

Challenges for the US Pension System

By

©Olivia S. Mitchell

Wharton School

mitchelo@wharton.upenn.edu

<http://prc.wharton.upenn.edu/prc/prc.html>

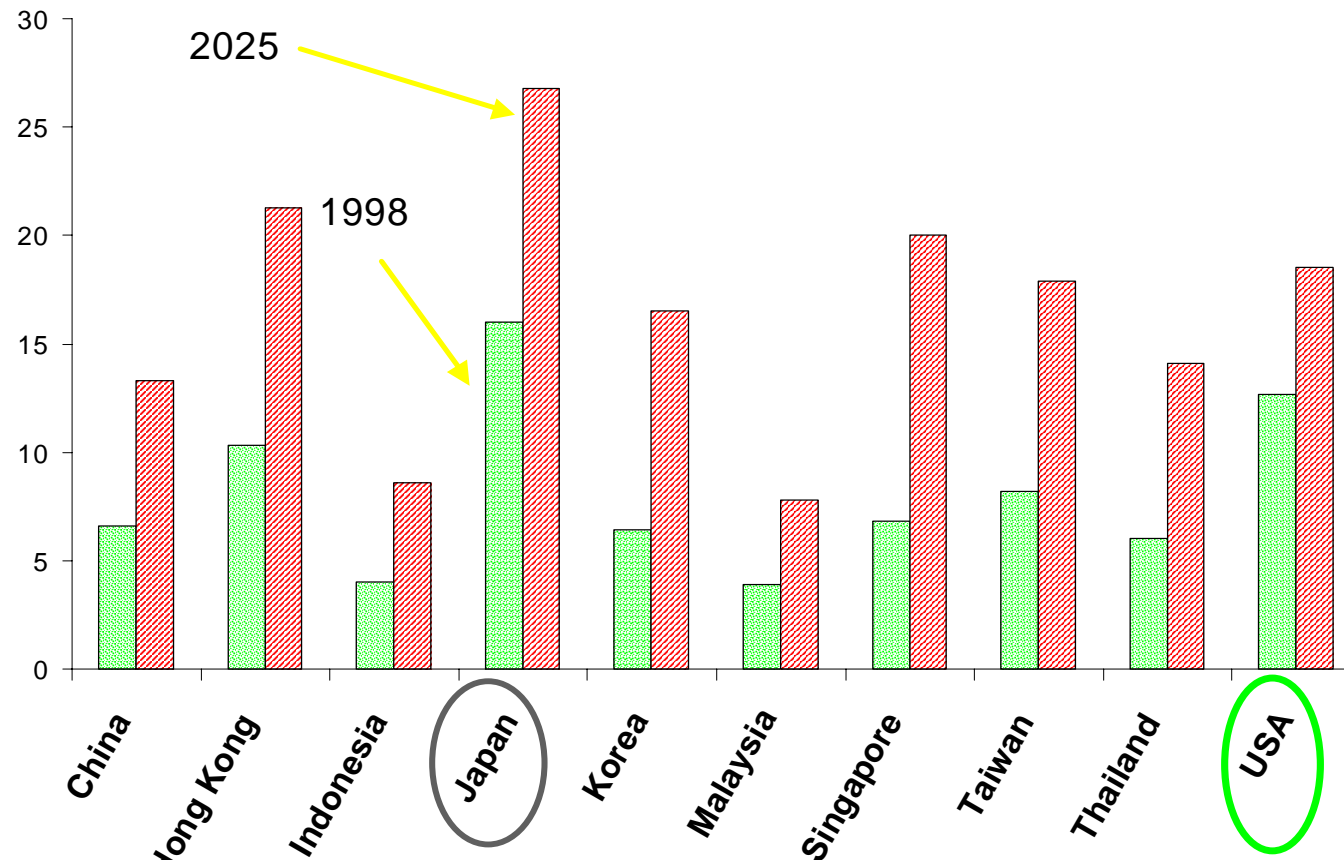
Inauguration Ceremony, Japan Pension Research Council

18 February 2002, Tokyo

US retirement system is in flux...

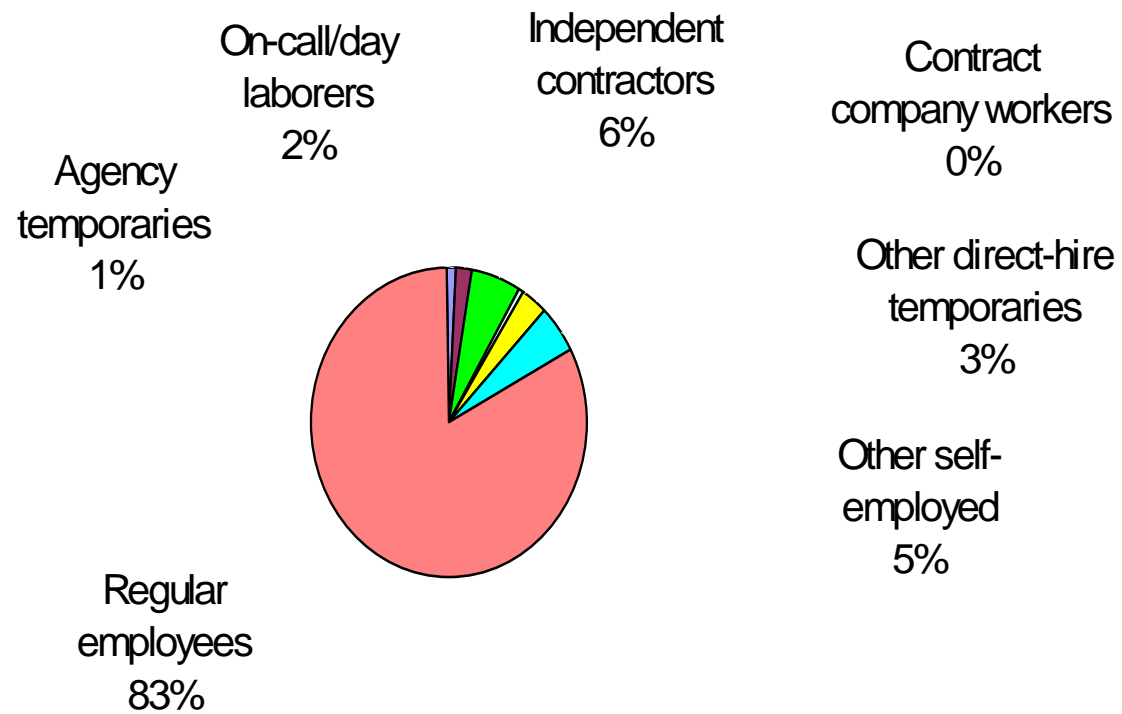
- Labor market changes:
 - Older population, more mobility
- Pension system changes:
 - Corporate DB pensions see problems
 - DC plans popular: financial disintermediation, portfolio diversification, ownership
 - Social Security faces insolvency
- Retirement outlook
 - More disintermediation – and challenges
 - Social Security reform

Population aging underway (%65+)



Source: Clark (1999)

US labor mobility growing

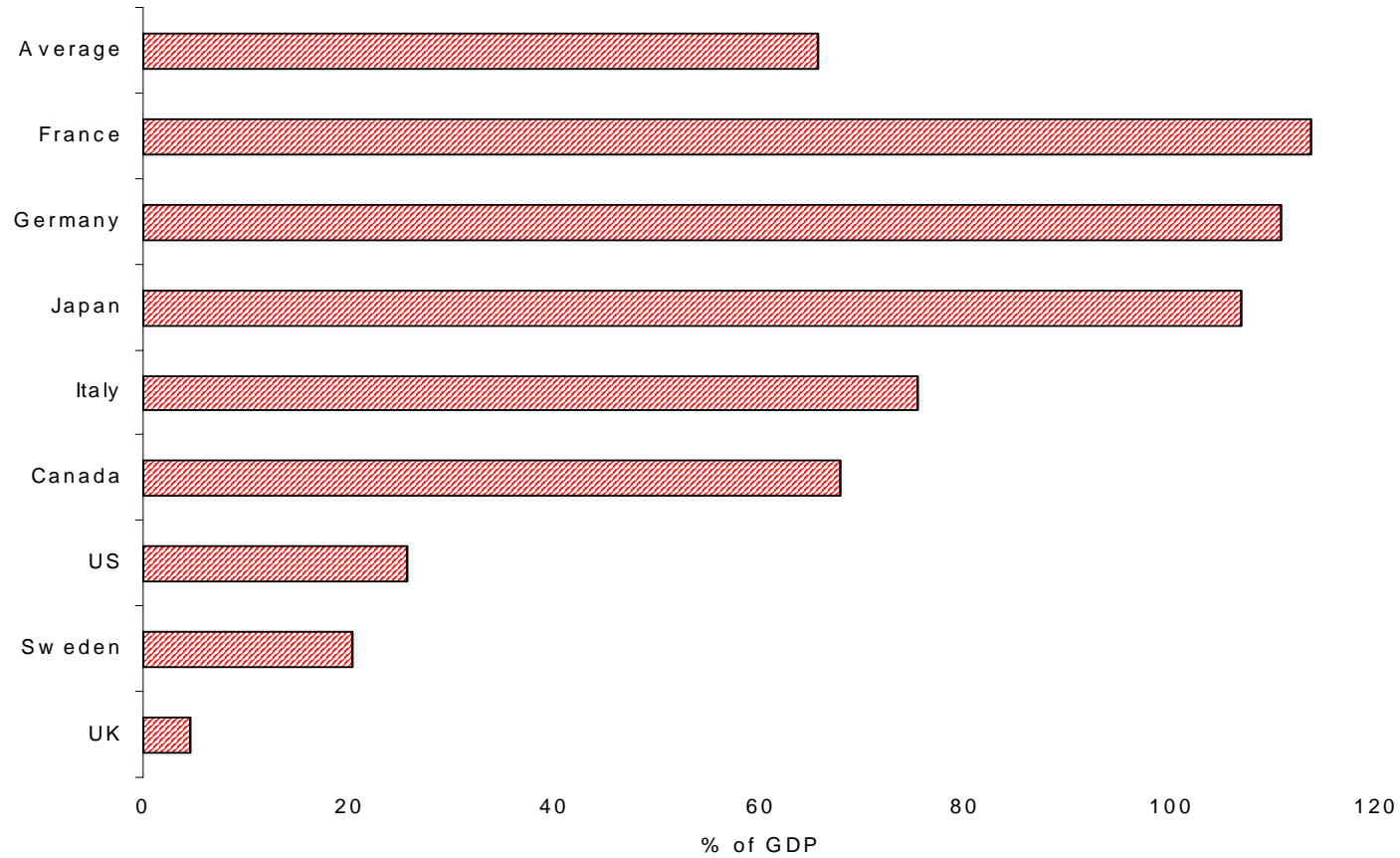


Related changes:

- Shorter employment spells: Men have 10 jobs in career, 6 by age 40
- Downsizing: Public sector & heavy manufacturing shrinking
- Outsourcing: More common now (e.g. benefits administration)
- Earlier retirement: median age 62

National pension debt substantial

(% of GDP to 2050; IMF)



US corporate DB pensions had 25 years of success:

- DB plans manage ~ \$3+ trillion US,
mostly well funded (Assets = ABO)
- Funding, reporting, investment
regulated by US Labor Department

<http://www.dol.gov/dol/pwba/>

- Government provides DB plan
insurance

Now DB funding outlook poor:

- Sponsor profitability < forecasts:
 - Layoffs, lack of cash to finance DB
- Stock market performance weak
 - DB assets lower than expected
- Govt bond rates dropping
 - DB liabilities higher than expected
- Few entrants to mature DB system

➔ Similar to Japan!

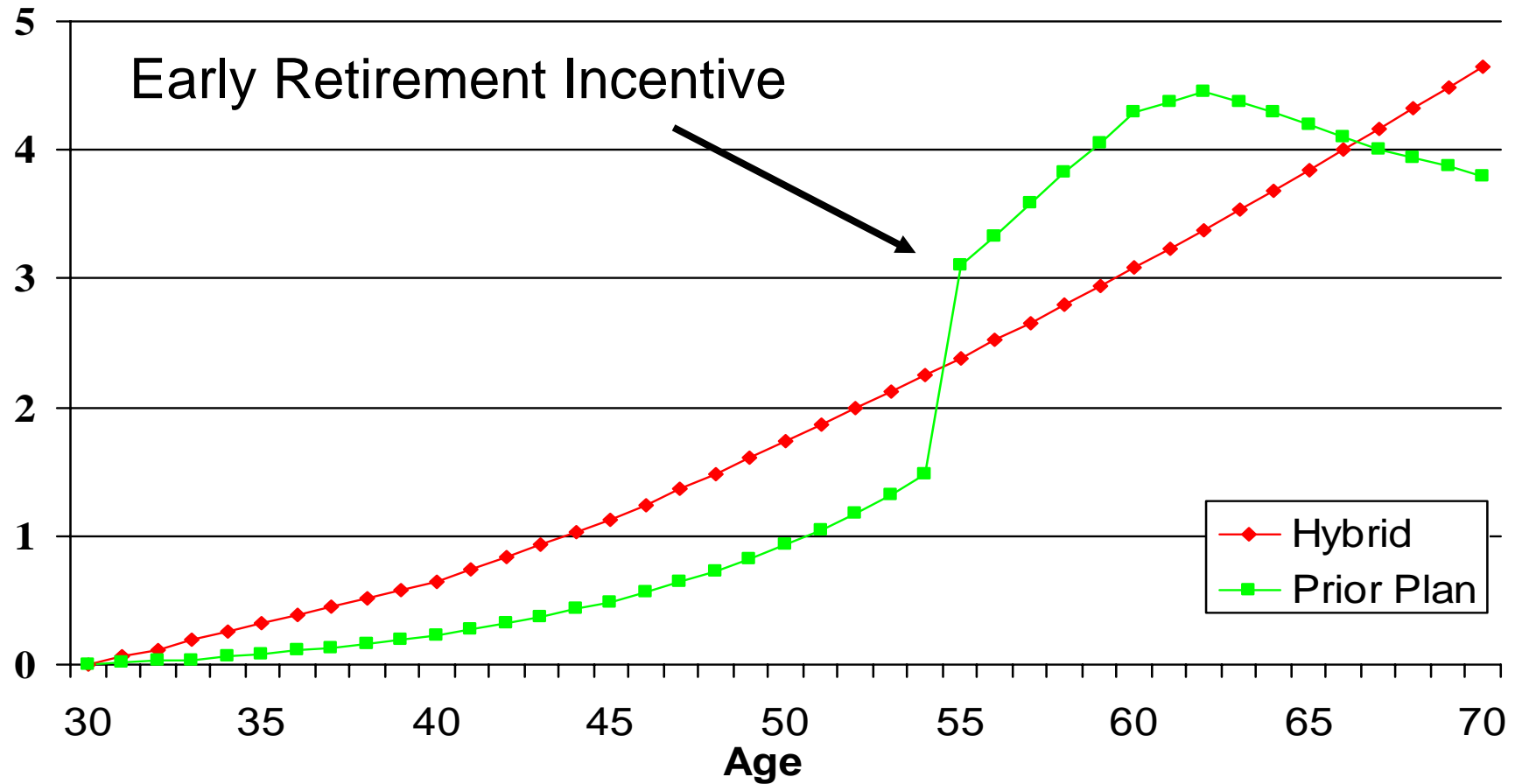
How are DB plans responding?

Plan Redesign: Hybrid or Cash-Balance plans

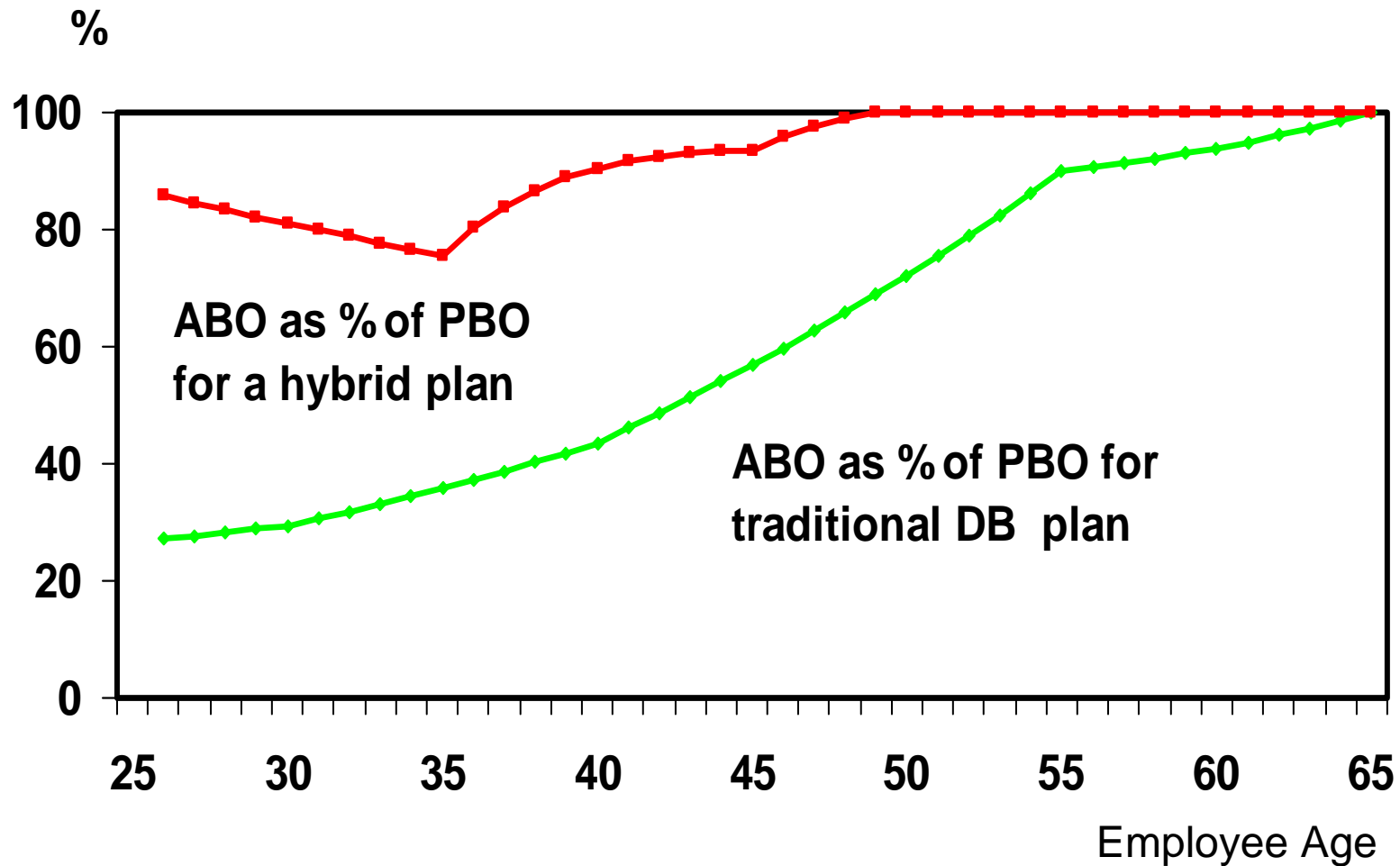
- Employer perspective:
 - Specifies annual contribution (% of pay)
 - Guarantees ROR on investment (this makes it DB in US context)
- Employee perspective:
 - Gets annual statement on asset value
 - Asset portable after termination (if vested)
- K market risk is employer's (with govt solvency fund)

Typical DB Accrual vs Hybrid Plan

Accrued benefit as a multiple of pay



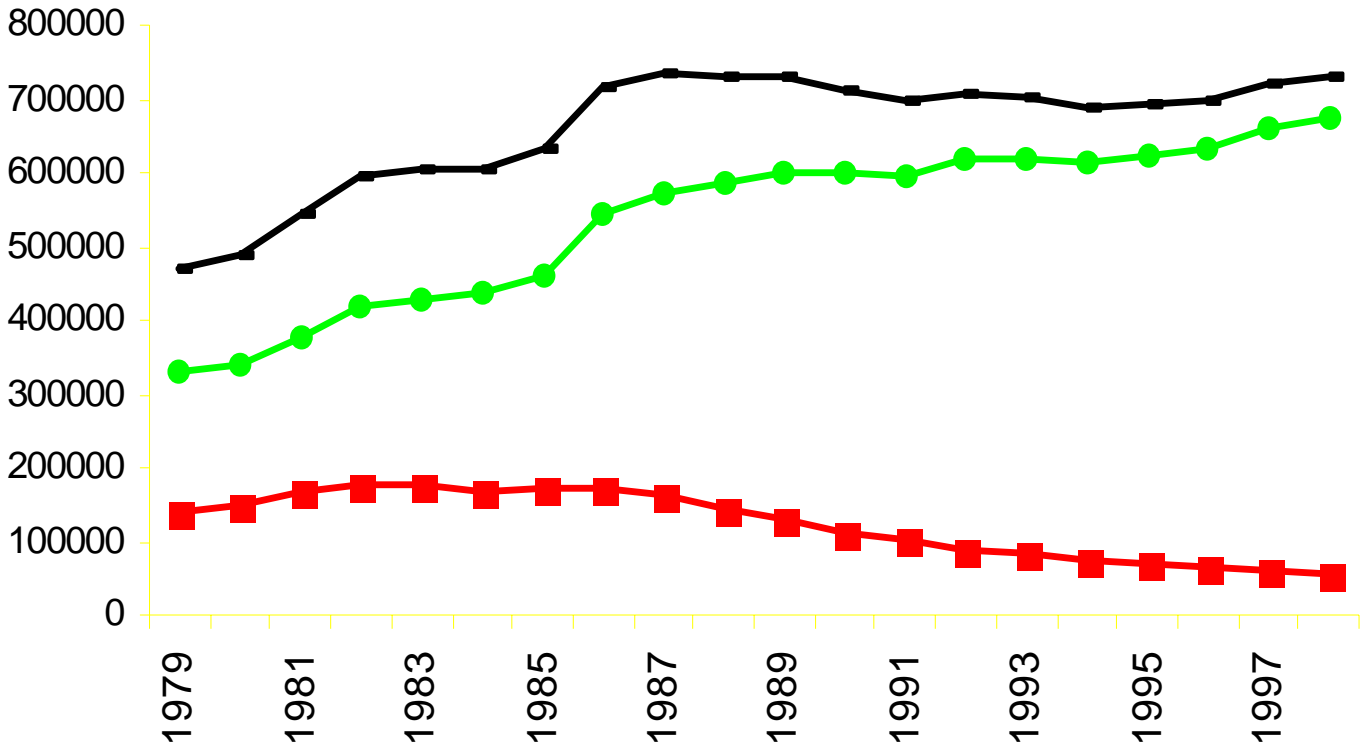
Hybrid plans have smoother funding profile than traditional DB plans



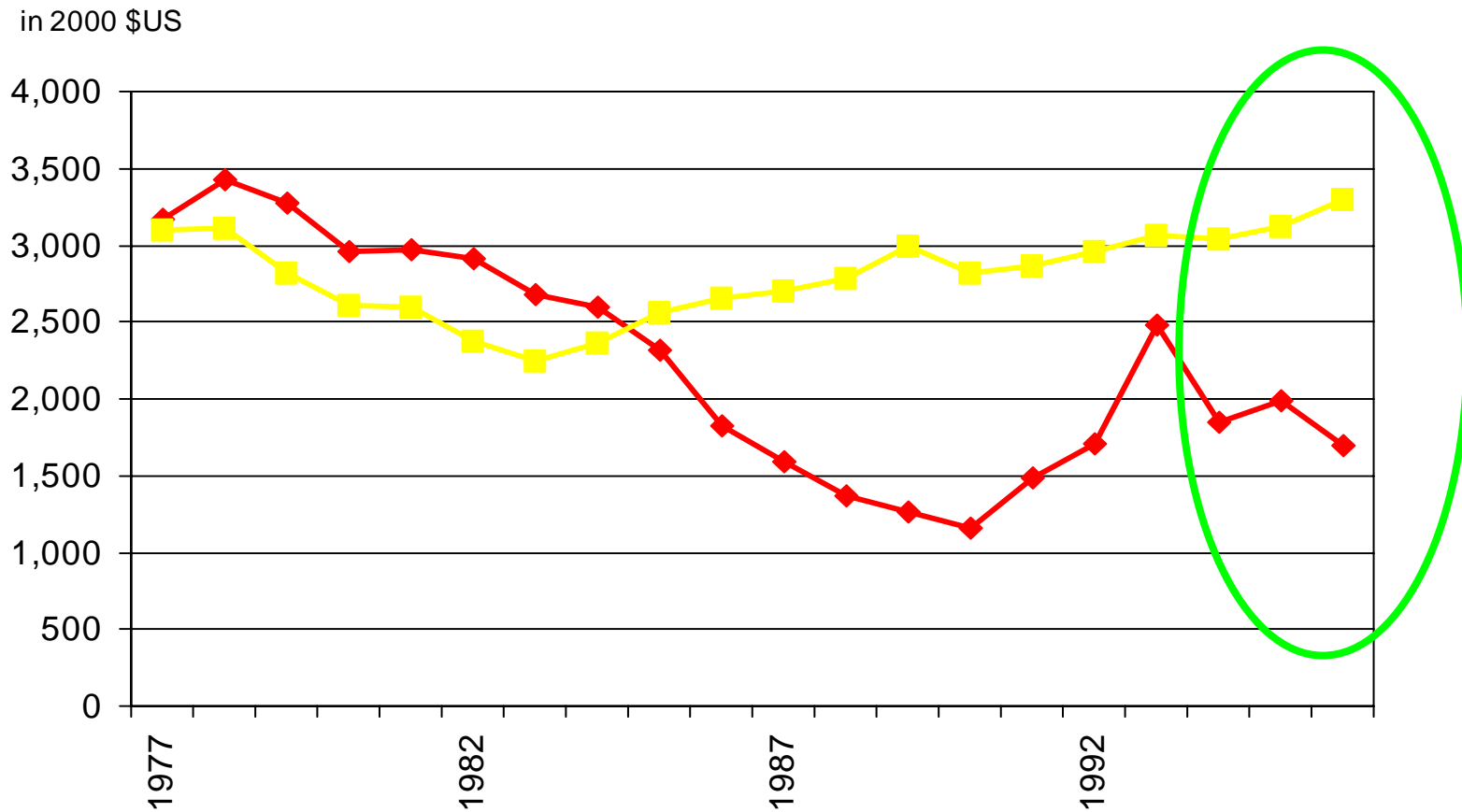
Conversion Issues

- By law: Sponsor must pay ABO = past DB plan benefits earned
- But sponsor can change future benefit promises
- So many DB→DC and traditional DB→cash balance conversions.
- Still must fund old ABO (and with low interest rates, is expensive).

The Broader View: DC plan growth

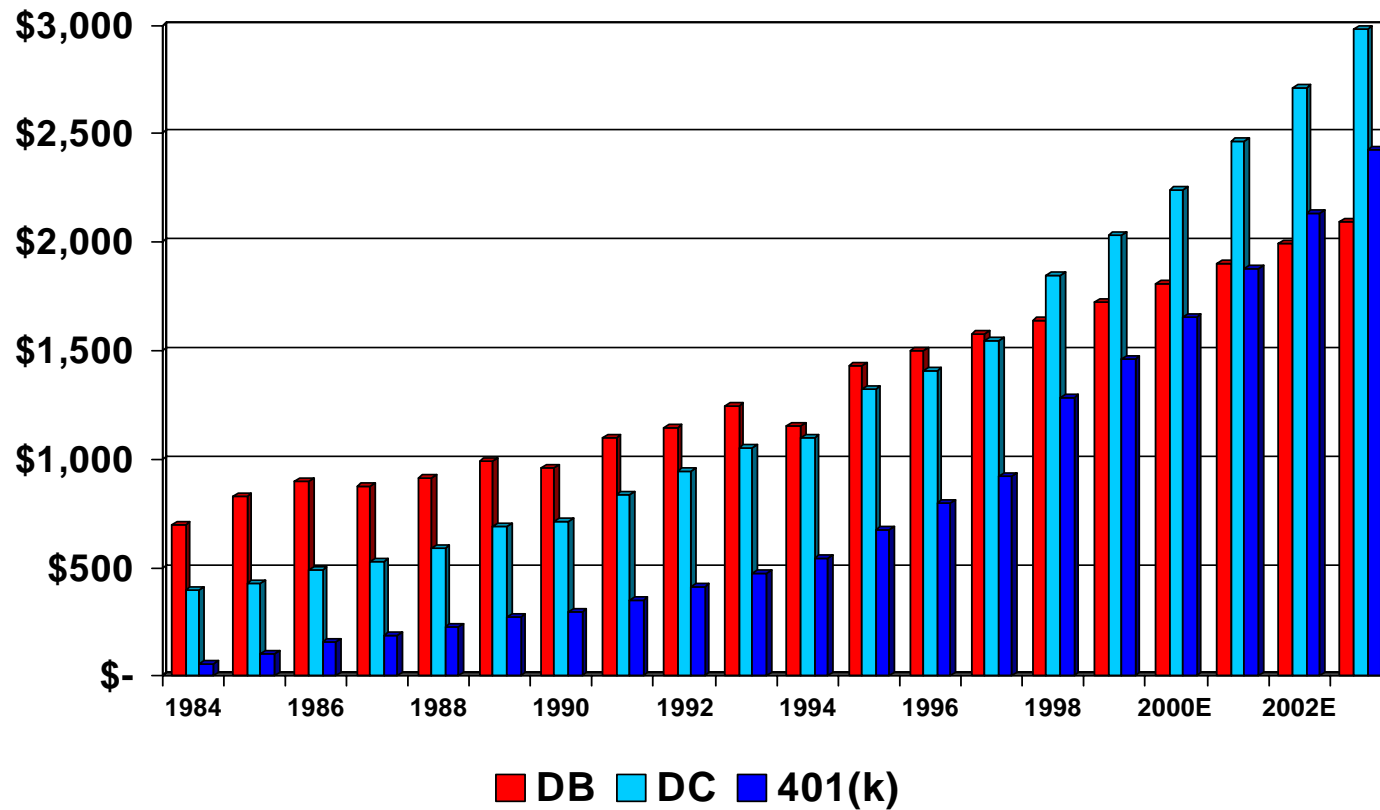


Annual Per Capita Contributions to Private Retirement Plans



DC assets surpass DB

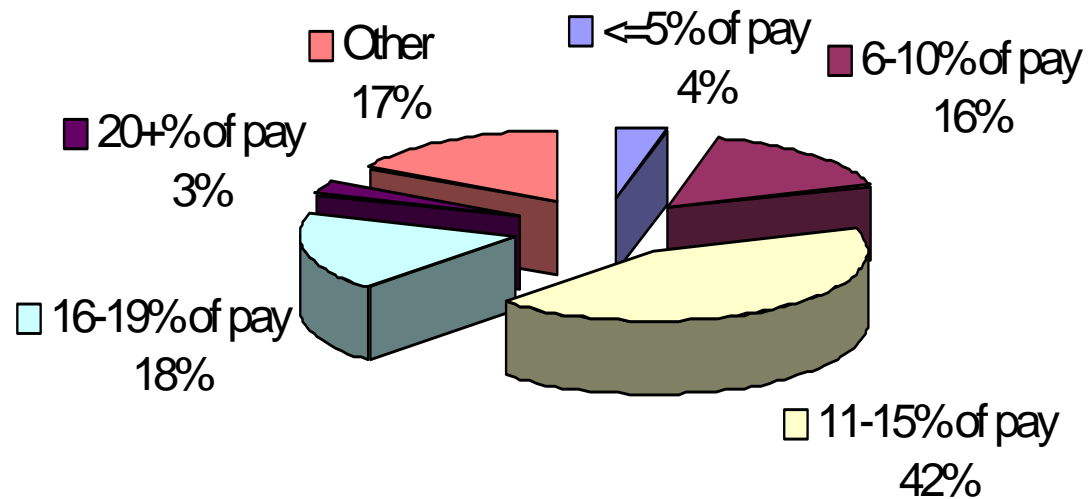
(US Corporate, B\$)



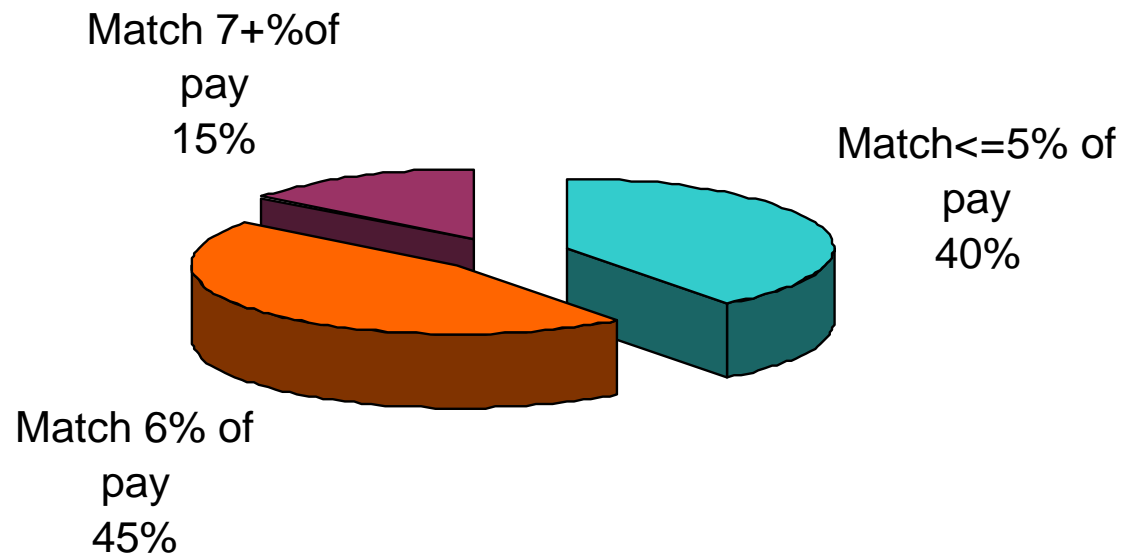
Aspects of 401(k) DC accounts

- ✓ Salary deferral
 - Employee pretax contribution rising (% of pay)
 - Employer match popular
 - Assets portable if change employers
- ✓ Automatic enrollment
- ✓ Employee bears K market risk & expenses
- ✓ Multiple investment options: average 12

Employees contribute % of pay to 401(k) accounts



Employers provide match as % of pay



Expenses: TIAA-CREF Annual Charges

(in hundredths of a percent, or basis pts)

	<u>Expense Ratio (bp)</u>
Stock	40
Global Eq.	46
Growth	42
Equity Indx	36
Bond	38
Infl Linked Bond	39
Social Choice	38
M Mkt	34

Administrative Costs Erode Lifetime Pension Savings

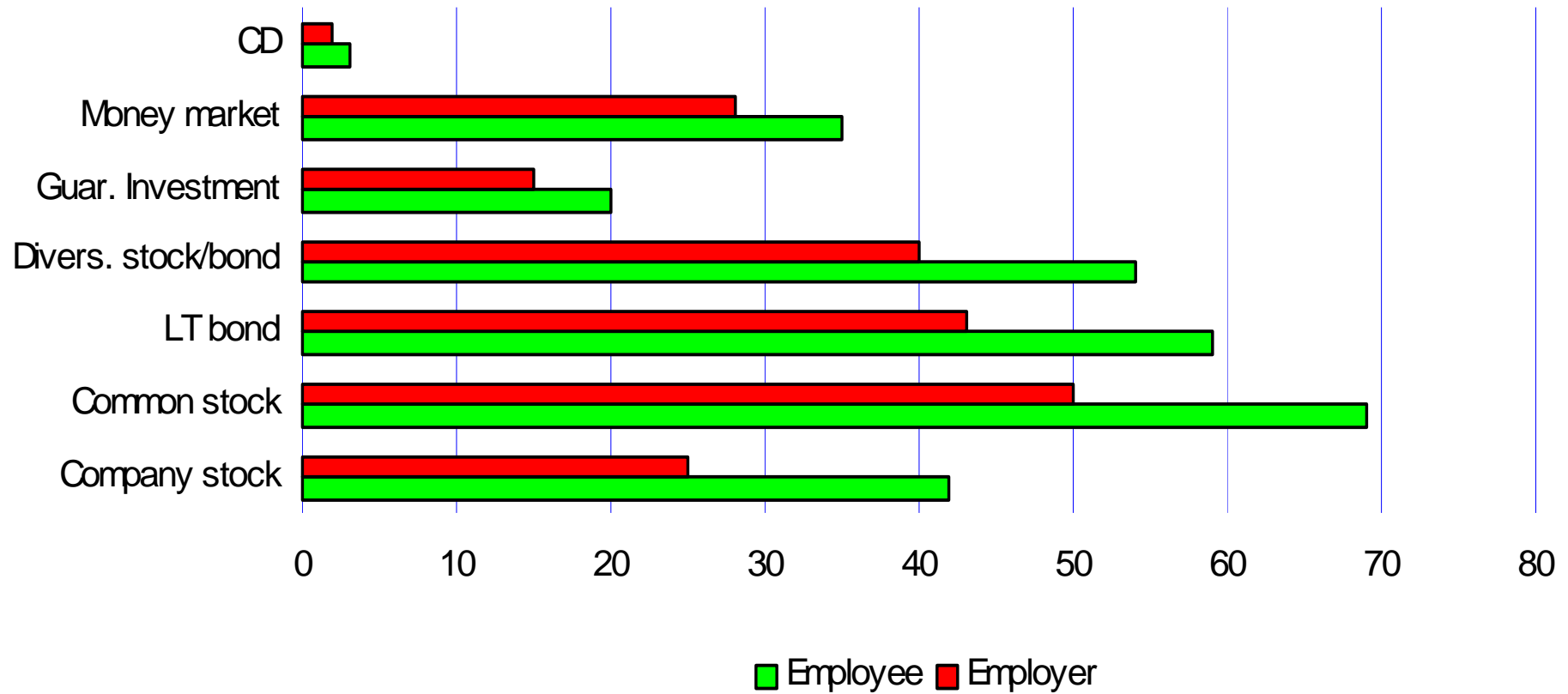
<u>Assuming ROR</u>	<u>12%</u>	<u>6%</u>
---------------------	------------	-----------

Saving decreased by:

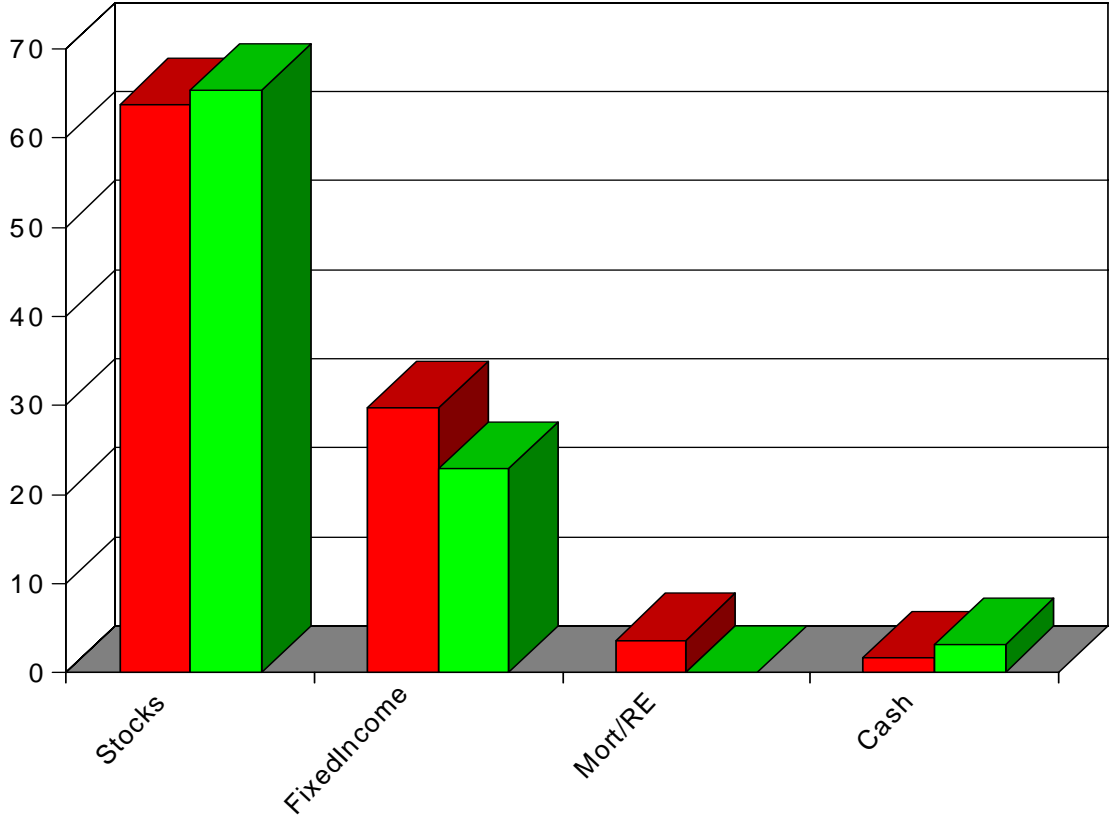
100 basis point expense	33 %	25 %
50 basis point expense	15 %	12 %

(Assumes 5% wage growth from age 21 to 65.)

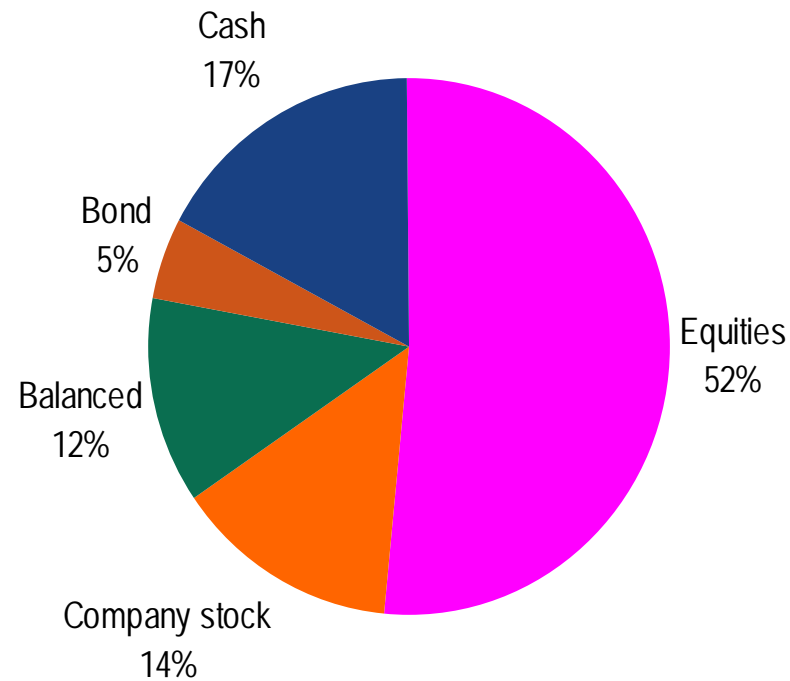
401(I) Investment Choices



Overall mix similar in DB and DC (top 1000 plans)

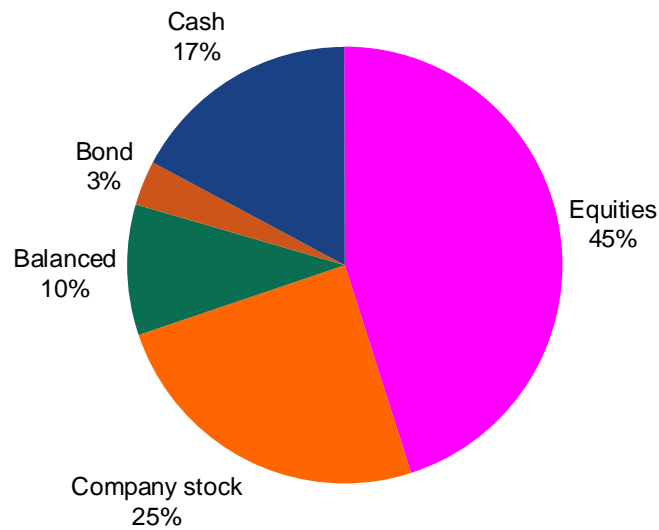


**BUT DC plan mix different:
66% equities, 14% company stock**

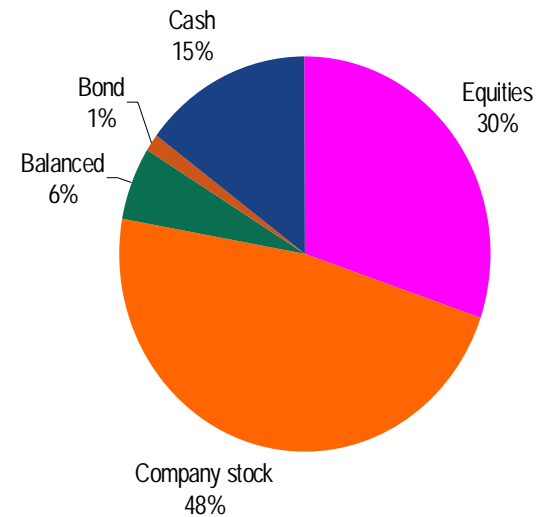


Exposure differs by plan design

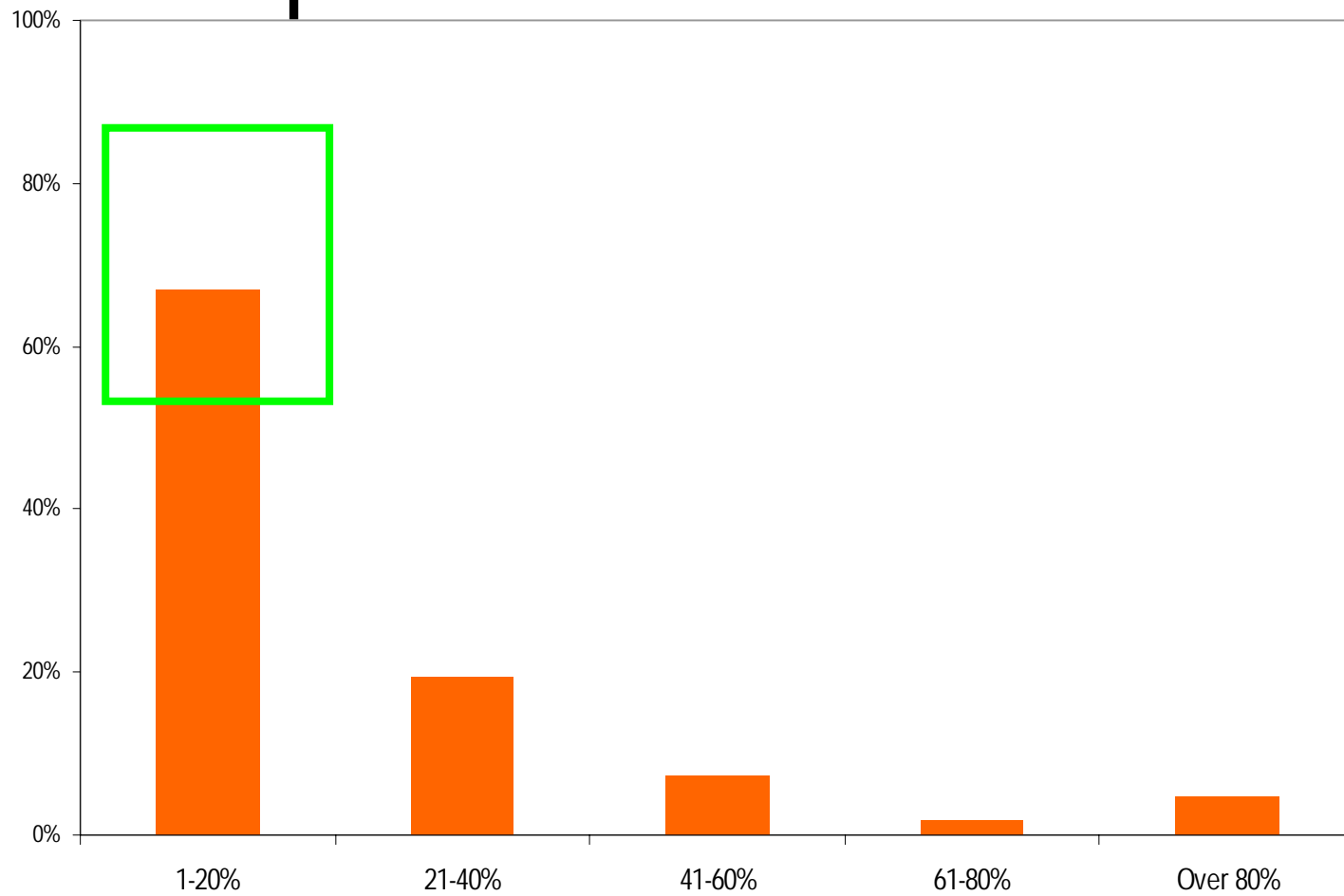
Asset Allocation (Company Stock Plans)



Asset Allocation (Plans with Employer Directed Contributions)

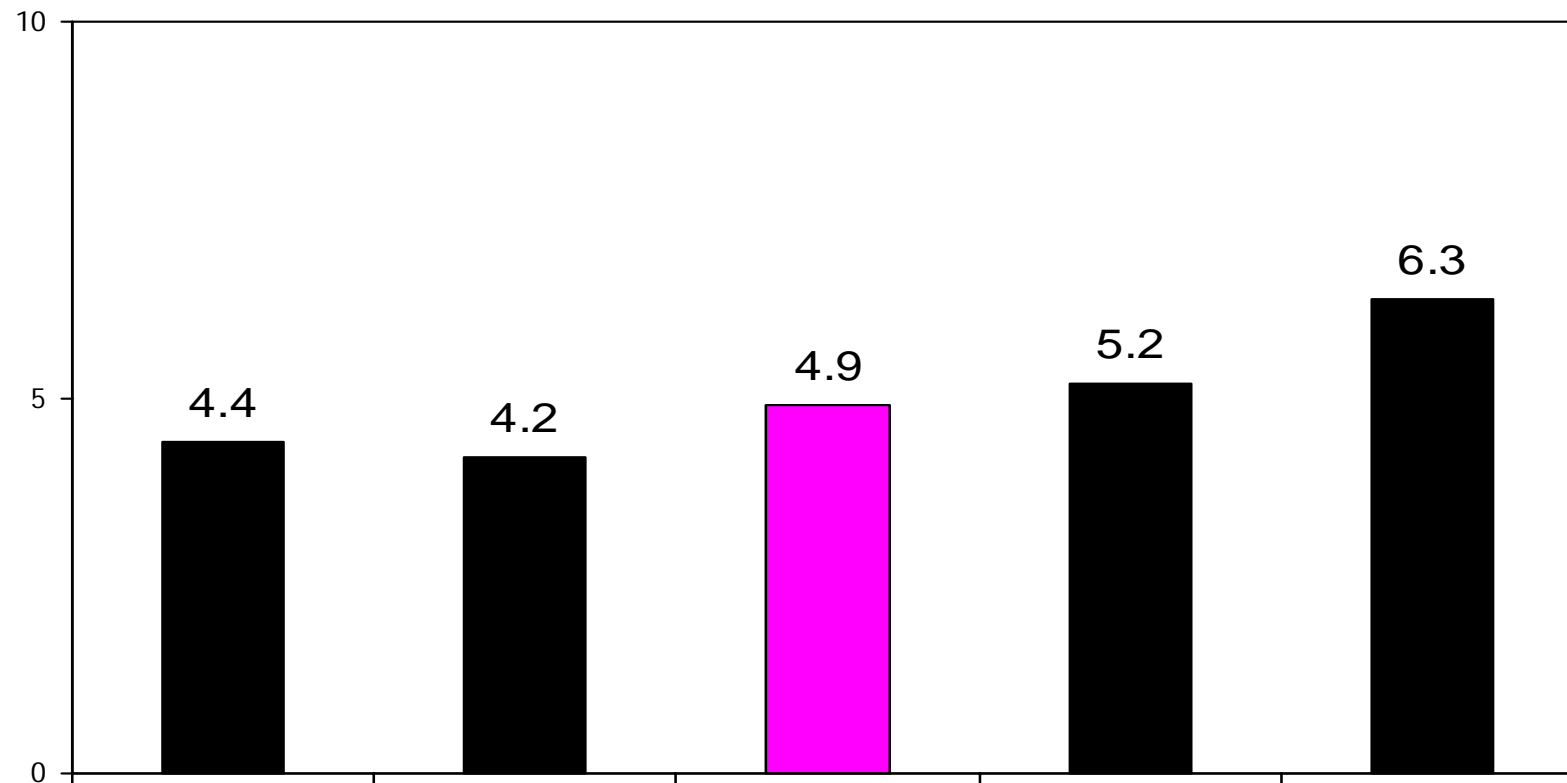


Exposure at Plan Level



Participant Risk Perceptions

Relative risk (scale of 1-10)



Source: Vanguard Group (2001)

Participant Education a Concern

- *Frequency and form of reporting, to whom?*
 - Employer?
 - Employees?
 - Govt?
- *Need to know:*
 - Expected risk & return
 - Actual investment performance
 - Expenses
 - Retirement targets

Recent developments: Impact of Enron on Pensions...

- Problem:
 - Many employees hold much employer stock in 401(k) acct
 - eg Enron, Coke, Lucent

Policy Proposals:

Legislative ideas:

- Cap contributions to stock, require diversifiable > 90 days
- Cut tax deduction for e'r stock contributions

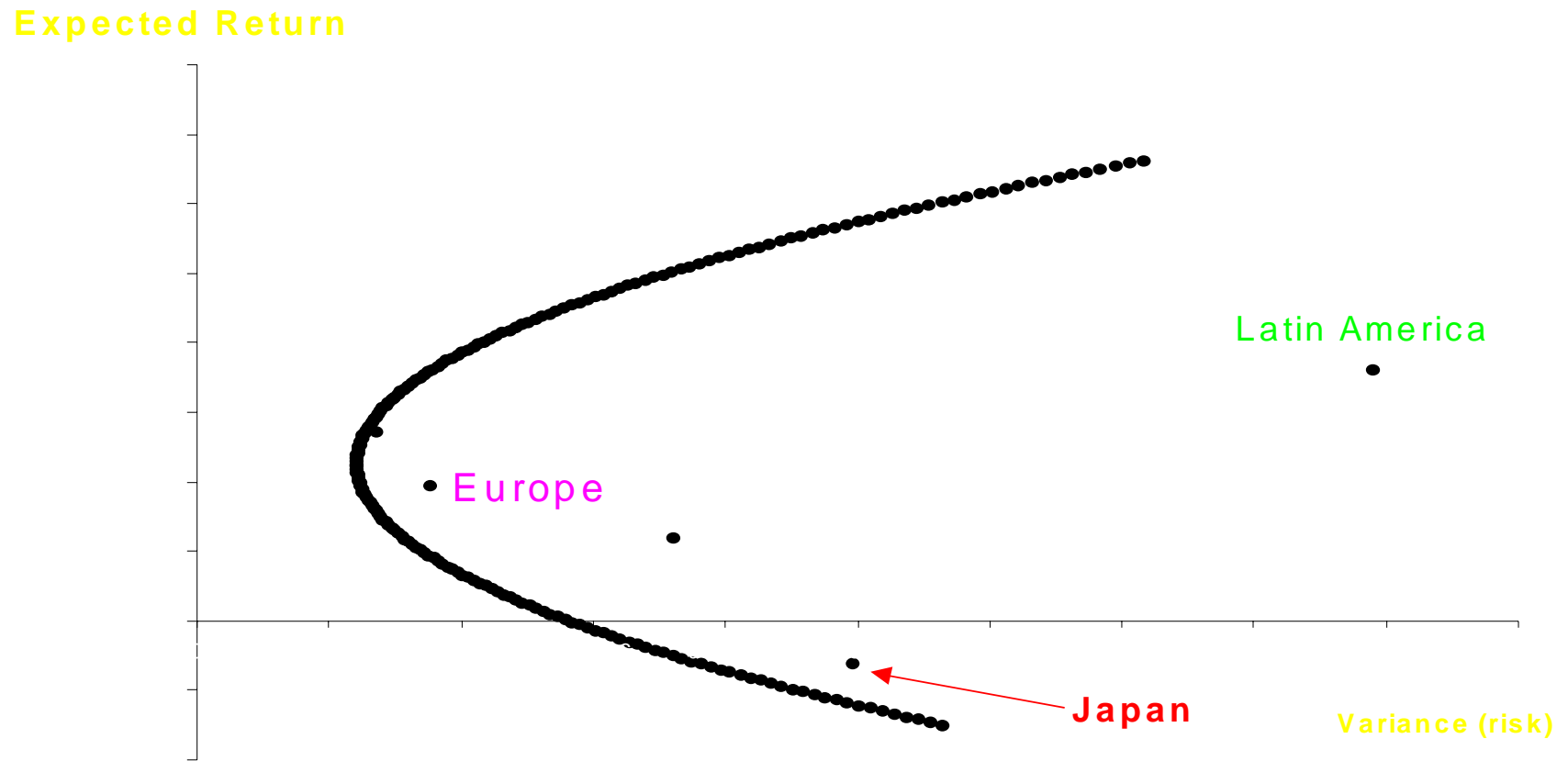
Judicial action:

- Lucent, Enron, others

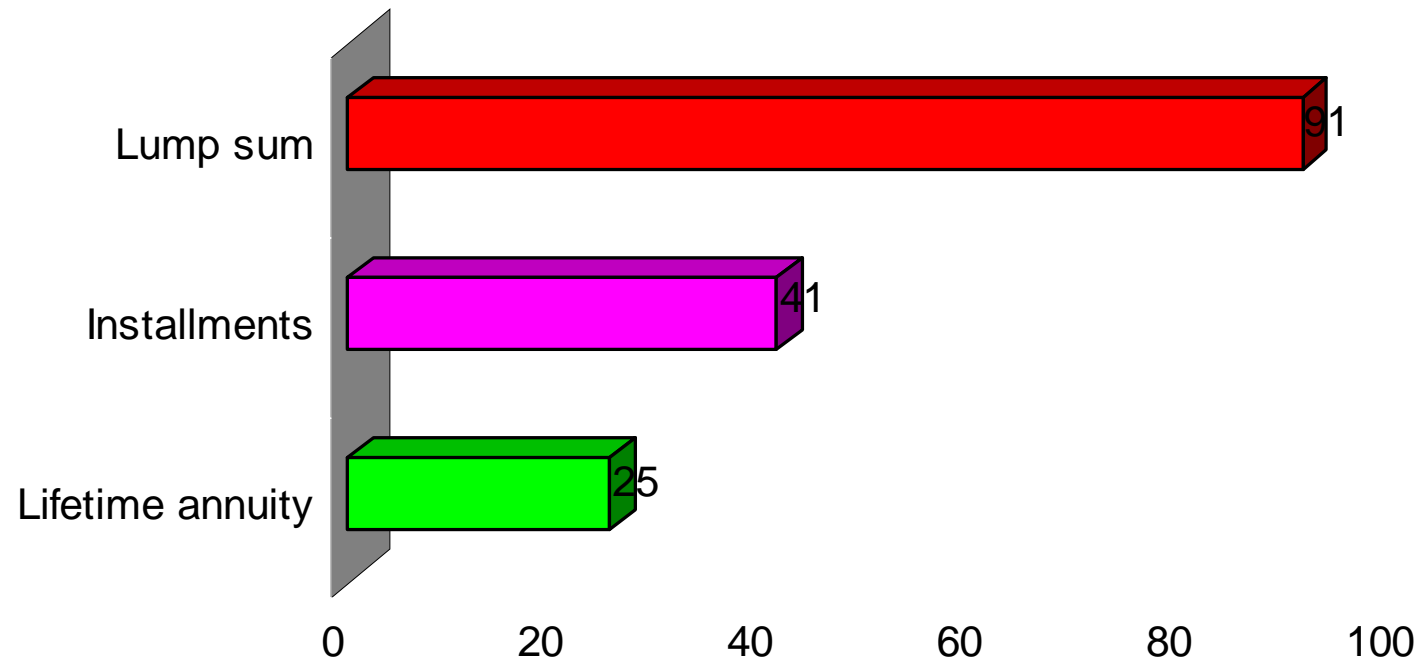
Employer guarantees?

- Some want minimum return from DC plan

Estimated Efficient Frontier for World Stock Markets



401(k) Payouts

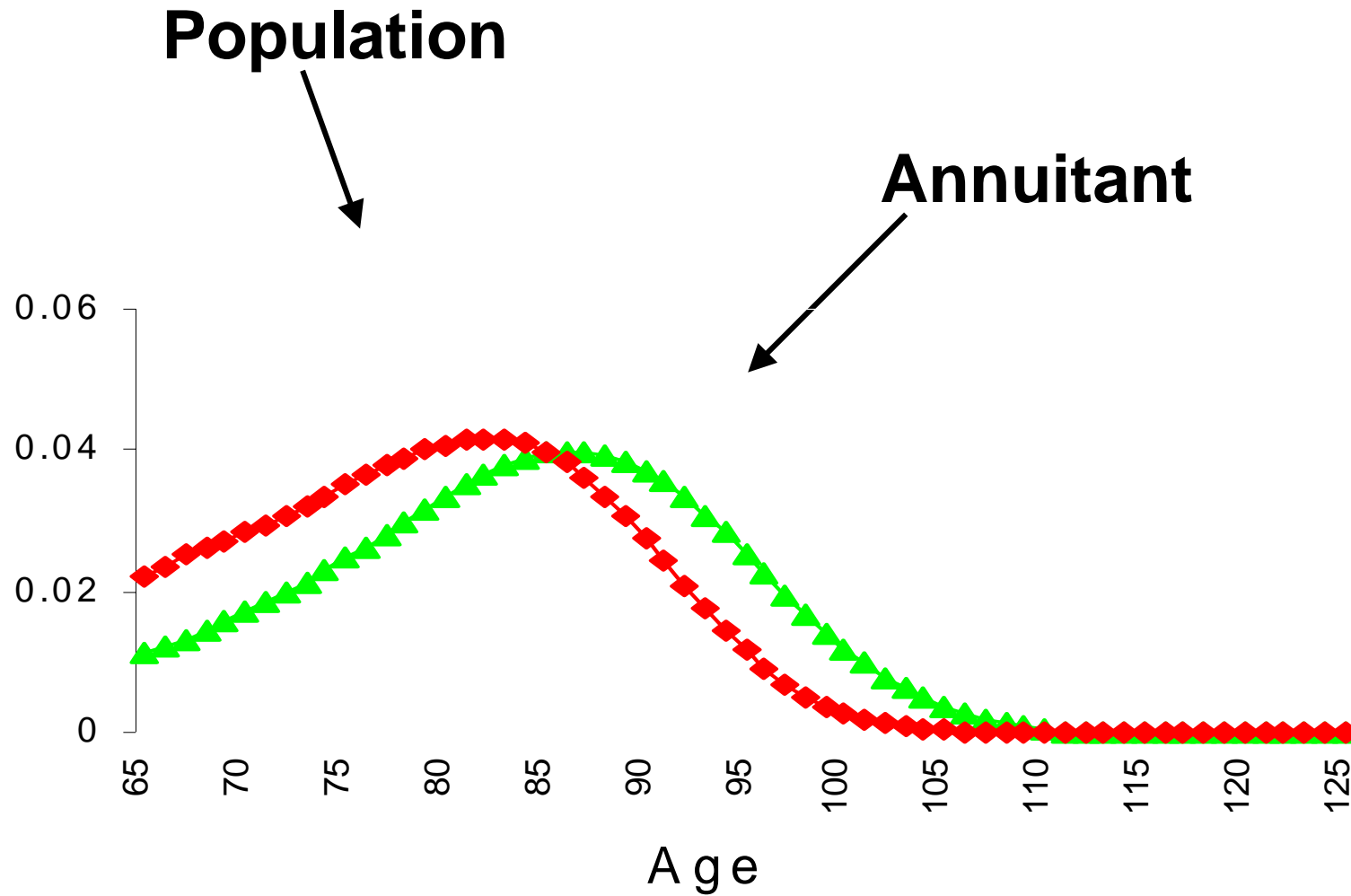


Source: Mitchell T29

Adverse Selection in Annuities

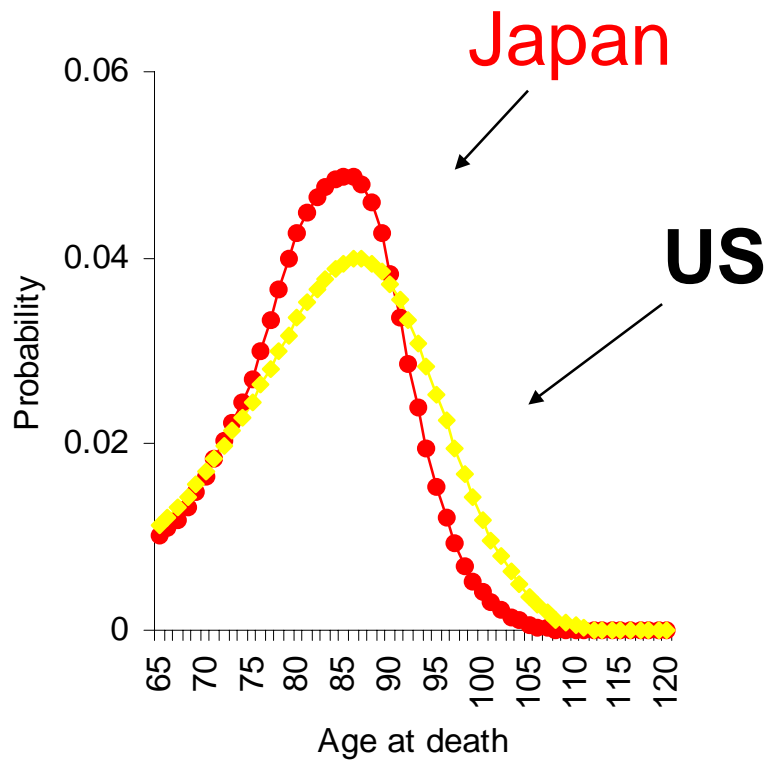
- Those buying annuities (if voluntary) likely to live LONGER
 - Asymmetric information
- Insurers need to price accordingly
 - How important is this in cost of annuity?

US Pop and Annuitant Age at Death: adverse selection

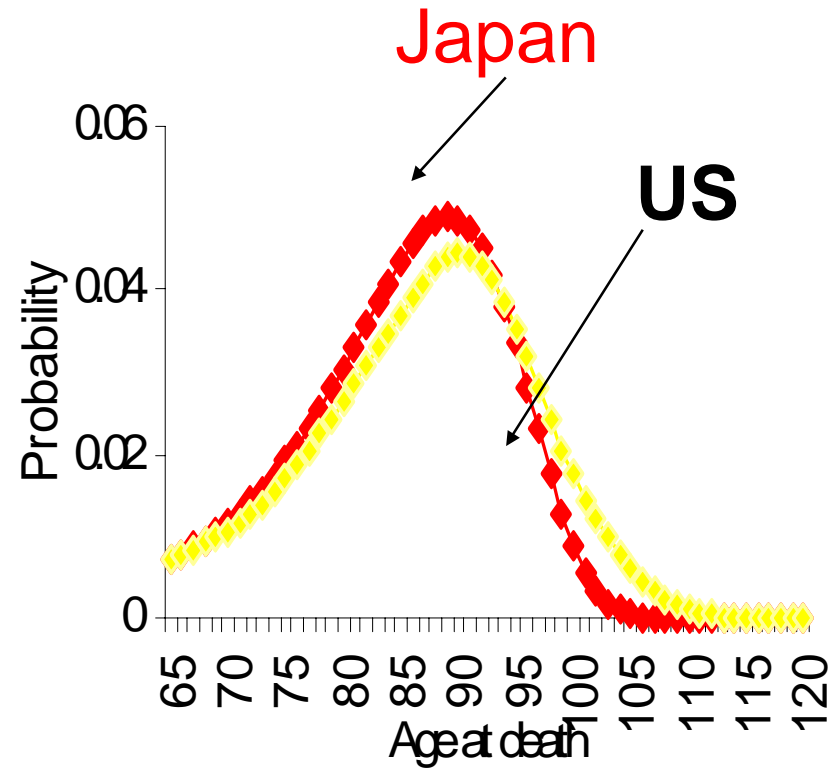


Source: Mitchell et al 2000; us male

Annuitants die younger in Japan?



Men



Women

Boosting Retirement Security:

- ❖ Raise DC contribution cap (tax-preferred saving)
- ❖ Privatize (part of) Social Security

Raise DC contribution caps

- Contributions = MIN of [\$10.5 K ('01 indexed) or 15% of income].
 - New law (EGTRRA) of 2001
 - Raise ceiling to \$11 K in '02,
 - Eliminate % of income cap to \$15 K by '06
- ➔ Big boost to DC saving expected

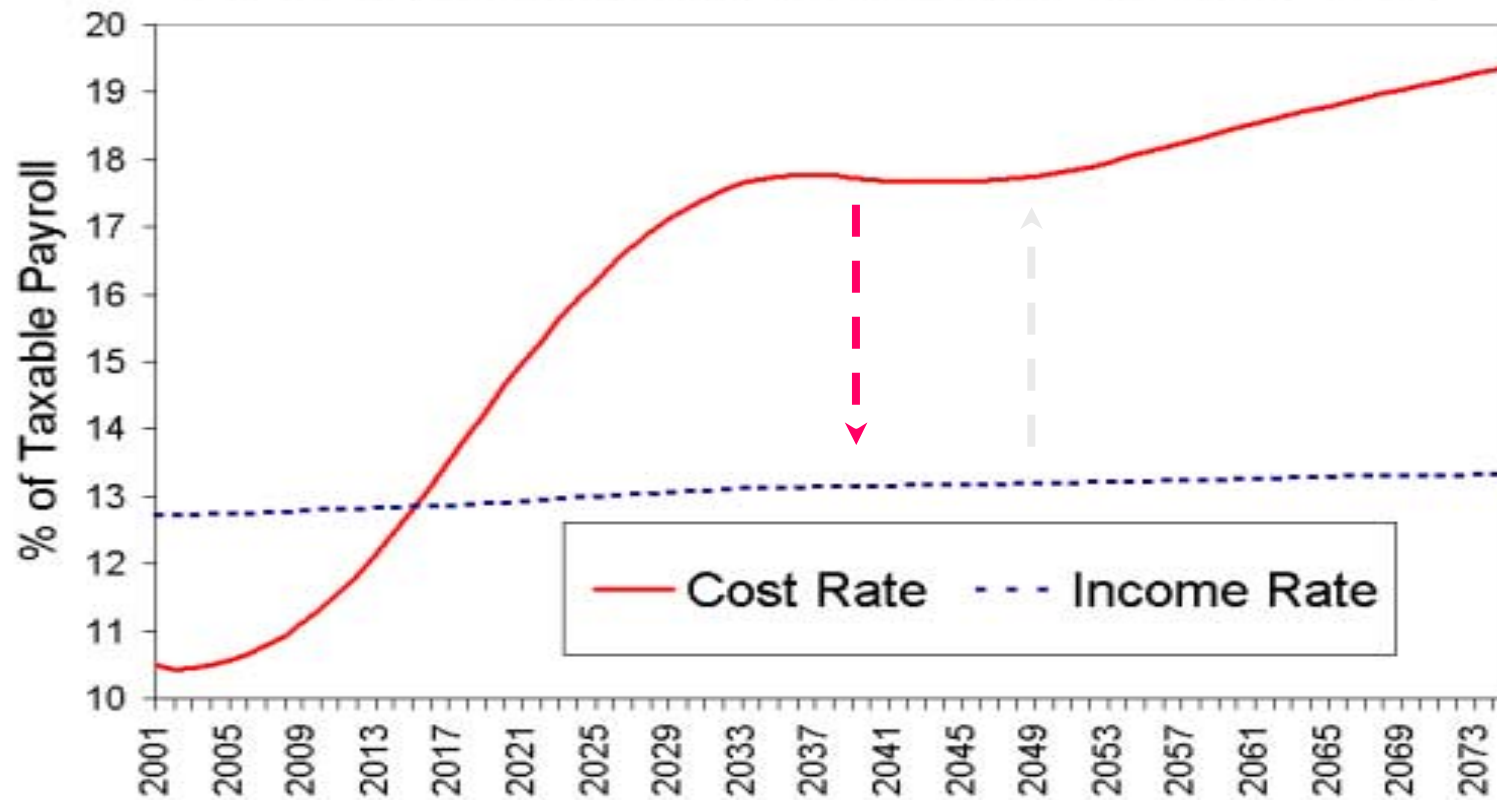
Reform Social Security: Commission charge

- Maintain SS benefits for retirees & near-retirees.
- Don't raise SS payroll taxes.
- No direct gov't investing in stock market.
- Include individually-controlled, voluntary personal retirement accounts.

➔ *While enhancing fiscal sustainability.*

Problem: Current Rules Unsustainable

Under current law, Social Security's annual costs will exceed its income in 2016, with perpetually increasing deficits thereafter.



**Cost
Rate**

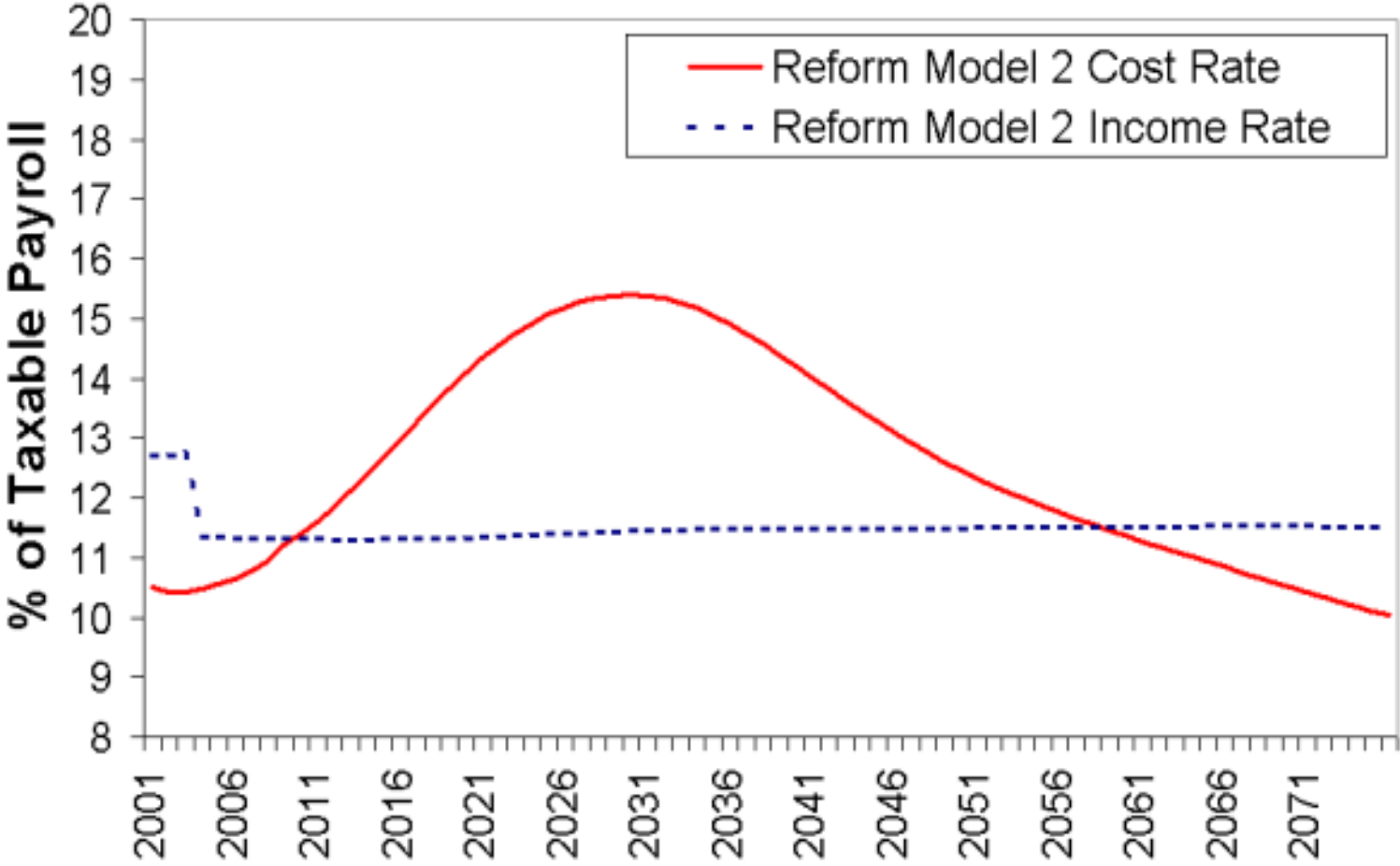
**Income
Rate**

Implement DC Accounts in Social Security: Preferred Model

- Voluntary account: 4% of pay up to \$1,000 (wage indexed); offset 2% real.
- Index traditional SS benefits to cost of living (not wages)
- Boost low-earner's benefits to 120% of poverty
- Boost widow/er benefit to 75% of couple benefits (if below av).

Preferred Model: 4% Accounts to \$1000/yr

Reform Model 2 Restores Positive Cash Flow by 2059, Surpluses Thereafter



Conclusions:

- ❖ DB plans in decline, except cash balance
- ❖ DC plans in flux
- ❖ Public pensions face insolvency
- ❖ Regulatory environment needs attention

Questions?

Thank you very much.