

Social Security

Insurance aspects:

1. Annuities: Steady stream of payments as long as recipient is alive. Insurance against the risk of unknown length of life
2. Survivor benefits
3. Disability benefits
4. Life-time income risk insurance: progressive formula provides insurance (like progressive income tax) against life-time income risk

Classification of Retirement Programs

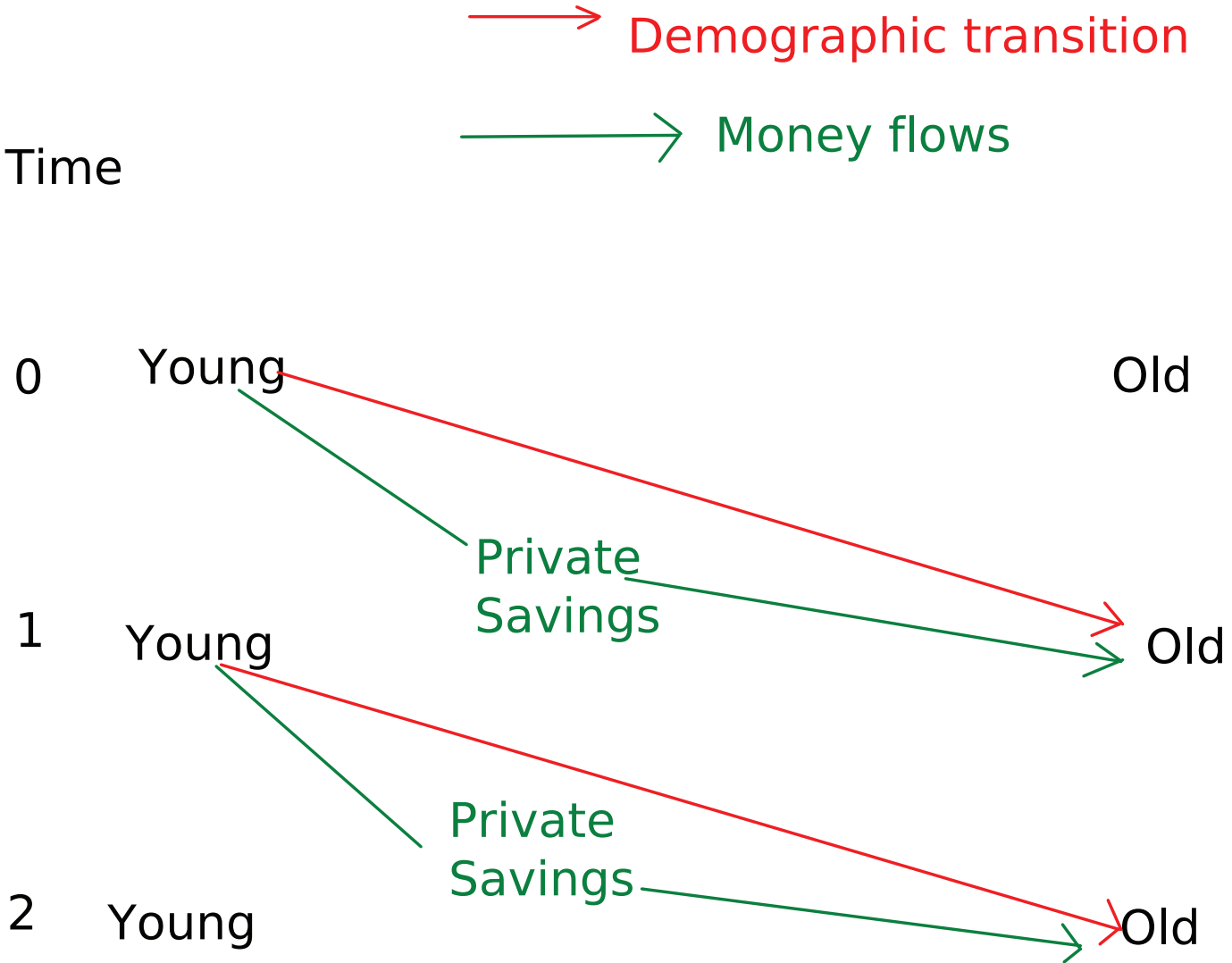
1. Funded vs. Unfunded

2. Defined Benefit vs. Defined Contribution

Social Security is a Unfunded (Pay-As-You-Go) defined benefit plan*

*Caveat: Trust Fund presents partial funding

Two-generation overlapping generations model without a Pension Plan

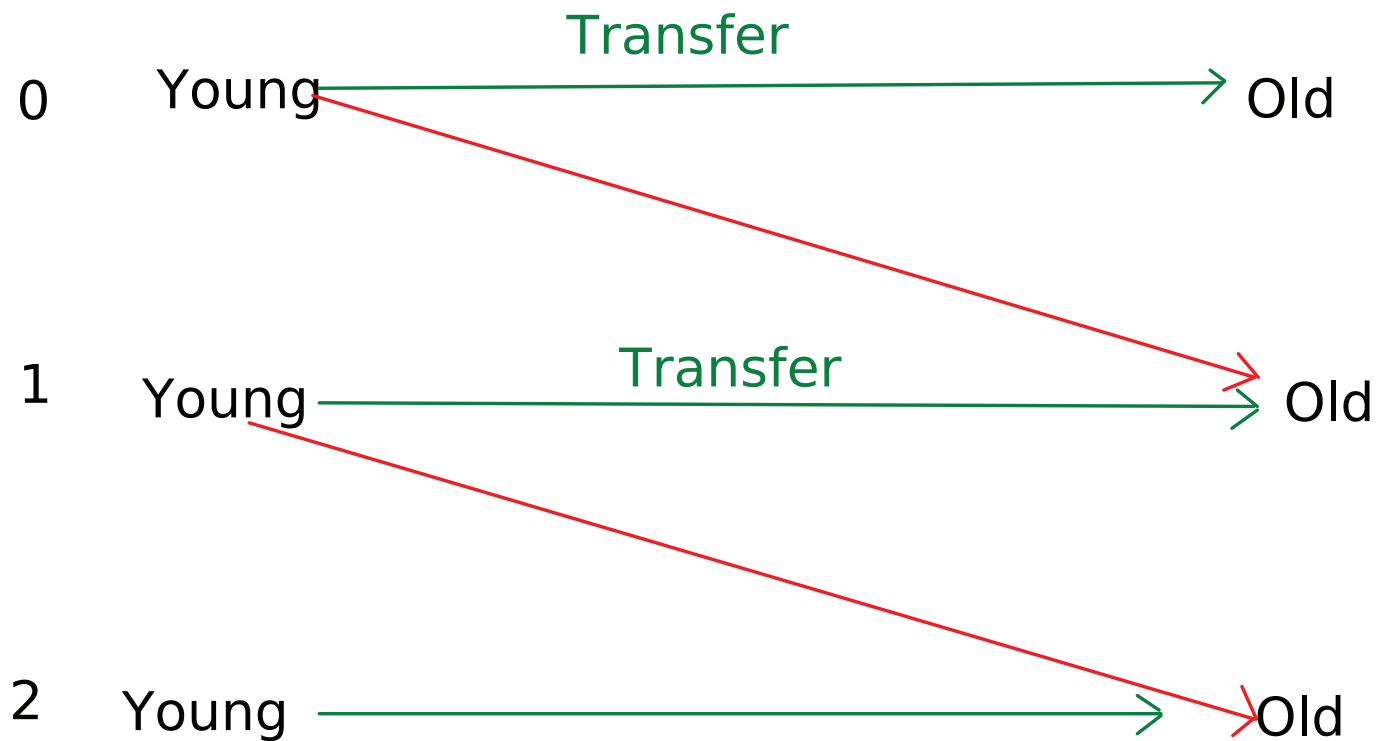


Two-generation overlapping generations model with an unfunded Pension Plan

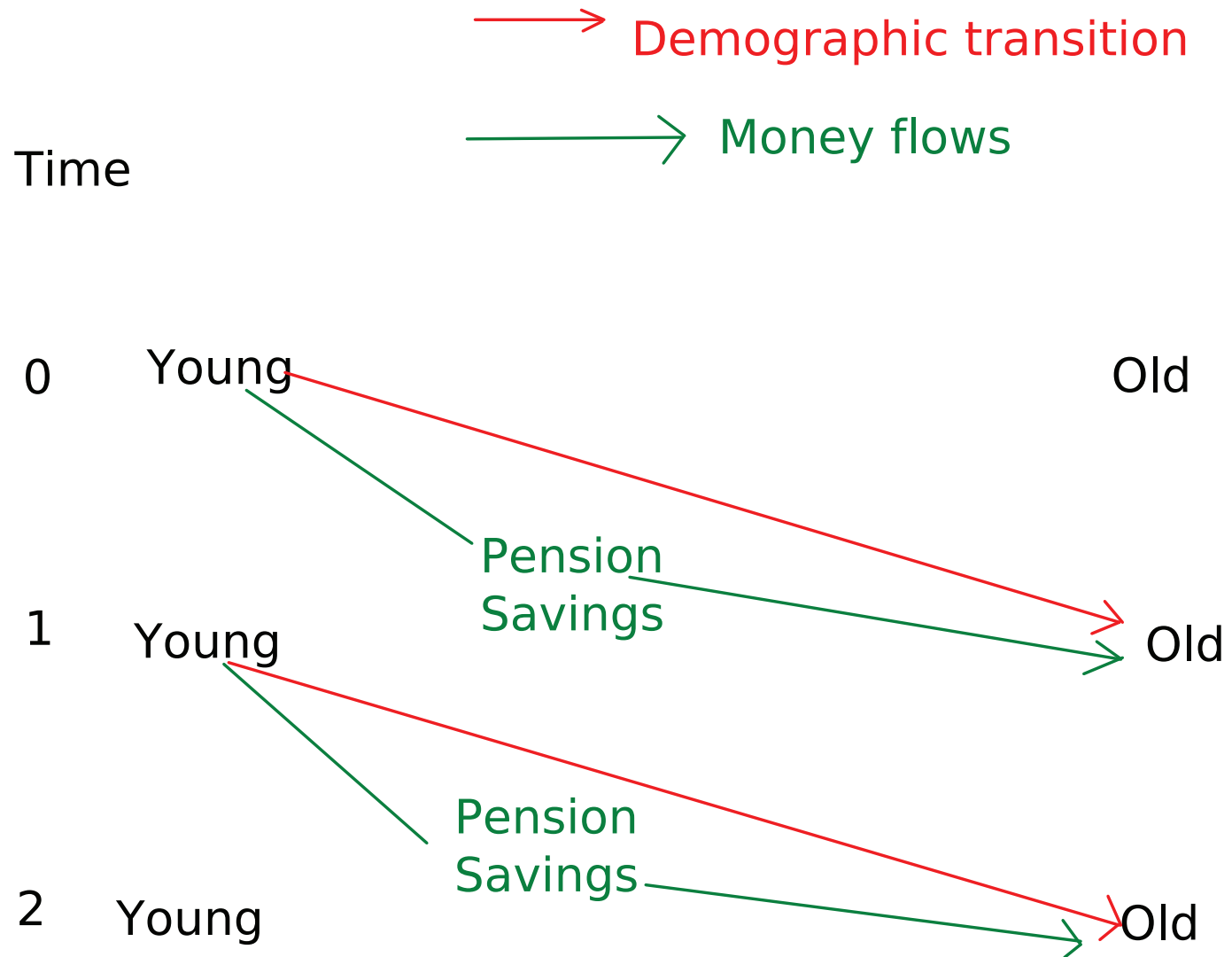
→ Demographic transition

→ Money flows

Time



Two-generation overlapping model with a Funded Pension Plan



Unfunded pension plan (like Social Security)

- Replaces private savings (not totally, but partially) with a transfer payment --> leads to lower capital stock in the economy
- Is equivalent to a funded system that was started with debt financed initial generation benefits
- This implicit debt in the system (see figures from the textbook) explains the low returns on social security investment

Financing and Benefit Determination

FICA tax 12.4% split evenly between employer and employee

Taxable base: first \$102,000 of annual earnings (2008)

Benefits:

Formula: AIME--> PIA --> Benefits

AIME: Average Monthly Indexed Earnings for highest 35 years (missing replaced with zero)

PIA=Primary Insurance Amount (for formula, see figure in the text)

PIA is a progressive formula, low earners get a better deal

Benefits:

Retirement Age: Between 62 and Full Benefit Age (between 65 and 67 depending on your year of birth) there is a reduction for early retirement

Family Status: Married Individuals can get either 100% of Social Security Benefits based on their own earnings history or 50% the benefits based on spouse's earnings history

Single Individual (at Full benefit age):
100% PIA

Married Couple:
Either 100% PIA of Husband and 100% PIA of wife
or 150% of PIA of the higher earner

--> If second, then the 12.4% FICA is fully a tax for secondary earners (no benefit linkage)

Social Security and Incentives:

Labor Supply:

--> See Gruber & Wise picture from the textbook

--> Large transition towards early and longer retirement over past century

--> Some of it predates Social Security (Costa research)

--> Is this Social Security or Income effect? Probably both relevant

Savings:

-Consensus estimate: about 30-40% crowdout of Private Savings due Social Security Wealth

Funding and Reform:

Current Funding Situation (2008 Numbers)

2017: Trust Fund outflows begin

2041: Insolvency, some obligations could not be met (about 75% could be met)

Ways to solve the problem:

- Raise tax rate from 12.4 to 14.1 now

- Cut all current and future benefits by 11.5% now

Other ways to reform:

- Extending tax base (increasing earning cap)

- Slowly scheduled benefit cuts

Privatization:

-For most part privatization would hurt, not help with current funding situation (reverting revenue from old system to new)

-A simple rate of return calculation comparing social security returns to stock market returns is not fair because of the implicit debt in the current system (unfunded initial generation benefits)

Real Pros of Privatization:

- More individual Choice
- Better labor supply incentives
- Increased funding --> higher long run capital stock
- Better transparency
- Private Property Rights for Social Security Wealth

Counterarguments:

- Administrative cost
- Less redistribution (depends on point of view)
- Does not address the current funding problem
- Some individuals might end up making bad investment decisions, how would a minimum retirement benefits be guaranteed for these individuals?

--> Evidence on individual 401K investments choices suggest many people make foolish investments