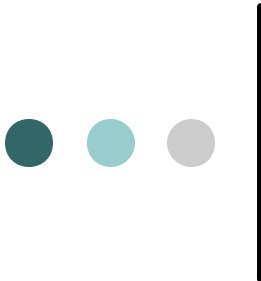




# What are the Risks and Returns of Private Accounts for Social Security?

Deborah Lucas

Northwestern University and NBER

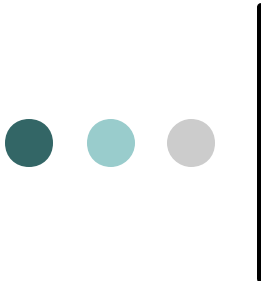


## Why include private accounts in a public pension system?

- exploit the equity premium (sic)
- Improve risk sharing
  - in financial markets
  - Reduce demographic instability with increased prefunding


.....

- increase transparency
- create a “lock-box”
- philosophic reasons



# Economists recognize that the equity premium is not a free lunch

- Aggregate resources available are the fundamental determinants of economic welfare.
  - “The economy is the trust fund” Dan Crippen
- A swap of gov’t debt for stocks provides little incentive for additional savings, and hence does not increase growth.
- Raw comparisons between average stock market returns and the historical returns to pensioners:
  - They **confuse investment returns with flows determined by program rules** (Geanakoplos, Mitchell and Zeldes (1998)).
  - They neglect that the **equity premium is fair compensation for risk.**



# But there are potential welfare gains from improved risk sharing

- Private accounts would shift the allocation of risk *within* and *between* generations through several mechanisms:
  - Changes in individual portfolio composition (likely small)
  - Changes in benefits (rule dependent)
  - Changes in taxes (rule dependent)
- For instance, they could provide younger and lower income workers with the ability to participate in the stock market.
  - Diamond and Geanakoplos (1999)
- However, such risk/return transfers could be accomplished by a change in tax and benefit formulas as easily as with private accounts.
- As with all complicated policy changes, the devil is in the details.



## Risk and return relative to what?

- **Narrow view** – as a stand alone portfolio; risk/return similar to 401(k), TSP or mutual fund.
  - Highlights that only can get higher return at the cost of higher risk
- **Broader view** – risk and return of modified system vs. the status quo social security system
  - Problem that neglects changes outside the system
- **Comprehensive view** – consequences for economic growth, risk-sharing, distribution, stability, etc.
- All three papers, rightly, address issues of relevance to the comprehensive view



# Demographic Change, Retirement Saving, and Financial Market Returns

Poterba, Venti and Wise

- Useful tabulation of likely flows into and out of retirement accounts from the SIPP
- Underscores that even in the absence of private accounts, there is **increasing exposure of retirement income to the stock market**, due to growing DC plan assets and declining private DB plans

# The Share of Stocks in Financial Assets Has Increased

Year	25%	50%	75%	Mean	Std dev	Skewness
1989	0	0	0.047	0.058	0.133	3.560
1992	0	0	0.077	0.077	0.158	3.005
1995	0	0	0.110	0.099	0.188	2.587
1998	0	0.021	0.217	0.140	0.210	1.800
2001	0	0.042	0.260	0.162	0.229	1.598

Tabulations are from the SCF, various years, and based on survey weights.

from **Heterogeneity and Portfolio Choice: Theory and Evidence** by Stephanie Curcuru, John Heaton, Deborah Lucas, Damien Moore<sup>4</sup>

# Much of the increase has been through private pension funds

YEAR	DIRECTLY OWNS MUTUAL FUND	ONLY OWNS EQUITY IN PENSION FUND	ONLY OWNS DIRECT EQUITY	OWNS EQUITY (ALL ACCOUNT TYPES)
1989	6.0	11.2	12.6	31.8
1992	8.4	14.9	11.1	36.7
1995	11.3	17.6	10.5	40.4
1998	15.2	20.2	10.4	48.9
2001	16.7	21.2	9.8	51.9

Tabulations are from the SCF, various years, and based on survey weights.





# Demographic Change, Retirement Saving, and Financial Market Returns

Poterba, Venti and Wise

- Goal is to evaluate stock price effects of demand shifts by baby boom
- Will results be persuasive?
  - absence of a reliable asset pricing model
  - uncertainty about demand from rest of the world
  - guess that demographic effects will be lost in the noise
- Should include uncertainty bands for wealth outcomes
  - avg. stock returns presents overly optimistic picture of future resources



# Interpreting Social Security as a DC System

John Geanakoplos & Stephen Zeldes

- Clever demonstration that the seemingly sharp distinction between DB and DC systems is fuzzier than you might think.
- Demonstrates that a (heavily regulated) DC system need not abandon universal annuitization and other insurance, nor wealth redistribution.
- But what does this have to do with the risk and return implications of private accounts?



# Interpreting Social Security as a DC System

John Geanakoplos & Stephen Zeldes

- Analysis underscores that **current law benefits** are subject to considerable **aggregate wage risk**.
- Wage risk arises from business cycle fluctuations and productivity shocks.
- The **same fundamental risks drive stock returns**, especially over long horizons.
- It follows that **workers already bear considerable stock market risk** via the labor market and retirement system
  - Cannot conclude that low-income workers are exposed to too little stock market risk under the status quo
  - It is technically incorrect to use the risk-free rate to discount<sub>11</sub> future social security benefit obligations.



# Political Risk vs. Market Risk in Social Security

by John Shoven and Sita Slavov

- The argument
  - Pay-go social insurance systems have significant political risk – taxes and benefits vary with demographics and economics
    - Riskier than private DB (!?)
  - Private accounts are also risky, but they have investment risk rather than political risk
  - The principle of diversification suggests a system with both will reduce overall risk



# Political Risk vs. Market Risk in Social Security

by John Shoven and Sita Slavov

- That conclusion rests on some debatable assumptions and interpretations of history:
  - Some outcomes described as evidence of **political risk** could be interpreted as **effective risk-sharing**
  - Systems with **private accounts** are **also susceptible to political risks**



## Political risk or effective risk-sharing?

- European example: Longevity has increased, population growth has slowed. The political response is benefit cuts and increased normal retirement age for future retirees
  - This is good! Demographic risk is shared across generations.
- U.S. example: IRRs vary for different cohorts in “money’s worth” calculations
  - Transfers from future generations of workers to preceding generations of elderly sharply reduced their poverty rate, a success!



# Political risk and private accounts

- Less susceptible to expropriation
- Gives young protected savings in system
- But what if the market crashes?
  - Federal intervention is likely
  - Retirees protected by explicit or ex post floor on benefits
  - Transfers downside risk of market to the working population through current or future tax increases, upside goes to retirees
  - Cost of such guarantees is high; a reform that introduces private accounts and guarantees a minimum benefit close to current levels is a net increase in benefits.