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Comments on Session 1 Papers  
Pension Research Council Symposium, May 1-2, 2008  
“The Future of Public Employee Retirement Systems”

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Redefining Traditional Plans: Variations and  
Developments in Public Employee Retirement Plan  
Design     Keith Brainard

The Evolution of Public Sector Pension Plans in the United  
States     Robert L. Clark, Lee A. Craig, and Neveen  
Ahmed (CCA)

- Common themes

Flexibility, adaptability of public pension systems

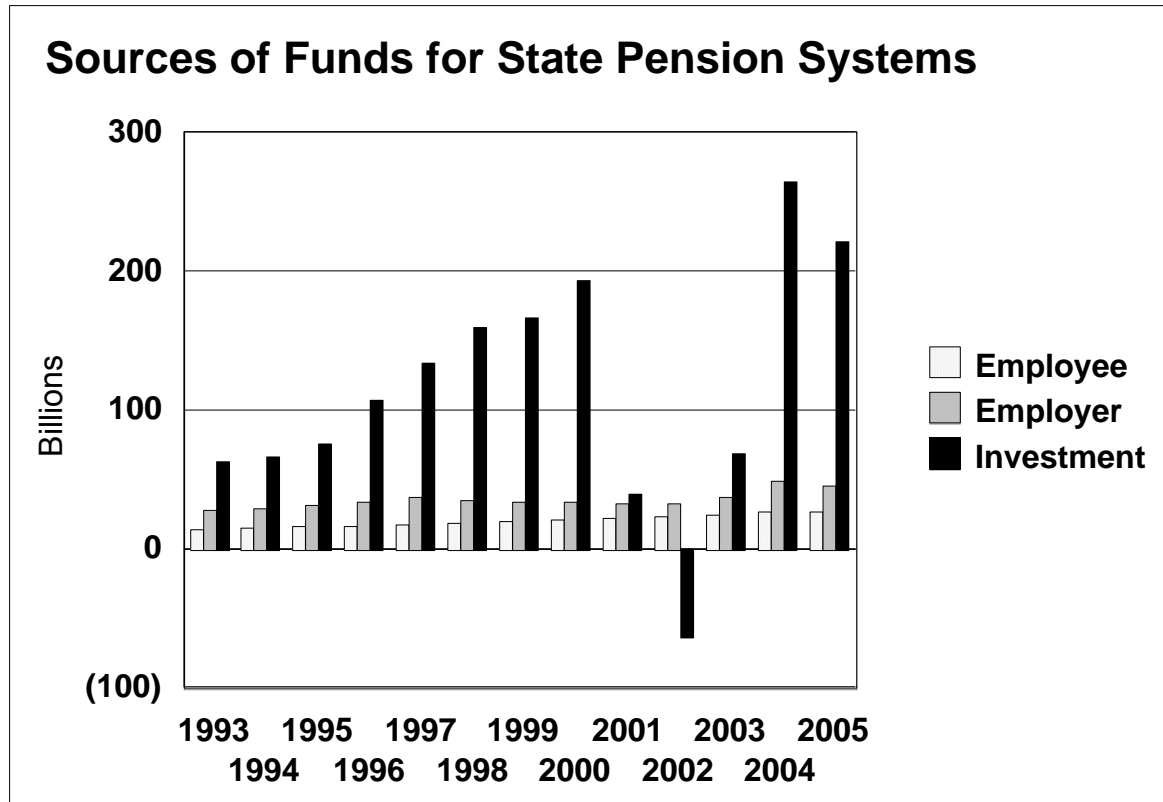
CCA: History of formation of state and local public plans; response to Social Security; determinants of replacement rates in benefit formulas from 1982 to 2006

Brainard: Five detailed examples of recent adjustments to state pension plans

- Motivation for changes to state plans in Brainard (2008)  
Add-on DC feature - “return to work” provision for teachers  
Addressing inflation problems in DB plans  
Address retirement saving inadequacy of DC plan (Nebraska)  
Restore cost sustainability in DB/DC hybrid (Oregon)
- Nebraska state and county workers  
Primary DC plan  
2002: Switch to Cash Balance Plan for new hires
- Oregon state workers, teachers, most local workers  
Declining DB funding level and high DC costs (guaranteed earnings feature → 20% employer contribution)
- Michigan state employees  
1997 Switch from DB to DC plan
- Close connection between state finances and state pension system

# Charts

Chart 1

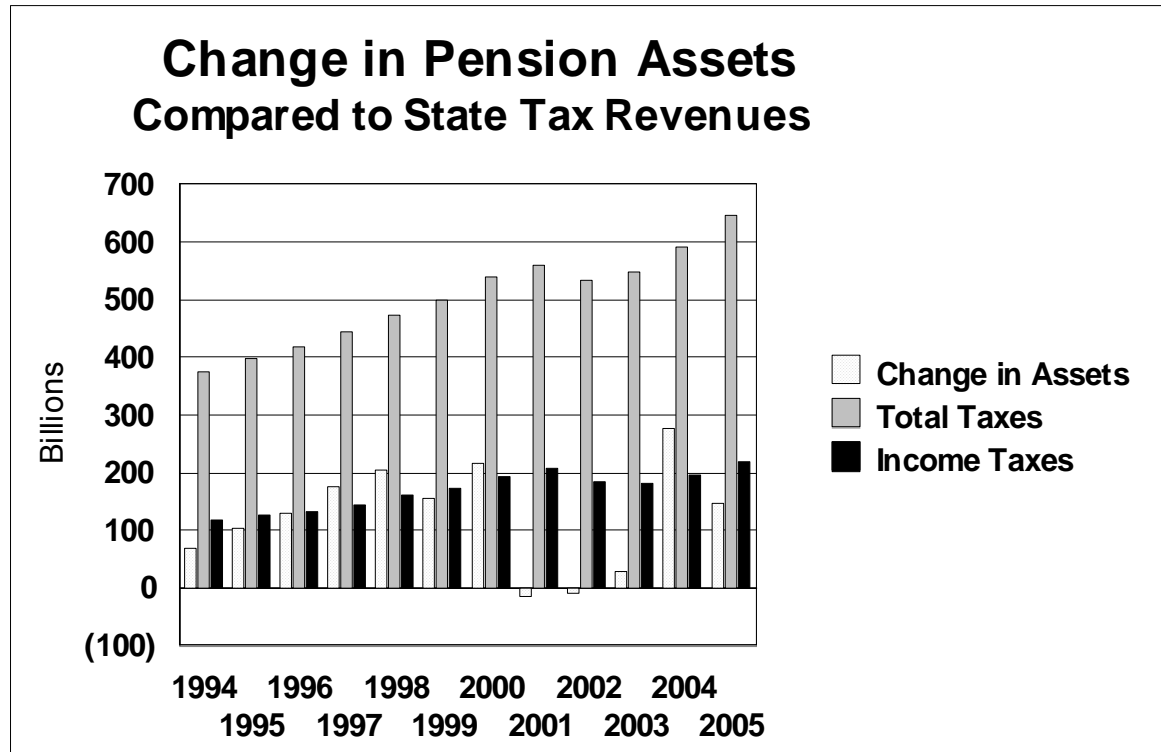


Source: Federal, State, and Local Governments, 2005 State and Local Government Employee-Retirement Systems, U.

S. Bureau of Census, <http://www.census.gov/govs/www/retire05view.html>

# Charts

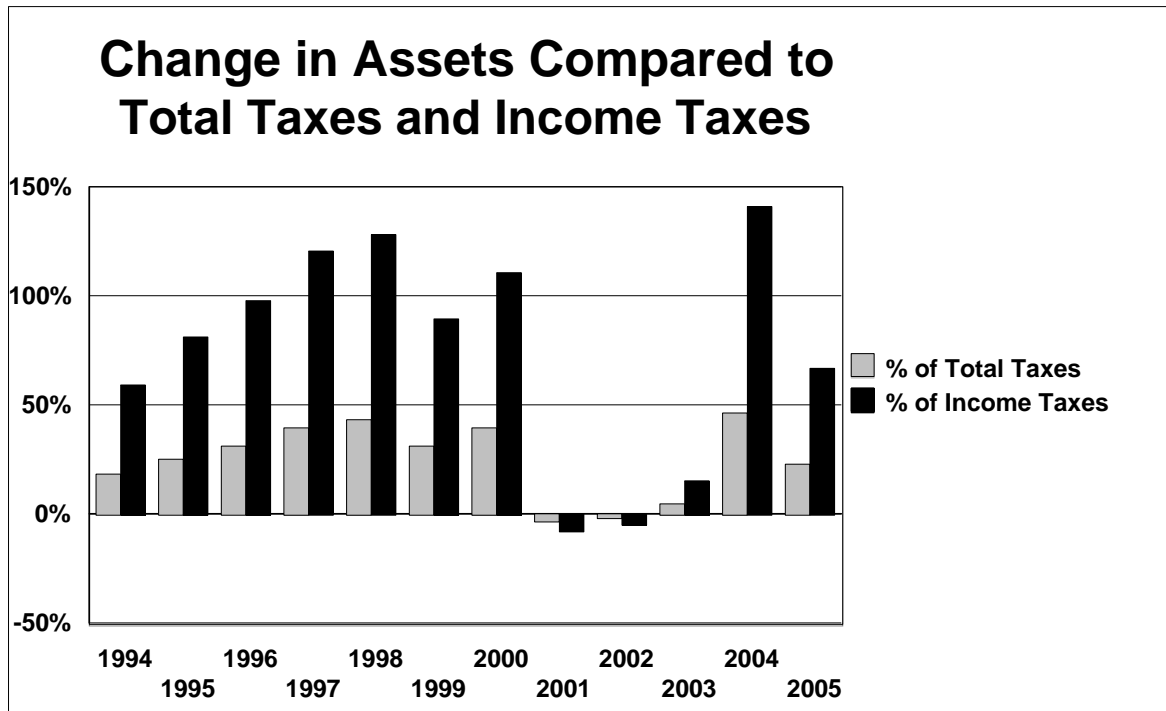
Chart 2:



Source: Federal, State, and Local Governments, 2005 State and Local Government Employee-Retirement Systems, U. S. Bureau of Census, <http://www.census.gov/govs/www/retire05view.html> and State Tax Collections, <http://ftp2.census.gov/govs/statetax/05staxss.xls> U. S. Bureau of Census.

# Charts

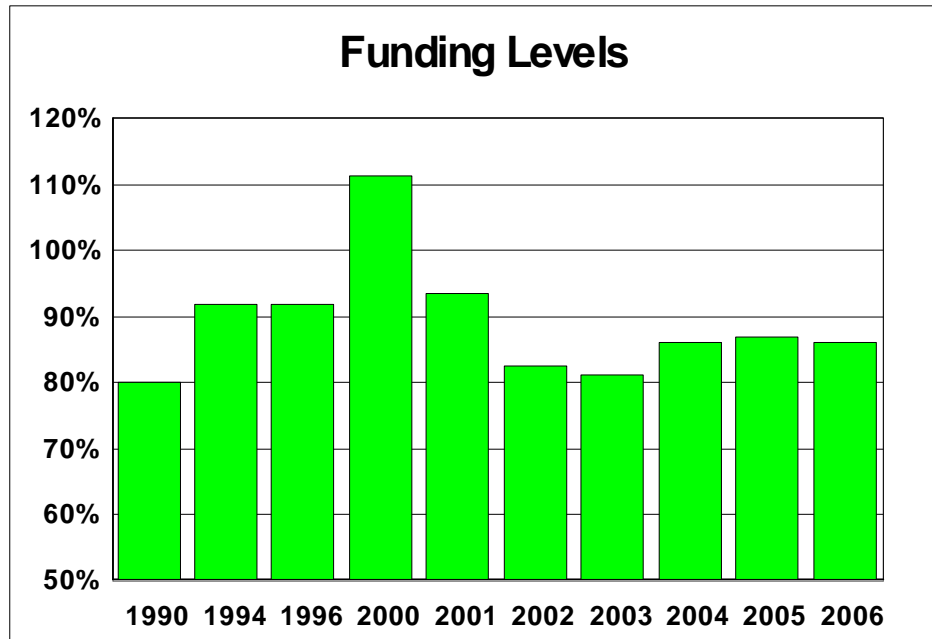
Chart 3:



Source: Federal, State, and Local Governments, 2005 State and Local Government Employee-Retirement Systems, U. S. Bureau of Census, <http://www.census.gov/govs/www/retire05view.html> and State Tax Collections, <http://ftp2.census.gov/govs/statetax/05staxss.xls> U. S. Bureau of Census.

# Charts

Chart 4:



Source: 2007 Wilshire Report on State Retirement Systems: Funding Levels and Asset Allocation, Wilshire Consulting



Table 3. Pooled OLS and Fixed Effects Regression.  
 Dependent variable: plan funding ratio (%)

	Pooled OLS 2000, 2002, 2004				Fixed Effects
	(1)	(2)	(3)	(4)	(5)
Local employees	5.50 (3.30)	4.46 (3.20)	<b>9.27</b> <b>(4.89)</b>	8.69 (4.72)	
Teachers	-5.25 (3.43)	-4.23 (3.38)	0.025 (3.92)	-0.56 (3.84)	
Log(active members)	1.55 (1.53)	1.05 (1.59)	-3.89 (4.22)	-2.98 (4.07)	-1.23 (6.87)
Ratio: actives to beneficiaries	<b>4.51</b> <b>(2.33)</b>	<b>5.11</b> <b>(2.54)</b>	<b>6.81</b> <b>(2.85)</b>	<b>6.47</b> <b>(2.79)</b>	-0.79 (2.99)
Auto COLA		4.22 (4.63)	2.65 (4.64)	2.60 (4.62)	-0.24 (4.41)
Early out		-1.10 (3.37)	0.95 (3.28)	0.39 (3.39)	1.36 (5.72)
Formula multiplier		<b>8.67</b> <b>(4.26)</b>	6.67 (4.77)	6.16 (4.83)	-7.50 (8.99)
Employee Contribution (%)		<b>-1.54</b> <b>(0.56)</b>	-1.18 (0.64)	-1.01 (0.63)	0.82 (0.99)
Unit credit Method		-4.63 (5.54)	-4.59 (4.95)	-6.20 (4.72)	0.74 (2.06)
Log(tax revenue pc)			9.77 (9.16)	11.07 (8.92)	<b>49.88</b> <b>(26.10)</b>
Log(population)			6.04 (4.26)	5.42 (4.08)	41.07 (53.11)

Note: Standard errors are robust to heteroskedasticity and serial correlation.  
 Source: Giertz and Papke (2007)

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Table 3. Pooled OLS and Fixed Effects Regression.  
 Dependent variable: plan funding ratio (%)

	Pooled OLS 2000, 2002, 2004				Fixed Effects
	(1)	(2)	(3)	(4)	(5)
Percent stocks				0.14 (0.10)	0.045 (0.100)
Percent bonds				0.038 (0.115)	0.051 (0.12)
Y2002	<b>-3.62</b> <b>(1.35)</b>	<b>-4.004</b> <b>(1.53)</b>	<b>-3.17</b> <b>(1.62)</b>	<b>-3.33</b> <b>(1.59)</b>	-3.84 (2.39)
Y2004	<b>-9.81</b> <b>(1.89)</b>	<b>-10.37</b> <b>(2.06)</b>	<b>-10.19</b> <b>(2.17)</b>	<b>-10.69</b> <b>(2.17)</b>	<b>-16.26</b> <b>(3.74)</b>
Constant	67.24 (17.00)	61.44 (18.56)	-13.91 (72.62)	-32.14 (71.96)	-596.34 (503.78)
R-squared	.180	.25	.28	.300	
Obs.	237	228	228	228	228

Note: Standard errors are robust to heteroskedasticity and serial correlation.  
 Source: Giertz and Papke (2007)

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