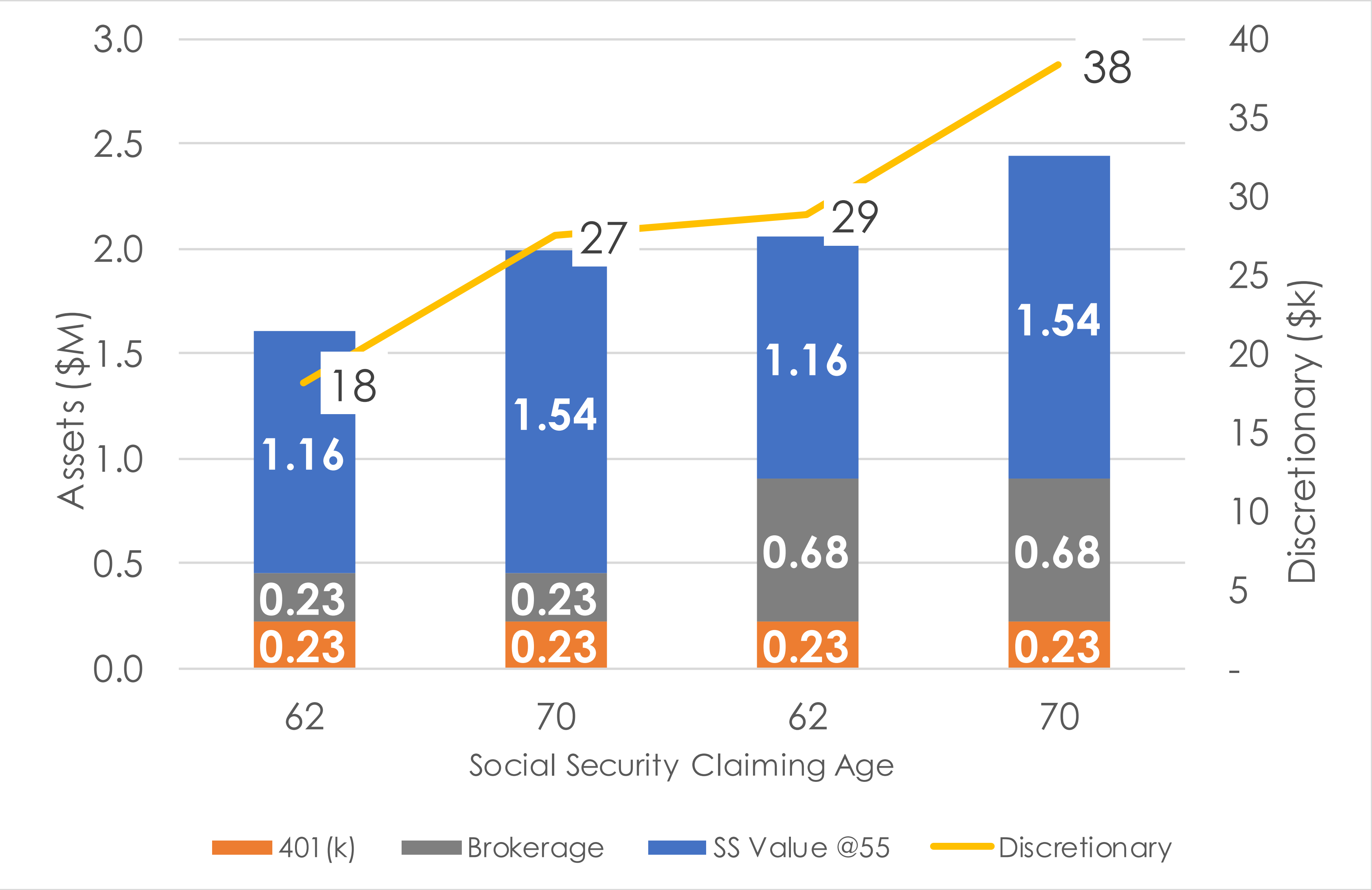
If I claim Social Security benefits later, can I retire earlier?

- Yalls gain $380k in Social Security value and $9k per year discretionary spending by claiming at 70 vs 62
- Claiming Social Security early is <u>**expensive**</u>



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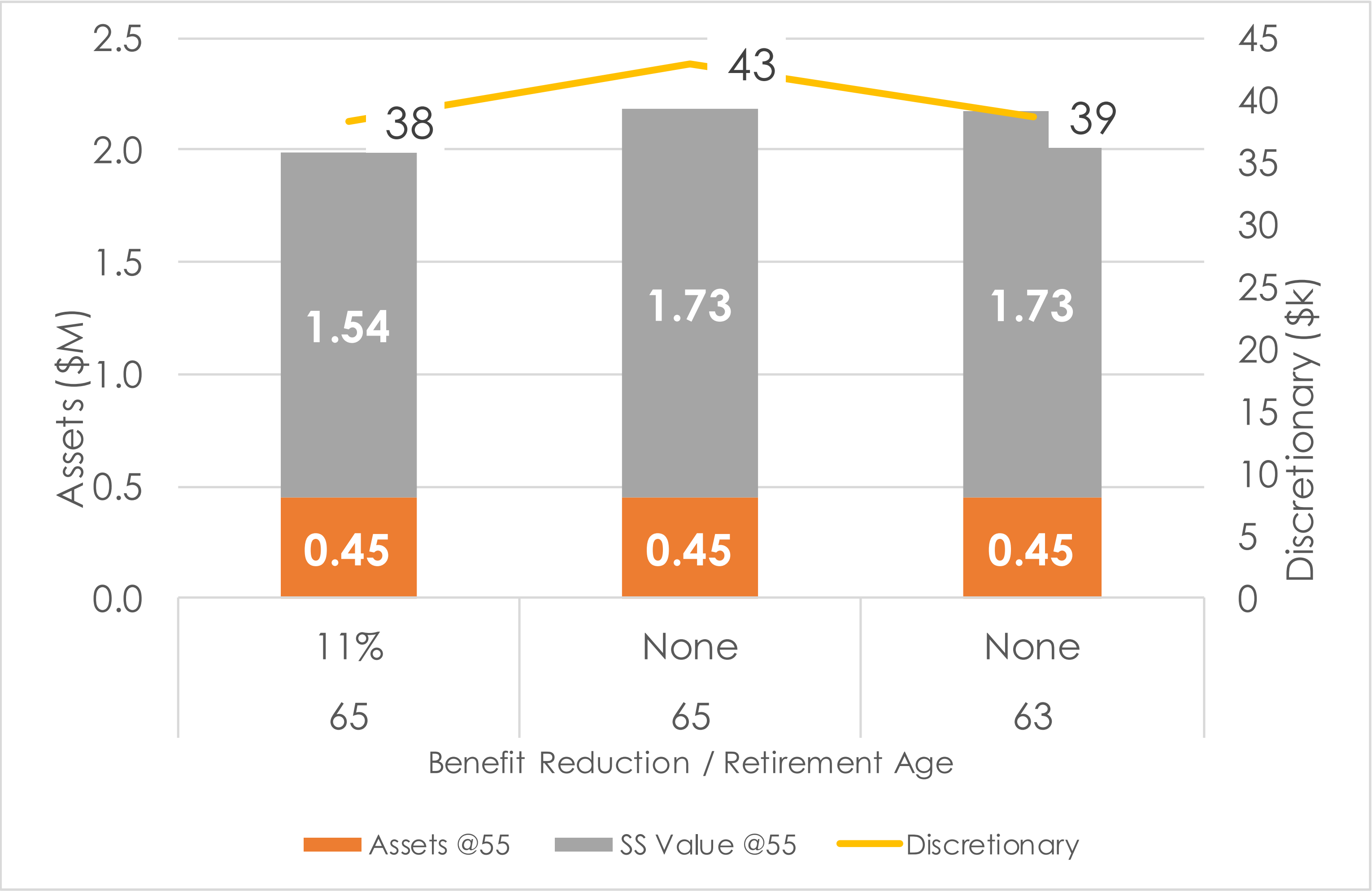
What about Social Security benefit reductions?

- Under current law Social Security is projected to be $12.5 trillion short over the next 75 years
- "Fixing" Social Security requires increasing taxes, reducing benefits, or both
- We assume **both** starting in 2035:
  - Benefits decrease by 11.5%
  - Payroll taxes increase from 12.4% to 14.2%.

What about Social Security benefit reductions?

- "Promised" benefits allow the Yalls to retire at 63
- Impact on retirement age is larger the more important Social Security is to the full plan



Summary

- You have an implicit retirement plan.
- To retire, your assets must fund your post-retirement spending.
- Maxifi calculates funding assets required.
  - Each retirement year adds to your "Number."
  - Retirement years before Social Security benefits are more expensive.
  - Positive rates of return reduce later year funding costs.

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Summary (continued)

- Longer life spans imply later retirement, lower spending, or both.
  - Be cautious about planning for a short life span.
- You are "on track" if
  - Your sustainable living standard is at or below your current discretionary spending.
  - Your spending is at or below your earlier plan, and your assets are at or above it.

Summary (concluded)

- Claiming Social Security benefits at 70 supports your earliest feasible retirement.
- If you know your Social Security benefits will not be reduced, you can retire a bit earlier.

Contact

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Thank you for participating!