

MAXIFI®

The Economics Approach to Financial Planning

a Five-Part Presentation to Dimensional Fund Advisors

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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

Executive Summary – Pricing Retirement

- *Retiring early isn't free.*
- *It reduces your sustainable spending.*
- *This means spending less **before** as well as after retirement to smooth consumption*
- *Retiring early has potentially huge Social Security and healthcare costs*
- *Deciding when to retire requires knowing its precise living standard price*

Everyone Has an Implicit Retirement Plan

- Right now, you have a retirement plan.
- There is a year when you could retire and maintain your living standard.
- If you save a lot and spend little, it could be now.
- If you spend a lot and save little, you might not be able to retire until your 90s!

Two Different Retirement Plans – Both Work



Charlie, age 55
Spends \$60,000/year
Savings \$1.24M
Will retire at 67

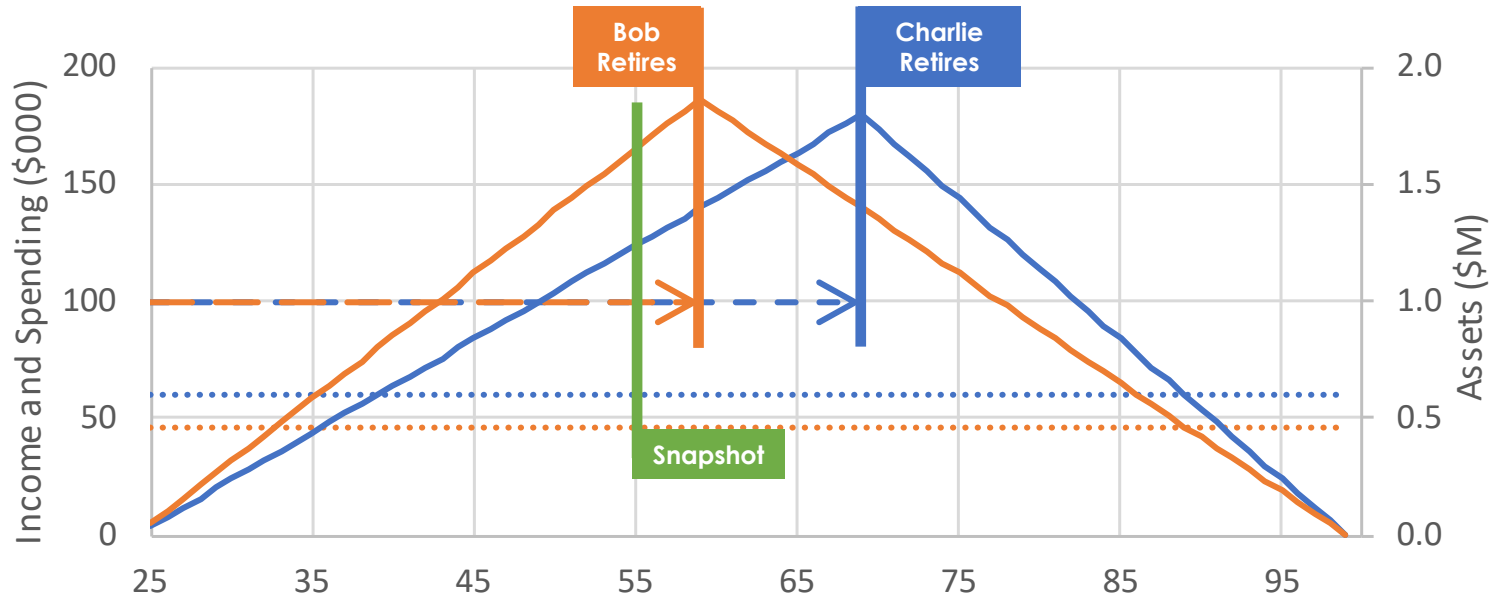
Both earn \$100,000/year



Bob, age 55
Spends \$46,667/year
Savings \$1.65M
Will retire at 57

Bob Spends Less/Saves More to Retire Early

Basic Retirement Arithmetic



—> Charlie Income —> Bob Income Charlie Spend
..... Bob Spend — Charlie Assets — Bob Assets

Meet Tina and Steve Garcia

	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
Discretionary Spending			38,000
Rent			30,000
Lifespan	100	100	
Social Security Strategy	70	70	
Social Security Earnings History (% of Wage Base)	60% since 1987	30% since 1987	



Tina (55, Therapist)



Steve (55, Personal Trainer)

When Can the Garcias Retire?

- We'll look at several "shared" retirements.
- We could also stagger retirement dates.

Scenario 1	Scenario 2	Scenario 3	Scenario 4
Retire now at 55	Retire soon at 60	Retire average at 65	Work until Social Security retirement benefits start at 70

The Garcias Can Retire at 65, Maintain Living Standard

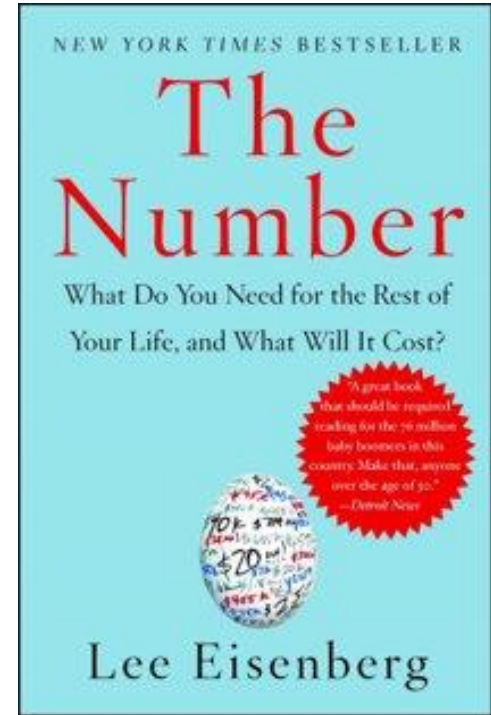
5 years of work represents ~\$11k in discretionary spending.

Sustainable Living Standard (in thousands)



What's my "Number?"

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



What's Your "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

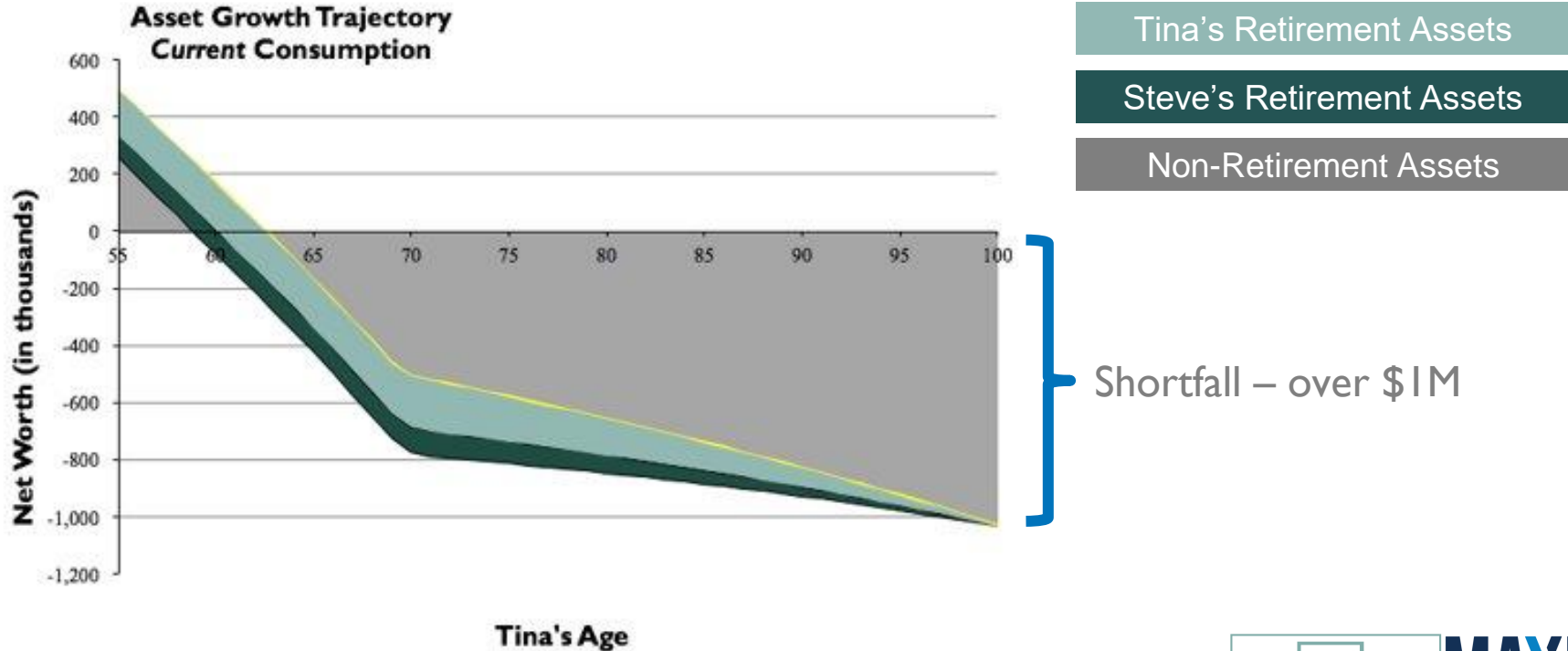
Garcias' Assets Too Small to Retire Now

5 more years of work supports ~\$11k in annual discretionary spending.

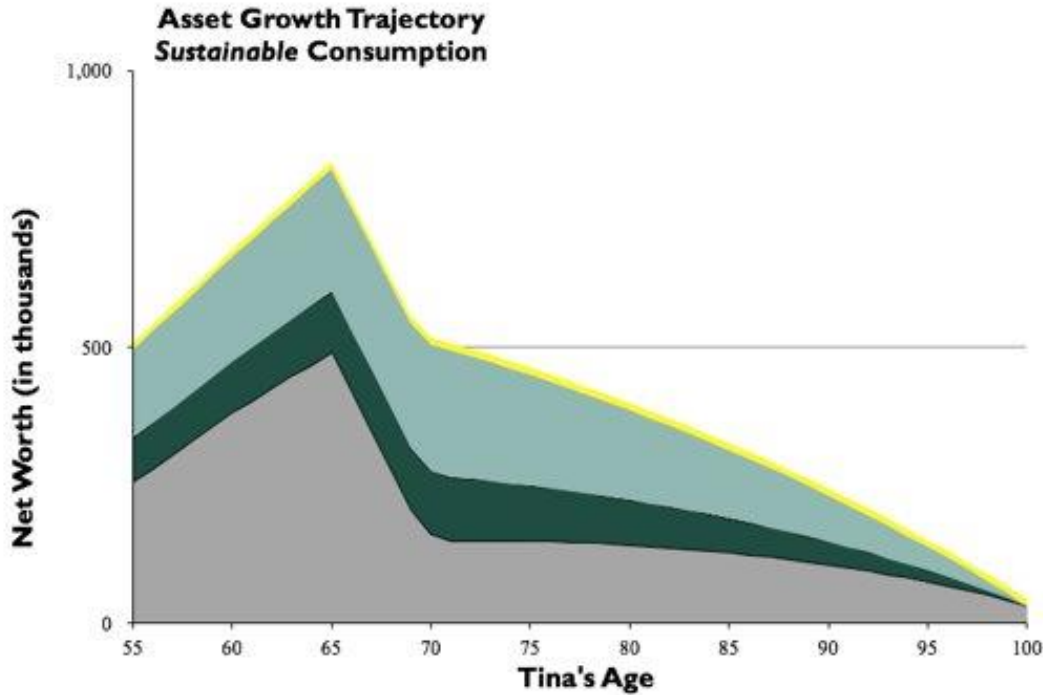
Sustainable Living Standard (in thousands)



Retire at 55 With Current Assets: Epic Fail!



Retirement At 65: "Just Right"



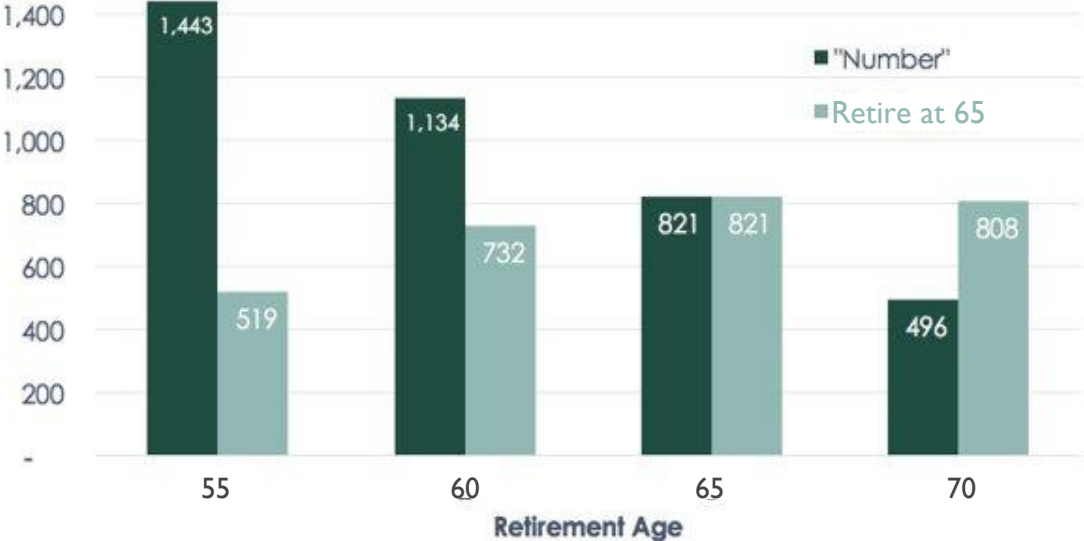
Tina's Retirement Assets

Steve's Retirement Assets

Non-Retirement Assets

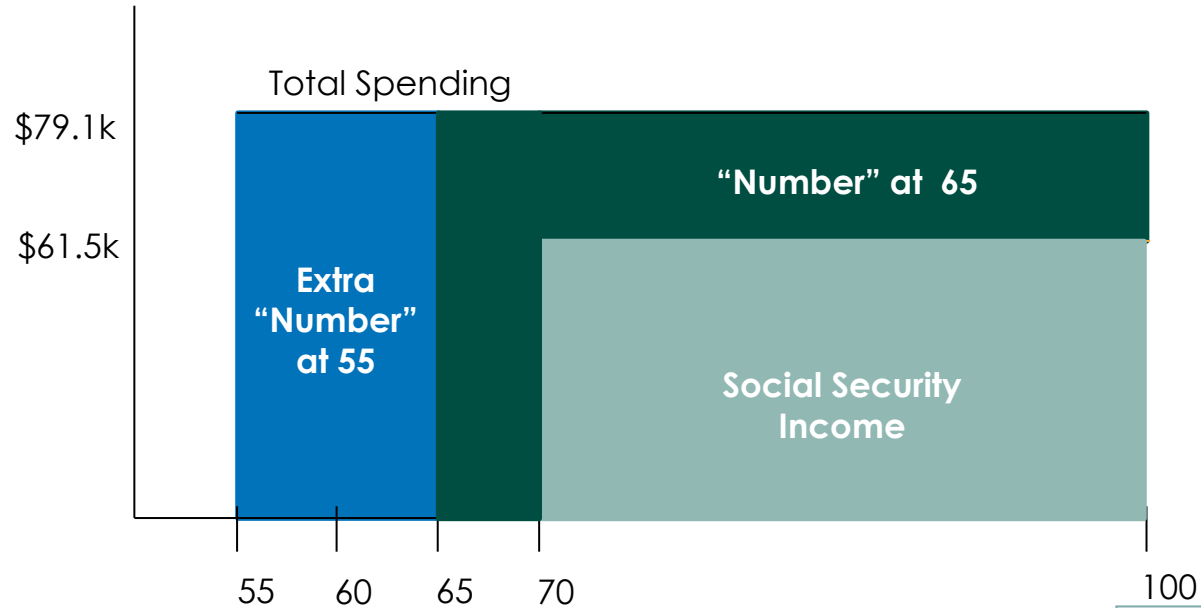
Garcias' Number Smaller If They Retire Later

Assets (in thousands) at Retirement - "Number" vs "Retire at 65"



The “Number” Is Larger For Earlier Retirement

Spending & Income



Retirement Benefits Grow With Delayed Start

- Social Security benefits adjust based on start date relative to Full Retirement Age (FRA)
- Benefits before FRA are lower (there is a "penalty")
- Benefits after FRA are higher (you earn "delayed retirement credits")
- Alternatively, benefits increase with every year (actually, every month!) you wait after 62

Start Age	Annual Benefit		Percent Increase
	Steve	Tina	
62	15,065	23,821	
63	16,141	25,523	7.1%
64	17,217	27,224	6.7%
65	18,652	29,493	8.3%
66	20,087	31,761	7.7%
67	21,521	34,030	7.1% "FRA"
68	23,243	36,752	8.0%
69	24,965	39,475	7.4%
70	26,687	42,197	6.9%

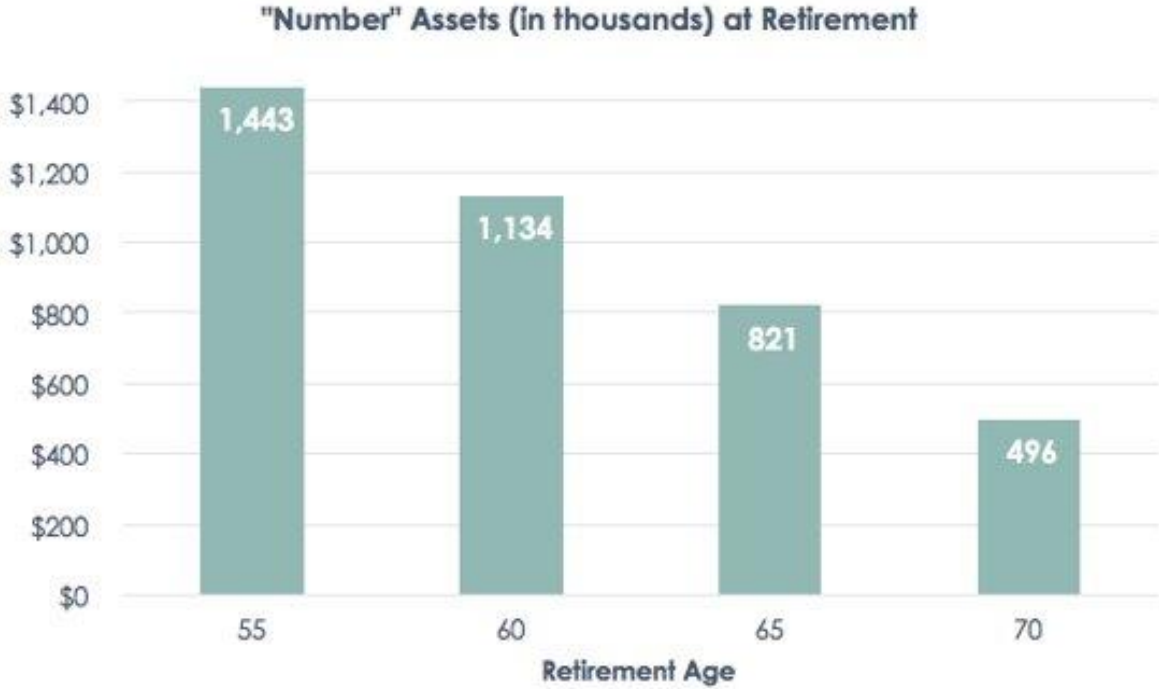
Claiming Later, Retiring Earlier

- Claiming at 70, the Garcias' Social Security Benefits represent almost 60% of their assets at age 60
- They can afford their current \$38,000 discretionary spending throughout their entire lives

Lifetime Balance Sheet - Age 60

Lifetime Assets		Lifetime Spending	
Category	(\$000)	Category	(\$000)
Earnings		Taxes	\$ 40
Social Security	\$ 1,585	Housing	\$ 1,056
Retirement Accounts	\$ 286	Medicare B	\$ 249
Taxable Assets	\$ 848	Discretionary Spending	\$ 1,350
		Other Expenses	\$ 23
Total	\$ 2,718	Total	\$ 2,718
Memo: Annual Discretionary Spending (\$000)			\$38
Memo: Total Assets			\$ 1,134

Recall: Later Retirement, Smaller “Number”



Claiming Early is Expensive!

- The Garcias can retire at 60 if they claim at 70, but not if they claim at 62.
- If they claim at 62
 - They give up \$380k present value of Social Security retirement benefits.
 - That's almost 25%
- They can afford only \$29,000 per year in discretionary spending

Lifetime Balance Sheet - Age 60

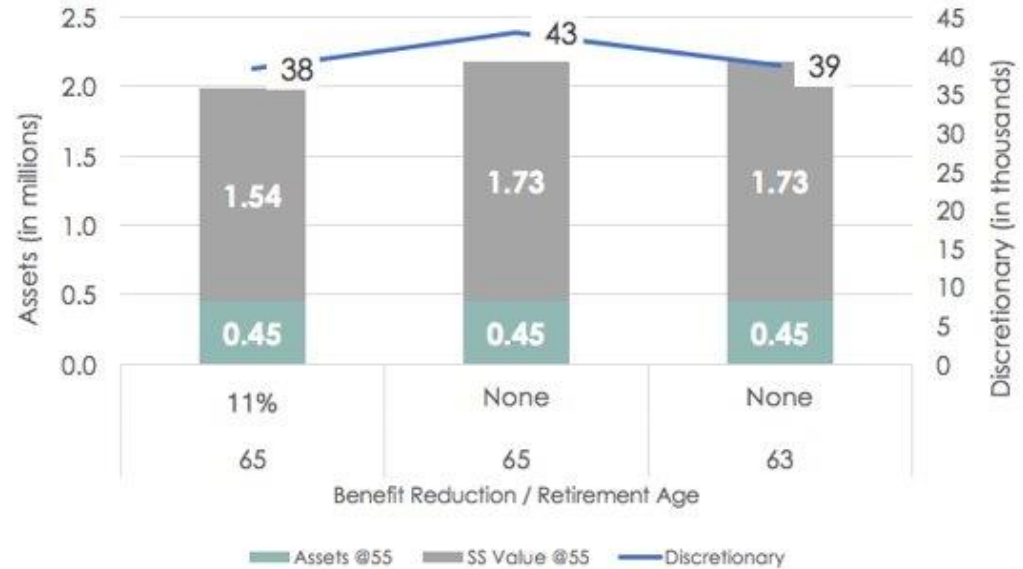
Lifetime Assets		Lifetime Spending	
Category	(\$000)	Category	(\$000)
Earnings		Taxes	44
Social Security	1,194	Housing	1,056
Retirement Accounts	286	Medicare B	248
Taxable Assets	906	Discretionary Spending	1,014
		Other Expenses	23
Total	2,386	Total	2,385
Memo: Annual Discretionary Spending (\$000)			\$29
Memo: Total Assets			\$ 1,191

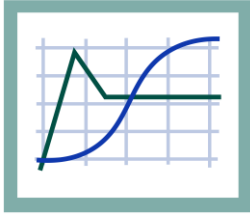
Social Security Benefit Reductions?

- 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%

No Reductions? Slightly Earlier Retirement

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





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Q&A



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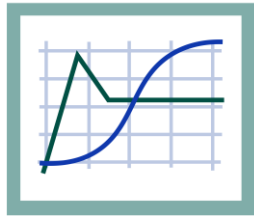
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