

April 2008

## The DB/DC Plan Spectrum: New Pension and Retirement Models

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### Recommended Citation

Singer, Larry (2008) "The DB/DC Plan Spectrum: New Pension and Retirement Models," *Journal of Collective Bargaining in the Academy*: Vol. 0 , Article 14.  
Available at: <http://thekeep.eiu.edu/jcba/vol0/iss3/14>

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# The DB/DC Plan Spectrum: New Pension and Retirement Models

**National Center for the Study of Collective Bargaining in Higher  
Education and the Professions**  
Baruch College – City University of New York

April 7, 2008  
1:45 pm – 3:45 pm

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## Are There New Forms that a Retirement Plan Can Take?

### ➤ Defined Benefit

- Provides income replacement
- Risks lie with employer
- Appropriate for long term employment relationships
- Desirable for older employees
- Desirable for employers with predictable, stable budgets

### ➤ Defined Contribution

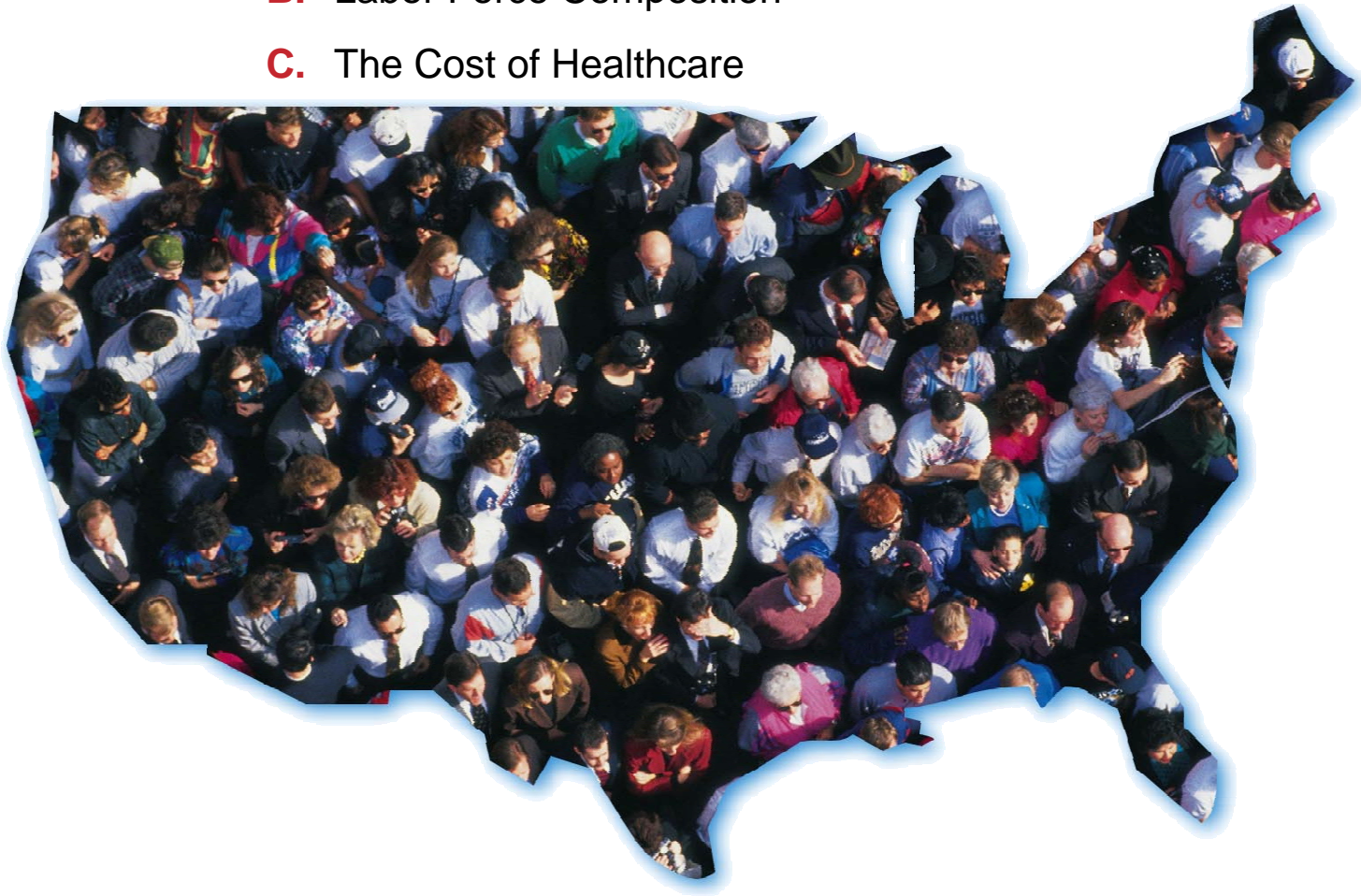
- Provides capital accumulation
- Risks lie with employee
- Appropriate for employees who change employers and/or change careers
- Desirable for younger employees
- Desirable for employers with less predicable, less stable budgets

# What Are the Changes in the Retirement Environment?

Retirement Plans Available to New Hires Today versus 10 Years Ago		
Program	Today	10 Years Ago
Final Average Plan	26%	78%
Career Average Plan	4%	7%
Other traditional DB	3%	5%
Cash Balance	23%	8%
PEP	3%	1%
Other hybrids	1%	1%
DC Only	40%	0%

## Key Trends

- A.** Labor Force Growth and Participation
- B.** Labor Force Composition
- C.** The Cost of Healthcare



## Post Employment Risks

### 7 Risks in a Defined Benefit Plan (Borne by Employers)

- Wage inflation risk
- Inflation risk
- Interest rate risk
- Investment risk
- Longevity risk
- Incentive risk
- Regulatory risk

### 7+4 Risks in a Defined Contribution Plan (Borne by Employees)

- Wage inflation risk
- Inflation risk
- Interest rate
- Investment risk
- Longevity risk
- Incentive risk
- Regulatory risk
- Non-participation risk
- Leakage risk
- Cognitive risk
- Will-power risk

# The Menu of Plan Designs

## Defined Benefit

- Traditional Final Average (FA)
- Traditional Career Average (CA)
- Career Average Revalued Earnings (CARE)
- Retirement Shares Plan (RSP)
- Cash Balance (CB)
- Pension Equity (PE)
- Stable Value (SV)

## Defined Contribution

- Traditional DC
  - 401(k)
- ## Hybrids
- Target benefit plans
  - Floor offset
  - Pension Preservation Plus

# DB/DC Attributes

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk									
Employer interest risk									
Longevity risk									
Regulatory Risk									
Accounting risk									
Leakage risk									
Non-participation risk									
Value distribution towards older, longer service employees									
Pre-retirement inflation risk									
Post-retirement inflation risk									
Attraction tool									
Retention tool									
Vehicle for profit sharing									



# Final Average (FA)

**Illustrative Design:** 50% of final average salary, payable beginning early as age 55 and continuing for life

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk	ER								
Employer interest risk	Higher								
Longevity risk	ER								
Regulatory Risk	Higher								
Accounting risk	Higher								
Leakage risk	None								
Non-participation risk	None								
Value distribution towards older, longer service employees	Yes								
Pre-retirement inflation risk	ER								
Post-retirement inflation risk	EE								
Attraction tool	Weak								
Retention tool	Strong								
Vehicle for profit sharing	No								

## Career Average (CA)

**Illustrative Design:** 2% of annual salary accumulates each year, payable beginning early as age 55 and continuing for life

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk	ER	ER							
Employer interest risk	Higher	Higher							
Longevity risk	ER	ER							
Regulatory Risk	Higher	Higher							
Accounting risk	Higher	Higher							
Leakage risk	None	None							
Non-participation risk	None	None							
Value distribution towards older, longer service employees	Yes	Older only							
Pre-retirement inflation risk	ER	ER but limited							
Post-retirement inflation risk	EE	EE							
Attraction tool	Weak	Weak							
Retention tool	Strong	Modest*							
Vehicle for profit sharing	No	No							

\* Typically

## Career Average Revalued Earnings (CARE)

**Illustrative Design:** Like CA, but annual accruals indexed (e.g., based on price or wage inflation, individual salary growth, position salary growth, or investment return)

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk	ER	ER	ER						
Employer interest risk	Higher	Higher	Higher						
Longevity risk	ER	ER	ER						
Regulatory Risk	Higher	Higher	Higher						
Accounting risk	Higher	Higher	Higher						
Leakage risk	None	None	None						
Non-participation risk	None	None	None						
Value distribution towards older, longer service employees	Yes	Older Only	Yes						
Pre-retirement inflation risk	ER	ER but limited	ER, but limited						
Post-retirement inflation risk	EE	EE	EE						
Attraction tool	Weak	Weak	Weak						
Retention tool	Strong	Modest	Better						
Vehicle for profit sharing	No	No	No						

# Retirement Shares Plan (RSP)

**Illustrative Design:** Essentially a CARE plan indexed on the basis of investment performance; but employee chooses the index

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk	ER	ER	ER	EE					
Employer interest risk	Higher	Higher	Higher	Limited					
Longevity risk	ER	ER	ER	ER					
Regulatory Risk	Higher	Higher	Higher	Higher					
Accounting risk	Higher	Higher	Higher	Higher					
Leakage risk	None	None	None	None					
Non-participation risk	None	None	None	None					
Value distribution towards older, longer service employees	Yes	Older Only	Yes	Older Only					
Pre-retirement inflation risk	ER	ER but limited	ER	ER/EE					
Post-retirement inflation risk	EE	EE	EE	EE					
Attraction tool	Weak	Weak	Weak	Weak					
Retention tool	Strong	Modest	Better	Modest					
Vehicle for profit sharing	No	No	No	No					

## Cash Balance (CB)

**Illustrative Design:** 5% of annual pay credited to a nominal account, which grows with 10-year Treasuries

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk	ER	ER	ER	EE	ER, but hedged				
Employer interest risk	Higher	Higher	Higher	Limited	Limited				
Longevity risk	ER	ER	ER	ER	EE*				
Regulatory Risk	Higher	Higher	Higher	Higher	Higher				
Accounting risk	Higher	Higher	Higher	Higher	Higher				
Leakage risk	None	None	None	None	Yes				
Non-participation risk	None	None	None	None	None				
Value distribution towards older, longer service employees	Yes	Older	Yes	Yes	No*				
Pre-retirement inflation risk	ER	ER but limited	ER	ER/EE	ER but limited				
Post-retirement inflation risk	EE	EE	EE	EE	EE				
Attraction tool	Weak	Weak	Weak	Weak	Modest				
Retention tool	Strong	Modest	Better	Modest	Limited*				
Vehicle for profit sharing	No	No	No	No	No				

\* Typically

## Stable Value (SV)

**Illustrative Design:** 15% of each year's pay—expressed as a lump sum payable at 65, and discounted by 4% per year for ages below 65

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk	ER	ER	ER	EE	ER, but hedged	ER			
Employer interest risk	Higher	Higher	Higher	Limited	Limited	Limited			
Longevity risk	ER	ER	ER	ER	EE*	EE*			
Regulatory Risk	Higher	Higher	Higher	Higher	Higher	Higher			
Accounting risk	Higher	Higher	Higher	Higher	Higher	Higher			
Leakage risk	None	None	None	None	Yes	Yes			
Non-participation risk	None	None	None	None	None	None			
Value distribution towards older, longer service employees	Yes	Older	Yes	Yes	No*	No*			
Pre-retirement inflation risk	ER	ER but limited	ER	ER/EE	ER but limited	ER but limited			
Post-retirement inflation risk	EE	EE	EE	EE	EE	EE			
Attraction tool	Weak	Weak	Weak	Weak	Modest	Modest			
Retention tool	Strong	Modest	Better	Modest	Limited*	Limited			
Vehicle for profit sharing	No	No	No	No	No	No			

\* Typically

## Pension Equity (PE)

**Illustrative Design:** Lump sum at 65 equals 12% of final average pay times year of service, reduced for payments below age 65

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk	ER	ER	ER	EE	ER, but hedged	ER	ER		
Employer interest risk	Higher	Higher	Higher	Limited	Limited	Limited	Limited		
Longevity risk	ER	ER	ER	ER	EE*	EE*	EE*		
Regulatory Risk	Higher	Higher	Higher	Higher	Higher	Higher	Higher		
Accounting risk	Higher	Higher	Higher	Higher	Higher	Higher	Higher		
Leakage risk	None	None	None	None	Yes	Yes	Yes		
Non-participation risk	None	None	None	None	None	None	None		
Value distribution towards older, longer service employees	Yes	Older	Yes	Yes	No*	No*	Yes		
Pre-retirement inflation risk	ER	ER but limited	ER	ER/EE	ER but limited	ER but limited	ER		
Post-retirement inflation risk	EE	EE	EE	EE	EE	EE	EE		
Attraction tool	Weak	Weak	Weak	Weak	Modest	Modest	Modest		
Retention tool	Strong	Modest	Better	Modest	Limited*	Limited	Strong		
Vehicle for profit sharing	No	No	No	No	No	No	No		

\* Typically

## Traditional DC - including employer 403(b) contributions

**Illustrative Design:** 5% of annual pay deposited in an account which is invested according to the employee's instructions

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk	ER	ER	ER	EE	ER, but hedged	ER	ER	EE	
Employer interest risk	Higher	Higher	Higher	Limited	Limited	Limited	Limited	None	
Longevity risk	ER	ER	ER	ER	EE*	EE*	EE*	EE	
Regulatory Risk	Higher	Higher	Higher	Higher	Higher	Higher	Higher	Lower	
Accounting risk	Higher	Higher	Higher	Higher	Higher	Higher	Higher	Low	
Leakage risk	None	None	None	None	Yes	Yes	Yes	Yes	
Non-participation risk	None	None	None	None	None	None	None	None	
Value distribution towards older, longer service employees	Yes	Older	Yes	Yes	No*	No*	Yes	No	
Pre-retirement inflation risk	ER	ER but limited	ER	EE	ER but limited	ER but limited	ER	EE	
Post-retirement inflation risk	EE	EE	EE	EE	EE	EE	EE	EE	
Attraction tool	Weak	Weak	Weak	Weak	Modest	Modest	Modest	Modest	
Retention tool	Strong	Modest	Better	Modest	Limited*	Limited	Strong	Weak*	
Vehicle for profit sharing	No	No	No	No	No	No	No	Yes	

\* Typically



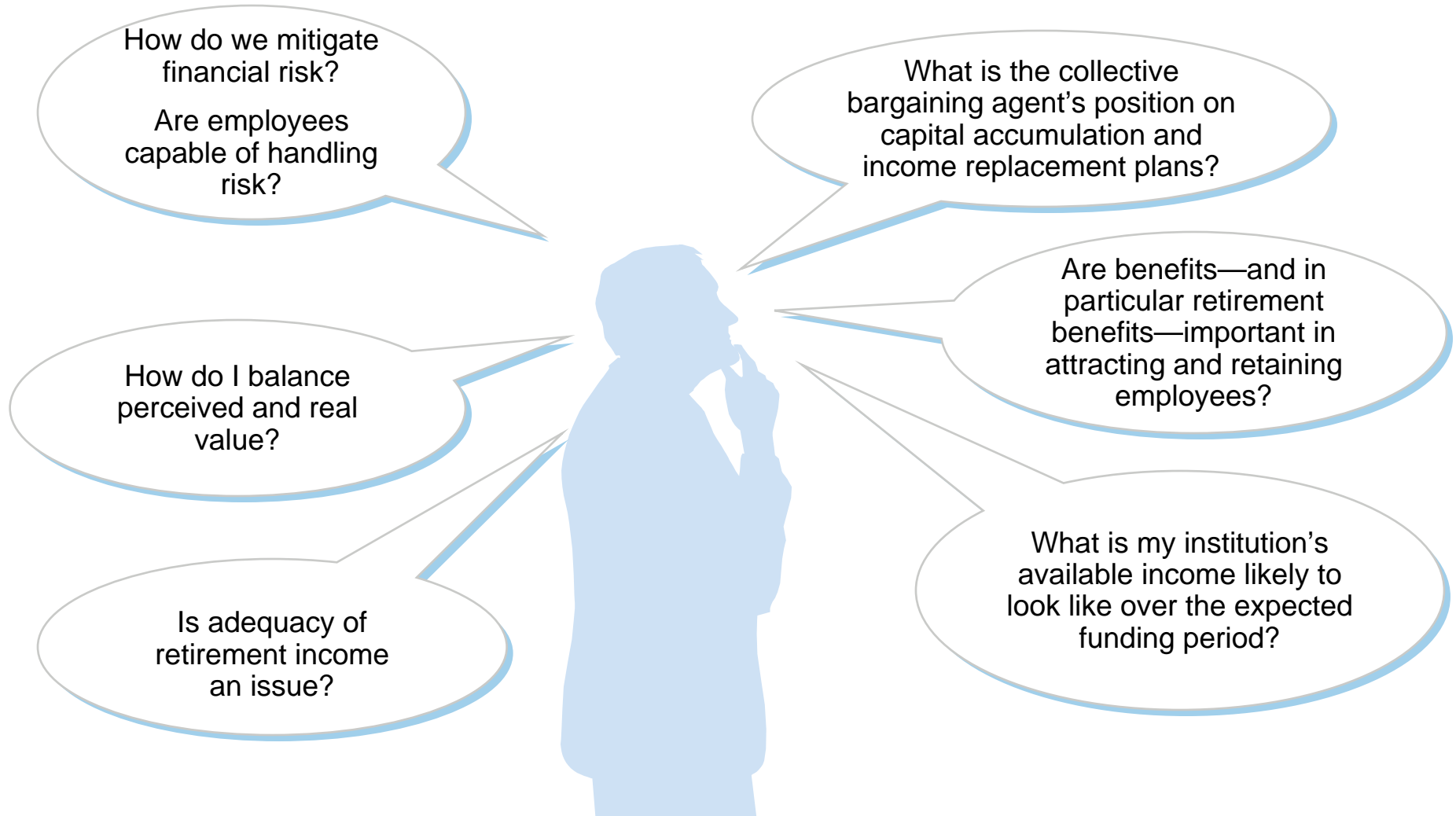
# 401(k)

**Illustrative Design:** Employee can contribute up to 10% of pay pre-tax, with the employer matching 50% of the first 6%

Issues	Designs								
	FA	CA	CARE	RSP	CB	PE	SV	DC	401(k)
Investment risk	ER	ER	ER	EE	ER, but hedged	ER	ER	EE	EE
Employer interest risk	Higher	Higher	Higher	Limited	Limited	Limited	Limited	None	None
Longevity risk	ER	ER	ER	ER	EE*	EE*	EE*	EE	EE
Regulatory risk	Higher	Higher	Higher	Higher	Higher	Higher	Higher	Lower	Lower
Accounting risk	Higher	Higher	Higher	Higher	Higher	Higher	Higher	Low	Low
Leakage risk	None	None	None	None	Yes	Yes	Yes	Yes	Yes
Non-participation risk	None	None	None	None	None	None	None	None	Yes
Value distribution towards older, longer service employees	Yes	Older	Yes	Yes	No*	No*	Yes	No	No
Pre-retirement inflation risk	ER	ER but limited	ER	EE	ER but limited	ER but limited	ER	EE	EE
Post-retirement inflation risk	EE	EE	EE	EE	EE	EE	EE	EE	EE
Attraction tool	Weak	Weak	Weak	Weak	Modest	Modest	Modest	Modest	Modest
Retention tool	Strong	Modest	Better	Modest	Limited*	Limited	Strong	Weak*	Weak
Vehicle for “profit” sharing	No	No	No	No	No	No	No	Yes	Yes

\* Typically

## What's the "right" plan design?



**The "right" design requires answers to some tough questions.**



**The right plan design is a design that the covered population understands and from which the covered population can make informed judgments about work, savings and retirement.**

**The right plan design is one that has been properly communicated and understood by all parties.**