

Financial Services

SERVING THE GOVERNMENT MARKET

A TIAA-CREF RETIREMENT PLAN PRESENTATION TO:

State of Kansas

February 7, 2012



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TODAY'S DISCUSSION

- Designing risk-managed pensions
- Principles of effective retirement plan design
- Managing risk in defined contribution (DC) plans
- DC risk management: Best practice design
- How contributions into a hybrid defined benefit (DB)/DC plan are structured
- Hybrid DB/DC plan income replacement ratio example
- Core DC plan income replacement ratio example
- Wrap-up and Q&A

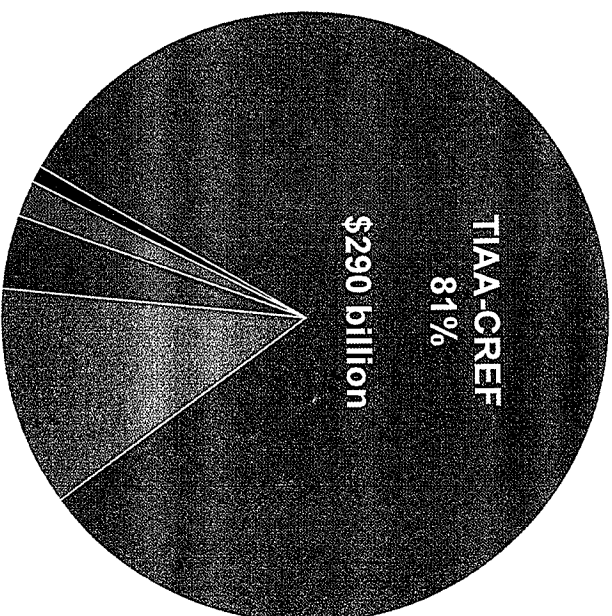
DESIGNING RISK-MANAGED RETIREMENT PLANS

TIAA-CREF's fundamental expertise is in creating "risk-managed" defined contribution plans dating back to its founding in 1918. Today, TIAA-CREF leads the not-for-profit higher education and K-12 retirement market segments:*

- More than \$469 billion in total assets under management
- 15,000 not-for-profit institutional clients
- 27,000 retirement plans
 - 1,491 Governmental defined contribution plans
 - Optional Retirement Plans (ORPs) in 46 states and D.C.
- 3.7 million participants

Data as of 6/30/11.

TIAA-CREF Higher Education Market Share
(Top Five Providers*)



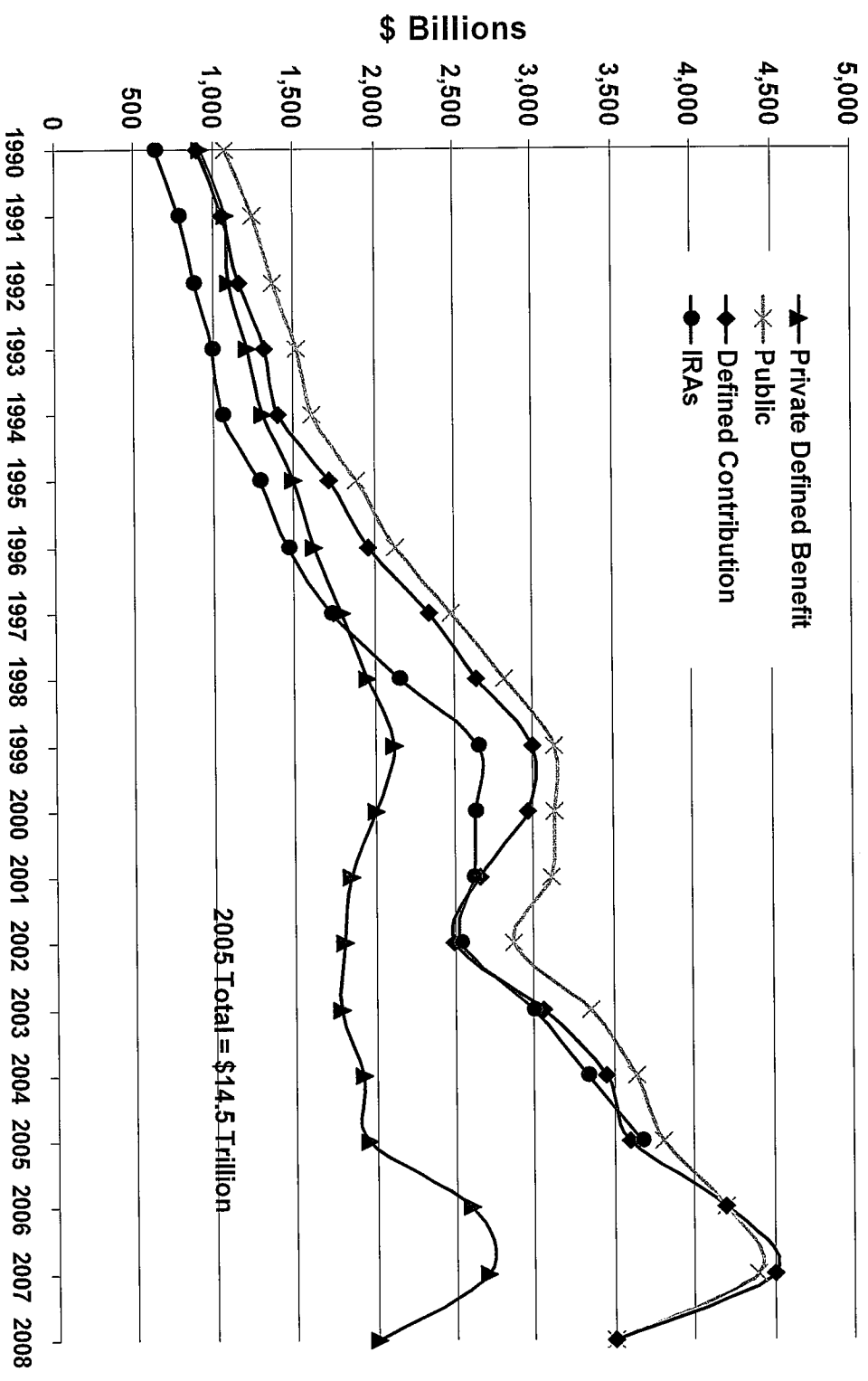
* Source: LIMRA, Not-for-Profit Market Survey, second-quarter 2011 results based on a survey of 30 companies. TIAA-CREF assets under management by market segment estimated; segment breakdown based on 20 companies representing 97% of the total reported full-service assets. Market share ranking does not reflect current investment performance. Average assets per participant based on full-service business.

DESIGNING RISK-MANAGED RETIREMENT PLANS

Achieving retirement adequacy and security
is becoming a riskier proposition.



UNITED STATES RETIREMENT SAVINGS



Source: Investment Company Institute.

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LESSONS LEARNED

1. DC plans have traditional risks that need to be managed better:

- Savings shortfall risk
- Investment volatility risk
- Longevity risk
- Inflation risk
- Annuitization rate risk
- Life event risk (e.g., termination, disability, preretirement death, long-term care)

LESSONS LEARNED

2. Long-term risk controls help, but short-term volatility hurts retirement outcomes

3. Nondiversifiable shock-event risks need to be recognized and managed as well:

- Financial systemic risk (e.g., subprime crisis)
- Political instability
- Global security / terrorism

PRINCIPLES OF EFFECTIVE RETIREMENT PLAN DESIGN

Principle # 1:

Retirement plans should focus on seeking to provide adequate and secure income throughout retirement.

Principle # 2:

Retirement income adequacy and security is a shared employer / employee / government responsibility.

Principle # 3:

It is important for all individuals to have access to a well-designed employer-sponsored retirement program.

PRINCIPLES OF EFFECTIVE RETIREMENT PLAN DESIGN

Principle # 4:

Effective retirement programs require an appropriate investment offering that is designed to achieve the objectives of the plan.

Principle # 5:

Effective retirement programs require a broad range of integrated participant services.

Principle # 6:

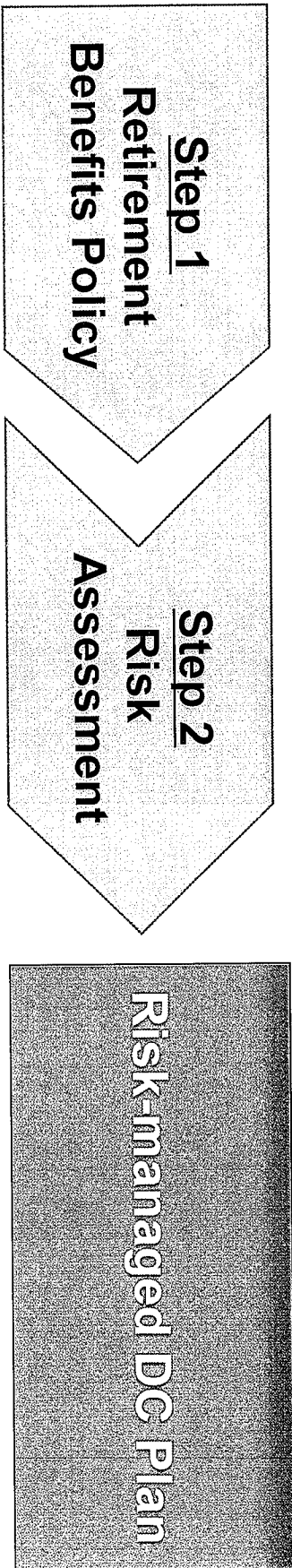
Retirement programs are more effective with competent fiduciary mechanisms.

THE FOUNDATIONAL PRINCIPLE

Retirement plans should focus on seeking to provide adequate and secure income throughout retirement.



MANAGING RISKS IN DC PLANS



MANAGING RISKS IN DC PLANS

Step 1 Retirement Benefits Policy

First question:

What is the purpose of the Plan?

- Retirement income?
- What is retirement income replacement objective (taking into account Core Pension and Social Security)?
- Wealth accumulation?
- Combination?

MANAGING RISKS IN DC PLANS

Step 2 Risk Assessment

Second question:

What risks need to be managed under the Plan?

Standard DC risks:

- Failure to participate
- Failure to vest
- Inadequate savings
- Inadequate investment return
- Inappropriate asset allocation
- Outliving retirement assets
- Inflation
- Retirement asset leakage
- Other risks:

— **Death and disability**

— **Excessive administration costs and fees**

DC RISK MANAGEMENT: BEST PRACTICE DESIGN

Plan Design Feature	Risk Management Best Practices	Risk Benefit
<p>Eligibility and participation</p>	<ul style="list-style-type: none"> ▪ Low age limits ▪ Shorter waiting period ▪ Mandatory participation 	<p>Lowers risk of nonparticipation</p>
<p>Vesting of employer contributions</p>	<p>Shorter is preferable</p>	<p>Lowers risk of forfeiture</p>
<p>Total contributions</p>	<p>Amount needed to achieve replacement income goal taking into account core pension and Social Security</p>	<p>Lowers risk of underfunding</p>

DC RISK MANAGEMENT: BEST PRACTICE DESIGN

Plan Design Feature	Risk Management Best Practices	Risk Benefit
<p>Investments</p>	<ul style="list-style-type: none"> ▪ Mandatory or default into lifecycle/target date, qualified managed account (QMA), or advice ▪ Limited array of 15-20 participant-directed investments covering the major asset classes ▪ Individual investment advice for participant-directed investments ▪ Broad-based employee investment education 	<p>Helping to connect participants with more efficient asset allocations helps lower their risk of poor investment decision-making</p>

DC RISK MANAGEMENT: BEST PRACTICE DESIGN

Plan Design Feature	Risk Management Best Practices	Risk Benefit
<p>Distributions</p>	<ul style="list-style-type: none"> ▪ No hardship and loan features ▪ Offer guaranteed life income annuity * ▪ Provide inflation-protected options and features 	<ul style="list-style-type: none"> ▪ Reduces risk of “retirement asset leakage” before retirement ▪ Reduces risk of the participant outliving the accrued DC benefit ▪ Helps maintain the participant’s standard of living during retirement

* Guarantees are based on the claims-paying ability of the issuing company.

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HYBRID DB/DC PLAN INCOME REPLACEMENT RATIO EXAMPLE

Target Benefit: 75% Replacement Income



Joe Planner

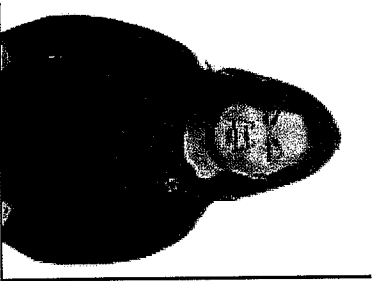
Hired Year: 2011
 Entry Age: 30
 Retirement Age: 65
 Salary: \$40,000
 DB Benefit Formula: 1.5% x Years of Service x Salary

A Hybrid DB/DC structure uses a combination of DB and DC benefits to achieve a 75% income replacement level at retirement

DB REPLACEMENT RATIO	SOCIAL SECURITY REPLACEMENT RATIO	REQUIRED DC CONTRIBUTION RATE WITH SOCIAL SECURITY	REQUIRED DC RATE WITHOUT SOCIAL SECURITY
52.5%	31.7%	0.0%	6.8%
Example with a DB Benefit Formula of 1.0% x Years of Service x Salary			
35.0%	31.7%	2.5%	12.1%

CORE DC PLAN INCOME REPLACEMENT RATIO EXAMPLE

Income Replacement Target: 75% of Salary



Jane Saver

Hired Year: 2011
 Entry Age: 30
 Retirement Age: 65
 Salary: \$40,000
 DB Benefit Formula: None

The Core DC structure uses a defined contribution approach to achieve a 75% income replacement level at retirement

SOCIAL SECURITY REPLACEMENT RATIO
 31.7%

REQUIRED DC RATE WITH SOCIAL SECURITY
 13.1%

REQUIRED DC RATE WITHOUT SOCIAL SECURITY
 22.7%

GOVERNMENT CONSIDERATIONS WHEN DESIGNING A NEW PLAN

Budgetary predictability

- Determine which structure (Hybrid DB/DC or Core DC) is most appropriate for the government's objectives
- DC plans remove any future unfunded liabilities, providing plan sponsors with more predictable costs for budgeting

Employee eligibility

- Depending on state or local government regulations, both Hybrid and Core plans can be open to new employees only, or to both new and select existing employees

Employee participation

- Automatic enrollment into an appropriate default investment, and elimination or lowering of certain restrictions such as age, vesting schedules and eligibility, can help maximize participation and adequacy of contributions

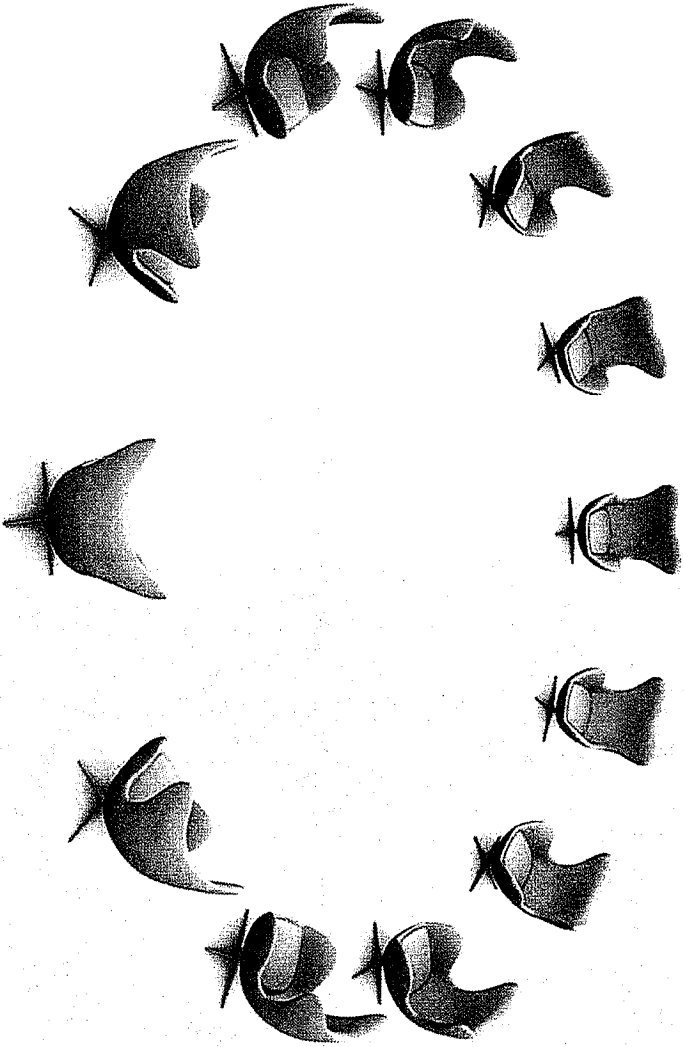
RISK-MANAGED DC STRUCTURE

The objective of a risk-managed program is to provide employees with the means to build sufficient savings through plan rules and the investment structure of the plan

Helping employees manage risk and maintain a long-term view:

- A low-cost investment menu with a maximum of 15 to 20 preselected options
- Predesigned portfolios that allow sophisticated but simple investment decisions
- Automatic asset allocation vehicles such as Lifecycle funds
- Individual investment advice to educate participants

QUESTIONS?



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QUESTIONS?

Thank You!

IMPORTANT INFORMATION

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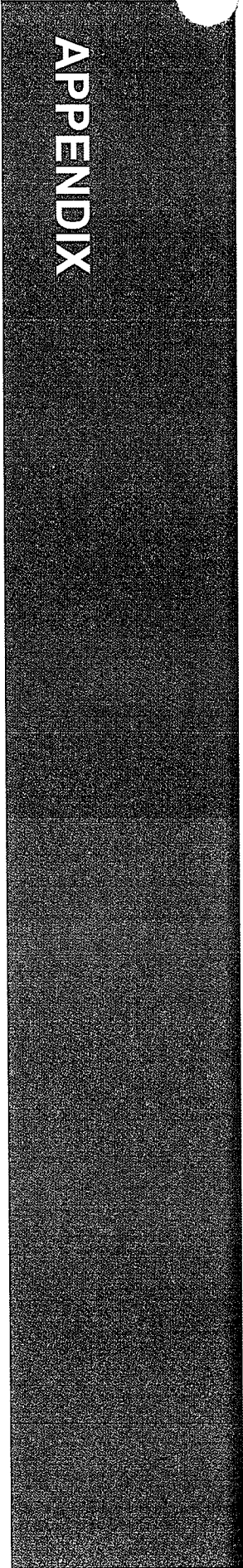
You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877 518-9161, or go to www.tiaa-cref.org/prospectuses for a current prospectus that contains this and other information. Please read the prospectus carefully before investing.

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APPENDIX



HOW CONTRIBUTIONS INTO A HYBRID DB/DC PLAN ARE STRUCTURED

When DB and DC plans work in tandem, the probability that employee retirement income needs can be met as they plan for – and live well in – retirement is increased.

DC PLAN CONTRIBUTION RATE REQUIRED TO ACHIEVE AN 85% REPLACEMENT RATIO

ENTRY SALARY	DB FORMULA	SOCIAL SECURITY REPLACEMENT RATIO	REQUIRED DC RATE WITH SOCIAL SECURITY	REQUIRED DC RATE WITHOUT SOCIAL SECURITY
\$40,000	1.5%	31.7%	0.2%	9.8%
\$60,000	1.5%	26.6%	1.8%	9.8%
\$80,000	1.5%	22.6%	3.0%	9.8%
\$40,000	1.0%	31.7%	5.5%	15.0%
\$60,000	1.0%	26.6%	7.0%	15.0%
\$80,000	1.0%	22.6%	8.2%	15.0%

DC PLAN CONTRIBUTION RATE REQUIRED TO ACHIEVE A 75% REPLACEMENT RATIO

ENTRY SALARY	DB FORMULA	SOCIAL SECURITY REPLACEMENT RATIO	REQUIRED DC RATE WITH SOCIAL SECURITY	REQUIRED DC RATE WITHOUT SOCIAL SECURITY
\$40,000	1.5%	31.7%	0.0%	6.8%
\$60,000	1.5%	26.6%	0.0%	6.8%
\$80,000	1.5%	22.6%	0.0%	6.8%
\$40,000	1.0%	31.7%	2.5%	12.1%
\$60,000	1.0%	26.6%	4.1%	12.1%
\$80,000	1.0%	22.6%	5.3%	12.1%

Assumptions:
 Entry Age is 30, Retirement Age is 65; Salary Increase is 4%; DB benefit replacement ratio is equal to formula times 35 years of service; Interest Rate is 6%; DC accumulation is used to purchase a Single Life Annuity w/10 years guaranteed; Annuity purchase rate based on 4% interest and current TIAA mortality; Social Security benefits based on current benefit formula, and 3% inflation
 The above scenarios are based on hypothetical assumptions and are not intended to represent the performance of any specific investment product. They cannot be used to predict or project investment company performance.