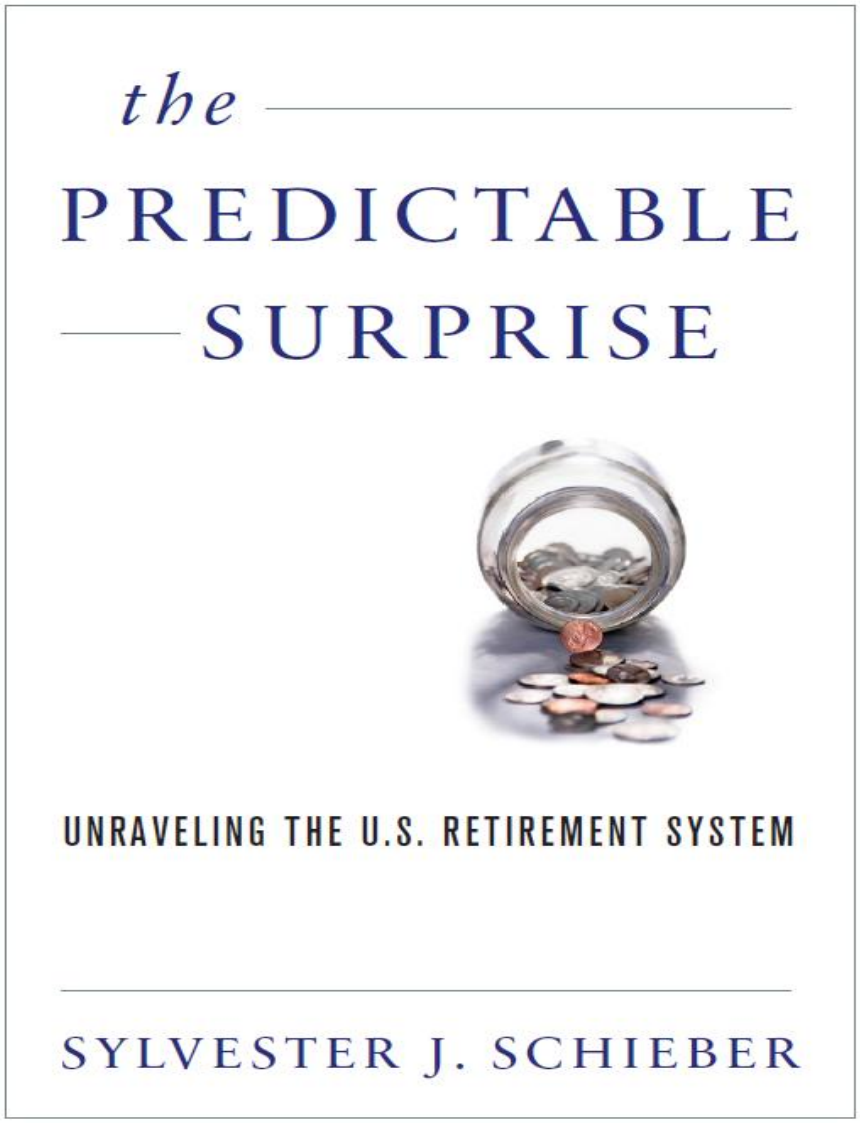
Overview

- Understanding what is driving retirement costs
- A puzzle: We are earning retirement benefits but they are not reflected in retirement income
- Policy recommendations and their implications
- Rethinking context of retirement



Winner of the 2012 TIAA-CREF Paul A. Samuelson Award recognizing excellence in economic research presented in a publication "containing ideas that the public and private sectors can use to improve American's lifelong financial well-being."

Cumulative Payroll Tax Rates and Supplemental Savings Rate as Percent of Worker's Lifetime Earnings

	Lifetime payroll tax as % of earnings	Required private contribution rate	Combined total
1955	2.1 %	4.6 %	6.7 %

Source: Sylvester J. Schieber, *The Predictable Surprise: The Unraveling of the U.S. Retirement System* (Oxford: Oxford University Press, 2012), p. 241.

Cumulative Payroll Tax Rates and Supplemental Savings Rate as Percent of Worker's Lifetime Earnings

	Lifetime payroll tax as % of earnings	Required private contribution rate	Combined total
1955	2.1 %	4.6 %	6.7 %
1965	3.6	5.4	9.0
1975	5.9	5.9	11.8
1985	9.0	6.1	15.1
1995	9.9	6.7	16.6
2005	12.0	7.1	19.1
2011	13.1	7.5	20.6

Source: Sylvester J. Schieber, *The Predictable Surprise: The Unraveling of the U.S. Retirement System* (Oxford: Oxford University Press, 2012), p. 241.

Retirement Cost Considerations across Time

- Social Security costs have gone up over time because pay-as-you-go financing is not economically efficient as systems mature
  - This is not an argument to end Social Security; it is an economic observation
  - Does not pertain to all state and local systems
- Supplemental plan or savings rates assume a steady rate of contributing and our history does not comply with that assumption

Average Lifetime Value of Social Security Benefits in Excess of Value of Lifetime Contributions on Earnings in 2009 Dollars

	Average earner		Maximum earner	
Year	Single male	Married with spouse benefit	Single male	Married with spouse benefit
1950	$39,724	$74,773	$47,515	$89,476

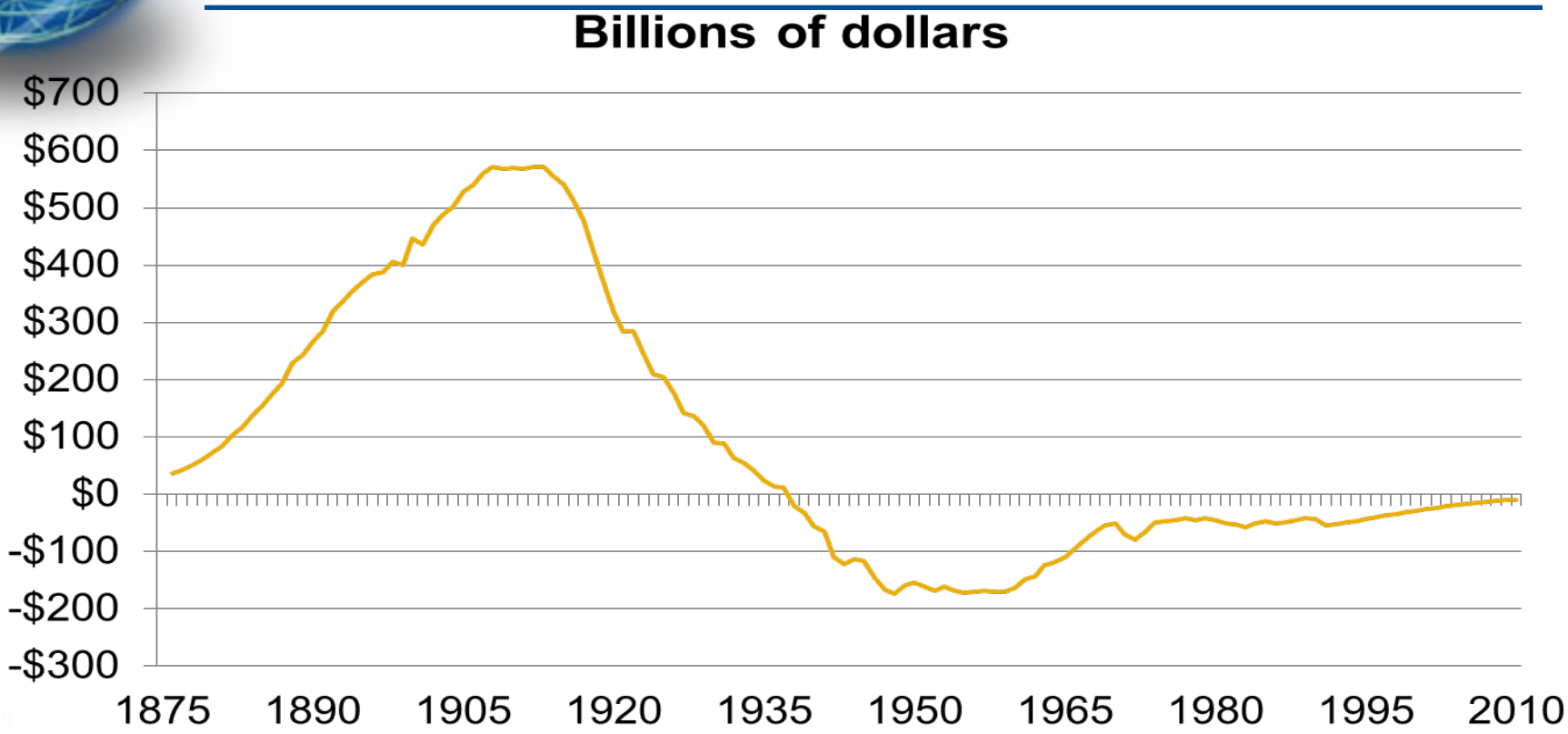
Source: Sylvester J. Schieber, *The Predictable Surprise: The Unraveling of the U.S. Retirement System* (New York: Oxford University Press, 2012), pp. 67-68.

Average Lifetime Value of Social Security Benefits in Excess of Value of Lifetime Contributions on Earnings in 2009 Dollars

	Average earner		Maximum earner	
Year	Single male	Married with spouse benefit	Single male	Married with spouse benefit
1950	$39,724	$74,773	$47,515	$89,476
1960	134,348	270,032	145,381	296,307
1970	146,298	303,433	158,674	335,777
1980	106,075	234,463	126,350	289,231

Source: Sylvester J. Schieber, *The Predictable Surprise: The Unraveling of the U.S. Retirement System* (New York: Oxford University Press, 2012), pp. 67-68.

Social Security Intercohort Transfers Paid to Specific Birth-Year Classes during Their Retirements in 2009 Dollars



The prospects suggested here for future retirees are misleading because the system is underfunded by $8.6 trillion (probably closer to $10.5 trillion today) under current law over next 75 years.

Source: Dean R. Leimer, "Cohort-Specific Measures of Lifetime Net Social Security Transfers," ORS Working Paper Series, Number 59 (Washington, DC: Social Security Administration, February 1994), pp. 76-77 and calculations by the author to update to 2009 dollars.

Value of Lifetime Social Security Contributions, Benefits and Net Position for Workers Born in 1949, Retiring in 2014

Value at retirement date	Medium earner	Maximum earner
Lifetime payroll taxes	$353,800	$898,346
Single male benefit	273,049	402,884
Net lifetime gain	-80,751	-495,462

Source: Sylvester J. Schieber, The Predictable Surprise: The Unraveling of the U.S. Retirement System (Oxford: Oxford University Press, 2012), p. 285.

Value of Lifetime Social Security Contributions, Benefits and Net Position for Workers Born in 1949, Retiring in 2014

Value at retirement date	Medium earner
Lifetime payroll taxes	$353,800
Single male benefit	273,049
Net lifetime gain	-80,751
One-earner couple benefit	554,229
Net lifetime gain	200,429
Two-earner couple taxes	707,600
Two-earner couple benefit	609,534
Net lifetime gain	-98,066

Source: Sylvester J. Schieber, The Predictable Surprise: The Unraveling of the U.S. Retirement System (Oxford: Oxford University Press, 2012), p. 285.

Value of Lifetime Social Security Contributions, Benefits and Net Position for Workers Born in 1949, Retiring in 2014

Value at retirement date	Medium earner	Maximum earner
Lifetime payroll taxes	$353,800	$898,346
Single male benefit	273,049	402,884
Net lifetime gain	-80,751	-495,462
One-earner couple benefit	554,229	789,968
Net lifetime gain	200,429	-108,378
Two-earner couple taxes	707,600	1,796,692
Two-earner couple benefit	609,534	899,364
Net lifetime gain	-98,066	-897,328

Source: Sylvester J. Schieber, The Predictable Surprise: The Unraveling of the U.S. Retirement System (Oxford: Oxford University Press, 2012), p. 285.

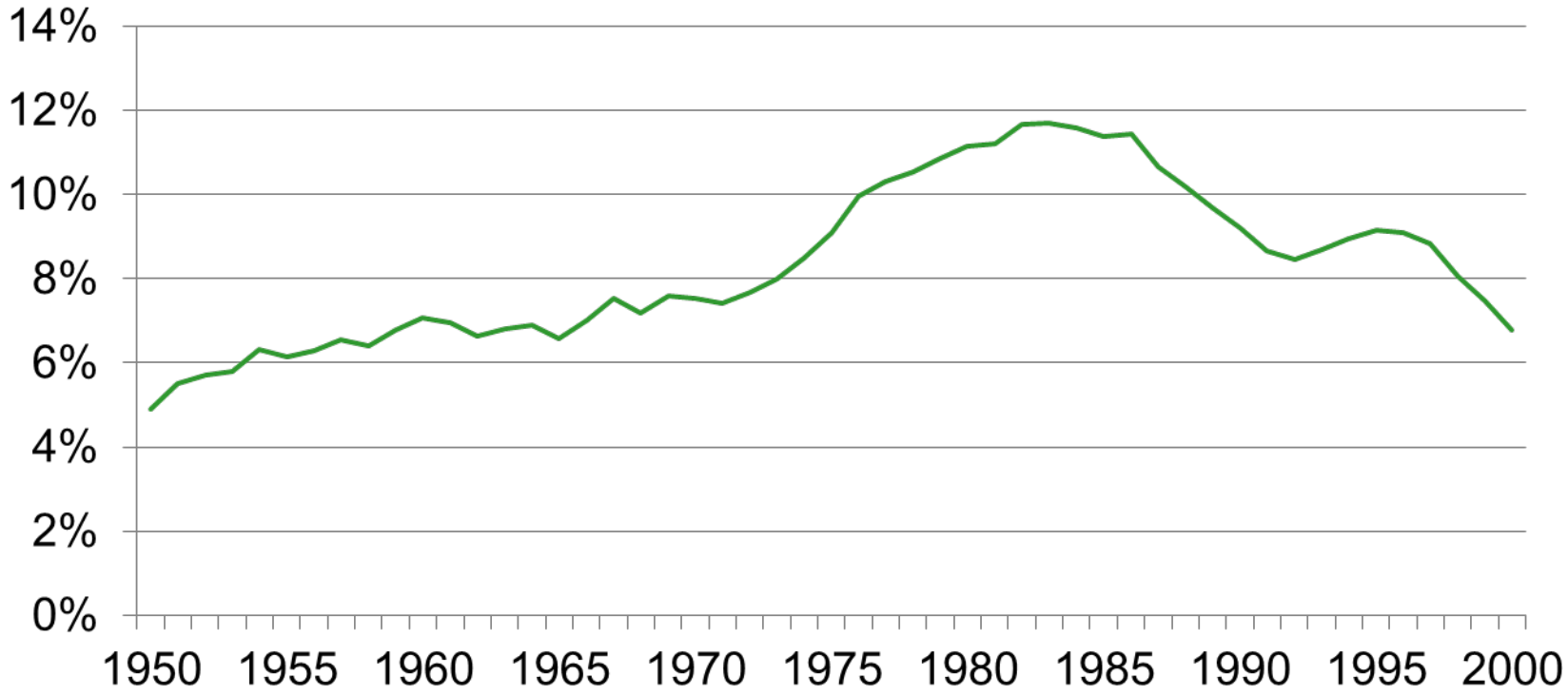
Private Retirement Plan Contribution Rates Have Varied Considerably over Time

- Employer contributions to retirement plans were 7.7 percent of pay in 1980 to 4.6 percent in 2000

	Active DB participants (thousands)	Per capita contributions (2011 $s)	Active DC participants (thousands)	Per capita contributions (2011 $s)
1980	30,100	$3,357	18,886	$2,953
1990	26,205	1,378	35,340	3,362
2000	22,218	1,919	50,874	4,985

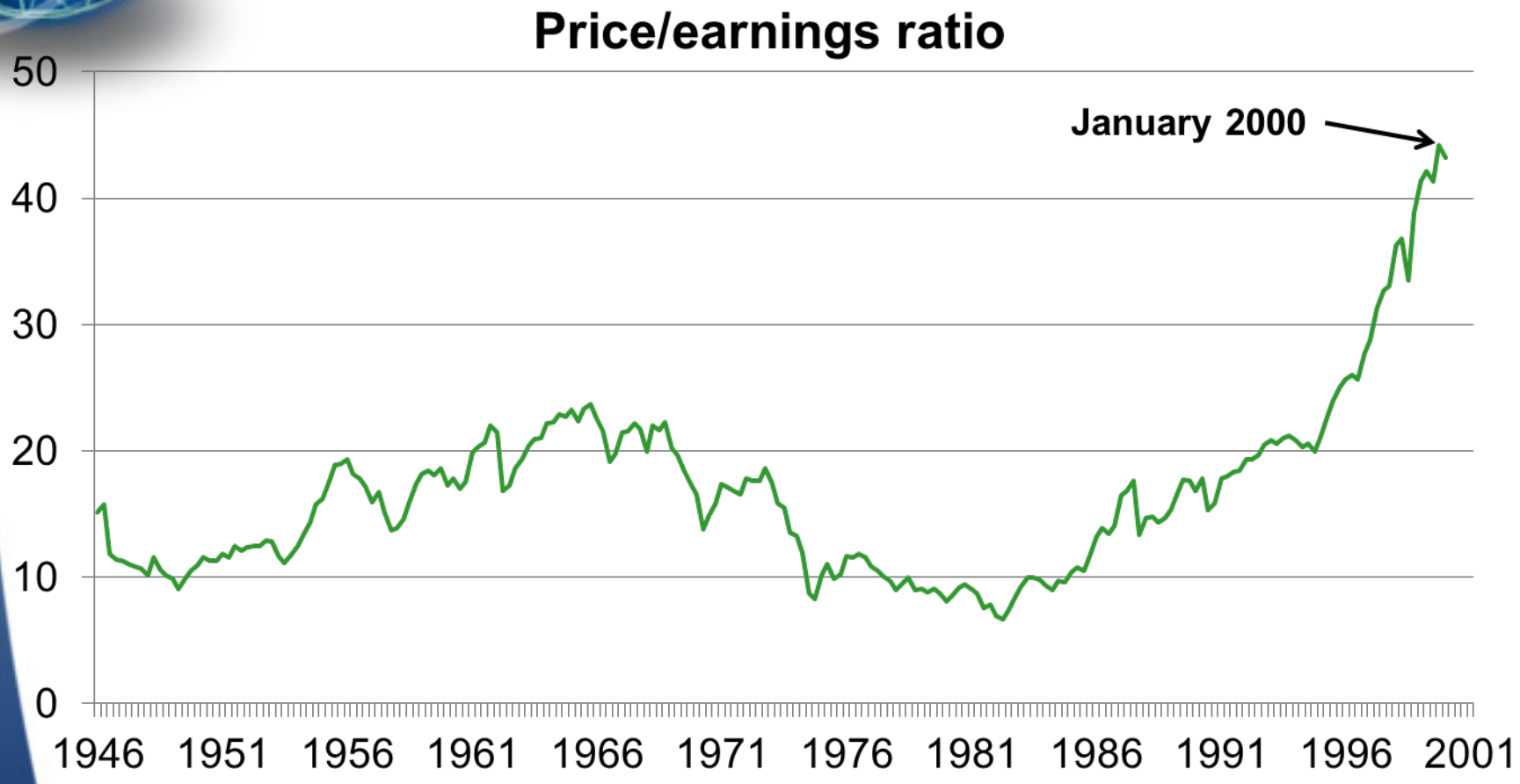
State & Local Government Pension Contributions as a Percent of Payroll

Employer contributions to retirement plans were 11.1 percent of pay in 1980 to 6.8 percent in 2000



Source: Calculated from U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts.*

Price-Earnings Ratios on U.S. Stocks for Selected Years

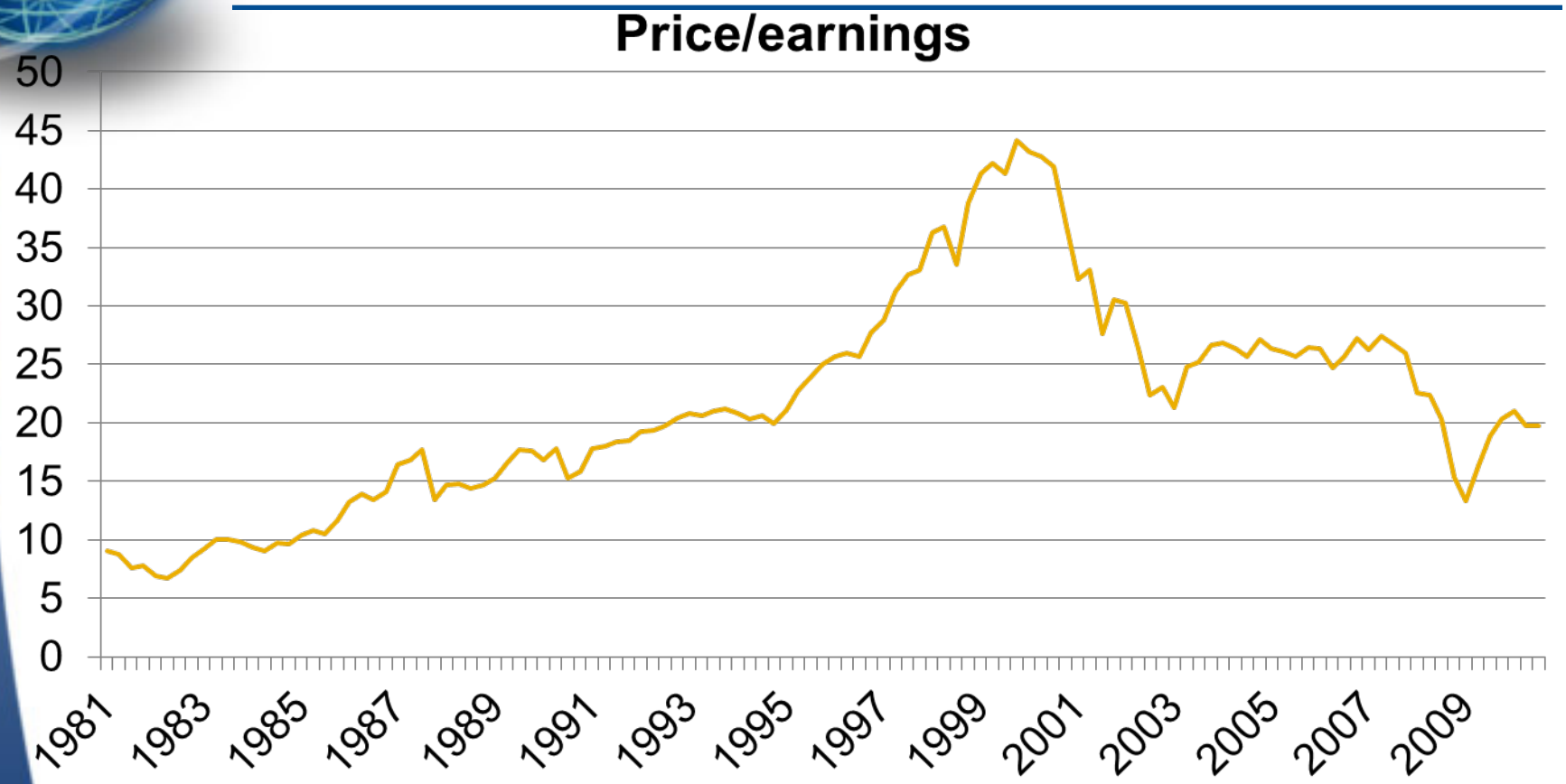


Source: Robert J. Shiller, updated data used in developing *Irrational Exuberance* (Princeton, NJ: Princeton University Press, 2000), found at: http://www.irrationalexuberance.com/index.htm.

While Contributions Were Declining Liabilities Were Increasing

- Three forces were increasing defined benefit liabilities during the 1980s and 1990s
  - The baby boomers were settling into career jobs and average service in plans was rising because of their relative share of the workforce
  - The baby boomers were also aging toward retirement day and the power of compound discounting was accelerating the growth of benefit obligations in present value terms
  - Interest rates were falling
- Irrational exuberance about financial market performance gave the impression we could manage the systems on thin margins

Price-Earnings Ratios on U.S. Stocks for Selected Years

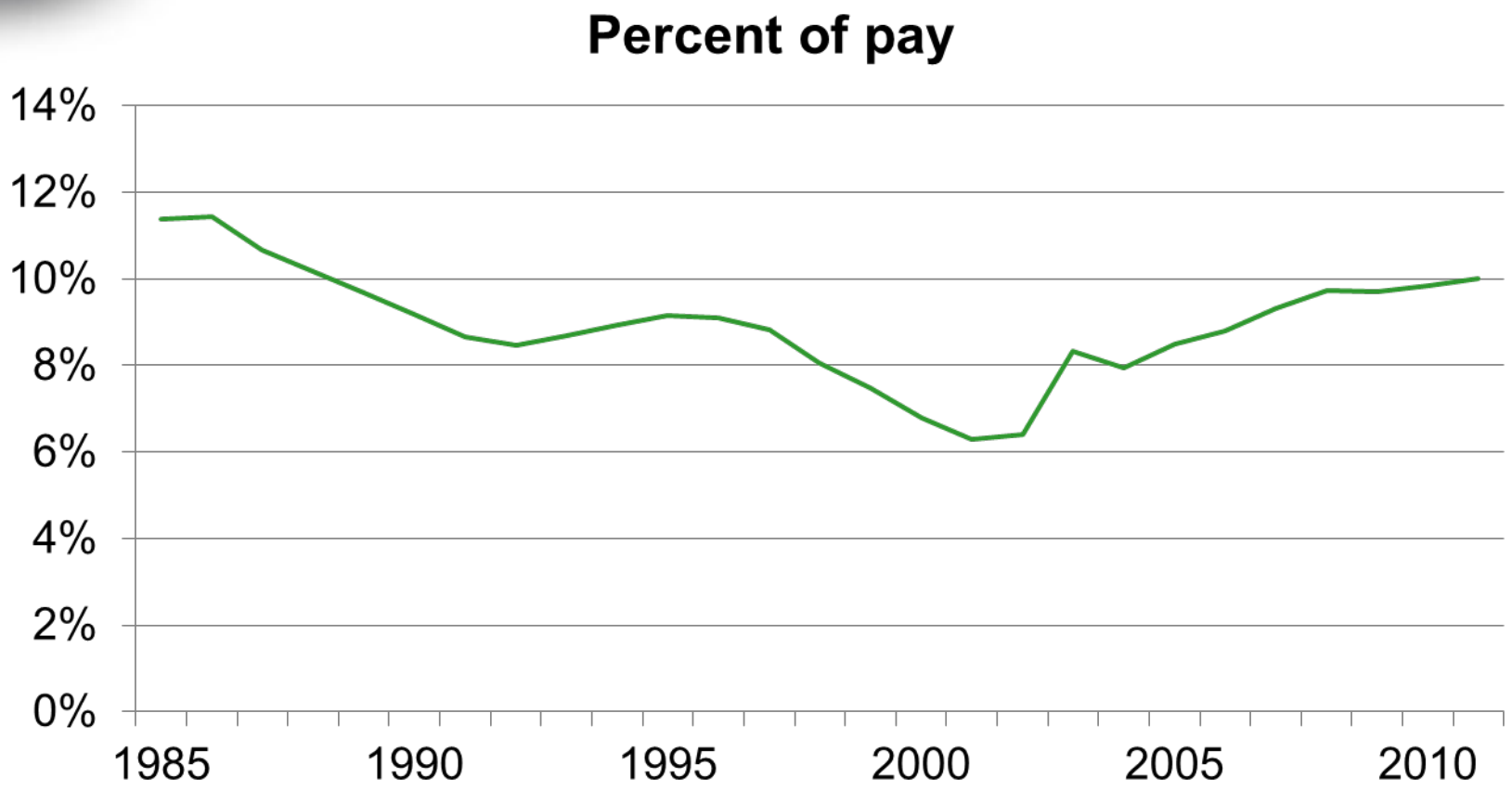


Source: Robert J. Shiller, updated data used in developing *Irrational Exuberance* (Princeton, NJ: Princeton University Press, 2000), found at: http://www.irrationalexuberance.com/index.htm.

Per Capita Contribution Patterns Per Active Plan Participant

	Active DB participants (thousands)	Per capita contributions (2011 $s)	Active DC participants (thousands)	Per capita contributions (2011 $s)
1980	30,100	$3,357	18,886	$2,953
1990	26,205	1,378	35,340	3,362
2000	22,218	1,919	50,874	4,985
2009	17,745	6,472	61,090	4,889

State & Local Government Pension Contributions as a Percent of Payroll



Source: Calculated from U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts.*

Funded Status and Contribution Measures for State Sponsored Pension Plans, 2009

Funding quintile	Average funding shortfall per active worker	Percentage of obligations funded	Contributions as a percent of payroll	
			Actuarially required	Actual
1	$106,293	59.0 %	18.0%	15.8%
2	75,124	69.9	12.4	8.2
3	53,006	73.3	8.1	7.7
4	31,147	84.8	18.7	16.6
5	20,234	94.8	25.9	22.6

Source: Based on tabulations of state disclosures on their defined benefit pension plans as found in their *Consolidated Annual Financial Reports.*

Funded Status of State Sponsored Pension Plans and Fortune 1000 Corporate Plans, 2009

	Percentage of obligations funded	
Funding quintile	State plans	Fortune 1000 plans
1	59.0%	61.9%
2	69.9	70.0
3	73.3	76.6
4	84.8	84.3
5	94.8	130.8

Source: Based on tabulations of state disclosures on their defined benefit pension plans as found in their *Consolidated Annual Financial Reports* and Corporate Annual Reports.

Percentage of Households with Some Plan Coverage by Ages 51-56

	Original sample	War baby sample	Early boomers sample
Survey year	in 1992	in 1998	in 2004
All respondents	78.8	81.2	80.4
All households	76.9	79.3	78.4
Couples	83.9	87.1	87.5
Singles	58.8	62.1	59.2

Source: Alan Gustman, Thomas Steinmeier and Nahid Tabatabai, *Pensions in the Health and Retirement Study* (Cambridge, MA: Harvard University Press, 2010), p. 95.

Percentage of People in Designated Plan types at Ages 51-56

	Total in a DB plan	Total in a DC plan	Total in both types
Original sample (51-56 in 1992)	68	58	27
War baby sample (51-56 in 1998)	60	70	31
Early baby boomer sample (51-56 in 2004)	49	72	25

Source: Alan Gustman, Thomas Steinmeier and Nahid Tabatabai, Pensions in the Health and Retirement Study (Cambridge, MA: Harvard University Press, 2010), p. 98.

Percentage of People 51 to 56 in 1992 Reporting Pension Income

Year surveyed	Percentage receiving pension income	Average monthly benefit in 1992 $s
1992	11.6%	1,073
1994	16.9%	1,511
1996	21.3%	1,265
1998	23.0%	1,032
2000	31.4%	1,041
2002	34.5%	945
2004	39.3%	925
2006	37.3%	817

Source: Alan Gustman, Thomas Steinmeier and Nahid Tabatabai, Pensions in the Health and Retirement Study (Cambridge, MA: Harvard University Press, 2010), p. 277.

Average Wealth Holdings of 51-56 Year Olds in 1992 in 1992 Dollars

	Whole cohort		Median 10 percent	
	Amount	% of total	Amount	% of total
Total	$409,765	100.0%	$312,253	100.0%
Social Security	123,953	30.2%	135,859	43.5%
Employer plans	98,186	24.0%	60,493	19.4%
IRA assets	15,569	3.8%	10,218	3.3%

Source: Alan Gustman, Thomas Steinmeier and Nahid Tabatabai, Pensions in the Health and Retirement Study (Cambridge, MA: Harvard University Press, 2010), p. 287.

Policy Implications of Smallish Benefits and Relatively Few Recipients

- Renewed focus on tax expenditures
  - Employer plans, $44.5 billion in 2012
  - 401(k)s, $60.1 billion in 2012
  - IRAs, $15.4 billion in 2012
  - Self employed plans, $15.0 billion in 2012

Policy Recommendations Emanating from Groups Focusing on Long-Term Federal Fiscal Outlook

- Renewed focus on tax expenditures—that is, loss of tax revenues due to tax preferences
- Fiscal Responsibility Commission and Deficit Reduction Task Force both recommended:
  - Employer plan proposals
    - Limit deductible contributions to 20 percent of earnings
    - Set dollar limit on DC contributions to $20,000
    - Silent on DB limits
  - Social Security proposals
    - Raise taxable income limits
    - Scale back benefit for higher earners

Maximum Net Value of Tax Preferences from Qualified Plans for 1949 Birth Cohort Retiring in 2014

	Medium earner
Plan accumulation	$359,015
Assumed marginal tax rate	15%
Income tax liability at retirement	53,852
Net pension distribution	305,163
Accumulated value of savings if taxed as a taxable savings account	241,521
Value of the tax preference versus a regular savings account	63,642

Source: Sylvester J. Schieber, The Predictable Surprise: The Unraveling of the U.S. Retirement System (Oxford: Oxford University Press, 2012), p. 287.

Maximum Net Value of Tax Preferences from Qualified Plans for 1949 Birth Cohort Retiring in 2014

	Medium earner	Max earner
Plan accumulation	$359,015	$1,904,088
Assumed marginal tax rate	15%	28%
Income tax liability at retirement	53,852	533,145
Net pension distribution	305,163	1,370,943
Accumulated value of savings if taxed as a taxable savings account	241,521	937,339
Value of the tax preference versus a regular savings account	63,642	433,604

Source: Sylvester J. Schieber, The Predictable Surprise: The Unraveling of the U.S. Retirement System (Oxford: Oxford University Press, 2012), p. 287.

Combined Value of Social Security Gains and Tax Preferences Qualified Plans for 1949 Birth Cohort Retiring in 2014

	Medium earner	Maximum earner
Single males	-$17,109	-$61,858
Single females	14,609	-15,060
One-earner couple	264,071	325,226
Two-earner couple	29,218	-30,119

Source: Sylvester J. Schieber, The Predictable Surprise: The Unraveling of the U.S. Retirement System (Oxford: Oxford University Press, 2012), p. 289.

The Definition of Double Jeopardy

- Proposals to roll back contribution limits would dramatically diminish the potential value of tax-qualified benefits for workers in $100,000 to $200,000 ranges
- Proposals to raise taxable maximum earnings under Social Security and rolling back benefit levels at upper income would dramatically worsen economic deal for workers in the $110,000 to $175,000 ranges

Policy Aspirations of Plan Sponsors and the Implications and Alternatives

- Short-term concerns about low interest rates and large pension obligations
- Longer term focus
  - We could be facing low interest rates for some time
  - Ultimately the obligations have to be covered
  - Continuing low funding levels simply exposes sponsors to any additional negative market shocks
  - For private plans, need to address the risk of overfunding plans in current environment with no potential to reclaim assets if plans become overfunded

Where from Here?

- Need to rescale the retirement system to provide basics without impoverishing the future
- Give those able to work longer the incentives to do so without harming those who cannot
- Must acknowledge that defined contribution savings are a critical part of retirement security
- Must provide an attractive and efficient means to convert these benefits into dependable lifetime support
- Social Security should remain a backstop but less bountiful at the top than today

One Closing Reminder

- Pensions evolved because of the mutual benefit provided to employers and workers
  - Employers had to worry about "hidden pensioners"
  - Workers had to worry about having adequate income to meet economic needs beyond careers
- Evidence that pensions are still relevant in the "knowledge economy"

Questions and Comments