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ALASKA STATE LEGISLATURE

SB23

Senator Joe Paskvan

Chair, Labor and Commerce
Vice Chair, Health and Social Services
Member, Transportation
Member, State Affairs
Member, Joint Armed Services



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Fairbanks and Fort Wainwright

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To: Senator Linda Menard, Chair
Senate State Affairs Committee

From: Senator Joe Paskvan

A handwritten signature in black ink that reads "Joe Paskvan".

Date: Friday, March 20, 2009

Re: SB 23 and National Institute on Retirement Security

Thank you for scheduling SB 23 for a hearing in State Affairs on Tuesday, March 24, and allowing Beth Almeida, Executive Director, National Institute on Retirement Security (NIRS), to present expert testimony.

Ms. Almeida's presentation will focus on two NIRS reports: (1) *Pensionomics: Measuring the Economic Impact of State and Local Pension Plans* with data specific to Alaska and (2) *A Better Bang for the Buck: The Economic Efficiencies of Defined Benefit Pension Plans*.

Please find the attached documents from the National Institute on Retirement Security, including the two mentioned above, that present the research of the institute:

- **Press release** (February 26, 2009): *New Study Finds 6,270 Jobs, \$1 Billion Economic Impact From Alaska's Public Pension System*;
- **Key Findings:** *Pensionomics: Measuring the Economic Impact of State and Local Pensions*;
- **Fact Sheet:** *A Better Bang for the Buck: The Economic Efficiencies of Defined Pension Plans*;
- **Frequently Asked Questions:** *A Better Bang for the Buck: The Economic Efficiencies of Defined Pension Plans*;
- **Issue Brief:** *Retirement Readiness: What Difference Does A Pension Make?*;
- **Issue Brief:** *Patience Is A Virtue: Asset Allocation Patterns in DB and DC Plans*;
- **Issue Brief:** *Look Before You Leap: The Unintended Consequences of Pension Freezes*;
- **At-A-Glance:** National Institute on Retirement Security.

Each of these documents can be found at www.nirsonline.org.

I look forward to discussing the merits of SB 23 on Tuesday and, again, thank you for your consideration. Please let me know if you have any questions or comments.



NATIONAL INSTITUTE ON
Retirement Security

NEWS Release

Contact: Kelly Kenneally
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NEW STUDY FINDS 6,270 JOBS, \$1 BILLION ECONOMIC IMPACT FROM ALASKA'S PUBLIC PENSION SYSTEMS

Analysis Determines Pensions Leave Substantial Economic Footprint

WASHINGTON, D.C., FEBRUARY 26, 2009 – An economic impact analysis released today finds that the benefits provided by Alaska's public pension plans have a sizable impact that ripples across the state and touches every industry. The new report, "*Pensionomics: Measuring the Economic Impact of State and Local Pension Plans*," finds that expenditures made from Alaska's public pension benefits for fiscal year 2005-2006:

- Had a total economic impact of more than \$1 billion.
- Supported more than 6,270 jobs that paid more than \$385.2 million in total compensation to Alaska's workers.
- Supported more than \$155.5 million in annual federal, state, local tax revenue.
- Paid \$819.5 million in pension benefits to 34,962 retirees and beneficiaries.
- Had large multiplier effects. Each taxpayer dollar invested in Alaska's public pensions supported \$1.25 in total economic activity, while each dollar paid out in benefits supported \$6.35 in economic activity.
- Impacted every industry in the state.

A detailed Alaska economic impact Fact Sheet is available at www.nirsonline.org. The report also analyzes the national economic impact of public pensions to find 2.5 million jobs and \$358 billion in economic activity supported by state and local pensions.

"This study measures the magnitude of the 'multiplier effect' of Alaska's public pensions across the state's economy," said Ilana Boivie, NIRS policy analyst and report co-author. "The multiplier effect occurs because one retiree's spending in Alaska becomes another person's income," she said.

Boivie explained, "For example, a retired Alaska teacher may spend his or her pension check to pay the gas bill, buy a car, or make purchases at the local pharmacy, grocery store, or movie theatre. As a result of the retiree's spending, businesses see an increase in their income, which then enables businesses to spend and create jobs. Each successive round of spending ripples through the Alaska economy to generate an economic impact that is much larger than the initial spending by the retiree."

--more--

"Understanding the considerable economic impact of Alaska's public pensions is vital given the severe financial crisis facing America," said Beth Almeida, NIRS executive director and report co-author. "Economists have long known that the steady monthly income provided by pensions can act as an 'automatic stabilizer.' That is, retirees with a stable monthly pension income can continue to spend on basic needs, even during an economic downturn. In contrast, retirees relying solely on plummeting 401(k)s or individual retirement accounts likely are forced to retreat from spending precisely at the time when the Alaska economy most needs stimulus," Almeida explained.

The analysis was conducted using data from the U.S. Census Bureau and IMPLAN, an input-output modeling software widely used by industry and governments.

NIRS will hold a conference call regarding the findings on Thursday, February 26, 2009 at 11 AM ET by dialing (800) 230-1074, Confirmation Number: 988166.

A live PowerPoint presentation will be available online during the conference call. Log on to the web conference by visiting www.gotomeeting.com. On the left hand column of the page, click "Join Meeting." When prompted, enter Meeting Number 193-429-659. Enter the requested information to access the presentation.

The Report, State Fact Sheets, and PowerPoint Presentation will be available in advance of the call at www.nirsonline.org on Feb. 26th at 9 AM ET.

An audio digitized replay of the call will be available from February 26, 2009 at 1 PM ET through March 26, 2009 at 11:59 PM ET by dialing (800) 475-6701, Access Code 988166.

ABOUT NIRS

NIRS is a non-profit, non-partisan organization established to contribute to informed policymaking by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole. Located in Washington, D.C., NIRS's membership includes employee benefit plans, agencies that manage retirement plans, trade associations, financial services firms, and other retirement service providers.

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Pensionomics:

Measuring the Economic Impact of State and Local Pension Plans

Key Findings

Benefits paid by state and local pension plans support a significant amount of economic activity in the state of Alaska.

Pension benefits received by retirees are spent in the local community. This spending ripples through the economy, as one person's spending becomes another person's income, creating a *multiplier effect*.

Expenditures stemming from state and local pensions supported...

- 6,270 jobs that paid \$385.2 million in wages and salaries
- \$1.0 billion in total economic output
- \$155.5 million in federal, state, and local tax revenues

... in the state of Alaska

Each dollar paid out in pension benefits supported \$1.25 in total economic activity in Alaska.

Each dollar "invested" by Alaska taxpayers in these plans supported \$6.35 in total economic activity in the state.

Overview

Expenditures made by retirees of state and local government provide a steady economic stimulus to Alaska communities and the state economy. In 2006, 34,962 residents of Alaska received a total of \$819.50 million in pension benefits from state and local pension plans, with \$808.64 million paid from plans within the state and the remainder originating from plans in other states.

The average pension benefit received was \$1,953 per month or \$23,440 per year. These modest benefits provide retired teachers, public safety personnel and others who served the public during their working careers income to meet basic needs in retirement.

Impact on Jobs and Incomes

Retiree expenditures stemming from state and local pension plan benefits supported 6,270 jobs in the state. The total income to state residents supported by pension expenditures was \$385.2 million.

Of this, the greatest share, \$188.0 million, was comprised of employee compensation (wages and salaries). Proprietors' income (self-employment income) represented \$33.6 million, and other property income (including payments from interest, rent, royalties, profits and dividends) totaled \$163.6 million.

Economic Impact

State and local pension funds in Alaska and other states paid a total of \$819.50 million in benefits to Alaska residents in 2006. Retirees' expenditures from these benefits supported a total of \$1.0 billion in total economic output in the state, and \$430.7 million in value added in the state.

\$790.8 million in direct economic impacts were supported by retirees' expenditures on goods and services from businesses in the state. An additional \$120.4 million in indirect economic impact resulted when these businesses purchased additional goods and services, generating additional income in the local economy. \$112.8 million in induced impacts occurred when employees hired by businesses as a result of the direct and indirect impacts made expenditures, supporting even more additional income.



For more information on the data and methodology used for these estimates, please refer to *Pensionomics: Measuring the Economic Impact of State and Local Pension Plans* National Institute on Retirement Security, Washington DC, February 2009. www.nirsonline.org

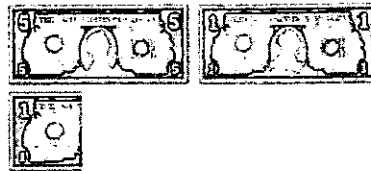
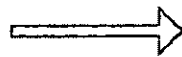
Economic Multipliers

Taxpayer Contribution Factor*



\$1.00

contributed by Alaska taxpayers to state and local pensions



\$6.35

total economic activity

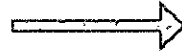
Each \$1 in taxpayer contributions to Alaska's state and local pension plans supported \$6.35 in total output in the state. This reflects the fact that taxpayer contributions are a minor source of financing for retirement benefits - investment earnings and employee contributions finance the lion's share.

Pension Benefit Multiplier



\$1.00

pension benefits paid to retirees in Alaska



\$1.25

total economic activity

Each \$1 in state and local pension benefits paid to Alaska residents ultimately supported \$1.25 in total output in the state. This "multiplier" incorporates the direct, indirect, and induced impacts of retiree spending, as it ripples through the state economy.

* Caution should be used in interpreting this number, because the Census data used reflect the taxable status of contributions only; because employee contributions may be reported as taxpayer contributions, the multiplier here may be underestimated.

Impact on Tax Revenues

State and local pension payments made to Alaska residents supported a total of \$155.5 million in revenue to federal, state and local governments. Taxes paid by retirees and beneficiaries directly out of pension payments totaled \$28.7 million. Taxes attributable to direct, indirect and induced expenditures accounted for \$126.8 million in tax revenue.

Federal Tax	87.5 million
State/Local Tax	67.8 million
Other Corporate Taxes	0.2 million
Total	\$155.5 million

Economic Impacts by Industry Sector

The economic impact of state and local pension benefits was broadly felt across various industry sectors in the state. The ten industry sectors with the largest employment impacts are presented in the table below.

Industry	Employment Impact (# Jobs)	Value Added Impact (\$ millions)	Income Impact (\$ millions)	Output Impact (\$ millions)
Health Care and Social Assistance	1,354	\$75.0	\$74.2	\$119.1
Retail Trade	1,331	64.4	50.9	97.0
Accommodation and Food Services	839	26.7	23.8	50.0
Other Services (Except Public Administration)	479	14.2	13.3	27.1
Real Estate and Rental and Leasing	452	33.8	28.2	50.8
Professional, Scientific, and Technical Services	229	11.8	11.5	23.2
Arts, Entertainment, and Recreation	229	6.2	5.6	10.8
Finance and Insurance	227	24.2	23.3	43.9
Public Administration	196	10.1	10.1	20.7
Transportation and Warehousing	187	11.4	10.8	22.0

FACT Sheet



NATIONAL INSTITUTE ON
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A Better Bang for the Buck The Economic Efficiencies of Defined Benefit Pension Plans

Overview

The National Institute on Retirement Security has released a new report, "A Better Bang for the Buck: The Economic Efficiencies of Defined Benefit Pension Plans." The report presents an original analysis on the efficiencies of defined benefit pension (DB) plans, and the costs of DB plans as compared to 401(k)-type individual defined contribution (DC) plans.

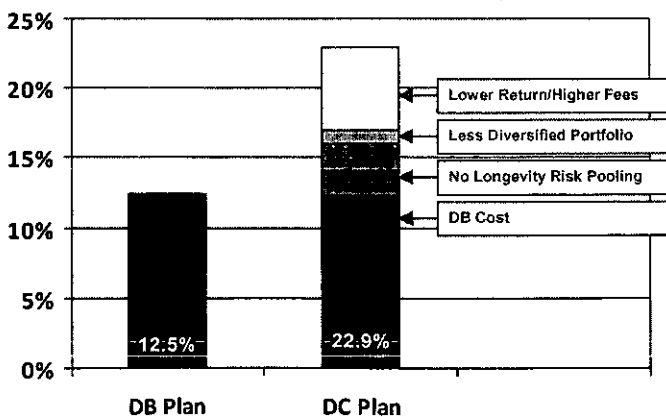
The report's analysis and findings serve as a myth buster with respect to the costs of defined benefit pension plans. Specifically, the embedded economic efficiencies of DB plans make them nearly half the cost of DC plans, or a 46 percent cost savings.

Policy and decision makers can utilize these findings to make informed decisions about retirement security issues and to evaluate claims that DC plans save money. The report concludes that DB plans should remain a centerpiece of retirement income policy and practice, especially in light of current fiscal and economic constraints facing corporate and government retirement plan sponsors.

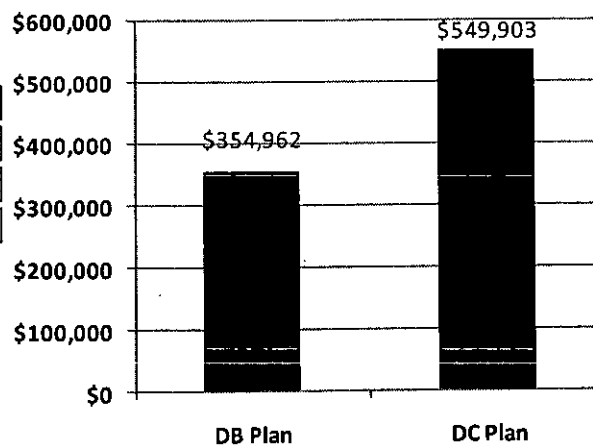
Methodology

The model makes an "apples to apples" calculation of the actual dollar contributions required for a DB and DC plan to achieve the same target retirement benefit. The target retirement benefit in the model is \$26,684. Together with Social Security benefits, this retirement benefit allows a retiree to replace 83% of pre-retirement income, which meets generally accepted standards of retirement income adequacy.

Cost of DB and DC Plan as % of Payroll



Required Assets per Employee at Age 62



Key Findings

The DB plan provides the best bang for the retirement buck. Under the model, the DB plan provides the same retirement income at nearly **half the cost - 46 % less** than individual 401(k)-type DC accounts.

Under the DB plan, contributions of 12.5% of payroll each year are required to fund the target retirement benefit. The DB plan will need to have \$355,000 set aside for each participant by the time the worker turns 62. In contrast, the DC plan requires contributions of 22.9% of payroll each year. The less-efficient DC plan will need to have \$550,000 set aside for each participant in the plan by the time the worker turns 62. In other words, the DB plan can provide the same benefit at a cost that is 46% lower than the DC plan. **The DB plan can do more with less providing the same benefit for nearly \$200,000 less per participant.**

Economic Efficiencies Are Embedded in DB Plans

DB plans have certain embedded characteristics that drive their economic efficiencies:

1. **DB Plans Avoid "Over-Saving."** We won't all live to be ninety-five or one hundred. But in an individual plan, many of us will want to save enough to last until very old age to avoid the risk of running out of money. However, a DB plan only has to save for the AVERAGE life expectancy, which is much lower and which actuaries can calculate with a high degree of accuracy. By saving for a realistic average life expectancy, the DB plan realizes a **15% cost savings** over the DC plan. In technical terms, this is called "longevity risk pooling."
2. **DB Plans Stay Forever Young.** Individuals age. Therefore, those in individual retirement plans must adjust their asset allocation to ensure sufficient cash is on hand to last throughout retirement. Most financial advisors counsel downshifting from higher risk/higher return investments to lower risk/lower return investments as they get older. This protects individuals from the risk of a stock market crash, but progressively reduces the investment returns that can be earned in retirement piggybanks. However, a DB plan exists across generations and therefore can always maintain the most optimal asset allocation. There isn't a need to be overly weighted in lower return/risk bonds or cash. This results in a **5% cost savings** over the DC plan.
3. **DB Plans Achieve Higher Investment Returns.** The higher returns of DB plans as compared to individual accounts can be attributed a combination of professional asset management and lower fees. A retirement plan that earns greater investment returns will require less money in contributions. Even seemingly small differences in annual returns compound over time. In our model, a 1% difference in annual investment returns results in a **26% cost savings** over a career, as compared to the DC plan.

Summary

"A Better Bang for the Buck: The Economic Efficiencies of Defined Benefit Pension Plans," makes it clear that the embedded economic efficiencies of DB plans enable them to deliver the **same benefit at nearly half the cost of DC plans, or a 46 percent cost savings**. While the efficiencies of DB plans are well documented, this report is important in terms of quantifying the magnitude of those efficiencies.

The report's findings also serve as a myth buster to conventional wisdom with respect to the fiscal efficiencies and costs of DB pension plans. In fact, **DB plans are the most fiscally efficient means of providing a modest but stable retirement income that cannot be outlived**. DC plans are important to the retirement security equation, but they were not designed to stand on their own.

Policy and decision makers can utilize this data to make informed decisions about retirement security issues and to evaluate claims that DC plans save money. The report concludes that DB plans should remain a centerpiece of retirement income policy and practice, especially in light of current fiscal and economic constraints facing corporate and government retirement plan sponsors.

FAQ



NATIONAL INSTITUTE ON
Retirement Security

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A Better Bang for the Buck The Economic Efficiencies of Defined Benefit Pension Plans

Why this report?

For a number of reasons, retirement security has been at the forefront of policy discussions and media attention. Millions of baby boomers are approaching retirement with inadequate retirement assets. At the same time, home values have plummeted, the market/401(k) accounts have taken a nosedive, and consumer prices and inflation have skyrocketed.

Unfortunately, inaccurate and incomplete information about defined benefit (DB) retirement plans has colored retirement policy discussions. In particular, claims have been made that 401(k)-type individual defined contribution (DC) plans are less expensive than DB plans.

"A Better Bang for the Buck: The Economic Efficiencies of Defined Benefit Pension Plans" was published to assess the embedded economic efficiencies of DB plans and then make an "apples-to-apples" calculation of the actual dollar contributions required for a DB and DC plan to achieve the same target retirement benefit.

The report is a myth buster. The findings indicate that a DB pension plan can deliver the same level of retirement income to a group of employees at nearly half the cost - 46% lower - than a DC account.

How was the study conducted?

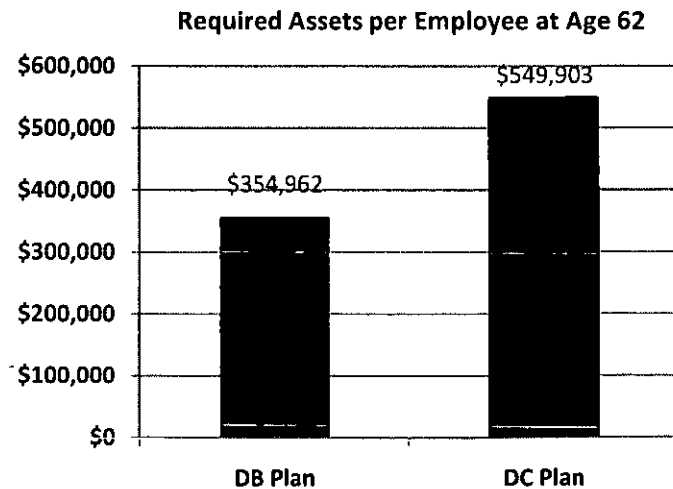
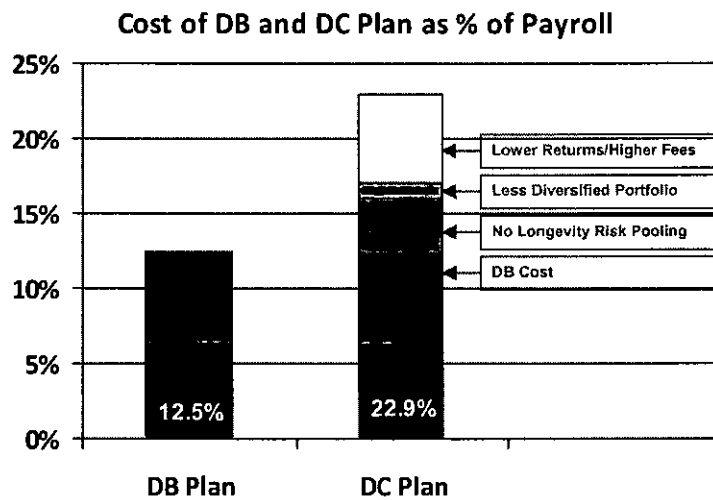
In "Bang for the Buck," we developed a model that makes an "apples to apples" calculation of the actual dollar contributions required for a DB and DC plan to achieve the same target retirement benefit.

The model is based on a group of 1,000 newly hired 30 year old female teachers who work for a total of 30 years and retire at age 62 with a final salary of \$50,000. The target annual pension benefit for the model is \$26,684 annually, or \$2,224 monthly with cost of living adjustments. Together with Social Security benefits, each teacher in the model can expect to receive roughly 83% of her pre-retirement income, which meets the accepted standards of retirement income adequacy.

What are the key findings?

The DB plan provides a better bang for the retirement buck. Under the model, the DB plan provides the same retirement income at nearly half the cost of individual 401(k)-type defined contribution accounts - specifically, a 46% lower cost.

The DB plan needs contributions of 12.5% of payroll each year in order to reach the target benefit level. It needs to set aside \$355,000 for each worker by the time she turns 62. In contrast, the DC plan requires contributions of 22.9% of payroll each year. It needs to set aside \$550,000 for each participant in the plan by the time she turns 62. In other words, the DB plan can provide the same benefit at a cost that is 46% lower than the DC plan, \$200,000 less per participant.



How is it that DB plans are less expensive than DC plans?

There are three characteristics embedded in DB plans that drive their economic efficiency:

1. **DB Plans Avoid "Over-Saving."** We won't all live to be ninety-five or one hundred. But in an individual plan, many of us will want to save enough to last until very old age to avoid the risk of running out of money. By contrast, a DB plan only has to save for the AVERAGE life expectancy, which is much lower and which actuaries can calculate with a high degree of accuracy. By saving for a realistic average life expectancy, the DB plan realizes a 15% **cost savings**. In technical terms, this is called "longevity risk pooling."
2. **DB Plans Stay Forever Young.** Individuals age. Therefore, those of us in individual retirement plans must adjust our asset allocation to ensure sufficient cash is on hand throughout retirement. Most advisors counsel individuals to downshift from higher risk/higher return investments to lower risk/lower return investments as they get older. This process protects us from the risk of a stock market crash, but progressively reduces the investment returns we can expect to earn in our retirement piggybanks. However, a DB plan exists across generations and can always maintain the most optimal asset allocation. There isn't a need to be overly weighted in bonds or cash. This results in a 5% **cost savings**.
3. **DB Plans Achieve Higher Investment Returns.** The higher returns of DB plans as compared to individual accounts can be attributed a combination of professional asset management and lower fees. A retirement plan that earns greater investment returns will require less money in contributions. Even seemingly small differences in annual returns compound over time. In our model, a 1% difference in annual investment returns results in a 26% **cost savings** over a career, as compared to the DC plan.

How much cheaper are DB plans?

By our calculations, delivering the same retirement benefit is 46 percent less expensive with a DB plan than a DC plan.

In our model, the DB plan can pay for the teachers target retirement income with contributions of just 12.5% of payroll each year, while the DC plan costs 22.9% of payroll each year. In terms of the dollars that must be accumulated, the DB plan can provide the target retirement income with \$355,000 set aside for each teacher by the time each turns 62. In contrast, the DC plan must accumulate \$550,000 per teacher in the plan by the time she turns 62. The DB plan can provide the same retirement benefits even as it accumulates nearly \$200,000 less per participant.

So, why the trend of switching from DB to DC plans?

There is a good deal of confusion about the relative costs and economic efficiencies of DB plans versus DC plans.

While many employers have cited the financial burden of DB plans as their main reason for shifting from a DB to a DC plan, it is important to separate the question of benefit generosity from the question of the economic efficiency of a retirement plan. Our model separates these issues by constructing an apples-to-apples comparison using the same target retirement benefit.

A review of the economic literature also helps in this regard. Researchers have found that when employers move out of DB and into DC plans, they almost always cut the average employee benefit in the process. One study found that between 1981 and 1998 the average employer pension contribution declined from \$2,140 to \$1,404 per employee, while the share of pension contributions attributed to DC plans increased from 23% to 68% in that time period.

Thus, when employers simultaneously reduce their contributions along with the move from DB to DC, they will undoubtedly save money. This does not mean, however, that DC plans are inherently cheaper than DB plans. It simply means that employers are reducing employee benefits while also changing the benefit design. Shifting costs from one party (the employer who reduces contributions) to another (employees who receive less in retirement) does not reduce costs overall.

What are the elements of a secure retirement?

NIRS, along with most retirement experts, believes that retirement security can be achieved with a "three-legged stool" consisting of Social Security, a DB plan, and a supplemental DC savings plan. Workers who have access to all three sources of retirement income are in the best position to achieve a secure retirement.

Although the report indicates that retirement benefits in DC plans are nearly twice the price, the report also indicates that DC plans are essential to the retirement security equation. DC plans enable workers the save for retirement in a manner that reflects their individual situations.

At the same time, there is a dire need to rebuild retirement readiness. This must involve ensuring DB plans remain the centerpiece of retirement income policy and practice. Given current fiscal and economic constraints facing corporate and government retirement plan sponsors, the bang for the buck provided by DB plans is all the more important.

Is there a way to create a “pension renaissance?”

Reviving the pension system for the private sector is imperative in ensuring the nation moves forward and not backward.

Right now, we're on the backward track. Retirement plan coverage is declining, and personal savings are virtually non-existent. Unless we can turn around and leverage the economic and fiscal efficiencies of DB plans, we are doomed to a nation of underfunded individual retirement plans. In the end, Americans will turn to expensive public entitlement programs in their old age or work until they die. Neither option is palatable.

We hope that research such as the Bang for the Buck will provide policy and decision makers with factual data to improve retirement policies and decisions. A pension renaissance can occur by leveraging pension systems that work (such as multi-employer and public pensions) and identifying ways to revive private sector plans.

Who authored and sponsored the report?

The report is published by the National Institute on Retirement Security, a new not-for-profit organization in Washington, DC. NIRS is dedicated to research and education programs that deliver reliable research and sensible solutions related to retirement security matters.

The report authors are Beth Almeida, NIRS Executive Director, and William (Flick) Fonia, Aon Consulting Senior Vice President. Almeida is an economist and was involved with the transition of some 40,000 airline employees out of terminating or freezing pensions into a multi-employer defined benefit pension plan. Fonia is an actuary with nearly 30 years of pension and healthcare experience in the public and private sectors.

##

ISSUE BRIEF
May 2008



NATIONAL INSTITUTE ON
Retirement Security

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Retirement Readiness
What Difference Does A Pension Make?
By Beth Almeida

Introduction

An adequate retirement income can be defined as one that enables an older household to take care of its own needs in retirement. Workers who retire without adequate sources of income may face a range of unattractive choices. Continuing to work may be the first alternative, but if that is not an option due to bad health, lack of appropriate job opportunities or other factors, retirees may become dependent on family or even public assistance programs to meet financial needs.

Most Americans prefer to be able to meet their own needs after they stop working, so the question of how employees achieve retirement income adequacy is a pressing one, not just for individuals' well-being, but for public policy as well. It is probably not surprising that job-based retirement plans make a difference, but the particular importance of traditional pensions, so-called defined benefit (DB) pensions, in ensuring retirement readiness may be underappreciated. DB pensions really do make a difference for working Americans in achieving an adequate standard of living in retirement as a reward for decades of hard work.

This brief reviews the evidence on the role DB pensions play in ensuring that older Americans have the resources they need to be self-sufficient in retirement.

It examines recent trends in pension coverage and discusses the effect these trends have had on the state of retirement readiness

among American workers. Finally, it points in the direction of areas worthy of exploration for policymakers seeking to address specific retirement security goals.

People with pensions are less likely to be at risk in retirement

The desire to remain independent in old age is virtually universal.

The notion that retirees should have the means to be self-sufficient in retirement was a bedrock value on which our nation's decades-long commitment to Social Security was built. While it is well-recognized that Social Security is highly effective at lifting retirees and their families out of poverty, it is also true that this safety net was not designed to enable retirees to maintain their pre-retirement living standards on its own.

Employment-based retirement plans are the key way that middle class workers remain part of the middle class after they stop working. Indeed for retirees with incomes between \$16,000 and \$44,000 per year, income from employment-based retirement plans represents the most significant source of income, after Social Security (Table 1).

The Social Security statistics do not distinguish between income provided by a DB pension and that deriving from defined contribution (DC) retirement savings plans, such as 401(k)s and IRAs. But there is reason to believe that DB pensions, distinct from DC plans, play an especially important role in supporting retirement income adequacy.

**Table 1 Sources of Income Among Households Aged 65 and Older, 2004
Percent Distribution by Source**

	Household Income				
	1 st	2 nd	3 rd	4 th	5 th
	quintile	quintile	quintile	quintile	quintile
	Up to \$10,399	\$10,400 to \$16,363	\$16,364 to \$25,587	\$25,588 to \$44,129	\$44,130 and up
Percentage of income from...					
Social Security/Railroad Retirement	82.9%	83.8%	67.2%	48.5%	19.2%
Employment-based Retirement Plans	3.2%	6.6%	16.0%	24.7%	20.9%
Earnings	1.2%	2.8%	7.1%	15.7%	40.1%
Income from assets	2.3%	3.8%	6%	8.4%	17.8%
Public assistance	8.4%	1.6%	0.9%	0.2%	0.1%
Other	<u>2.0%</u>	<u>1.5%</u>	<u>2.7%</u>	<u>2.6%</u>	<u>1.9%</u>
All income sources	100%	100%	100%	100%	100%

Source: Social Security Administration, 2006

Studies of retirement preparedness typically begin by examining the financial resources that will be available to households when they retire. Such resources may include DB pension benefits, Social Security benefits, and savings accumulated in DC plans and elsewhere. Some studies take an even broader measure, including earnings from work by "retired" individuals, the value of welfare benefits, and the value of home equity, as assets that can be tapped to generate income in retirement.

To gauge retirement readiness, researchers compare the aggregate level of such resources for individual households to some standard. Some researchers rely on a relative standard, like the proportion of pre-retirement income that can be replaced in retirement (replacement rates). An "adequate" replacement rate is typically defined as one that allows a retired household to enjoy roughly the same standard of living as it did before retirement. This standard of adequacy might be deemed to fall anywhere from 65% to 85% of pre-retirement income.¹ Other researchers have used an absolute standard, like the poverty threshold. Obviously, this

¹ A replacement rate less than 100% may adequately allow a household to maintain its pre-retirement standard of living, because some expenses decline in retirement (e.g. payroll taxes, commuting costs and other job-related expenses, and the cost of saving for retirement).

approach encompasses a narrower definition of "needs" in retirement. Using either standard, DB pensions appear to play a special role in ensuring retirement preparedness.

Researchers at Boston College find that those with DB pensions are much more likely to maintain their pre-retirement living standard and thus are less likely to be at risk of inadequate retirement income than those who rely on DC plans or who have no retirement plan to rely on. (Munnell et al 2007 and 2008) Predictably, those with both a DB pension and a DC plan are the least likely to be at risk of having income that falls short. The study labels "at risk" households that are projected to fall more than 10% short of achieving a target replacement rate designed to maintain pre-retirement living standards.

For households approaching retirement today, about one in three are at risk of falling short. But among those with a DB pension plan, just 15% are "at risk" and just 12% of those that can count on both a DB pension and a DC plan are "at risk." Fully half of households approaching retirement that do not have any type of retirement plan are deemed "at risk." The risk-reducing effects of DB pension plans are consistent across age groups - from the Early Baby Boomers through Generation X (Table 2).

Table 2 Percent of Households "At Risk" at Age 65
by Birth Cohort and Retirement Plan Coverage

Retirement Plan Coverage	Early Boomers Born 1946-1954	Late Boomers Born 1955-1964	Generation X'ers Born 1965-1972
All households	35%	44%	49%
Households with both DB pension & DC plan	12%	21%	25%
Households with a DB pension plan	15%	20%	30%
Households with a DC plan	49%	52%	48%
Households with no retirement plan	50%	60%	65%

Source: Munnell et al 2007

Likewise, a 2007 Federal Reserve study finds that DB pension plans are highly effective at ensuring that retirees have sufficient resources to support themselves. (Love et al 2007) This study uses an absolute standard of retirement income adequacy (i.e. the poverty line or "near-poverty," defined as 1.5 times the poverty line). It finds that fully 96% of households that can count on receiving DB pension benefits will have sufficient income to exceed the poverty line.² 83% of DB pension recipients will have income in excess of 1.5 times the poverty line. Households that rely on DC plans face higher risks of hardship than those with DB pensions. 10% of DC plan households will have income below the poverty line and 26% will be either poor or near-poor, with income below 1.5 times the poverty line.

Considering that only four in ten household in the Federal Reserve study have DB pensions, whereas about half have DC plans, the stronger poverty-reducing impact of DB pension plans may be surprising. However, it

² It is well recognized that the official "poverty line" is a problematic and somewhat arbitrary standard. The "poverty line" is based on a measurement developed in 1964 that fails to accurately account for dramatic changes since that time in the costs of health care, housing, and other items. For this reason, researchers will often use a threshold of 1.5 times the poverty line as a better measure of income adequacy. This is supported by research in the field of gerontology which indicates that elder households may need income of 1.5 to 3.0 times the poverty line in order to meet even the most basic needs. (Russell Bruce and Conahan 2006)

is less surprising when one takes into account the fact that the median wealth held in a DB pension plan is about two times larger than the median holdings in DC plans and IRAs.³ This indicates that DB pension plans tend to be better at ensuring employees are able to accumulate adequate resources for retirement.

Features of DB pensions enhance retirement income adequacy

What is it about DB pensions that makes them so effective at ensuring retirement income adequacy, as compared with DC plans? Certainly, DB plans share common features with DC plans. For instance, they both are employment-based plans that make preparing for retirement easier than if employees had to tackle the job completely on their own. Both DB pensions and DC plans benefit from tax incentives designed to encourage retirement preparedness. Both types of plans are governed by laws designed to protect employees and their benefits. But there are certain features that are distinctive to DB pensions that seem to make a significant impact on retirement readiness.

³ Although DB pensions typically pay a regular income for life, researchers typically translate this expected stream of income into a stock of wealth to make the benefit comparable to retirement savings accounts, such as 401(k) plans. In essence, researchers calculate the amount of savings today that would, together with interest, pay the same regular income stream in the future.

DB pensions provide broad-based coverage. In other words, if an employee meets the eligibility requirements of the plan, she is automatically included in the plan and will earn benefits without having to actively make any decisions. By contrast, DC plans often require an employee to enroll, make decisions about how much to save, and direct their own investments.

Research tells us that despite employees' best efforts, workers generally fail to save enough, make poor asset allocation and investment decisions, and are reluctant to purchase annuities with the retirement wealth they do manage to accumulate - even when doing so could enhance their well-being. (Benartzi and Thaler 2007; Mitchell and Utkus 2004; Munnell and Sunden 2004) Simply put, research suggests that the average worker is not cut out for a "do-it-yourself" retirement plan.

Recent changes in DC plan regulations under the Pension Protection Act of 2006 have made employers more willing to set up "default" participation and investment rules in their DC plans, whereby even if the employee makes no affirmative decisions, he will be automatically enrolled in the plan and his savings will be directed to a default investment. The hope is, this will improve the outcomes for participants in DC plans, but it is far too soon to reach any conclusions and in light of the poor state of Americans' retirement readiness, the stakes are high.

DB pensions provide secure money for retirement. Just as important as what DB pensions do is what they do not do. Generally, the inability of individuals to tap funds in their DB pensions (either via a withdrawal or loan) means that money set aside for retirement is more likely to actually be used for its intended purpose. This is an important distinction from 401(k) plans, 87.5% of which permit participants to borrow from their retirement accounts. (PSCA 2007) Likewise, individuals can withdraw assets from 401(k) plans and IRAs before retirement age. According to one conservative estimate, some 10% of retirement wealth is lost because of this "leakage" of money from DC plans. (Englehart 1999)

DB pensions provide professional asset management. Because assets in DB pension plans are pooled together and managed by professionals, it should not be surprising that DB pension plans tend to achieve better investment returns than individuals. According to one estimate, the gap is huge - over an eight-year period, DB pension plans outperformed DC plans by an average of 1.8% per year. The impact of such under-performance over a career is staggering. At the end of 25 years, the effect of a 1.8% difference in annual return translates to a reduction in the size of an individual's savings by 34%. (Flynn and Lum 2007) Expressing this in dollar terms, a 34% reduction would shrink a \$150,000 nest egg to a much smaller \$99,000.⁴

DB pensions provide a lifetime income. A predictable income that cannot be outlived is an essential element of retirement security. Private sector DB pensions are required by the Employee Retirement Income Security Act (ERISA) to offer annuity benefits - that is a series of monthly payments that last a lifetime - as the standard form of payment. DB pension plans offered by federal, state and local governments also pay annuity benefits, even though they are not required by ERISA to do so.

The availability of an annuity benefit means that retirees with income from a DB pension have an easier time budgeting for their regular expenses, because the size of their pension check does not fluctuate with interest rates or the stock market. As will be discussed in greater detail, older Americans appear to be having a difficult time spending down their retirement savings in DC plans in an optimal way. This indicates that the predictable, monthly, lifetime benefit provided by DB pensions has great value that may be underappreciated. Indeed, retirees tend to be happier and report greater levels of satisfaction when they have a predictable, guaranteed source of retirement income like a DB pension or annuity, on top of Social Security. (Panis 2004; Sondergeld et al 2002; Metlife 2002)

⁴ With \$150,000 in a DC plan at retirement at age 65, an individual could purchase an annuity that would pay about \$865 per month, every month, for life, with protections for a surviving spouse. A \$99,000 nest egg would provide an income of only about \$570 per month.

DB pensions provide special protections for spouses. Beyond the basic requirement to offer a lifetime stream of income, ERISA goes a step further in providing special protections for spouses of married beneficiaries. The law requires that the standard benefit form for married participants is an annuity that continues paying a benefit to a spouse, even after the death of the employee/retiree. The right to receive benefits in this form can be waived, but only by the spouse. Federal, state and local government DB pension plans typically provide similar spousal benefits. Considering their longer life expectancy, spousal protections are especially important to women's economic security in retirement. (Shaw and Hill 2001)

Recent trends in DB pension coverage raise concern

In recent years, many employers in the private sector have shifted away from offering DB pensions in favor of DC plans. Evidence indicates that this shift has not only been one of form, but one of substance as well. Specifically, the shift has involved a reduction in the amount of money being set aside for retirement, leading to a reduction in retirement wealth for the typical worker.

Ghilarducci and Wei (2006) find that the shift from DB pensions to DC plans was associated with a reduction in employer spending on retirement plans. Specifically, they find that a 10% increase in the use of DC plans reduces employer retirement plan costs per worker by 1.7-3.5%. This suggests firms have used DC plans to reduce retirement plan expenditures, meaning fewer dollars being directed by employers into retirement plans.

Unfortunately, it does not appear that employees are digging deeper into their household budgets to save more in response to employers' reduced contributions to retirement plans. Instead, the shift from DB pensions to DC plans appears to be having a negative effect on the typical household's retirement readiness.

Sorokina et al (2008) find that retirement wealth for households approaching retirement actually fell between 1992 and 2004, a period that saw DB pension coverage drop and the proportion of the workforce

covered by DC plans surge. In 1992, about three-fourths of those with a retirement plan at work were covered by a DB pension plan, or a combination of a DB pension plan *and* a supplemental DC plan. By 2004, this proportion had fallen to 57%.

The authors find that the shift from DB pensions to DC plans was accompanied by a significant reduction in total retirement wealth. Although the average household's DC wealth grew from about \$35,000 in 1992 to about \$48,000 in 2004, DB pension wealth for the average household declined from over \$92,000 in 1992 to just over \$65,000 in 2004. Thus, total retirement wealth declined from about \$127,000 to roughly \$113,800 - an 11% drop.

Many Americans will fall short in retirement without DB pensions

Plenty of evidence suggests that recent trends in DB pension coverage will leave large numbers of American families under-prepared for retirement, with insufficient resources to meet their needs.

The afore-mentioned Boston College studies find that between 44% and 61% of households are at risk of being unable to maintain their living standards in retirement, even if they work to age 65, plan to consume all their financial assets, and take out reverse mortgages to "monetize" their housing wealth. (Munnell et al 2007 and 2008)

The Federal Reserve study cited earlier finds that 12% of Americans currently aged 51 and older will fall below the poverty line, and that another 9% will be "near poor" even after accounting for receipt of public assistance, wages from work, and the consumption of all wealth (including housing wealth) over one's expected lifetime. (Love et al 2007) That two in five elder households will struggle financially, even after taking into account the receipt of public assistance, is certainly cause for concern.

The findings of these two studies are even more alarming in light of the fact that most households do not or cannot effectively "monetize" their housing wealth. Despite the increasing awareness and availability of reverse mortgages that could allow older

Americans to convert their home equity into cash that can be spent to meet retirement income needs, high fees and other obstacles have limited this option. (Sinai and Souleles 2007) This suggests these studies may be underestimating the degree of retirement income inadequacy.

Nor do households seem to be having an easy time drawing down savings that have accumulated in DC plans. The Boston College and Federal Reserve studies assume that households "annuitize" - convert into lifetime streams of income - their financial wealth, but in practice this tends not to happen. Although employers that offer DC plans could provide annuity payout options, they rarely do. (Perun 2007)

Rather, households appear to be trying, not always successfully, to draw down their retirement savings on their own. A recent study by the Employee Benefit Research Institute found that large numbers households seem to be drawing down these funds too quickly, raising the risk that they will deplete their savings before they die. (Copeland 2007) And at the other extreme, there is evidence that retirees may be holding on to DC plan assets too tightly. (Copeland 2007; Love et al 2007) While drawing down assets "too slowly" may be less of a public policy concern than spending them too fast, it does mean that some retirees' standard of living is lower than it could (or should) be. This phenomenon could be due to a lack of knowledge about how to draw down assets in an optimal way, or to psychological factors, whereby retirees, fearful of depleting their savings, deprive themselves of things they want or need. Either way, retirees' difficulties in making the leap from saving for retirement to spending in retirement have real consequences for their living standards.

Restoring Retirement Readiness

The evidence is clear - DB pensions provide, as a practical matter, the best path to retirement readiness for ordinary Americans. The shift away from DB pensions in recent years has coincided with a decline in retirement wealth for the typical household, reducing retirement readiness and increasing the risk of hardship in old age. This means

fewer working families will have a good chance of maintaining a middle-class living standard in retirement.

Thus, rebuilding the promise of retirement security will mean protecting, strengthening, and expanding DB pension coverage for American workers. In the short- to medium-term, policy makers should focus on ways to shore up existing DB pension plans. This will require a fine balance between making sure that employers have the right incentives to maintain their DB pension plans, but also contribute enough to the plans so that employees do not have to worry about the security of their promised benefits.

Two initial steps seem necessary to achieve this balance. First, the rules governing the funding of private sector DB pension plans should be re-examined. In addition, models of DB pension plan design that insulate employer contributions from shocks, that reduce the possibility of large swings in annual contributions, and that secure employees' retirement benefits deserve a second look. Such designs include, but are not limited to multiemployer DB pension plans in the private sector and multiple employer public sector pension plans.

In the longer term, identifying channels through which new plans can be established or existing plans can be expanded will be necessary. Some of the initial lessons from recent experience in the U.S. and abroad point the direction towards some promising policies. Common to all of these approaches are the pooling of funds across employers, industries and occupations and the role of the government in serving as an incubator for new, well-functioning, secure pensions.

Future research and policy analysis from the National Institute on Retirement Security will explore these themes and others in greater depth. A key goal of our work is to inform the public policy debate around issues of retirement security in the U.S. In light of some of the trends described herein, there is much at stake. The ability of millions of ordinary Americans to sustain their middle-class standards of living into their retirement years is one we as a nation cannot afford to ignore.

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About NIRS

National Institute on Retirement Security is a non-profit research institute established to contribute to informed policy making by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole. NIRS works to fulfill this mission through research, education, and outreach programs that are national in scope.

ISSUE BRIEF

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NATIONAL INSTITUTE ON
Retirement Security

Reliable Research. Sensible Solutions.

Patience is a Virtue

Asset Allocation Patterns in DB and DC Plans

By Ilana Boivie and Beth Almeida

Introduction

Public and private retirement funds represent a considerable source of capital in U.S. financial markets. In 2007, retirement plans held close to \$9 trillion in assets. Such retirement plans encompass traditional pension plans, also called defined benefit (DB) plans, where assets are invested and managed on a group basis, and defined contribution (DC) plans, where individuals typically direct investments on their own. This Issue Brief examines how these plans invest their assets and how these investments have changed over time.

The past few decades have witnessed significant changes in retirement plan coverage, especially in the private sector. Traditional pension coverage in the private sector has decreased drastically in recent decades. Today, while 80% of state and local government workers are covered by traditional DB pension plans, only 14% of workers in the private sector are covered by DB plans. DC plans, on the other hand, are the primary retirement plan for 10% of state and local employees, but a full 64% of private employees. (Munnell, Haverstick & Soto 2007)

We examine whether the move from DB to DC plans has had an impact on the way retirement assets are invested. Individual investors, for instance, may have a shorter term investment horizon than DB plans. This raises questions about the risk exposure and investment performance of DC plans relative to DB plans. The shift from DB plans to DC plans may have reduced the supply of patient capital over time, meaning that businesses may have a harder time than in the past getting the financing for long-term productive investment projects.

Key Findings

Using data from the Federal Reserve's Flow of Funds database and other sources, this issue brief finds that:

- Investments of public sector pension plans and private sector DB plans closely resemble each other. In 2007, both types of plans allocated 63% of their assets to corporate stocks, compared to a direct stock allocation of only 37% for DC plans.
- Over the past decades, public sector pension plans have increased their equity allocation to catch up with their private sector counterparts. In 1985, public sector DB plans allocated only 29.9% of their assets to corporate stocks, while private sector DB plans already held 42.3% of their assets in corporate stocks. Private sector DC plans lowered their direct stock holding over the past two decades.
- Legal and regulatory obstacles to portfolio diversification have been reduced over time. This has allowed public sector plans to better balance their asset allocations with their long-term investment goals.
- Defined benefit plans are more long-term investors than DC plans. DC plans shift their allocation to and from corporate stocks more frequently than their DB plan counterparts do. This raises serious questions about the overall risk embedded in individual accounts, the consequences for retirement security and the availability of long-term financing for productive business investments.

Defined Benefit Plans Hold More of Their Assets in Corporate Stocks

The primary focus of any discussion on portfolio allocation is the degree to which assets are spread among a range of assets, including higher return/higher risk assets, such as corporate stocks. This is because incurring some risk will allow investors to take advantage of higher rates of return, especially over long periods of time. Also, if the risk in one asset is unrelated to the risk in another, the allocation to one asset offers some insurance against a decline in the value of other asset classes. That is, diversification into a number of different assets can help to substantially improve retirement income security by enhancing investment returns. Corporate stock returns fluctuate because they help to finance long-term, uncertain business investments. These investments are critical for productivity, economic, wage and profit growth over time. Without financial investors, such as retirement plans willing to take some risk in their portfolios, businesses could not finance their longer-term projects and economic growth may be slower than would be otherwise the case.

The data show that DB plans have most of their assets allocated to widely dispersed holdings of corporate stocks. Table 1, calculated from Flow of Funds data from the Federal Reserve Board of Governors (2007), shows the dollar value of assets by asset class for public sector plans, private sector DB plans and private sector DC plans. It also shows the percent of total assets allocated to each class for each type of plan. Table 1 shows that for each type of plan, assets

are spread across a range of different types of investments. Public plans and private sector DB plans look quite similar in terms of the percentage of assets allocated to each category. This is probably not surprising considering that in 2006, 95% of funds in public plans were DB plan assets. (BOG 2007 and Census 2007)

Private sector DC plans are more reliant on mutual funds and "other investments" (a category that includes insurance contracts and municipal securities) than public plans or private DB plans. DC plans also hold more liquid assets than other types of plans.

Pension Plans' Diversification Reflects Tenets of Modern Portfolio Theory

At a high-level, then, retirement plans appear to be broadly diversified. Such a pattern of diversification reflects the tenets of modern portfolio theory, which was first introduced by Harry Markowitz in his 1952 paper "Portfolio Selection." This theory states that rather than focusing on the risk and return of any individual stock or asset, an investor should instead concentrate on ensuring diversification of assets across the entire portfolio. Markowitz found that what he called the expected return-variance of return rule "implies diversification [and] leads to efficient portfolios almost all of which are diversified." (Markowitz 1952) In other words, the more diversification in one's overall portfolio, the more that overall risk is minimized, and this minimization of risk ultimately provides for greater efficiency of investment.

Table 1
Assets Held in Public and Private Sector Pension Plans, 2007
(in billions of dollars)

	Cash and Liquid Assets	Treasury and Agency Debt	Corporate and Foreign Bonds	Stocks	Mutual funds	Other Investments	Total
Public Plans	\$64	\$534	\$249	\$1,981	\$296	\$16	\$3,139
Private DB	\$55	\$254	\$212	\$1,471	\$226	\$116	\$2,334
Private DC	\$160	\$161	\$101	\$1,296	\$1,385	\$378	\$3,480
(as a percent of total)							
Public Plans	2%	17%	8%	63%	9%	1%	100%
Private DB	2%	11%	9%	63%	10%	5%	100%
Private DC	5%	5%	3%	37%	40%	11%	100%

Source: *Flow of Funds*, (BOG 2007). Stocks include both foreign and domestic equities.

The seminal role of modern portfolio theory was recognized in 1990 when Markowitz, along with Merton Miller and William Sharpe, received the Nobel Prize in Economics for his work on the subject. Since 1952, other researchers have built on the foundations laid by modern portfolio theory and the field has developed sophisticated techniques to assist investors in designing "optimal portfolios," which balance the tradeoffs between risk and return embedded in any range of investment options. Researchers continue to verify the importance of portfolio diversification as a tool to manage risk. (See Abdelazim & Wahba 2006; Teulings & de Vries 2003; Elton & Gruber 1997)

In DB plans, where investment decisions are made by professionals, we would expect asset allocations to reflect this tenet of portfolio diversification, especially because different asset classes have different roles to play within a portfolio in order to best diversify overall risk. A discussion of the various asset categories and the role they play in a diversified portfolio appears in the Appendix to this brief.

DC plans, where asset allocation decisions are made by individuals, appear diversified at a high level, but as we will see, these data mask how assets are allocated at the individual account level.

Stock Allocations in Public Plans Have Caught Up to Private Plans

The manner in which retirement plans allocate their assets has changed over time. Table 2, calculated from the Flow of Funds, presents asset allocation data for public and private sector pension plans starting in 1985, at five-year intervals, and ending with the most recent year, 2007. Historically, as shown in Table 2, both public- and private-sector retirement plans have invested in a broad range of assets.

In 1985, the largest differences in asset allocation were between private- (both DB and DC) and public-sector plans, largely because of restrictions which hampered diversification in public plans. That year, public-sector plans tended to invest much more heavily in bonds and less heavily in stocks and other investments, as compared with private plans.

However, each type of plan allocated the largest proportion of assets to stocks. Private DB plans designated 42.3% of funds to stocks, similar to private DC plans' 41.7% allocation. Public sector plans allocated just 29.9% of funds to equities. All types of plans invested only a small percentage of assets in mutual funds, at 0.7% of funds for private DB plans, 1.2% for private DC plans, and 1.7% for public plans.

Table 2

Asset Allocation of Public and Private Sector Pension Plans, 1985-2007
(% of Assets)

	<u>Cash and Liquid Assets</u>			<u>Treasury and Agency Debt</u>			<u>Corporate and Foreign Bonds</u>			<u>Stocks</u>			<u>Mutual Funds</u>			<u>Other Investments</u>		
	Private DB	Private DC	Public	Private DB	Private DC	Public	Private DB	Private DC	Public	Private DB	Private DC	Public	Private DB	Private DC	Public	Private DB	Private DC	Public
1985	7%	12%	6%	21%	13%	32%	10%	5%	27%	42%	42%	30%	1%	1%	2%	20%	27%	4%
1990	8%	12%	4%	25%	9%	33%	12%	7%	20%	38%	36%	39%	1%	5%	1%	17%	31%	3%
1995	6%	6%	4%	19%	6%	23%	12%	4%	14%	47%	40%	53%	5%	20%	5%	11%	24%	2%
2000	5%	5%	3%	12%	5%	18%	10%	3%	14%	54%	36%	57%	12%	36%	8%	8%	15%	1%
2005	2%	5%	2%	12%	4%	17%	9%	3%	8%	61%	38%	63%	11%	38%	9%	5%	12%	1%
2007	2%	5%	2%	11%	5%	17%	9%	3%	8%	63%	37%	63%	10%	40%	9%	5%	11%	1%

Source: Flow of Funds, (BOG 2007)

Notes: Because of rounding, figures may not sum to 100%. Authors' calculations based on Flow of Funds (BOG 2007)

The different types of plans diverged the most during this time on allocation to "other investments" (which included investments like real estate as well as insurance contracts and municipal securities). Private DB plans invested 19.6% and private DC plans invested 27.3% in these assets, while the public sector invested only 3.9% of funds in these "other investments."

Plans also differed on allocations to corporate and foreign bonds with public plans investing more heavily, with 26.7% of assets in bonds, compared to just 9.8% for private DB plans and 4.5% for private DC plans. The same pattern held for treasuries and agency debt (32.3% for public funds, 20.5% for private DB and 12.7% for private DC).

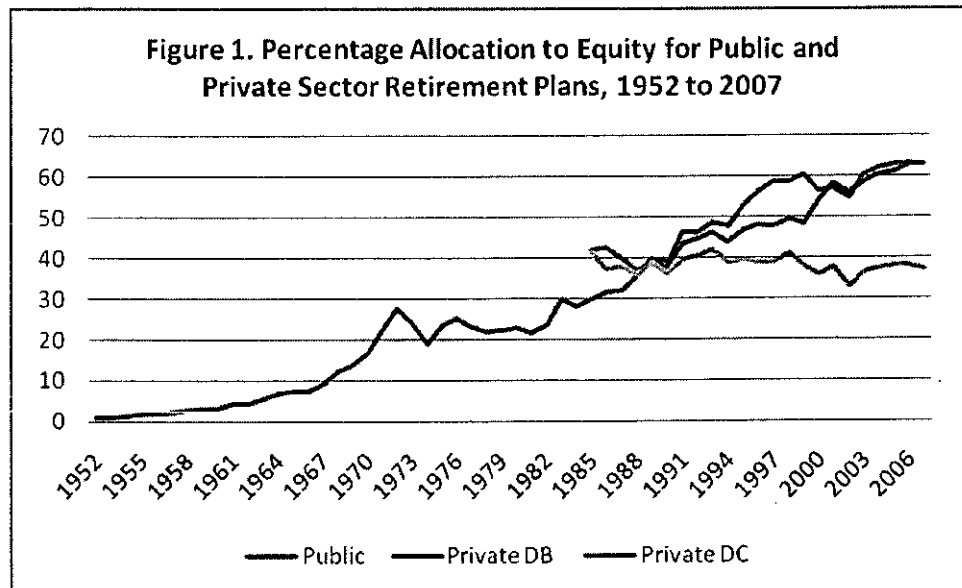
By 2007, the picture had changed. The largest discrepancy was no longer between public and private funds, but rather between DB and DC plans. Public sector plans' asset allocation closely mirrored that of private sector DB plans, with both types invested most heavily in stocks. The proportion of funds allocated to stocks increased substantially, to 63.0% for private DB and 62.9% for public plans. Private DC plans, meanwhile, reduced their allocation to stocks, to 37.2% of assets, but dramatically boosted their allocations to mutual funds. Also, the large discrepancy between the public plans and private DB plans' allocations to corporate and foreign bonds that existed in the 1980s virtually vanished: private

DB plans allocated 9.1% and public plans invested 8.2% of funds to this asset class in 2007. Again, private DC plans differed, allocating just 2.9% to corporate and foreign bonds in 2007.

Since the 1980s, then, we have seen a steady convergence in asset allocation patterns of public plans and private sector DB plans, with the result that in 2007 public and private DB plans look very similar. Private sector DC plans have notably different asset allocations, in particular with their much heavier reliance on mutual funds. It should be noted that this period, 1985 to 2007, witnessed a virtual explosion in private sector DC plan participation. Assets in such plans grew from \$431.7 billion to almost \$3.5 trillion.

Legal and Regulatory Changes Have Enhanced Plans' Diversification

Public pension plans have been steadily increasing the proportion of stocks in their portfolios over time. As far back as 1953, only 1.5% of public plan assets were allocated to stocks, but by 2007 stock allocation had increased to 60.3%—a level on par with private-sector DB plans. (BOG 2007) Figure 1 shows the percentage of portfolio funds allocated to equity since 1952 for public-sector plans, and since 1985 (the first year data is available) for private DB and DC plans.



Source: Flow of Funds (BOG 2007) and authors' calculations.

Public pensions' transition to portfolios more heavily weighted toward equities has been gradual and occurred over a period that saw these plans move from operating more as pay-as-you-go systems (in which, similar to Social Security, current contributions to the system pay for current retirees' benefits) to pre-funded entities (in which each employee's pension is funded throughout his/her career). In 1952, the public plan system held just \$6.6 billion in assets; by 2007, having fully moved to a pre-funding system, public plans held \$3.1 trillion in assets. (BOG 2007)

Along with the move to pre-funding came a series of legislative adjustments to lower restrictions on public plans' investment options. Up to that time, many public plans' investment activities were strictly constrained by "legal lists" and other legislative dictates. (Mitchell et al. 2001) Although these funds were restricted by state legislation from owning certain securities at one time, eventually, "under pressure by local lobbying from public funds and faced with data showing the relatively poor returns earned by such restricted funds, [many] states amended their rules." (Wallace 1983) With these two changes, public pension plans began shifting to a longer-term view of investment allocation, and thus moved more into equity. (Logue and Rader 1998) That is, public sector DB plans were finally able to "catch up" to the private sector in diversified, efficient asset allocation, resulting in "high returns earned in financial markets, especially domestic equities." (Mitchell et al. 2001)

Turning to private sector DC plans, the period 1985 to 2007 witnessed substantial change. In 1985, 401(k) plans had not yet been widely adopted. At that time, assets in private sector DC plans stood at \$432 billion, with many DC plans set up as Employee Stock Ownership Plans (ESOPs). ESOP adoption peaked in 1993. (National Center for Employee Ownership 2008) Employers preferred ESOPs because they gave them the ability to leverage plan assets, which ultimately decreases the tax burden of the company. (Munnell & Sunden 2004)

The mutual fund industry grew up along-side the growth of DC plans, as mutual funds seemed to represent the "logical investment for 401(k) plans." (Munnell & Sunden 2004) That is, with most employers electing not to bear the responsibility of managing DC plan assets,

mutual funds stepped in as a way for employees to achieve some diversification in their 401(k) accounts. Today, DC plans are ubiquitous in the private sector, with 58 percent of households depending solely on 401(k) or similar plans in 2001, (Munnell & Sunden 2004) and assets totaling \$3.5 trillion in 2007, (BOG 2007) with investment of these assets almost entirely self-managed.

Changes to Asset Allocations in Public Plans Have Been Gradual and Smooth

Given the differences in investment patterns between plans and the changes in these patterns over time, it may be useful to examine the extent to which changes in asset allocations have been gradual and smooth, versus volatile and unpredictable. Increased volatility may be an indication that investors in one particular type of retirement plan are less patient with their financial investments.

In particular, investors in DC plans may be less patient with their financial investments than DB plans because individuals have a shorter time horizon during which to invest. Importantly, if the shift to DC plans has gone along with more volatile financial market investments in certain assets, it may indicate that businesses may have found it harder to find the necessary long-term financing for their projects through traditional financing vehicles, such as stock issues.

To assess the volatility of the portfolio allocation of a particular type of retirement plan, we calculate the standard deviation (a typical measure of volatility) of the change in the share of assets plans allocate to equity. Table 3 shows these standard deviations, measured on a quarterly basis, since 1952, for state and local plans as well as for private plans.

However, the better measure of volatility in one's portfolio allocation may be the relative standard deviation, considering that both types of plans have seen allocation to equities change over time. The relative standard deviation is the standard deviation relative to the average. In this case, the standard deviation of the quarterly growth rate of the equity allocation for a particular type of plan over a specified period of time is divided by the average growth rate of the equity allocation for that type of plan during the particular time period.

Table 3

**Volatility and Relative Volatility of Asset Allocation
in Public and Private Sector Retirement Plans,
1952-First Quarter 2008**

	Public Sector Plans	Private Sector Plans
Total standard deviation 1952-2008	1.3	1.8
Relative standard deviation 1952-2008	4.8	12.5
Last 30 year standard deviation	1.5	1.6
Relative 30-year standard deviation	4.6	32.2
Last 20 year standard deviation	1.5	1.3
Relative 20-year standard deviation	2.2	12.1
Last 15 year standard deviation	1.5	1.1
Relative 15-year standard deviation	5.2	13.6

Source: Authors' calculations based on data from Flow of Funds (BOG 2007)

Table 3 shows that changes to equity allocations in state and local plans exhibit much lower volatility than private plans. Overall, since 1952, changes to private plans' equity allocations have been nearly three times more volatile, with a relative standard deviation of 12.5, as compared with public plans' 4.8 relative standard deviation.

Even within the last fifteen years—during which public plans have been substantially increasing allocations to equity—the standard deviation of changes to public plan equity allocations is only slightly higher than that of private plans (1.5 versus 1.1), and the relative standard deviation is still significantly lower (5.2 versus 13.6).

These results strongly suggest that changes to equity allocations for public plans have been more stable than those of private plans.

Asset Allocation Changes in DC Plans Have Been More Volatile

Because DB and DC investments have varied so much in recent years, it may also be valuable to analyze the volatility of changes in equity allocations for such plans in the private sector.

Due to data limitations, we can only examine this back to 1985, and only on an annual basis. Results appear in Table 4, which show that changes in equity allocations in DC plans have been much more volatile than those of public plans or private sector DB plans.

Overall, since 1985 all three types of plans showed similar standard deviations, with 0.07 for private DC, 0.06 for private DB, and 0.06 for public plans. The relative standard deviation, however, was just 3.0 for private DB and 1.8 for public sector plans, but a sizeable 473.0 for private DC plans.

Within the last 15 years, the volatility in equity allocations for private DC plans remained similar to the 22-year total, at 0.06, while volatility for other plans declined slightly, to 0.05 for private DB and 0.05 for public plans. The relative standard deviation for the last 15 years shows that even in this shorter timeframe, changes in equity allocations in private DC plans have been much less stable than for other plans, with a measurement of 10.8 for DC plans, compared to 2.0 for private sector DB plans and 2.3 for public sector plans.

Table 4

**Volatility and Relative Volatility of Private DB, Private DC,
and Public Sector Pension Plans, 1985-2007**

	Public Sector Plans	Private Sector DB Plans	Private Sector DC Plans
Total standard deviation 1985-2007	0.06	0.06	0.07
Relative standard deviation 1985-2007	1.8	3.0	473.0
Last 20 year standard deviation	0.06	0.06	0.06
Relative 20-year standard deviation	1.9	2.4	58.5
Last 15-year standard deviation	0.05	0.05	0.06
Relative 15-year standard deviation	2.3	2.0	10.8

Source: Authors' calculations based on data from Flow of Funds (BOG 2007)

Other recent findings corroborate the conclusion that allocations to equity in DB plans may be more stable and efficient than allocations to equity in DC plans. For example, Holden and VanDerhei (2001) found that more than half of all DC plan participants had either no funds invested in stocks, which exposes them to very low investment returns, or had almost all their assets allocated to stocks, making for a much more volatile portfolio. Another diversification shortcoming in DC plans is the issue of company stock. Many employees have large holdings of their own employer's stock in their DC plans. Among large employers, company stock made up 37.6% of assets in DC plans. (Profit Sharing/401k Council of America 2002) The risk inherent in this practice was summed up in the case of Enron, where employees had some 60% of their DC plan assets allocated to their employer's stock, which became worthless when the company crashed. (Munnell & Sunden 2004)

That DC plans exhibit higher volatility in asset allocation than DB plans suggests different investment behavior between individuals and institutional investors. This is perhaps not surprising, considering that public sector plans and private sector DB plans are professionally managed with "considerable financial education, experience, discipline and access to sophisticated investment tools" (Watson Wyatt 2008), while the individualized nature of DC plans means that these rely on self-management.

Such factors may help to explain why DC plans tend to achieve poor investment returns, as compared with DB plans. A 2007 report from the global benchmarking firm, CEM, Inc., concluded that between 1998 and 2005 DB plans showed annual returns 1.8 percentage points higher than DC plans, largely due to differences in asset mix. (Flynn & Lum 2007) And Watson Wyatt (2008) found that between 1995 and 2006 DB plans outperformed DC plans by 1.09 percentage points annually, on average.

Policy Challenges Presented by Asset Allocation Patterns in DC Plans

In light of the explosion in DC plan participation in the private sector, these findings present a challenge. Inefficient asset allocation and the resulting lower investment returns may leave individuals with insufficient resources to meet their needs in retirement.

Research in the field of behavioral finance reinforces these concerns, with findings that most individuals are relatively poor at making investment decisions (van Rooij 2007), and possess "little knowledge of the investment strategies or financial details of their investments." (Capon et al. 1996) Many employees make the mistake of chasing short-term returns, which often leads to the practice of buying high and selling low, and which reduces overall returns, while increasing standard deviation of return. (Watson Wyatt 2008; Keim 2003) Moreover, many individuals understand

that they can be poor investors: a recent survey of 1,000 Dutch citizens found that the "average respondent considers himself financially unsophisticated and is reluctant to take control of retirement savings investment, even when offered the possibility to increase expertise." (Orth 2006)

Also, because DC plans are individually managed, they do not have access to certain asset classes, especially alternative investments such as private equities, hedge funds and venture capital, which require investments in the millions of dollars. Because such alternatives can offer high rates of return that may not be correlated with the returns of other assets, the inability of individuals with DC plans to invest in these assets presents a significant disadvantage to their investment strategies and overall portfolio returns.

Overall, economists and financial analysts generally agree that taking on appropriate risk in one's portfolio is advisable, especially in the long term. (Romaniuk 2006; Campbell & Viceira 2002; Srinivas et al. 2000) Maintaining a reasonable mix of low, medium, and higher risk investments in one's portfolio is both an important aspect of diversification, as well as a prudent and efficient way to maximize returns in the long term. (Romaniuk 2006; Siegmann 2003)

Congress essentially endorsed this principle—that individuals should take on equity risk as part of a diversified portfolio—in its passage of the 2006 Pension Protection Act (PPA). The PPA not only allows employers to automatically enroll employees in a DC retirement plan (PPA Section 902), but also permits employers, under this automatic enrollment, to direct assets to be invested in a "qualified default investment alternative" (QDIA). (PPA Section 624)

Congress explicitly recognized that most individuals have a difficult time effectively managing their own portfolios in its designation of four types of QDIAs allowed under the regulation, which include life-cycle or targeted-retirement-date funds, in which the asset allocation changes based on an employee's age, a professionally managed account, and a balanced fund. (U.S. Department of Labor 2008) These PPA regulations represent a Congressional attempt to encourage enrollment in a retirement portfolio consisting of some risk—but especially in one that is managed, or at least designed, by professional managers.

Conclusion

The evidence indicates that professional asset management provides important benefits for retirement plan participants and the employers who sponsor retirement plans. Economic growth is boosted as businesses tap patient capital for long-term projects. Professionally-directed asset allocations are more likely to reflect an optimal strategy of diversification, generating investment returns that are higher and more stable, thus lowering the costs of delivering retirement benefits and improving benefit adequacy.

Unlike individuals, who must adopt more conservative investment strategies as they age, DB plans, whose participants can include young, middle-aged, and retired individuals, are not bound by such life-cycle based constraints and can remain invested in equities because of their perpetual nature. Thus, the greater stability in asset allocations, or patient capital, among public plans and private sector DB plans may also provide benefits for financial markets as a whole, since professional investors who follow a long-term strategy are less likely to cause market disruptions by chasing short-term returns.

The dramatic shift away from professionally-managed group DB plans in the private sector in favor of individually-directed DC plans raises important policy concerns. Although Congress has taken steps to attempt to foster more efficient asset allocations in individual DC plan accounts, it is too soon to know what effect these attempts may have. Considering the research findings presented herein, any steps by policymakers that can encourage more optimal asset allocations in DC plans are to be welcomed. However, so long as investment decisions in DC plans are directed by individuals, the risk of less-than-optimal asset allocations will still exist. Another concern is that because there is no easy way for individuals to capture the uncorrelated returns offered by alternative investments, it seems that individual DC plan participants will remain at a disadvantage as compared with professionally managed DB plans.

Our findings suggest that the seismic shift from DB to DC plan coverage, at least in the private sector, has been accompanied by equally important shifts in asset allocations. While the ultimate effects are not yet known, these shifts have been significant enough to warrant further study on their potential consequences.

Appendix

The Role of Stocks and Bonds in a Diversified Portfolio

Perhaps the most important way to diversify one's portfolio is between stocks (mainly corporate equities) and bonds (including treasury debts as well as corporate bonds). Bonds, whose returns tend to be more stable than those of equities, can help to reduce the volatility of investment returns, when they are used as part of a diversified portfolio. Stocks are an important asset class for long-term investors because they offer much higher rates of return over longer time horizons, as compared with bonds.¹ (Siegel & Thaler 1997) Mutual funds, which account for a large share of DC plan assets, may be invested in stocks, bonds, liquid assets, or a combination thereof. Mutual funds are a favored way for individuals to invest, because they allow small investors (or even large ones) a simple way to achieve a broadly diversified portfolio. For example, an investor can purchase shares of a S&P 500 mutual fund, which will mimic the performance of all 500 stocks in the S&P index. In 2007, for instance, 74.2% of mutual fund assets were allocated to common and preferred stocks, 8.4% to long-term U.S. government bonds, 8.8% to corporate bonds, 4.1% to municipal bonds, 4.2% to liquid assets, and 0.2% to other investments. (Investment Company Institute 2008) In this way, even a small investor can get a broad, diversified exposure to hundreds of individual stocks. Allocation of assets to both stocks and bonds, either directly or through mutual funds, then, is the most common way to obtain at least a moderately diversified portfolio.

The Role of Other Investments in a Diversified Portfolio

The Flow of Funds "other investments" category comprises assets such as unallocated insurance contracts (including guaranteed investment contracts (GICs) and variable annuities) as well as so-called "alternative investments" such as private

¹ The greater rate of return that equities have delivered, what economists call the "equity premium," can only partly be attributed to stocks greater riskiness. Economists have determined the size of the equity premium is too large to be explained by standard economic models, and have labeled this phenomenon the "equity premium puzzle."

equity, hedge funds, real estate, and commodities. Unallocated insurance contracts are contracts with an insurance company under which payments are accumulated in a fund to be used to meet benefit payments, either directly or through the purchase of annuities. Variable annuities are insurance contracts in which the insurer makes periodic payments, either at present or in the future. GICs are contracts under which, once a lump-sum payment is made, the insurer ensures a relatively high interest rate for a set amount of time. Unallocated insurance contracts "were introduced by insurers to attract large pension funds" (Investments & Income 2008), because they are a good hedge against overall market risk in that, similar to bonds, they offer a fixed rate of return; however, the rate of return is usually higher than that of bonds.

The Role of "Alternative Investments" in a Diversified Portfolio

"Alternative investments" include assets such as such as real estate, commodities, financial derivatives, hedge funds, private equity, and/or venture capital. Real estate and commodities are sometimes referred to as "real" assets, in that these investments are actual physical goods, unlike most financial assets. Commodities—which include agricultural goods and other resources such as crude oil, iron ore, and gold—and real estate both serve as a hedge against inflationary pressures. (Steil 2008) In the face of inflation, when the value of most financial assets decreases, investment in real estate or commodities can protect the real value of one's portfolio. Real estate specifically is commonly believed to show a "strong record of high-return, low-volatility performance," due to its heterogeneity, which is a means, once again, of diversification. (Logue & Rader 1998)

Other alternatives that are used to diversify portfolios, such as hedge funds, private equities and venture capital, have traditionally held a reputation for being higher risk investments with the potential for high returns. However, such investments are often incorporated into a portfolio, not because of higher expected rates of return, but because they can offer uncorrelated returns that are somewhat insulated from stock market shocks. That is, should the market as a whole see a substantial downturn, these alternatives can be somewhat more shielded from showing a large loss than other equities might be, due to their relative independence. (Seco

2005; Phillips & Surz 2003; Indjic & Partners 2002)

This ability—to show just single digit losses in a market decline, for example, when other equities may show double digit losses—can significantly impact a retirement plan's compounded rate of return over time. Thus, in recent years, some DB plans have allocated a small share of assets to "alternative assets." In 2007, for example, a survey conducted of the 52 largest public pension funds reported that the average allocation to real estate was 5.5% of assets, private equity 5.7% of assets, and hedge funds 1.1% of assets. (NASRA 2007)

In order to successfully invest in these "alternative" assets, investors must have a long time horizon and must have a high degree of sophistication to understand these often-complex investments. These factors can make alternatives a sound investment choice for DB plan investors, which have the benefit of professional investment advisors and staffs, very long-term time horizons, and the need and ability to diversify to reduce risk.

Individual investors in DC plans typically do not have the access or the expertise to invest in these types of assets, which may put them at a disadvantage. Data from Watson Wyatt (2008) show that during 2000-2002 market downturn, DB plans outperformed DC plans, in part, because of their exposure to a broader range of assets, including alternatives. The decision to invest a small proportion of one's portfolio in such alternative investments once again follows modern portfolio theory's central principle of diversification. In other words, when DB investors choose to allocate some assets to alternatives, they are employing a reasonable, long-term investment strategy. (James & Karceski 2002)

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About NIRS

National Institute on Retirement Security is a non-profit research institute established to contribute to informed policy making by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole. NIRS works to fulfill this mission through research, education, and outreach programs that are national in scope.

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NATIONAL INSTITUTE ON
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Reliable Research. Sensible Solutions.

Look Before You Leap

The Unintended Consequences of Pension Freezes

By Ilana Boivie and Beth Almeida

Introduction

Americans are increasingly worried about their retirement security in the face of falling home values, turmoil in the financial markets, and general economic instability. This insecurity can, at least in part, be attributed to the fact that fewer workers and retirees are able to count on a secure, predictable monthly pension, as more employers in the private sector have “frozen” participation in their pension plans. The trend away from traditional defined benefit pension plans in the private sector in favor of individual retirement savings accounts (such as those found in defined contribution plans) has left Americans especially vulnerable to the volatility in financial markets.

With the economy becoming weaker, many state and local governments will be facing fiscal challenges in the months and years ahead. These challenges will undoubtedly prompt governments to carefully examine all aspects of their budgets, including pension costs for state and local workforces. Policymakers may be wondering, “Are secure retirement benefits for our employees still affordable?” or “Should we consider shifting to a defined contribution approach?”

This brief explores important factors public employers should keep in mind when making decisions about their retirement programs. We conclude that caution should be the watchword for governments that might be tempted to follow

the trend in the private sector to abandon defined benefit (DB) pensions in favor of defined contribution (DC) plans.

Key Findings

We find that freezing DB plans can have several serious, unintended consequences.

- Freezing a DB pension and moving to a DC plan can increase costs to the employer/taxpayer at exactly the wrong time. This is because ...
 - Maintaining two plans is more costly than operating just one;
 - Forgoing and undermining the economic efficiencies of DB pensions drives up retirement plan costs; and
 - Accounting rules can require pension costs to accelerate in the wake of a freeze.
- Freezing a DB pension and moving to a DC plan can worsen retirement insecurity, potentially damaging recruitment and retention efforts.

Because of this, most states that have studied whether to freeze a DB and switch to a DC plan have found continuation of the DB plan to be in the best interests of employers/taxpayers and employees.

The Anatomy of a Pension Freeze

An employer “freezes” a pension plan when it limits the ability of employees to earn benefits in the plan. An employer may have the option to “freeze” a pension by ending benefit accruals in the plan for all employees (sometimes described as a “hard freeze”), or to close the plan to newly-hired employees only (a “soft freeze”). Generally speaking, employers in the private sector have some latitude in deciding whether and how to freeze a plan. In the public sector, because of differences in the legal protections of benefits, employers are often limited to restricting freezes to new hires (soft freezes). Many employers have established new DC plans (or enhanced existing DC plans) in the wake of a pension freeze.

According to the Government Accountability Office (GAO) nearly half of private sector DB pension plans are currently closed to new entrants.¹ Although employers often establish a new DC plan after freezing a DB pension plan, researchers have found that the replacement DC plans typically offer much less generous benefits than the DB plans being frozen.² Thus, given the high number of firms choosing to freeze their plan, it appears that fewer and fewer workers will receive secure retirement benefits in the future.³ When DB pension plans are frozen, workers can experience grave consequences. Although the precise impact of a DB to DC switch hinges on specific plan provisions and benefit formulas, in general, mid-career and older workers will see the largest reductions in retirement income when a DB pension is frozen and replaced with a DC plan.⁴

In contrast to the unfortunate chill that has settled in over private sector DB pension plans, public sector plans are still faring well. Some 80 percent of public sector workers are still covered by a traditional pension, and, according to a recent GAO report, the majority of public sector pension plans have been fiscally sound, with a funded ratio of 80 percent or higher.⁵ The consulting firm Wilshire Associates found that funding levels for 125 state pension plans increased to 95 percent in 2007 from 88 percent

in 2006.⁶

Despite the health of pension plans in recent years, state or local governments may be looking down the road to a tighter budget environment, especially in these tough economic times. When this occurs, proposals can surface to freeze DB pension plans and switch to DC plans as a way to save money. However, a careful examination of just what a plan freeze entails shows that freezing the plan will typically cause costs to *increase* significantly in the short run—not exactly the desired result for a state or municipality that is already in economic turmoil.

Freezing a Pension Plan Can Increase Costs

Freezing a DB and moving to a DC plan can actually increase costs to public sector employers (and therefore, taxpayers) for several reasons.

First, there is the simple fact that maintaining two plans is more costly than operating just one. State and local governments typically do not have the option of transferring all employees out of a DB plan and into a new DC plan. Because of legal protections, it is often the case that only newly-hired employees may be “frozen out” of a DB plan in the public sector.⁷ This means the employer/taxpayer will have to bear administrative costs for two plans, at least until the DB plan is finally phased out completely, a process that could take many decades as employees in the system complete their careers, retire, and ultimately die.

Second, employers that switch to DC plans will forgo the built-in economic efficiencies inherent in DB plans, and freezing a DB plan will actually undermine the economics of a frozen plan over time. The economic efficiencies embedded in DB plans are substantial and stem from the pooled, professionally managed nature of these plans. DB plans save money by pooling risks and achieving greater investment returns, as compared with DC plans. According to one estimate, a DB plan can provide the same retirement income at about half the cost of a DC plan.⁸ Thus, when a DB plan is frozen and replaced with a DC plan, far greater contributions from both employers/taxpayers

and employees will be required to maintain the same level of benefit in the DC plan.

Of course, employers/taxpayers could save money by cutting retirement benefits, but by forfeiting the economic efficiencies embedded in DB plans, a switch to a DC will entail an even greater reduction in benefits than what would otherwise be required if benefits in the DB plan were modified. Moreover, benefit cuts (whether within a DB plan or as part of a DB-to-DC switch) would not be without repercussions (a point to which we return later).

Worse still, the frozen DB plan will, over time, see its economic efficiency erode. This is because freezing the plan prematurely accelerates the age profile of the plan, which can force changes to how the plan's assets are invested.

To illustrate this process, consider the advice that individuals in DC plans typically receive to gradually change their investment mix as they approach retirement age, forgoing higher return/higher risk assets like equities in favor of lower return/lower risk assets like bonds. While this is done for a good reason (to protect against market shocks later in life) it necessarily involves the sacrifice of some expected return. Unlike individuals, open (i.e. non-frozen) DB plans do not age. An open DB plan will have a mix of younger, middle-aged, and older participants, and for a mature plan, this mix will not change much over time. This means that an open DB plan can achieve better returns by maintaining a more diversified portfolio over time, as compared with individuals in DC plans who must shift to a more conservative asset allocation as they get closer to retirement age. Freezing the plan sacrifices valuable investment earnings employers/taxpayers could have profited from had newer hires still been covered by the plan.

The third reason why freezing a DB plan can drive up costs has to do with the accounting rules that govern public pension plans. These rules can cause an acceleration of required pension contributions—specifically, those to cover “unfunded liabilities”—in the wake of a freeze.

“Unfunded liabilities” exist in a DB plan when the value of assets in the pension trust is smaller than the value of plan's benefit obligations. A gap between the value of the assets in a plan and the plan's obligations can emerge for several reasons. For instance, unexpected events, such as a drop in the value of the fund's assets resulting from a shock to financial markets can lead to unfunded liabilities. But decisions on the part of the employer can also play a role—for instance an employer that fails to make required contributions to the plan, or that improves benefits in the plan without making commensurate contributions to pay for these, can also see unfunded liabilities develop in the plan.

Whether a DB plan is open or frozen, the obligation to pay for benefits earned in the past will remain. However, all the benefits in a pension plan do not become payable right away, because employees will only gradually become eligible to start drawing pension benefits. Accounting rules recognize this fact and allow these obligations to be paid for over time. But the Government Accounting Standards Board (GASB) does have rules prescribing exactly how this may occur.⁹

According to GASB, the payment period to fund these liabilities may be no more than 30 years and payments can be made either in level dollar amounts, or as a level percentage of the projected payroll of the active employees in the plan. In an open plan, payroll can be expected to continue to grow over time, as retiring employees are replaced by new hires, and average pay increases each year.

As a result, payment schedules in open plans can see the dollar amount of payments gradually increase, at the same rate as the growth in payroll. But once a plan is frozen to new entrants, the number of active members in the plan will steadily fall, as individuals retire, meaning an ever-smaller payroll base over which to spread payments. Because of this, accounting rules require that if a plan is frozen to new entrants, either the unfunded liability must be paid in level dollar amounts, or as a level percent of a decreasing payroll.

In practice, this means that payments to retire any unfunded liability in a frozen plan will tend to be more front-loaded, as compared with an open plan that spreads these costs over a growing payroll base. In other words, a pension freeze can have a similar effect of a household refinancing a 30-year mortgage into a 15-year mortgage. By making larger payments sooner, the debt is paid down faster. While a household may have good reasons to want to retire its mortgage debt sooner, it probably would not do so if it was experiencing a temporary economic rough patch. Similarly, accelerating pension payments is unlikely to be a helpful strategy for a state or local government looking for ways to manage through a difficult fiscal environment.

Accounting rule-driven spikes in pension contributions can be significant, as the State of Alaska found out when it froze participation in its DB plans in 2005. The freeze forced additional contributions to the Teachers Retirement System to the tune of 14% of payroll, and required contributions to the Public Employees Retirement System totaled an additional 9% of pay.¹⁰ These amounts were on top of the contributions that were otherwise required.

Ultimately, when the additional costs involved in a DB plan freeze—and a DC implementation—are known and accounted for, such a drastic move can be revealed as not only unnecessary, but as counterproductive.

A DB to DC Switch Can Hurt Retirement Security for Employees, Recruitment/Retention Efforts for Employers

As noted earlier, an employer can obviously reduce its pension costs by reducing the generosity of the benefits it offers, but doing so will have consequences. In theory, reducing employer costs by cutting benefits could be accomplished either by reducing benefits in a DB plan or as part of a switch to a DC plan. But the effect of any given reduction in employer cost will be more severe under a DB to DC switch than if benefits in the existing DB plan were reduced. Thus, a DB to DC plan switch will have a far

worse impact on workers' retirement security. As a result, such a switch will likely have repercussions that impact negatively on recruitment and retention efforts.

The recent experience in West Virginia is instructive. In 1991, the West Virginia Teacher's Retirement System (TRS), a DB plan, was frozen, and all newly hired teachers were put into a new plan, the Teachers Defined Contribution Retirement System (TDC).¹¹ The impetus for the freeze was large unfunded liabilities in the DB plan, which were the result of the failure of the state and many of the county school boards to make required contributions to the pension system for many years. In fact, for some years, from 1979 onward, the state and many of the county school boards failed to match even employee contributions to the retirement fund.¹² West Virginia continued adding new teachers to the TDC plan until 2004; after the state's Consolidated Public Retirement Board realized that many teachers had amassed very little in the way of assets for retirement. The average TDC account balance stood at just \$41,478, with a mere 105 of the 1,767 teachers over 60 years old having accumulated over \$100,000. (An account balance of \$100,000, if converted to an annuity, would provide a very modest monthly income of only about \$600 starting at age 65.) The most common reason cited by the teachers and school personnel for these "pitifully small" balances was their unfamiliarity with investing.¹³ The state, concerned that teachers with inadequate retirement income would require some form of governmental assistance—either in the form of an increased retirement benefit or welfare and Medicaid¹⁴—decided that effective June 30, 2005, all newly hired teachers would be enrolled in the traditional DB pension plan, TRS, which had historically proven to offer greater and more secure retirement income.¹⁵

The enhanced security offered by DB plans appears to be highly valued by public employees. Public employees consistently express strong preferences in favor of DB plans, according to national public opinion polls.¹⁶ And when public sector employees are given a choice between a

traditional DB pension and DC plan, overwhelmingly the workers choose the DB plan.

A mere 3.3% of employees, for example, in the Ohio Public Employee Retirement System (PERS) elected the DC plan over the DB pension when offered, while 63% of Washington State PERS members chose an all-DB plan over the default of a combined DB and DC plan.¹⁷

And, as lawmakers in West Virginia found out, the preference among state employees in favor of DB plans can actually work to the state's financial advantage as well. After the once-frozen DB plan (TRS) was reopened to new hires, the state allowed teachers who had been hired into the DC plan (TDC) to choose whether they wanted to remain in TDC, or switch over to TRS. The state's retirement board had estimated that 10 percent or fewer of younger teachers (under 40 years old) would opt back into the DB plan, given the widely held notion that DC plans are more popular among younger workers. But an overwhelming number of these younger teachers—over 75 percent of them—decided to make the switch back to the TRS. Because so many younger employees made the switch, this had the effect of reducing the cost of re-opening the DB plan. A far cry from its initial \$78 million cost estimate, West Virginia is now estimating that the switch to the DB will actually save the state \$22 million.¹⁸

These revealed preferences for DB plans suggest that the plans are very important in attracting and retaining public sector employees. Thus, experts warn that freezing these plans and switching to DC plans can hamper recruitment, and even result in high turnover rates, labor shortages, increased training costs, and lower levels of productivity.¹⁹

Studies Have Found that Freezing DB Plans and Switching to DC Costs More

Time after time, when states have studied whether to freeze a DB pension plan and move to a DC plan, they have found the cost of switching to be prohibitive. In Kansas, for example, a recent feasibility study found that moving to a DC plan would be significantly more expensive than

a DB system, so a new, modified DB plan was implemented for new hires instead.²⁰

A 2007 study conducted for the Employees' Retirement System of Rhode Island (ERSRI) found that, should the DB plan be frozen, the state would have to substantially *increase* payments to the ERSRI for several years in order to stay in compliance with governmental accounting rules. After some time, the study's authors found, payments to ERSRI may decline; however, they did not take into account any costs of administering or contributing to a replacement DC plan, costs that would undoubtedly offset much of these savings.²¹

In 2005, a similar study examined whether New Mexico should freeze its DB plan and adopt a DC plan for newly-hired teachers. It found that such a move could "not produce 'same or better' benefits," and that the change would result in either a decrease in retirement benefits, an increase in the plan's total cost, deterioration of the funded position of the frozen DB plan, or some combination of these three scenarios.²²

Conclusion

Considering the costs and complexities of freezing DB plans and switching to DC plans, it is perhaps not surprising that most state and local governments have chosen to retain their pension plans. Although some public employers have had to make the difficult decision to reduce benefits because of tight budgetary constraints, they have generally found that modifying benefits within the existing DB pension framework has been the more cost effective option, rather than freezing the pension plan and instituting a new DC plan.

Certainly, the private sector trend of freezing DB plans and moving to DC plans is an unfortunate trend that has had serious, negative ramifications for many workers' retirement security prospects. The current economic turmoil has magnified this insecurity. Luckily, public sector employers can avoid the same regrettable results for their workforces by exercising caution, and allowing the facts to guide decision-making. In other words, policy makers are wise to look before they

leap, since freezing DB plans and switching to DC plans may carry unintended consequences.

Time and again, states that have carefully studied the issue have concluded that, even in tough economic times, continuing to provide retirement benefits via cost-effective DB plans meets the joint interests of fiscal responsibility for employers/taxpayers and retirement security for employees.

Endnotes

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About the Authors

Ilana Boivie is a Policy Analyst with the National Institute on Retirement Security. Prior to joining NIRS, Ms. Boivie worked with the Arrowhead Center at New Mexico State University and at the Center for American Progress in Washington, D.C., conducting economic development and public policy research. Ms. Boivie began her career in publishing, as an editorial associate with *Humanist*, a nationally published bimonthly magazine. Ms. Boivie holds a M.A. in Economics from New Mexico State University, with a concentration in applied econometrics and experimental statistics, and a B.A. in English from Binghamton University, where she graduated Magna Cum Laude.

Beth Almeida is the Executive Director of the National Institute on Retirement Security. Before joining NIRS, she served as assistant director for strategic resources and as senior economist with the International Association of Machinists and Aerospace Workers (IAM) where she was instrumental in transitioning some 40,000 airline employees out of terminating or freezing pensions into the IAM's multi-employer defined benefit pension plan. Earlier in her career, Ms. Almeida led research initiatives at academic centers in Germany, France, and her home state of Massachusetts. She has authored numerous economic and pension publications and is a frequent speaker at academic and industry conferences, both in the US and abroad. Beth earned a B.A. in international business from Lehigh University and a M.A. in economics from the University of Massachusetts Amherst.

About NIRS

National Institute on Retirement Security is a non-profit research institute established to contribute to informed policy making by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole. NIRS works to fulfill this mission through research, education, and outreach programs that are national in scope.

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National Institute on Retirement Security *At-A-Glance*

Overview

The National Institute on Retirement Security is a not-for-profit organization established to contribute to informed policymaking by fostering a deep understanding of the value of retirement security to employees, employers, and the economy. NIRS fulfills this mission by conducting national research and education programs. Located in Washington, D.C., the organization has a diverse membership of organizations interested in retirement security issues such as employee benefit plans, state or local agencies that manage retirement plans, trade associations, financial services firms, and other retirement service providers.

Vision

NIRS seeks to encourage the development of public policies that enhance retirement security in America. Our vision is one of a retirement system that simultaneously meets the needs of employers, employees, and the public interest. That is, one where:

- ❖ employers can offer affordable, high quality retirement benefits that help them achieve their human resources goals;
- ❖ employees can count on a secure source of retirement income that enables them to maintain a decent living standard after a lifetime of work;
- ❖ the public interest is well-served by retirement systems that are managed in ways that promote fiscal responsibility, economic growth, and responsible stewardship of retirement assets.

Approach

High-quality research that informs the public debate on retirement policy. Our research program focuses on the role and value of defined benefit pension plans for employers, employees, and the public at large. We also conduct research on policy approaches and other innovative strategies to expand broad based retirement security.

Education programs that disseminate our research findings broadly. We share our research findings with the public, policy makers, and the media by distributing reports, conducting briefings, and participating in conferences and other public forums.

Outreach to partners and key stakeholders. By building partnerships with other experts in the field of retirement research and with stakeholders that support retirement security, we leverage the impact of our research and education efforts. Our outreach activities also improve the capacity of government agencies, non-profits, the private sector, and others working to promote and expand retirement security.

Leadership

In November 2007, Beth Almeida was named the first executive director of NIRS. With the Board of Directors, Almeida leads the organization's strategic planning, research and education initiatives. During NIRS first full year of operation, she directed the successful completion of six research products that are enhancing the 2American debate on retirement security challenges. She has spoken at numerous conferences from coast-to-coast regarding NIRS research and retirement security issues, and is regularly cited in national, local, trade and international news reports.

Previously, she served as assistant director of strategic resources and as senior economist with the International Association of Machinists and Aerospace Workers where she was instrumental in transitioning some 40,000 airline employees out of terminating or freezing pensions into the IAM's multi-employer defined benefit pension plan. Additionally, she has led research initiatives with the Center for European Integration Studies, the European Institute for Business Administration, and the Center for Industrial Competitiveness. She holds a bachelor's degree in international business from Lehigh University and a master's degree in economics from the University of Massachusetts Amherst.

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SENATOR KIM ELTON

MEMORANDUM

March 2, 2009

To: Senator Linda Menard, Chair
Senate State Affairs Committee

From:  Kim Elton

Re: SB 23, Restoring Public Pensions

I respectfully request a hearing on Senate Bill 23, restoring pensions to police, teachers, fire fighters, and other public employees.

I look forward to discussing the bill with the committee.

If you have questions about scheduling this bill, please feel free to contact Jesse Kiehl in my office at 465-6827.

ALASKA SENATE

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SENATOR KIM ELTON

SB 23 – Restoring Pension Benefits for Public Employees

Sponsor Statement

SB 23 returns guaranteed pensions and retiree healthcare benefits to Alaska teachers and public employees. It will make it easier to recruit and retain teachers, police officers, firefighters, and other public employees.

Analyses by actuaries and the state Division of Retirement and Benefits show that Alaska's defined benefit pensions – paying a guaranteed monthly benefit plus health care for employees with a long record of service – cost the same as the new defined contribution system but provide much better benefits. With SB 23 Alaskans get more benefit for the same cost, strengthening the 1.5 billion retirees contribute to Alaska's economy. A recent study shows the vast majority of pension benefits paid in Alaska come from the public pension systems.

SB 23 hires new employees in the least expensive pension plans – public employee tier III and teacher tier II – instead of risky individual savings accounts. The state already administers these plans for thousands of members, so no new bureaucracy is needed. The bill also allows new employees who already have a defined benefit pension to choose the high-risk accounts within the first 60 days of employment.

A few years ago, Alaska beefed up oversight of the pension system. Now two actuaries analyze the health of the pension funds, there are more frequent experience studies and the state stopped the practice of sometimes paying less than the cost of benefits. SB 23 keeps these smart reforms, making Alaska pensions stronger than ever.

Without the defined benefit of Social Security, teachers and public employees face excessive risk in individual accounts. On average these accounts earn much less than professionally managed pension funds, and pay higher fees. Worse, the state is now paying some employees to attend investing seminars during work hours – instead of doing their jobs.

The K-12 teachers and university professors who educate our children, the police and firefighters who protect our families, and the public employees who serve our state and cities deserve a secure retirement in return for their service.

I respectfully ask for your support.

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SENATOR KIM ELTON

MEMORANDUM

March 2, 2009

To: Senator Linda Menard, Chair
Senate State Affairs Committee

From: Kim Elton 

Re: Sectional Analysis, SB 23

Secs. 1 and 2 Clarify that the Teachers Retirement System defined benefit statutes apply only to employees who participate in the DB plan and did not convert to defined contribution. No employees can participate in both the DB and DC plans.

Secs. 3 and 4 Allow the Alaska Retirement Management Board, rather than the plan administrator, to adjust pension payments for inflation when the financial condition of the TRS trust fund permits, by removing the 105 percent funding ratio requirement.

Sec. 5 Clarifies that the TRS DC statutes apply only to employees who participate in the DC plan and did not convert to DB. No employees can participate in both the DB and DC plans.

Sec. 6 Allows a new employee who is already fully vested in a defined benefit retirement plan other than the Alaska Public Employees Retirement System or TRS to make a one-time, irrevocable election to participate in the TRS DC plan. The administrator must provide information and the employee must choose the DC plan within 60 days of hire.

Sec. 7 Clarifies that the PERS DB statutes apply only to employees who participate in the DB plan and did not convert to defined contribution. No employees can participate in both the DB and DC plans.

Sec. 8 Allow the Alaska Retirement Management Board, rather than the plan administrator, to adjust pension payments for inflation when the financial condition of the PERS trust fund permits, by removing the 105 percent funding ratio requirement.

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Sec. 9 Allows employers that return to PERS after terminating participation to hire employees the same way other PERS employers do, and allows employees to earn service credits in the appropriate tier when working for those employers.

Sec. 10 Clarifies that the PERS DC statutes apply only to employees who participate in the DC plan and did not convert to DB. No employees can participate in both the DB and DC plans.

Sec. 11 Allows a new employee who is already fully vested in a defined benefit retirement plan other than the Alaska PERS or TRS to make a one-time, irrevocable election to participate in the PERS DC plan. The administrator must provide information and the employee must choose the DC plan within 60 days of hire.

Sec. 12 Repeals sections that let employees convert from DB to DC and require employers to match the funds transferred dollar for dollar. Repeals sections related to political subdivisions that participate only in the DC plan. Repeals a requirement that DB employees who refunded contributions from the system and return to work after July 1, 2010 participate only in the DC plan. (Such employees will be treated as new hires.)

Sec. 13 Gives employees hired into the DC plans who have not refunded out of those plans a 90-day period from the effective date of the bill (or until September 1, 2009, whichever is later) to irrevocably convert into PERS tier III or TRS tier II, as appropriate. It also gives them the opportunity to transfer their contributions from the DC plan to the DB plan if they make the switch.

Sec. 14 Sets for the procedure for the conversion election in Sec. 34 and allows the Alaska Retirement Management Board to adopt regulations related to the conversion. The choice to convert is irrevocable, and certain information must be provided to the employee. Employees who transfer receive credited service in the defined benefit plan equal to the lesser of the employee's actual service or the actuarially calculated value of the employer and employee money transferred from the defined contribution account.

Sec. 15 Allows the Commissioner of Administration to adopt regulations to implement and make specific the bill's provisions.

Sec. 16 is an immediate effective date for sections 14 and 15 of the bill.

Changes in SB 23

The Labor & Commerce Committee CS makes the following changes to the bill:

- A new teacher or public employee who is fully vested in a defined benefit retirement plan other than PERS or TRS may choose to enter the Defined Contribution Retirement Plan. (bill sections 6 & 11)
 - An employer must give eligible new hires information about the choice within five days of hire.
 - The new employee must choose the DCRP within 60 days of hire.
- The DCRP as a whole is not repealed.
- Certain parts of the DCRP are still repealed (bill section 12), including:
 - Sections in both TRS and PERS allowing non-vested Defined Benefit Retirement Plan employees to transfer to the DCRP and requiring employers to match the employee's contribution dollar-for-dollar.
 - Sections in both TRS and PERS relating to DB employees who work for political subdivisions of the state that participate only in the DCRP.
 - Session law applying to both TRS and PERS limiting employees who refunded their DB contributions and return to work after July 1, 2010 to participation in the DCRP.
 - Language limiting PERS employers who left the PERS system to participation only in the DCRP upon return. (bill section 9)
- Several statutes are amended or repealed and reenacted to account for the fact that some employees will accrue benefits under the DB statutes, while others will accrue benefits under the DCRP statutes. (bill sections 1,2,5,7, 10)



SENATOR KIM ELTON

Memorandum

TO: Sens. Hoffman and Stedman, co-chairs, and Finance Committee members

FROM: Sen. Kim Elton

RE: Defined Benefit/Defined Contribution

DATE: March 30, 2007

Attached are slightly reformatted charts codifying data provided by Buck Consultants in their letter dated March 19, 2007. The Buck letter responds to requests by the committee to disaggregate by tiers data that previously was dumped into only two buckets for comparison purposes—a defined benefit bucket and a defined contribution bucket. Now we have several buckets of data—four PERS buckets (tiers 1-4) and three TRS buckets.

The normal cost charts for PERS and TRS are easy-to-read comparisons of PERS pension and medical costs by tier and TRS pension and medical costs by tier. The third chart, the accrued liability chart, puts dollar amounts to liabilities by tier.

Here are some demonstrable basics revealed by the Buck data:

- the PERS tier 3 DB employees are just slightly more expensive than the new DC employees;
- the new TRS DC employees are very slightly more expensive than the TRS tier 2 DB employees;
- the very slight cost advantage of a PERS tier 4 over a tier 3 is erased when tier 4 employees leave early and take employer dollars that, if left in the system, would help meet pension benefit obligations in the out years; so
- the DB PERS tier 3 and the DB TRS tier 2 fundamentally fixed the problems the governor claimed had to be fixed by his new DC plan.

There also are some other DB/DC inferences that can be drawn:

- recruitment for quality public employees is made more difficult when Alaska is a defined contribution pension system (without even the backstop of the defined Social Security benefit) because professionals can work with other public employers that are just as competitive on wages and almost all of whom provide a defined benefit pension; and
- retention is made more difficult with the portability provisions of the defined contribution because relatively short-term employees can take their contributions as-well-as employer contributions out of the retirement systems and go to

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another public employer that provides a defined benefit (any federal employer, or any other state, or almost all municipalities or school districts outside Alaska). As we know, a high percentage of teachers and public employees leave before five years and now new DC employees have a special financial inducement to leave—they can cut and run and take the employer dollars, too.

These inferences are now backed with anecdotal Alaska evidence, even after less than a year's experience with tier 4. Further, the anecdotal Alaska evidence mimics the real-life experience of the two states that actually moved to a defined contribution but later back-tracked because of recruitment and retention problems.

Given the instructive Buck numbers that finally compare the immediately previous DB plans to the replacement DC plan and given, too, the cost-sharing bills that will spread the past service costs to employers regardless of tiers, we need to review what we wrought with SB141.

We must not assume our only options now are passing a DC 'fix-it' bill and passing a cost sharing bill that spreads the pain of past service costs. At a minimum we must also decide whether to give new employees a choice of tier 3 or DC in the PERS system or tier 2 and DC in the TRS system. If the cost differences are a wash, why limit the ability of employers to recruit and retain, and limit new employees to a risky defined contribution plan?

Normal Cost

Employer Normal Cost Rate	PERS Pension	PERS Medical	PERS Total	# of Members ¹
Tier 1 (DB)±	9.15%	10.46%	19.61%	27,561
Tier 2 (DB) ±	5.33%	10.41%	15.74%	16,331
Tier 3 (DB)‡	2.97%	7.98%	10.95%	27,466
Tier 4 (DC)‡	5.38%	3.85%	9.23%	9,211

¹ DRB data dated February, 2009

Employer Normal Cost Rate	TRS Pension	TRS Medical	TRS Total	# of Members ²
Tier 1 (DB)±	7.18%	8.02%	15.20%	11,615
Tier 2 (DB)‡	2.71%	6.25%	8.96%	9,782
Tier 3 (DC)‡	7.32%	4.08%	11.40%	2,415

± rates per Buck Consultants letter March, 2007

² DRB data dated February, 2009

‡ rates per Buck Consultants letter February, 2009

Accrued Liability³

Accrued Liability (DB)	PERS Pension	PERS Medical	PERS Total	TRS Pension	TRS Medical	TRS Total
Tier 1	\$5,628,778	\$4,036,751	\$9,665,530	\$3,925,023	\$1,816,223	\$5,741,247
Tier 2	1,123,559	1,334,674	2,458,233	409,562	347,748	757,309
Tier 3	334,854	386,224	721,078	N/A	N/A	N/A
Total	\$7,087,191	\$5,757,650	\$12,844,841	\$4,334,585	\$2,163,971	\$6,498,556
Assets ^o			\$8,442,919			\$3,958,939
Accrued Liability			\$4,401,922			\$2,539,617

³ per Buck Consultants letter, March 2007^oPERS DB net assets as of 6/30/2008 were \$10,726,913,000.

TRS DB net assets as of 6/30/2008 were \$4,804,371,000.

**Alaska Division of Retirement and Benefits
Public Employees' Retirement System (PERS) Plan Comparison Chart**

Feature	Tier I 1/1/61 - 6/30/86	Tier II Entered on or after 7/1/86	Tier III Entered on or after 7/1/96	Tier IV Entered on or after 7/1/06
Employee Contribution	Pre-tax employee contribution: 6.75% beginning 1/1/87—all others 7.5% beginning 1/1/87—police and fire 9.6% beginning 7/1/99—school district	Pre-tax employee contribution: 6.75% beginning 1/1/87—all others 7.5% beginning 1/1/87—police and fire 9.6% beginning 7/1/99—school district	Pre-tax employee contribution: 6.75% beginning 1/1/87—all others 7.5% beginning 1/1/87—police and fire 9.6% beginning 7/1/99—school district	Pre-tax employee contribution: 8% all employees Employee may make additional contributions.
Employer Contribution	Determined by annual actuarial valuation.	Determined by annual actuarial valuation.	Determined by annual actuarial valuation.	5% DC Account 1.75% Health Plan - determined by annual actuarial valuation after FY07. HRA - Flat dollar amount per employee based on 3% of the employer's average annual employee compensation. .4% Disability - P/F .3 All others
Vesting	Members vest with 5 years of service.	Members vest with 5 years of service.	Members vest with 5 years of service.	100% vested in employee contributions from inception. Vested in employer contributions based on the following schedule: 25% after 2 years of service, 50% after 3 years, 75% after 4 years and 100% after five years.
Qualifications for Retirement	Normal retirement age is 55, with early retirement at age 50; police/fire members can retire at any age after 20 years of police/fire service; all other members can retire at any age after 30 years of membership service. Early retirement reduction will be 1/2% per month or 6% per year for every year less than the required normal retirement age.	Normal retirement age is 60, with early retirement at age 55; police/fire members can retire at any age after 20 years of police/fire service; all other members can retire at any age after 30 years of membership service. Early retirement reduction will be 1/2% per month or 6% per year for every year less than the required normal retirement age.	Normal retirement age is 60, with early retirement at age 55; police/fire members can retire at any age after 20 years of police/fire service; all other members can retire at any age after 30 years of membership service. Early retirement reduction will be 1/2% per month or 6% per year for every year less than the required normal retirement age.	None for investment account. Taxes and penalties may apply if withdrawn before age 59-1/2. See requirements for Retirement Medical Coverage.
Benefit Calculation Formula	Benefit formula is 2% for first 10 years and all years of service prior to July 1, 1986, 2.25% for the next 10 years, 2.5% per year thereafter. Benefit calculation is determined on the average of the high three consecutive years' salary. Police/Fire - 2% X 10, 2.5% over 10.	Benefit formula is 2% for first 10 years, 2.25% for the next 10 years, and 2.5% per year thereafter. Benefit calculation is determined on the average of the high three consecutive years' salary. Police/Fire - 2% X 10, 2.5% over 10.	Benefit formulas did not change; however, the benefit calculation is determined on the average of the high five consecutive years' salary. The benefit calculation for police and fire members is the average of the high three consecutive years regardless of tier (effective 2002).	DC account balance plus investment earnings. May be received in several different payment options. Payout options include lump sum payments, rollovers to another qualified plan, or annuities. Annuities may be taken as a lifetime annuity, joint and survivor annuity, or for a period certain.
Alaska Cost-of-living Increases (COLA)	An Alaska Cost-of-Living Allowance is payable to benefit recipients who remain domiciled in Alaska after retirement. The allowance is \$50 or 10% of the base benefit, whichever is greater.	An Alaska Cost-of-Living Allowance is payable to benefit recipients 65 or older or disability benefit recipients regardless of age who remain domiciled in Alaska after retirement. The allowance is \$50 or 10% of the base benefit, whichever is greater.	An Alaska Cost-of-Living Allowance is payable to benefit recipients 65 or older or disability benefit recipients regardless of age who remain domiciled in Alaska after retirement. The allowance is \$50 or 10% of the base benefit, whichever is greater.	None provided.

More detailed information may be found on the Division website, www.state.ak.us/dr/b, or in the PERS Information Handbook.

*Credited service includes all service used in the calculation of a retirement benefit.

G:/publications/handbooks/pers tier chart.doc (Rev. 9/06)

Doug Molyneaux

Residence Address:
7711 Highlander Drive
Anchorage, AK 99518
868-3118

Mailing Address:
P.O. Box 233624
Anchorage, AK 99523

Issue: Testimony for SB 23 in Senate Labor and Commerce on 19 February 2009

Mr. Chairman, committee members, my name is Doug Molyneaux. I have been a fishery biologist with the Alaska Department of Fish and Game since 1981, though my testimony today is my own opinion. I am also a member of the Supervisor Unit of the Alaska Public Employees Association.

Since 1989 my work has focused on Kuskokwim Area salmon fisheries. The Area supports one of the largest subsistence fisheries in the State; accounting for half the annual subsistence harvest of Chinook salmon in Alaska. The Area also supports commercial salmon fisheries, which are poised to expand with the development of a new fish processing plant. Kuskokwim salmon are also caught as bycatch in the lucrative Bering Sea Pollock Fishery, and concern over that bycatch threatens costly restrictions on the pollock fishery.

We have developed a quality salmon monitoring program that is allowing us to emerge from a period of precautionary management to better optimize commercial harvest and avoid unnecessary restrictions. Our ability to implement and maintain that program, however, is at risk because of difficulty in recruitment of staff with needed expertise, and retention of staff to build and maintain the institutional knowledge needed for long-term effectiveness and for building public trust.

There are multiple reasons for the recruitment and retention problem, but a big one is Tier IV, which fails to provide a guaranteed pension for new employees. The recent plummeting of investment values under Tier IV makes that shortfall all the more poignant. One common retention scenario is for us to hire someone, increasingly a non-resident, provide him or her with training, and after a few years they move to a more lucrative federal or private sector job.

Recruitment is also a problem. In just the past few months key positions such as the Regional Supervisor for the Arctic-Yukon-Kuskokwim Region, Yukon Area Research Biologist, multiple biometrician positions, and Fishery Scientist positions have all had recruitment periods spanning months with multiple extensions and nation-wide advertisement, and still we get insufficient hiring pools. From my observation, the problem has worsened since Tier IV.

New and prospective employees are just not satisfied with what the State of Alaska is offering. Tier IV is not the only problem, but it is a big part of the problem, and it is a problem you can do something about. I ask that you take action by reverting to a Defined Benefits Program similar to PERS Tier III.

Backup Addendum:

I qualify for retirement, but I do not see anyone in the wings interested in taking my place. I fear the States' investment in me over the past 20+ years is going to erode away. One of the consequences is that fishery management will be forced to precautionary practices that limit economic opportunity and results in unnecessary restrictions to the public we serve.



Anchorage Firefighters Local 1264



P.O. Box 242041 • Anchorage, AK 99524-2041
(907) 349-1264 • (907) 349-5580 (fax)

February 4, 2009

Senator Kim Elton
State Capitol Room 506
Juneau, Alaska 99801-1182

Re: SB 23

Sen. Elton,

The International Association of Fire Fighters (IAFF) Local 1264, based in Anchorage, Alaska strongly recommends that the 26th Alaska Legislature work to reinstate a Defined Benefit (DB) pension plan for all new PERS employees.

It costs approximately \$100,000 to recruit, train, and equip entry level Fire Fighters and Paramedics in Anchorage. Unlike other professions where freedom to move from employer to employer may be an attractive quality, employee retention in public safety is paramount to providing quality emergency service. The current PERS Tier IV retirement system provides no stability for new employees, and actually encourages them to move on after gaining five years of valuable "street time" and numerous professional certifications, all at local taxpayer expense.

On a broader macroeconomic scale, 401(k) style retirement plans have proven to be an inadequate means of providing post-employment security to workers. Fire fighters do not participate in Social Security, and even those who have achieved sufficient quarters to qualify for payouts prior to their fire service careers see greatly reduced benefits due to the Windfall Elimination Provision. As recent market events have shown, even diligent retirement planning does not necessarily result in adequate retirement income. By taking away the Defined Benefit pension as well as any social security income, PERS Tier IV members stand to become a greater burden on our future economy when their savings runs out.

The bottom line is that Alaska public safety entities are no longer competitive when it comes to attracting the best new workers. Until pay and benefits are once again similar to other states, there will also be retention problems. We urge you to pass legislation this year to solve this problem and ensure that future generations of Alaskans receive the public safety that they deserve.

Sincerely,

Tom Wescott
President IAFF Local 1264



AARP Alaska
3601 C Street
Suite 1420
Anchorage, AK 99503

T 1-866-227-7447
F 907-341-2270
TTY 1-877-434-7598
www.aarp.org/ak

February 9, 2009

The Honorable Joe Paskvan, Chair
Senate Labor and Commerce Committee
Alaska State Capitol, Room 7
Juneau, AK 99801-1182

RE: SB 23 (Elton)--Support

Dear Chair Paskvan:

On behalf of the members of AARP in Alaska, we encourage you and your colleagues on the Senate Labor and Commerce Committee to support SB 23, authored by Senator Kim Elton and co-sponsored by Senators Ellis, French, Menard, Thomas, McGuire, Davis, Wielechowski and you.

Lifetime financial security is a cornerstone of the American dream: if you work hard and follow the rules, you will be able to retire without financial worries. For most Alaskans, Social Security forms the base of a secure retirement and it is augmented by pensions, IRA's, 401-K's and savings. However few of our teachers or state and municipal employees participate in Social Security. Our defined benefit pensions under TRS and PERS were a stable substitute for Social Security. You cannot outlive Social Security. You cannot outlive a defined benefit pension.

Alaskans who make it to 65 have to prepare financially for a long time in retirement. Of all the women who reach age 65, 29% will also reach age 90. Eighteen percent of men who reach age 65 will also reach age 90.

Our newly hired public employees will only have the defined contribution plan. What will Alaska do with retired teachers, police officers and firefighters who outlive their contributions and have no defined benefit plan under PERS or TRS and do not participate in Social Security?

SB 23 will return to a system that will provide reasonable pension benefits that cannot be outlived.

We urge an "AYE" vote on SB 23.

Should you have any questions about our position, please feel free to contact me (586-3637) or Patrick Luby, AARP Advocacy Director (907-762-3314).

Thank you for your consideration.

Sincerely,



Marie Darlin, Coordinator
AARP Capital City Task Force
415 Willoughby Avenue, Apt. 506
Juneau, AK 99801
586-3637 (voice)
463-3580 (fax)

CC: Vice-Chair Joe Thomas
Senator Bettye Davis
Senator Kevin Meyer
Senator Con Bunde
Senator Kim Elton

Public Safety Employees Association, Inc.
"Representing Alaska's Finest"

Public Safety Employees Association Position Paper
Supporting SB 23

The Public Safety Employees Association is pleased to support SB 23 by Senators Elton, Ellis, French, Wielechowski, Menard, Paskvan, McGuire, Thomas, and Davis. The bill will give PERS and TRS employees hired after July 1, 2006, the option of leaving the defined contribution plan and enter the defined benefit plan. New employees will become members of the defined benefit plan after the effective date of the statute, should SB 23 become law.

Currently the Department of Public Safety struggles to hire enough new troopers to raise the Alaska State Troopers to full strength. Many municipal police departments experience similar difficulties. As more laws are enacted to curb crime, the State of Alaska must hire the necessary number of public safety employees to insure that laws are enforced. Increased crimes involving gangs, drugs, and the internet are added to more conventional crimes involving violence, larceny, burglary, traffic and theft violations. The public will be safer when public safety is at full strength.

While hiring the most qualified and prepared prospects for careers in public safety is important, encouraging those public safety officers to continue their careers is equally important. One valuable tool that the State of Alaska has historically used to both retain and attract persons to positions as peace officers has been the retirement system. Realizing that Public Safety must compete with other states, other police departments and private security firms for officers, the defined benefit retirement system has served as a valuable recruiting tool. Restoring that benefit program will help recruiting.

The defined benefit retirement program has been a valuable retention tool for police officers. Each year of work means increased retirement. We are now concerned that the defined contribution plan may actually encourage shorter lengths of service by officers in Alaska. The retirement system for those hired since July 1, 2006, will accommodate an officer who becomes trained in Alaska, acquires experience in Alaska, establishes a 401K type savings account and decides to take full advantage of the portability of the retirement plan and leave our state for another — especially one with a defined benefit plan. Not only will the police officer take his or her 401K but, they will also take valuable training and experience with them.

As our experience drains to other states, Alaska will find itself investing more training dollars than necessary to offset personnel losses. Restoring a retirement program that is an incentive for recruitment and an encouragement for continued service is good public policy. Such a program is a prescription for improved public safety and greater peace of mind by those who depend on the men and women of public safety to keep their communities safe.

PSEA encourages passage of SB 23.

Dear Governor Palin:

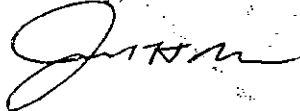
The mission of the American Fisheries Society (AFS) is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals. The fisheries professionals within the Alaska Chapter of AFS strive to meet this objective through a sustained effort in the advancement and development of Alaska's aquatic resources. The Past Presidents Committee, comprised of individuals representing the Chapter's institutional knowledge and experience, is deeply concerned about trends in recruitment and retention of the state employees responsible for the conservation and sustainable management of the State's fisheries resources.

In 2006, the retirement and benefits package for state employees was changed from defined benefits to defined contributions. This change will create a very mobile work force that is able to switch employers and take their retirement package with them. Incentives need to be in place to retain good employees or they will seek better pay and benefits with the private sector or other government agencies. In the absence of salary and retirement packages that at least equal those offered by other entities, the recruitment and retention of qualified individuals into state positions will become increasingly difficult.

As past presidents of the AFS Alaska Chapter, we believe the future of Alaska's fisheries is directly linked to the quality and experience of aquatic resource professionals in state employment. Recent and anticipated upcoming retirements by many long-term employees, combined with the lack of retention and recruitment of newer employees, will leave few individuals with the experience necessary to effectively manage, research, and develop Alaska's aquatic resources. We feel that competition in the job market will become more intense in the future, especially when a gas pipeline is constructed. Therefore, we urge you to work with the legislature to re-examine the long-term impacts of current salary schedules and recent changes to the retirement and benefits package on employee retention.

Thank you for your consideration of this issue that has such broad effects on a part of the Alaska economy that employs so many people in our state.

Sincerely,



Jamal Moss, Scott Maclean, Hal Geiger, Tim Joyce, Carol Kerkvleit, Bill Bectol, Cindy Hartmann, Alex Wertheimer, Tom Kron, and Bill Wilson

cc- all current Alaska Legislators



Retired Public Employees of Alaska, APEA/AFT

3310 Arctic Blvd., Suite 200, Anchorage, Alaska 99503
Phone: (907) 274-1703 or (800) 478-9992. Fax: (907) 277-4588
Email: rpea@alaska.net
Web site: www.rpea.afea-aft.org

Jesse

February 3, 2009

Dear Senator Elton,

On behalf of the Retired Public Employees of Alaska (RPEA) we thank you for sponsoring SB 23 to provide a defined benefit retirement plan for public employees. RPEA is a volunteer organization made up of 2,226 retired public employee members.

RPEA believes Alaska's public employees should be covered by a defined benefit retirement plan that helps public employees continue to live in Alaska after they retire. There are no cost of living incentives in the current defined contribution plan for public employees to stay and contribute to Alaska after they retire. We appreciate your sponsorship of legislation to return public employees to the former defined benefits retirement plan would provide a 10% Alaska cost of living allowance, and post retirement pension adjustment to offset inflation.

As you know, Alaska's retired public employees make a significant contribution to Alaska's economy. According to a September 2006 study by the University of Alaska's Institute of Social and Economic Research¹, 23% of Alaska's retirement population are public employee retirees. The study found that in 2004 all of Alaska's retirees brought an estimated \$1.46 billion into the state that was "roughly equal to what fisherman were paid in 2005 for their Alaska seafood harvests, or the value of zinc, gold, and other metals mined in Alaska in 2004."

¹ Sept. 2006, UA Research Summary No. 7, "\$1.5 Billion A Year and Growing: Economic Contributions of Older Alaskans", by Scott Goldsmith and Jane Angvik

Protecting and Enriching Your Retirement Years

Alaskans who live to age 65 must be prepared financially for a long time in retirement. Twenty-nine percent of women who reach age 65 will reach age 90. Eighteen percent of men who reach age 65 will also reach age 90. With no Post Retirement Pension Adjustment to help offset inflation, and no Cost-of-Living Allowance for living in Alaska, retired public employees face significant financial pressure to relocate to states with lower costs of living. Alaska's public employees should be encouraged to live out their retirement years in Alaska and not relocate to some other state or country that would reap the economic benefits of their retirement investments.

We appreciate your leadership on this important issue.

Sincerely, Bob Doll

A handwritten signature in black ink, appearing to read 'Bob Doll', with a large, stylized flourish at the end.

RPEA President

Protecting and Enriching Your Retirement Years

Feature	Tier I 1/1/61 - 6/30/86	Tier II Entered on or after 7/1/86	Tier III Entered on or after 7/1/96	Tier IV Entered on or after 7/1/06
			the base benefit, whichever is greater.	
Post Retirement Pension Adjustments (PRPA) (Inflation Protection)	PRPA increases granted on an ad hoc basis. If an ad hoc is not granted, tier I employees must be age 60 or over or receiving benefits for 5 years to qualify for the automatic PRPA. The automatic PRPA legislated in 1986 applied to all members regardless of hire date.	Automatic PRPA adjustments to disabled members, retirees 60 and over, and those who have received benefits for 5 years.	Automatic PRPA adjustments to disabled members, retirees 60 and over, and those who have received benefits for 5 years.	None provided.
Retirement Medical Coverage	Medical coverage is provided to all benefit recipients and their eligible dependents. The retiree medical plan premium is paid by the retirement system.	Medical coverage is provided to disabilitants, regardless of age and benefit recipients over age 60 or <ul style="list-style-type: none"> Peace officer/fire members with 25 years of police/fire service all other members with 30 years of membership service and their eligible dependents. The retirement system pays the retiree medical plan premium. Retirees and survivors under age 60 must pay the full premium cost if they want coverage.	Same as Tier II. However, employees must accrue a minimum of 10 years of credited service* , to have system-paid coverage at age 60. Employees with less than 10 years must pay the full premiums as long as they wish to continue medical coverage.	Access to medical coverage at Medicare eligible age with 10 years of service or at any age with 25 years of service for peace officers and firefighters or with 30 years of service for all others. Must retire directly from the system. If not eligible for Medicare, must pay full premium. May use health reimbursement arrangement (HRA) account to pay premiums. Once the HRA is exhausted, member self- pays premiums. When eligible for Medicare, the percentage of premium paid by the retiree or surviving spouse is: 10-14 years of service - 30% 15-19 years - 25% 20-24 years - 20% 25-29 years - 15% 30 years or more - 10%
Disability Benefits	Disability benefits for members: nonoccupational disability benefits are calculated as a normal retirement. Occupational disability provides 40% of the gross monthly compensation. Different occupational disability formula available before 7/1/76.	Disability benefits for members: nonoccupational disability benefits are calculated as a normal retirement. Occupational disability provides 40% of the gross monthly compensation.	Disability benefits for members: nonoccupational disability benefits are calculated as a normal retirement. Occupational disability provides 40% of the gross monthly compensation.	Must be a total and presumably permanent disability whose cause is directly related to performance of duties of the job or on the job injury. Benefit is 40% of salary, earns service while on occupational disability. Employer continues to make all required contributions as if the member were working, plus the member's required contributions to the DC account, without deduction from the member's disability payment. Disability benefits cease when the member becomes eligible for normal retirement at Medicare eligible age and 10 years of service or at any age with 25 years of service for peace officers and firefighters or with 30 years of service for all others. Medical insurance is available to members receiving disability when member is eligible for a normal retirement.

More detailed information may be found on the Division website, www.state.ak.us/drb, or in the PERS Information Handbook.

*Credited service includes all service used in the calculation of a retirement benefit.

Alaska Division of Retirement and Benefits
Teachers' Retirement System (TRS) Plan Comparison Chart

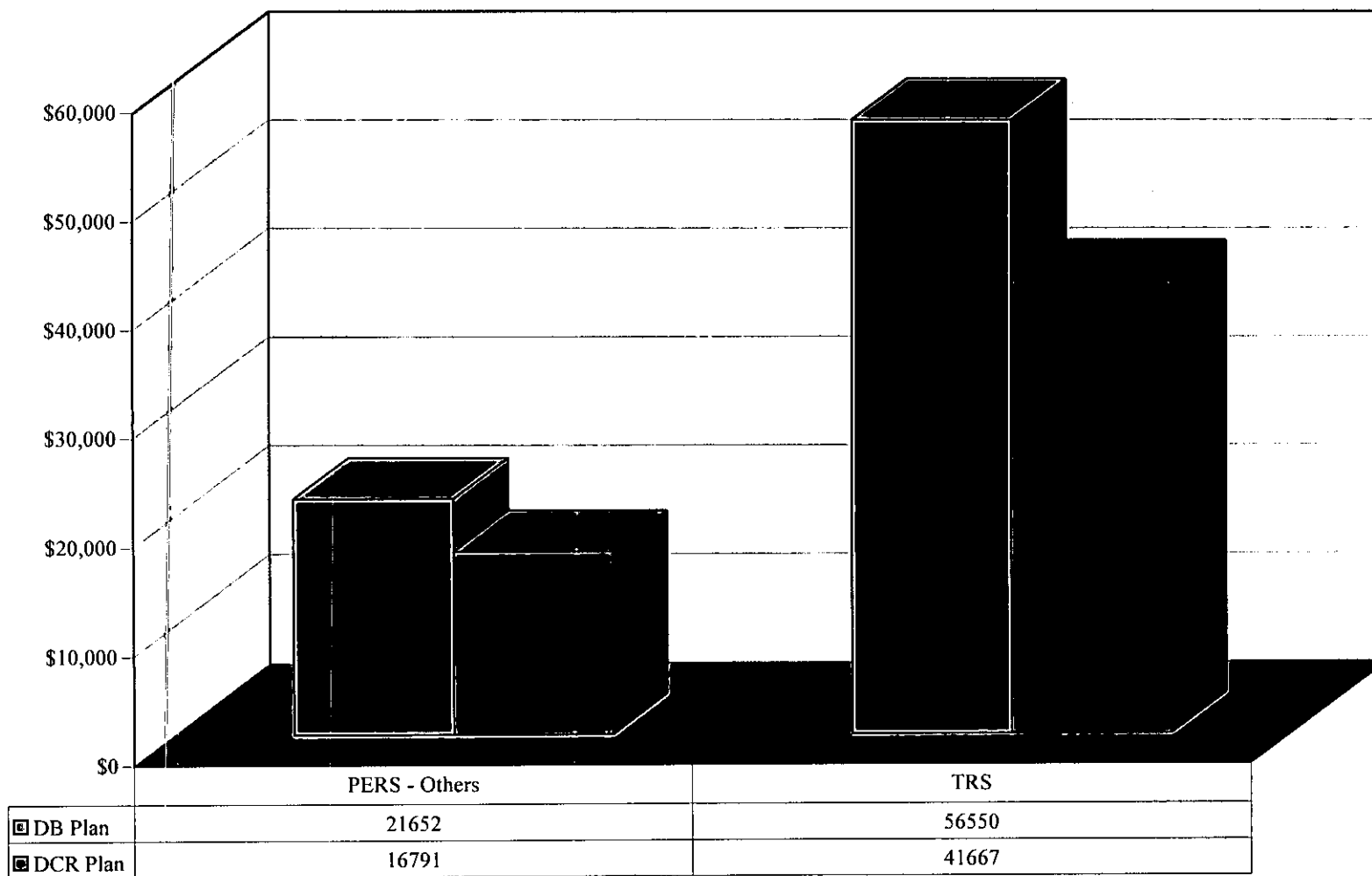
Feature	Tier I July 1, 1955 – June 30, 1990	Tier II Entered on or after July 1, 1990	Tier III Entered on or after July 1, 2006
Employee Contribution	Pre-tax employee contribution: 8.65% beginning 1/1/91	Pre-tax employee contribution: 8.65% beginning 1/1/91	Pre-tax employee contribution: 8% Employee may make additional contributions.
Employer Contribution	Determined by annual actuarial valuation.	Determined by annual actuarial valuation.	7% - DC account 1.75% Health Plan - determined by annual actuarial valuation after FY07. HRA - Flat dollar amount per employee based on 3% of the employer's average annual employee compensation.
Vesting	Members vest with 8 years of service.	Members vest with 8 years of service.	100% vested in employee contributions from inception. Vested in employer contributions based on the following schedule: 25% after 2 years of service, 50% after 3 years, 75% after 4 years and 100% after five years.
Qualifications for Retirement	Normal retirement age is 55, with early retirement at age 50; teachers can retire at any age after 20 years of membership service.	Normal retirement age is 60, with early retirement at age 55; teachers can retire at any age after 20 years of membership service.	None for investment account. Taxes and penalties may apply if withdrawn before age 59 1/2. See requirements for Retirement Medical Coverage.
Benefit Calculation Formula	Benefit formula is 2% for the first 20 years and all years of service prior to July 1, 1990 , 2.5% thereafter. Benefit calculation is determined on the average of the high three contract salaries.	Benefit formula is 2% for the first 20 years, 2.5% thereafter. Benefit calculation is determined on the average of the high three contract salaries.	DC account balance plus investment earnings.
Alaska Cost-of-living Increases (COLA)	An Alaska Cost-of-Living Allowance is payable to benefit recipients who remain domiciled in Alaska after retirement. The allowance is 10% of the base benefit.	An Alaska Cost-of-Living Allowance is payable to benefit recipients 65 or older or disability benefit recipients regardless of age who remain domiciled in Alaska after retirement. The allowance is 10% of the base benefit.	None provided.

More detailed information may be found on the Division website, www.state.ak.us/drb, or in the TRS Information Handbook.
G:/publications/handbooks/trs tier chart.doc (Rev. 3/06)

Feature	Tier I July 1, 1955–June 30, 1990	Tier II Entered on or after July 1, 1990	Tier III Entered on or after July 1, 2006
Post Retirement Pension Adjustments (PRPA) (inflation protection)	PRPA increases granted on an ad hoc basis. If an ad hoc is not granted, tier I employees must be age 60 or over or receiving benefits for 8 years to qualify for the automatic PRPA. The automatic PRPA legislated in 1990 applied to all members regardless of hire date.	Automatic PRPA adjustments to disabled members, retirees 60 and over, and those who have received benefits for 8 years.	None provided.
Retirement Medical Coverage	Medical coverage is provided to all benefit recipients and their eligible dependents. The retiree medical plan premium is paid by the retirement system.	The retirement system pays the retiree medical plan premium for all disabilities regardless of age, for retirees and survivors over age 60 and for retirees with at least 25 years of membership service. This coverage includes eligible dependents. Retirees and survivors under age 60, with less than 25 years of membership service must pay the full premium cost if they want coverage.	Access to medical coverage at Medicare eligible age with 10 years of service or at any age with 30 years of service. Must retire directly from the system. If not eligible for Medicare, must pay full premium. May use health reimbursement arrangement (HRA) account to pay premiums. Once the HRA is exhausted, member self-pays premiums. When eligible for Medicare, the percentage of premium paid by the retiree or surviving spouse is: 10-14 years of service - 30% 15-19 years - 25% 20-24 years - 20% 25-29 years - 15% 30 years or more - 10%
Disability Benefits	Disability benefits are 50% of base salary, plus 10% for each eligible dependent child up to a maximum of 4 children.	Disability benefits are 50% of base salary, plus 10% for each eligible dependent child up to a maximum of 4 children.	Must be a total and presumably permanent disability whose cause is directly related to performance of duties of the job or an on the job injury. Benefit is 40% of salary, earns service while on occupational disability. Employer continues to make all required contributions as if the member were working, plus the member's required contributions to the DC account, without deduction from the member's disability payment. Disability benefits cease when the member becomes eligible for normal retirement at Medicare eligible age and 10 years of service or at any age with 30 years of service. No medical insurance until eligible for normal retirement.

More detailed information may be found on the Division website, www.state.ak.us/drb, or in the TRS Information Handbook.
G:/publications/handbooks/trs tier chart.doc (Rev. 3/06)

**Value of Employer-Paid Benefits
(31-year old new employee)**



Based on data provided by Buck Consultants, letter dated May 4, 2006

Assumes a married member with starting salary of \$35.5/year.

February 12, 2009

VIA EMAIL

Mr. Pat Shier
 Director
 Division of Retirement and Benefits
 Department of Administration
 State of Alaska
 333 Willoughby Avenue
 6th Floor State Office Building
 Juneau, AK 99811-0208

**Re: Alaska PERS and TRS
 Comparison of DB versus DCR Ongoing Costs**

Dear Pat:

As requested, we are providing a comparison of the costs between the Defined Benefit (DB) plans and the Defined Contribution Retirement Plan (DCR) for the State of Alaska Teachers' Retirement System (TRS) and Public Employees' Retirement System (PERS). The results provided represent employer costs as a percent of pay for FY11 and are net of member contributions. The comparison is between the most recent tier of the DB plan (Tier 2 for TRS, Tier 3 for PERS) and the DCR Plan (Tier 3 for TRS, Tier 4 for PERS). The rates were determined using the payroll applicable to each group and are not based on total payroll.

RESULTS

The following results compare the DB and DCR ongoing plan costs:

Public Employees' Retirement System (All Members)	DB Plan Tier 3	DCR Plan Tier 4*
DB Plan Employer Normal Cost Rate	2.97%	N/A
DC Employer Contribution Rate	N/A	5.00%
Occupational Death and Disability Normal Cost Rate	N/A	0.38%
Medical Normal Cost Rate	7.98%	0.85%
HRA Contribution Rate	N/A	3.00%
Total	10.95%	9.23%

* Based on results as of June 30, 2007. Updated results as of June 30, 2008 will be ready in the next few weeks.

Mr. Pat Shier
February 12, 2009
Page 2

Teachers' Retirement System	DB Plan Tier 2	DCR Plan Tier 3*
DB Plan Employer Normal Cost Rate	2.71%	N/A
DC Employer Contribution Rate	N/A	7.00%
Occupational Death and Disability Normal Cost Rate	N/A	0.32%
Medical Normal Cost Rate	6.25%	1.08%
HRA Contribution Rate	N/A	3.00%
Total	8.96%	11.40%

* Based on results as of June 30, 2007. Updated results as of June 30, 2008 will be ready in the next few weeks.

For both PERS and TRS, the normal cost rate of the DB plan is less than the DC employer contribution rate.

There are other factors to consider, not just cost, when comparing the DB and the DCR plans. One of the fundamental differences between a defined benefit and defined contribution plan is who bears the risk. The risk, whether investment risk or mortality risk, is borne by the employer in a DB plan. This risk causes volatility over the short-term in determining the annual cost that will sufficiently meet the long-term benefit obligation. The employer contribution rates for the DB plan shown in this letter represent the expected long-term cost of the DB plan benefits. When experience is different than assumed from one year to the next, hence short-term volatility, the employer contribution rates change. The employer contribution rates in the DCR plan are not subject to this short-term volatility since the members bear most of the risk. As a result, employer contribution rates are stable and not subject to volatility.

DATA, ASSUMPTIONS, METHODS AND PROVISIONS

The data, assumptions, plan provisions and methods used for the DB plan costs are described in the draft actuarial valuation reports as of June 30, 2008. The postretirement healthcare and occupational death and disability rates shown for the DCR plan costs are based on the June 30, 2007 valuation of the DCR plan. The assumptions, methods and provisions used for the DCR plan costs are the same as those outlined in our previous letter sent to Pat Shier on April 29, 2008. The actual FY11 DCR rates will be finalized soon.

Please let me know if you have any questions or if we can be of further assistance.

Sincerely,



David H. Sliskinsky, ASA, EA, MAAA
Principal, Consulting Actuary



Michelle Reding DeLange, FSA, EA, MAAA
Director, Retirement Actuary

/mlp

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INVESTMENT RETURNS: DEFINED BENEFIT VS. 401(k) PLANS

BY ALICIA H. MUNNELL, MAURICIO SOTO, JERILYN LIBBY, AND JOHN PRINZIVALLI*

Introduction

Pension coverage in the private sector has shifted from defined benefit plans where professionals manage the money to 401(k) plans where participants invest their own accounts. The supposition is that individuals are not very good at investing their own money. The question is whether the supposition is borne out by the facts. That is, are returns on 401(k) plans markedly lower than those on traditional defined benefit plans?

This *brief* first reports rates of return on defined benefit and 401(k) plans over the period 1988-2004. The second section then looks at the holdings of the two types of plans to see whether the differences in returns can be explained by a more risky portfolio. The third section speculates about the role fees play in the results. The fourth section explores the implications of the findings for 401(k) participants. The final section reports on Individual Retirement Accounts (IRAs), because the assets in these accounts now exceed holdings in either defined benefit or

defined contribution plans, and most of the money is rolled over from employer-sponsored plans.

The bottom line is that over the period 1988-2004 defined benefit plans outperformed 401(k) plans by one percentage point. This outcome occurred despite the fact that 401(k) plans held a higher portion of their assets in equities during the bull market of the 1990s. Part of the explanation may rest with higher fees, which are deducted before returns are reported to participants. But the one percentage point shortfall understates the investment problem in 401(k) plans, since an aggregate number does not reflect the fact that more than half of participants in 401(k) plans do not follow the prudent investment strategy of diversifying their holdings. Finally, the available data suggest that IRAs produce even lower returns than 401(k) plans, which, if true, implies trouble ahead given the massive amount of money that is being rolled over into these accounts.

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Rates of Return in Defined Benefit and 401(k) Plans

Financial assets in private sector defined benefit and defined contribution plans (including IRAs) totaled \$8.5 trillion at the end of 2005 (see Table 1). At that time, defined benefit assets accounted for only 23 percent of the total, while self-directed defined contribution plans and IRAs made up the rest. Thus, the question of how individuals fare when investing their own retirement funds is an important one.

TABLE 1. PRIVATE SECTOR RETIREMENT ASSETS, YEAR END 2005

Type of plan	Billions of dollars	Percent of total
Defined benefit	\$1,916.5	22.7%
Defined contribution	2,868.7	33.9
IRAs	3,667.0	43.4
Total	8,452.2	100.0

Source: U.S. Board of Governors of the Federal Reserve System (2006).

The first step in assessing the performance is to compare median annual rates of return for defined benefit and 401(k) plans. The analysis focuses on companies that sponsor both types of plans to minimize the effect of company or participant characteristics on the results.¹ The formula for calculating rate of return is one commonly used by actuaries.² It relates the change in assets ($A_t - A_{t-1}$), netting out the impact of benefit payments from the plan (B) and contributions to the plan (C), to initial assets (A_{t-1}) plus half of net inflows ($C - B$):

$$\text{Rate of return} = \frac{(A_t - A_{t-1}) + B - C}{(A_{t-1}) + \frac{1}{2}(C - B)}$$

The Department of Labor's Form 5500 filings provide data on assets, contributions, and benefits for each plan over the period 1988-2004.³

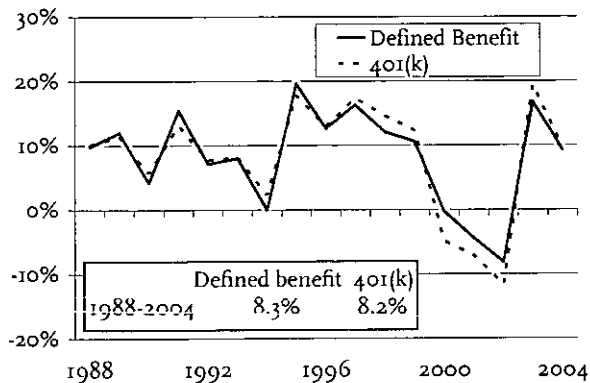
Returns, even median returns, can be calculated in a number of ways. The analysis presented below starts with the simplest approach, and one used in earlier studies, that arrays the plans and reports the return for the plan at the 50th percentile. In terms of the example shown below, the median rate of return would be 5 percent. One obvious question is whether comparing median rates of return is the right exercise, since three-quarters of the total assets in the example are in Plan A earning 10 percent. An alternative measure would be one that weighted returns by plan assets, and then identified the median. Such an approach would yield a return of 10 percent in this example. In our view, this is the preferred approach, although both results are reported below.

EXAMPLE: UNWEIGHTED VERSUS WEIGHTED MEDIANS

Plan	Assets	Rate of return
Plan A	\$75	10%
Plan B	20	5
Plan C	5	2

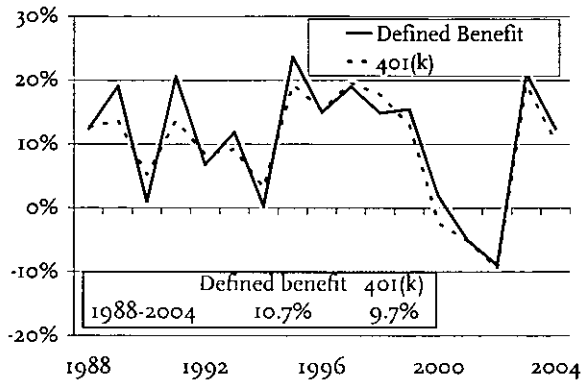
Figure 1 shows the simple medians over the period 1988-2004.⁴ During the period, the average of this measure suggests that the performance of defined benefit and 401(k) plans is virtually identical — 8.3 percent versus 8.2 percent.⁵

FIGURE 1. UNWEIGHTED MEDIAN RATES OF RETURN FOR DEFINED BENEFIT AND 401(k) PLANS, 1988-2004



Source: Authors' calculations from U.S. Department of Labor (1990-2006).

FIGURE 2. WEIGHTED MEDIAN RATES OF RETURN FOR DEFINED BENEFIT AND 401(K) PLANS, 1988-2004



Source: Authors' calculations from U.S. Department of Labor (1990-2006).

Figure 2 recalculates rates of return weighting returns by assets in the plan. Two factors change. First, the returns are higher. Second, defined benefit plans appear to have outperformed 401(k) plans by one percentage point (10.7 percent versus 9.7 percent).

The higher return reflects the fact that larger plans have historically performed better than smaller ones (see Table 2). The usual explanation is that large plans can hire better managers and spread fees over a larger base. Size matters much less for 401(k) plans, because the outcome reflects a myriad of individual investment decisions.

TABLE 2. MEDIAN RATES OF RETURN BY ASSET QUINTILE FOR DEFINED BENEFIT AND 401(k) PLANS, 1988-2004

Asset quintile	Defined benefit	401(k)
Largest 20 percent	10.1%	8.8%
Second	8.9	8.1
Third	8.2	7.8
Fourth	7.4	7.6
Smallest 20 percent	5.6	6.6

Source: Authors' calculations from U.S. Department of Labor (1990-2006).

The Impact of Portfolio Allocation

One question is the extent to which portfolio differences can explain differences in rates of return. Based on historical performance, stocks have a high yield and big fluctuations in annual rates of return; corporate bonds have a lower yield and much less variation; Treasury bills are the most predictable investment but provide the lowest return (see Table 3).

TABLE 3. ANNUAL TOTAL RETURNS ON VARIOUS FINANCIAL INSTRUMENTS, 1926-2005

Financial instrument	Rate of return	Standard deviation
Stocks	10.4%	20.2%
Long-term corporate bonds	5.9	8.5
Intermediate government bonds	5.3	5.7
U.S. Treasury bills	3.7	3.1
Inflation	3.0	4.3

Source: Ibbotson Associates (2006). Based on copyrighted works by Ibbotson and Sinquefeld. All rights reserved. Used with permission.

Table 4 shows a breakdown by type of investment for both defined benefit and defined contribution plans.⁶ Defined benefit plans appear to hold about 59 percent of assets in equities, compared to 35 percent for defined contribution plans.⁷ But that is not the end of the story because mutual funds also reflect equity holdings, and mutual funds are a very important component of the assets of defined contribution plans. In 2005, roughly 78 percent of the mutual fund assets in 401(k) plans were equities.⁸ Applying that percentage to both the defined benefit and defined contribution mutual fund numbers yields total equity holdings of 67 percent in defined benefit plans and 65 percent in defined contribution plans.

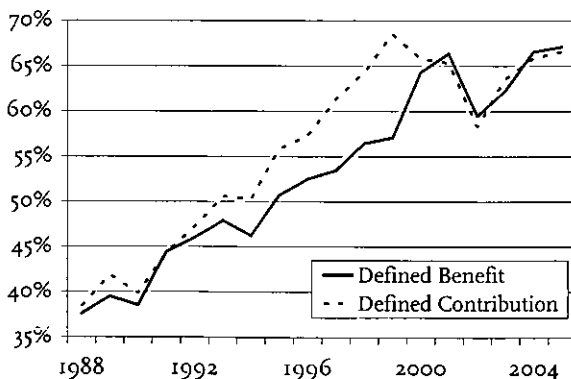
TABLE 4. PERCENTAGE DISTRIBUTION OF ASSETS IN PRIVATE SECTOR DEFINED BENEFIT AND DEFINED CONTRIBUTION PLANS, YEAR END 2005

Financial instrument	Defined benefit	Defined contribution
Equities	58.8%	35.2%
Mutual funds	10.6	38.5
Bonds	21.9	6.7
Cash	3.1	4.5
GICs	3.6	8.7
Other	2.0	6.4
Total	100.0	100.0

Source: U.S. Board of Governors of the Federal Reserve System (2006).

Figure 3 shows the percentage of the portfolios in equities for defined benefit and defined contribution plans over the period 1988-2005, where a portion of mutual funds are included in equities as described above. The higher share in equities for defined contribution plans in the late 1990s allowed 401(k) plans to outperform defined benefit plans. The reliance on equities also meant that 401(k) participants were hurt more when the stock market collapsed in 2000, and then did better when the stock market recovered.

FIGURE 3. EQUITIES AS A PERCENT OF TOTAL PORTFOLIO, DEFINED BENEFIT AND DEFINED CONTRIBUTION PLANS, 1988-2005



Sources: Authors' calculations from U.S. Board of Governors of the Federal Reserve System (2006); Investment Company Institute (2005); and Investment Company Institute (2006b).

One interesting aspect of Figure 3 is not the difference between the defined benefit and defined contribution portfolios, but the fact that both professional managers and individual 401(k) participants dramatically increased their holdings of equities over the period. If defined benefit portfolios were optimally balanced in the early 1990s with about 40 percent in equities, what would make 65 percent optimal by the end of the period? In the case of defined benefit plans, an aging beneficiary population would argue, if anything, for less equity investment. Some potential explanations include: 1) professional managers, like individual investors, forgot to re-balance; 2) professional managers, like individual investors, got swept up in the euphoria of the boom and purposely increased their holdings of stocks; 3) sponsors of fully funded defined benefit plans felt like they could gamble with their "surplus" funds; or 4) defined benefit managers wanted to hold the market portfolio and the boom caused equities to increase as a share of the total market. Regardless of the explanation, defined benefit and defined contribution plans both held 40 percent of their portfolios in equities in 1990 and increased their holdings to 65 percent by 2000. The difference is that during most of that period, individual 401(k) investors had higher equity holdings.

The Role of Fees

Another possible explanation for the lower return in defined contribution plans is investment fees, which typically account for 75 to 90 percent of total expenses associated with managing 401(k) plans.⁹ These fees compensate providers of, say, mutual funds for selecting the stocks and undertaking the research that leads to buy and sell decisions. These fees are usually assessed as a percentage of invested assets, and are paid by the employee in that they are deducted directly from investment returns.¹⁰

Mutual funds are the major investment vehicle for 401(k) participants, and Table 5 reports the fees for alternative investments. The fees vary substantially depending on whether the investments are actively managed or follow an index. For example, an actively managed Global Fund costs 1.72 percent of assets annually compared to 0.59 percent for an S&P Index Fund. Given these charges, it is probably reasonable to assume that fees reduce the gross return on 401(k) plans by about one percentage point.

Of course, defined benefit plans also involve some expenses but these are small compared to those associated with 401(k) plans.¹¹

TABLE 5. MUTUAL FUND FEES AS A PERCENT OF ASSETS, JULY 31, 2006

Category	Fee
Global Fund	1.72%
Equity Income Fund	1.33
Balanced Fund	1.22
Intermediate Bond Fund	0.92
S&P Index Fund	0.59
Institutional Money Market Fund	0.45

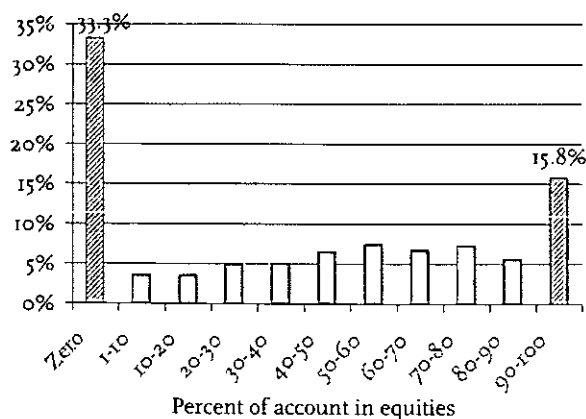
Source: Lipper (2006).

The Implications for Individual 401(k) Participants

So far the discussion has focused only on totals and averages, which tell us little about how individuals might invest. After all, if a plan has 100 participants and half invest all their assets in stocks and the other half all their assets in bonds, the aggregate data suggest that participants are well diversified when in fact they are not. Therefore, it is useful to look at investment data from particular 401(k) plans to see whether the individual participants have balanced portfolios or whether the balance simply reflects offsetting behavior.

As shown in Figure 4, detailed data on the asset allocation of individual participants show that nearly half of all participants have either none of their ac-

FIGURE 4. EQUITIES AS A PERCENT OF 401(k) PARTICIPANT ACCOUNT BALANCES BY PERCENT OF PARTICIPANTS, 2005



Source: Holden and VanDerhei (2006).

count in equities or virtually all of their account in equities. So even though the aggregate data suggest that participants make sensible investment choices on average, the individual data reveal that a majority of participants are not diversified at all. Given their choices, most participants face the risk of ending up with inadequate retirement income or exposing themselves to large swings in the value of their assets.¹² Thus, the one percentage point difference in returns between defined benefit and 401(k) plans understates the poor investment decisions made by individuals.

TABLE 6. ASSET HOLDINGS AND IRAS BY INSTITUTION, YEAR END 2005

Institution	Percent of total
Mutual funds	39.0%
Life insurance companies	11.1
Money market mutual funds	4.4
Commercial banking	4.6
Saving institutions	1.5
Credit unions	1.3
Other self-directed accounts	38.0
Total	100.0
Memorandum: total assets (billions)	\$3,667.0

Source: U.S. Board of Governors of the Federal Reserve System (2006).

The Inclusion of IRAs

It has become impossible to ignore the role of IRAs. As shown earlier in Table 1, IRAs now hold more money than either defined benefit or defined contribution plans. And even though most IRAs are not sponsored by employers, the Investment Company Institute (2006b), the national association for mutual fund companies, reported that 94 percent of the money flowing into traditional IRAs was rolled over from employer-sponsored plans in the period 1997-2003.¹³ Although detailed information is not available, it is probably reasonable to assume that most of the rollovers come from defined contribution plans — although lump-sum payments are becoming increasingly common in defined benefit plans.

Only limited information is available on the asset allocation in IRAs. The Flow of Funds data show only the type of institution holding the account, as opposed to the type of asset in the account (see Table 6). About 73 percent of the mutual fund assets — the

largest component — are in stock.¹⁴ But no information is available on the composition of IRA assets held by other institutions, which hold the majority of the assets.

The Investment Company Institute (2006a) provides data on beginning-year assets, year-end assets, contributions, rollovers, and withdrawals for traditional IRAs that make it possible to calculate the aggregate average return for the period 1998-2003. Table 7 summarizes these results and compares them to returns earned on defined benefit and 401(k) plans over the same period. If estimates of the flows into and out of IRAs are correct, the rate of return numbers suggest that IRA investments produced significantly lower returns than either defined benefit or 401(k) plans during the six-year period.¹⁵ More important than the precise numbers, however, is the message that the performance of IRAs will have a significant impact on the retirement security of people in the future.

TABLE 7. RATE OF RETURN FOR IRAs, DEFINED BENEFIT PLANS AND 401(k)s, 1998-2003

Year	IRA	Defined benefit	401(k)
1998	13.6 %	14.9 %	17.8 %
1999	15.7	15.5	13.1
2000	-6.0	1.8	-2.4
2001	-4.6	-5.1	-5.1
2002	-8.1	-8.9	-9.5
2003	12.1	21.2	19.4
1998-2003	3.8	6.6	5.6

Source: Authors' estimates based on Investment Company Institute (2006a).

Conclusion

Three main conclusions emerge from this review. First, defined benefit plans outperformed 401(k) plans over the period 1988-2004. This conclusion is most evident using the weighted median. A higher equity allocation most likely led to higher 401(k) returns during the 1990s, while fees inevitably reduced returns. These two effects may well have balanced each other out, leaving a one percentage point shortfall due to poor timing and other investment mistakes.

Second, lower returns are only one component of the investment problems facing 401(k) investors. The other is that despite a reasonable mix for 401(k) assets in the aggregate, nearly half of 401(k) participants are either nearly fully invested in stocks or hold no stocks at all. That is, nearly 50 percent of participants are not diversified in their retirement accounts. The combination of the lack of diversification and the lower returns suggests that introducing balanced portfolios as a default, which would remove the individual from the decision making, would significantly improve the performance of 401(k) plans.

Finally, IRAs are now bigger than either defined benefit or defined contribution plans, and their performance is going to have a major impact on retirement security in the future. Preliminary data suggest that IRAs underperform employer-sponsored plans. IRAs are too big and important a form of retirement saving to not know what is going on with these accounts. Some mechanism is needed to identify the asset allocations in these accounts as well as document the inflows and outflows. Only by including IRAs will it be possible to understand fully how well people are investing for retirement.

Endnotes

- 1 This formulation follows Watson Wyatt (2002 and 2003). Calculations for the entire universe of plans showed very similar results.
- 2 Including one half of contributions less benefits assumes that net inflows occur at an even rate over the year so that on average half the annual net inflows are available for investment. This assumption is necessary because the Form 5500 lacks detailed information on the timing of benefits and contributions over the year.
- 3 See Buessing and Soto (2006) for a detailed description of the Form 5500 data.
- 4 The median refers to the across-firm rates of return per year for defined benefit and defined contribution plans. The average returns shown are the arithmetic means of the median rates of return over the period 1988-2004. The geometric means do not differ widely from the arithmetic means calculated for the unweighted and weighted median rates of return. Appendix Table A1 shows the unweighted and weighted median rates of return as well as the arithmetic and geometric means.
- 5 For the 1990-2002 period, the results are similar to results from Watson Wyatt (2004) with defined benefit plans outperforming 401(k) plans. The difference in defined benefit and 401(k) returns is 0.35 percent while Watson Wyatt showed a difference of 0.56 percent for this period. The improved performance of 401(k)s over the 1988-2004 period comes simply from adding four more years of data to what was a very close outcome.
- 6 Separate data on 401(k) plans are not available on a comparable basis. But in 2004, 401(k) assets accounted for 88 percent of total private sector defined contribution assets for plans sponsored by employers with 100 or more employees. See Munnell and Perun (2006).
- 7 Since most 401(k) participants invest through mutual funds, the high number for "Equities" for defined contribution plans (that is, direct equity holdings as opposed to equities held through mutual funds) in Table 4 is surprising. The explanation is that "Equities" include pools of stocks that companies set up themselves for their 401(k) plans; only mutual funds bought off the shelf are included in the mutual fund line. The other large category of direct equity holdings is employer stock. The final category of direct equity investment arises from a relatively small percentage of 401(k) participants who invest directly through brokerage accounts.
- 8 Investment Company Institute (2006a).
- 9 Munnell and Sundén (2004).
- 10 Fees are generally not explicitly reported in the Form 5500. See U.S. Department of Labor (2004).
- 11 Council of Institutional Investors (2005).
- 12 Of course, critics contend that assessing individuals' 401(k) holdings without knowing their entire asset holdings is of limited value. They argue that most people who save through a 401(k) plan also have Social Security, human capital, defined benefit pension wealth, housing, and taxable savings. But for most people taxable savings are miniscule, and their 401(k) plan is their major financial asset. Thus the investment allocation within their 401(k) plan is important.
- 13 In 2005, assets in traditional IRAs accounted for 90 percent of total IRA assets. This share was down slightly from 95 percent in 1997.
- 14 Investment Company Institute (2006a).
- 15 One likely explanation for the lower returns in IRAs is that IRAs are often held by older workers who have rolled over their 401(k) assets. Older workers tend to invest in assets with lower returns to avoid the potentially large fluctuations that are associated with riskier investments.

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APPENDIX

Appendix A

TABLE A1. UNWEIGHTED AND WEIGHTED MEDIAN RATES OF RETURN FOR DEFINED BENEFIT AND 401(k) PLANS, 1988-2004

Year	Unweighted		Weighted	
	Defined benefit	401(k)	Defined benefit	401(k)
1988	9.8	10.1	12.4	12.7
1989	12.0	11.3	19.1	13.7
1990	4.2	5.7	1.0	5.2
1991	15.4	13.1	20.6	13.7
1992	7.1	7.7	6.8	8.5
1993	8.0	8.2	11.9	9.2
1994	0.0	2.3	0.3	3.2
1995	19.6	17.8	23.7	19.3
1996	12.6	12.9	15.0	15.4
1997	16.3	17.4	19.0	19.6
1998	12.1	14.6	14.9	17.8
1999	10.6	12.4	15.5	13.1
2000	-0.3	-4.9	1.8	-2.4
2001	-4.4	-7.1	-5.1	-5.1
2002	-8.2	-11.7	-8.9	-9.5
2003	16.7	19.4	21.2	19.4
2004	9.3	9.7	12.5	10.5
Arithmetic Mean	8.3	8.2	10.7	9.7
Geometric Mean	8.0	7.8	10.2	9.3

Source: Authors' calculations from U.S. Department of Labor (1990-2006).

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The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decision makers in the public and private sectors around an issue of critical importance to the nation's future.

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FISCAL NOTE

STATE OF ALASKA
2009 LEGISLATIVE SESSION

Fiscal Note Number: 1
Bill Version: CSSB 23(L&C)
S) Publish Date: 2/27/09

Identifier (file name): SB023-DOA-DRB-02-24-09 Dept. Affected: Statewide
Title: An Act repealing the defined contribution retirement plans for RDU: Statewide
teachers and for public employees.... Component: Statewide
Sponsor: Senators ELTON, Ellis, French, Wielechowski, Menard,....
Requester: Senate Labor & Commerce Committee Component Number: _____

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	Appropriation Required	Information						
		FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
OPERATING EXPENDITURES								
Personal Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Travel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contractual	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Land & Structures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grants & Claims	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.0	0.0	37,559.0	16,101.0	16,637.0	17,223.0	17,868.0	
TOTAL OPERATING	0.0	0.0	37,559.0	16,101.0	16,637.0	17,223.0	17,868.0	

CAPITAL EXPENDITURES							
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CHANGE IN REVENUES ()							
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1003 GF Match	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1004 GF	0.0	0.0	37,559.0	16,101.0	16,637.0	17,223.0	17,868.0
1005 GF/Program Receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1037 GF/Mental Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Interagency Receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	37,559.0	16,101.0	16,637.0	17,223.0	17,868.0

Estimate of any current year (FY2008) cost: _____

POSITIONS

Full-time	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Part-time	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ANALYSIS: (Attach a separate page if necessary)

This legislation acts to repeal the hybrid defined contribution retirement (DCR) plan for teachers and for public employees and enroll new employees in the last tier of the defined benefit (DB) plans for both pension and retiree medical benefits (TRS Tier II, PERS Tier III). Existing DCR plan participants will be given a one-time opportunity to convert their DCR accounts to the DB plan. The legislation also moves the authority to approve an annual cost of living increase available only to Tier I DB members, the Ad Hoc Post Retirement Pension Adjustment (PRPA), from the Commissioner of Administration to the Alaska Retirement Management Board and removes the requirement for 105% funding of the systems before an Ad Hoc PRPA can be issued. A breakdown of the costs for this bill between the PERS and TRS systems is contained on page two of this fiscal note. Since employer rates are capped at 22% for PERS and 12.56% for TRS, all increased costs are a liability of the state.

Prepared by: Patrick Shier, Director
Division: Retirement and Benefits
Approved by: Rachael Petro, Deputy Commissioner
Department of Administration

Phone 465-4817
Date/Time 2/26/09 10:24 AM
Date _____

FISCAL NOTE # 1

**STATE OF ALASKA
2009 LEGISLATIVE SESSION**

BILL NO. CSSB 23(L&C)

ANALYSIS CONTINUATION

The immediate cost to the State to eliminate the unfunded liabilities created by this change is approximately \$15.2 million for PERS and \$6.8 million for TRS and is included in the FY11 column.

I. The tables in the section below show the cost of the bill for fiscal years 2011 through 2015 if the DCR Plan for pension and medical benefits is repealed and members revert back to the DB plans. Costs are based on PERS system payroll of \$2 billion and TRS system payroll of \$667 million annually. It is further assumed that payroll will grow by 4% per year and that all current DCR members will become members of the latest tier of DB plans and employer assets from the DCR plans will be transferred to the DB plans. Contribution rates have already been set for FY10 so costs are reflected beginning in FY11.

Dollars are in thousands.

PERS	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Increase in Normal Cost Amount	\$0.00	\$13,077	\$13,491	\$13,946	\$14,444	\$14,994
Increase in Past Service Cost	\$0.00	\$15,182	\$0	\$0	\$0	\$0
Total Increase in Annual State Contribution Amount	\$0.00	\$28,259	\$13,491	\$13,946	\$14,444	\$14,994

TRS	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Increase in Normal Cost Amount	\$0.00	\$2,537	\$2,610	\$2,691	\$2,779	\$2,874
Increase in Past Service Cost	\$0.00	\$6,763	\$0	\$0	\$0	\$0
Total Increase in Annual State Contribution Amount	\$0.00	\$9,300	\$2,610	\$2,691	\$2,779	\$2,874

II. The tables in the section below show the change in the normal cost rate and unfunded accrued liability. Dollars are in thousands.

Pension Only	PERS	TRS
Change in Employer Normal Cost Rate	0.34%	0.27%
Change in Unfunded Accrued Liability after transfer of DCR assets.	(\$7,393)	(\$1,747)
Change in Total Employer Rate	0.32%	0.25%

Healthcare Only		
Change in Employer Normal Cost Rate	1.41%	1.18%
Change in Unfunded Accrued Liability after transfer of DCR assets.	\$22,575	\$8,510
Change in Total Employer Rate	1.49%	1.26%

Total		
Change in Employer Normal Cost Rate	1.75%	1.45%
Change in Unfunded Accrued Liability after transfer of DCR assets.	\$15,182	\$6,763
Change in Total Employer Rate	1.81%	1.51%

FISCAL NOTE

STATE OF ALASKA
2009 LEGISLATIVE SESSION

Fiscal Note Number: _____
 Bill Version: CSSB 23
 () Publish Date: _____

Identifier (file name): CS(L&C)SB23-DOA-DRB-03-23-09 Dept. Affected: Administration
 Title An Act repealing the defined contribution retirement plans for RDU Centralized Administrative Services
 teachers...public emp. Component Retirement and Benefits
 Sponsor Sens. ELTON, Ellis, French...
 Requester (S)STA Component Number 64

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	Appropriation Required	Information						
		FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
OPERATING EXPENDITURES								
Personal Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Travel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contractual	752.3	160.8	84.0	0.0	0.0	0.0	0.0	0.0
Supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Land & Structures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grants & Claims	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL OPERATING	752.3	160.8	84.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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CHANGE IN REVENUES ()	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1003 GF Match	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1004 GF	752.3	160.8	84.0	0.0	0.0	0.0	0.0	0.0
1005 GF/Program Receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1037 GF/Mental Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Interagency Receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	752.3	160.8	84.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2008) cost: _____

POSITIONS

Full-time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Part-time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ANALYSIS: *(Attach a separate page if necessary)*
 This legislation acts to repeal the hybrid defined contribution retirement (DCR) plan for teachers and for public employees and enroll new employees in the last tier of the defined benefit (DB) plans for both pension and retiree medical benefits. Existing DCR plan participants will be given a one-time opportunity to convert their DCR accounts to the DB plan. The legislation also moves the authority to approve an annual cost of living increase available only to Tier I DB members, the Ad Hoc Post Retirement Pension Adjustment, from the Commissioner of Administration to the Alaska Retirement Management Board and removes the requirement for 105% funding of the systems before an Ad Hoc can be issued. A breakdown of the costs for this bill are contained on page two of this fiscal note.

Prepared by: Patrick Shier, Director Phone 465-4817
 Division Retirement and Benefits Date/Time 3/23/09 12:29 PM
 Approved by: Rachael Petro Date 3/23/2009
 Deputy Commissioner

FISCAL NOTE

STATE OF ALASKA
2009 LEGISLATIVE SESSION

BILL NO. CSSB 23

ANALYSIS CONTINUATION

Implementation of this legislation will require reprogramming of the Combined Retirement System (CRS) computer system that tracks member service, salaries and contributions as well as reprogramming of e-Reporting, the application employers use to report payroll information to CRS. The reprogramming will be done by a contractor with subsequent training provided to division staff for future maintenance.

Educational materials regarding both plans and the conversion option will be produced and distributed to all DCR members.

An amendment to the division's actuarial contract will be needed to calculate the actuarially determined service each DCR member will be eligible to convert to the DB plan.

The estimated administrative costs to the division by fiscal year are as follows:
Dollars in thousands.

	FY 10	FY 11	FY 12	FY 13-15
CONTRACTUAL (Information Technology)				
CRS Programming	\$84.0	\$57.6	\$28.8	\$0.0
eReporting Programming	\$50.4	\$57.6	\$28.8	\$0.0
Oracle/DB2 accommodations	\$32.0	\$0.0	\$0.0	\$0.0
IT Staff Training	\$11.4	\$7.2	\$7.2	\$0.0
Conversion	\$479.0	\$0.0	\$0.0	\$0.0
Accounting dependencies	\$0.0	\$0.0	\$19.2	\$0.0
Reporting Residuals	\$0.0	\$38.4	\$0.0	\$0.0
	<hr/>	<hr/>	<hr/>	<hr/>
	\$656.8	\$160.8	\$84.0	\$0.0
<u>Other</u>				
Communications/Postage	\$75.5	\$0.0	\$0.0	\$0.0
Actuarial Services	\$20.0			
Total	<hr/>	<hr/>	<hr/>	<hr/>
	\$752.3	\$160.8	\$84.0	\$0.0



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NEWS Release

Contact: Kelly Kenneally
202.457.8190
kkenneally@nirsonline.org

NEW STUDY FINDS 6,270 JOBS, \$1 BILLION ECONOMIC IMPACT FROM ALASKA'S PUBLIC PENSION SYSTEMS

Analysis Determines Pensions Leave Substantial Economic Footprint

WASHINGTON, D.C., FEBRUARY 26, 2009 - An economic impact analysis released today finds that the benefits provided by Alaska's public pension plans have a sizable impact that ripples across the state and touches every industry. The new report, "*Pensionomics: Measuring the Economic Impact of State and Local Pension Plans*," finds that expenditures made from Alaska's public pension benefits for fiscal year 2005-2006:

- Had a total economic impact of more than \$1 billion.
- Supported more than 6,270 jobs that paid more than \$385.2 million in total compensation to Alaska's workers.
- Supported more than \$155.5 million in annual federal, state, local tax revenue.
- Paid \$819.5 million in pension benefits to 34,962 retirees and beneficiaries.
- Had large multiplier effects. Each taxpayer dollar invested in Alaska's public pensions supported \$1.25 in total economic activity, while each dollar paid out in benefits supported \$6.35 in economic activity.
- Impacted every industry in the state.

A detailed Alaska economic impact Fact Sheet is available at www.nirsonline.org. The report also analyzes the national economic impact of public pensions to find 2.5 million jobs and \$358 billion in economic activity supported by state and local pensions.

"This study measures the magnitude of the 'multiplier effect' of Alaska's public pensions across the state's economy," said Ilana Boivie, NIRS policy analyst and report co-author. "The multiplier effect occurs because one retiree's spending in Alaska becomes another person's income," she said.

Boivie explained, "For example, a retired Alaska teacher may spend his or her pension check to pay the gas bill, buy a car, or make purchases at the local pharmacy, grocery store, or movie theatre. As a result of the retiree's spending, businesses see an increase in their income, which then enables businesses to spend and create jobs. Each successive round of spending ripples through the Alaska economy to generate an economic impact that is much larger than the initial spending by the retiree."

--more--

"Understanding the considerable economic impact of Alaska's public pensions is vital given the severe financial crisis facing America," said Beth Almeida, NIRS executive director and report co-author. "Economists have long known that the steady monthly income provided by pensions can act as an 'automatic stabilizer.' That is, retirees with a stable monthly pension income can continue to spend on basic needs, even during an economic downturn. In contrast, retirees relying solely on plummeting 401(k)s or individual retirement accounts likely are forced to retreat from spending precisely at the time when the Alaska economy most needs stimulus," Almeida explained.

The analysis was conducted using data from the U.S. Census Bureau and IMPLAN, an input-output modeling software widely used by industry and governments.

NIRS will hold a conference call regarding the findings on Thursday, February 26, 2009 at 11 AM ET by dialing (800) 230-1074, Confirmation Number: 988166.

A live PowerPoint presentation will be available online during the conference call. Log on to the web conference by visiting www.gotomeeting.com. On the left hand column of the page, click "Join Meeting." When prompted, enter Meeting Number 193-429-659. Enter the requested information to access the presentation.

The Report, State Fact Sheets, and PowerPoint Presentation will be available in advance of the call at www.nirsonline.org on Feb. 26th at 9 AM ET.

An audio digitized replay of the call will be available from February 26, 2009 at 1 PM ET through March 26, 2009 at 11:59 PM ET by dialing (800) 475-6701, Access Code 988166.

ABOUT NIRS

NIRS is a non-profit, non-partisan organization established to contribute to informed policymaking by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole. Located in Washington, D.C., NIRS's membership includes employee benefit plans, agencies that manage retirement plans, trade associations, financial services firms, and other retirement service providers.

###

***“Pensionomics”
and
“A Better Bang for the Buck”***

**Testimony of Beth Almeida
Executive Director
Senate State Affairs Committee
Legislature of the State of Alaska
March 24, 2009**



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NIRS Mission

- Contribute to informed policy making by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole.
- Research, education, and outreach programs that are national in scope.

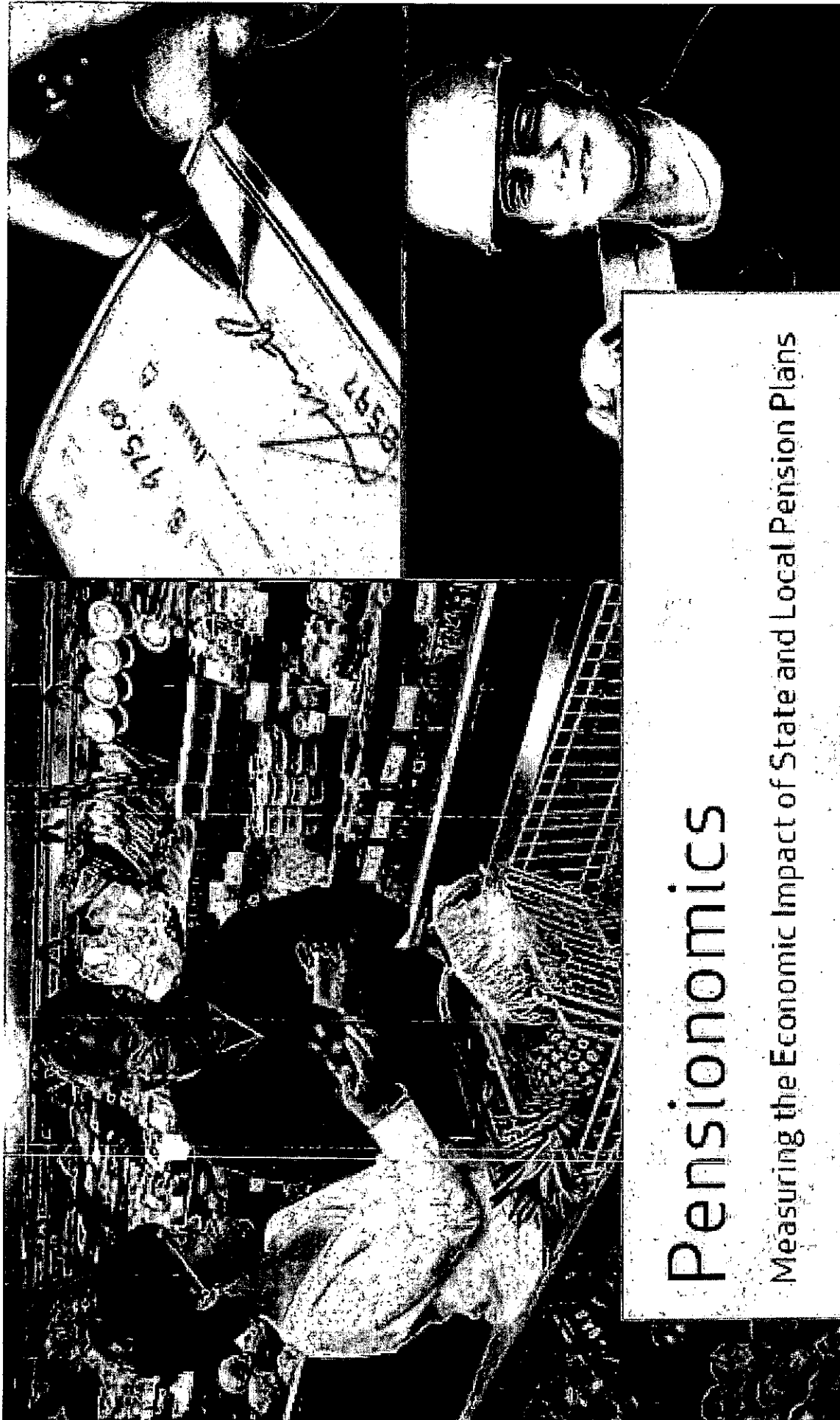


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NIRS Membership

- NIRS has a diverse membership of organizations interested in retirement security
- Members include:
 - Employee benefit plans
 - State/local agencies that manage retirement plans
 - Trade associations
 - Financial services firms
 - Other retirement providers





Pensionomics

Measuring the Economic Impact of State and Local Pension Plans

by Ilana Boivie and Beth Almeida

February 2009

Why We Did this Study

- Measure the “economic footprint” of state and local pension plans, both nationally and within states.
- DB plans act as an “automatic stabilizer” for the economy
 - Even in tough times, retirees with a reliable pension can maintain spending on basic needs
- Get a sense of how much of a stabilizing effect state and local pensions may have on the U.S. economy and state economies.



What We Found - Nationally

- In 2006, expenditures made out of state and local retirement benefits supported...
 - **2.5 million jobs** that paid **\$92 billion** in income
 - **\$358 billion** in economic output nationwide
 - **\$57 billion** in federal, state, and local tax revenue



What We Found - Alaska

- In 2006, expenditures made out of state and local retirement benefits supported...
 - **6,270 jobs** that paid **\$385 million** in income
 - **\$1 billion** in economic output statewide
 - **\$155 million** in federal, state, and local tax revenue



What We Found - Alaska

- For every dollar paid out in benefits, \$1.25 in total economic activity was supported in the state.

Pension Benefit Multiplier



\$1.00

pension benefits paid to
retirees in Alaska



\$1.25

total economic activity



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What We Found - Alaska

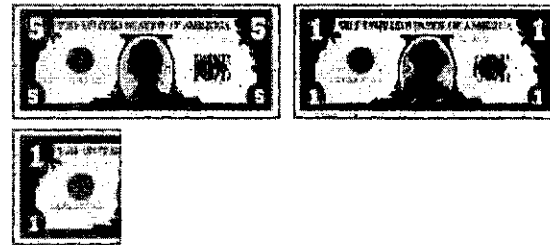
- For every dollar contributed by taxpayers, \$6.35 in economic activity was supported in the state.

Taxpayer Contribution Factor*



\$1.00

contributed by Alaska taxpayers
to state and local pensions



\$6.35

total economic activity

→ (Employer Contributions)



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Overview of State and Local DB Pensions in Alaska

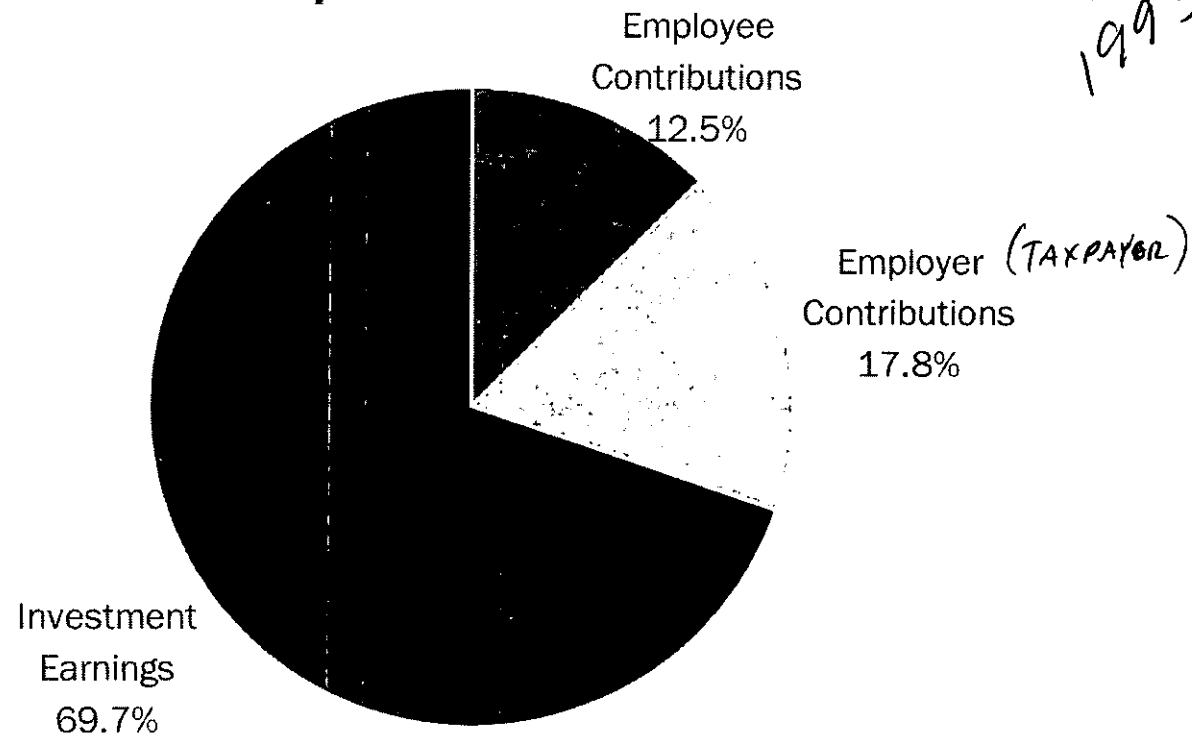
- According to the U.S. Census Bureau, close to 35,000 Alaskans received pension benefits from state and local pensions in 2006.
- Retired Alaskans received roughly \$819 million in benefit payments in 2006.
- The average pension was \$1,953 per month, or \$23,440 per year.



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Financing of State and Local Pension Plans in Alaska

Aggregate Contributions by Source, 1993-2006



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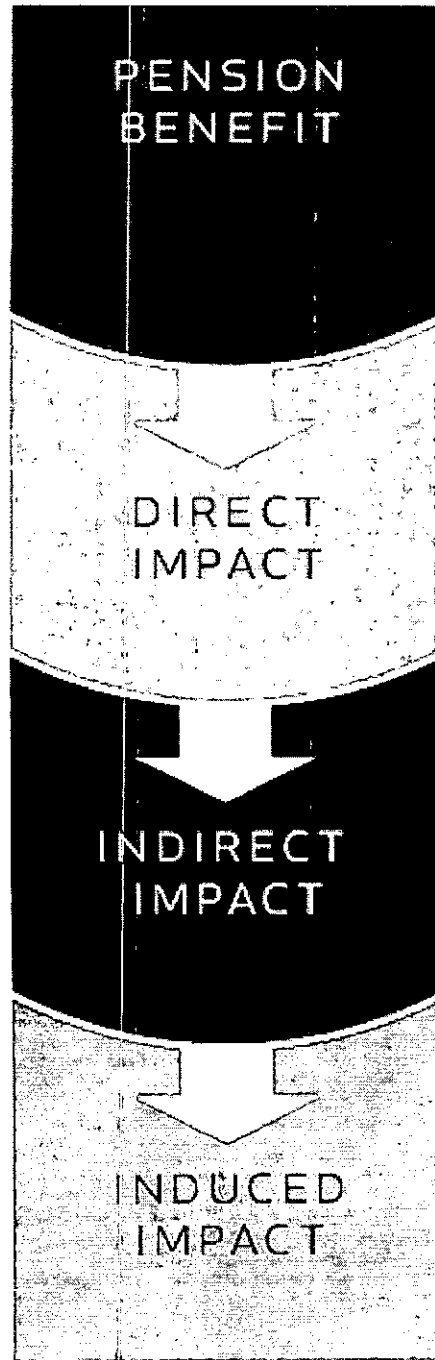
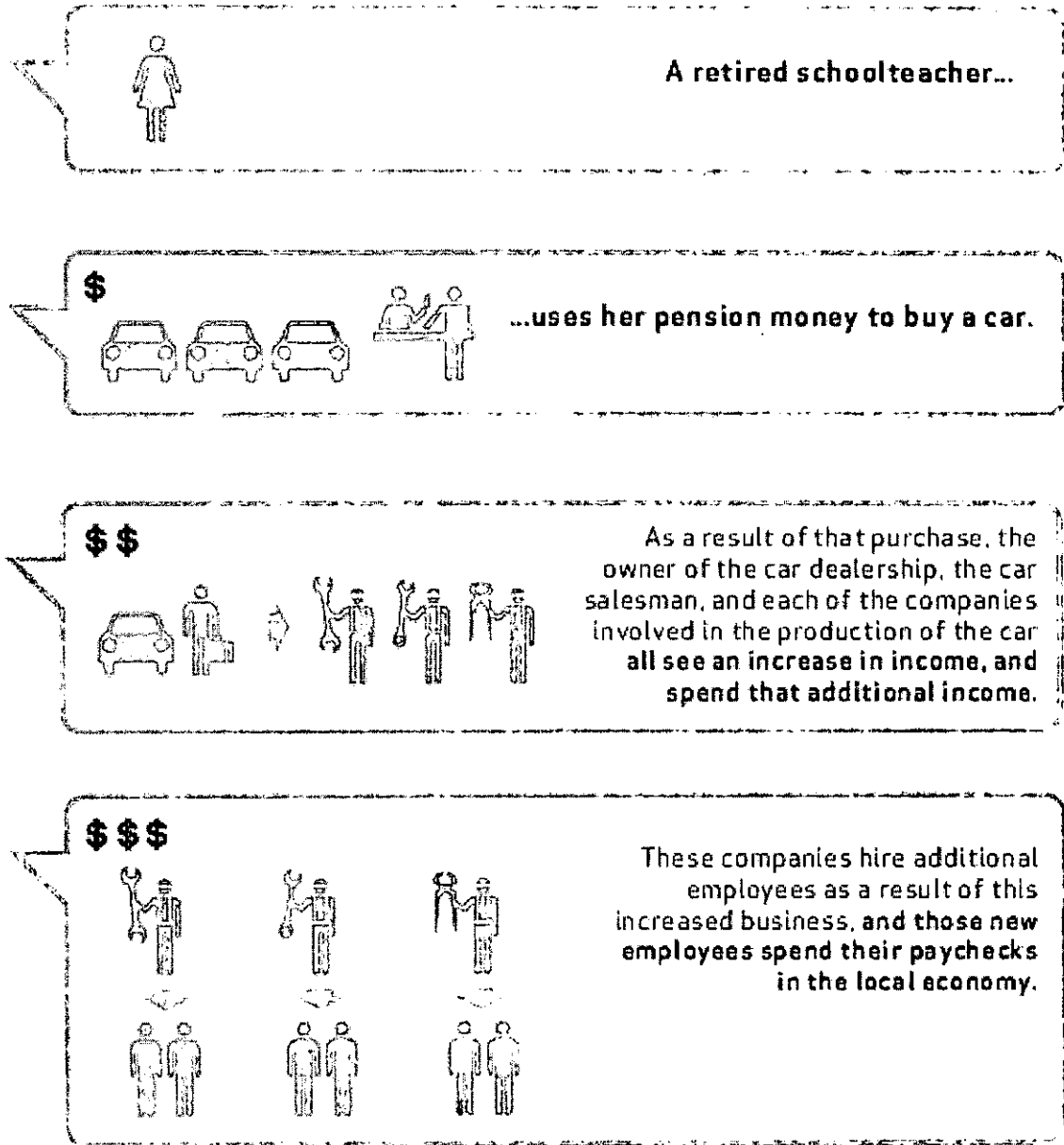


Figure 2:
The Multiplier Effect: How Spending Ripples Through the Economy, Supporting Jobs and Incomes in the Process



Methodology

What We Did

- Began with benefit payment data from the U.S. Census Bureau's State & Local Government Employee Retirement System survey.
- Estimated taxes paid out of benefits using data from CBO and Edwards and Wallace (2004).
- Adjusted Census benefit payment data to account for migration of retirees from one state to another.
- Using IMPLAN input-output modeling software, estimated the economic impacts of retiree expenditures and taxes.



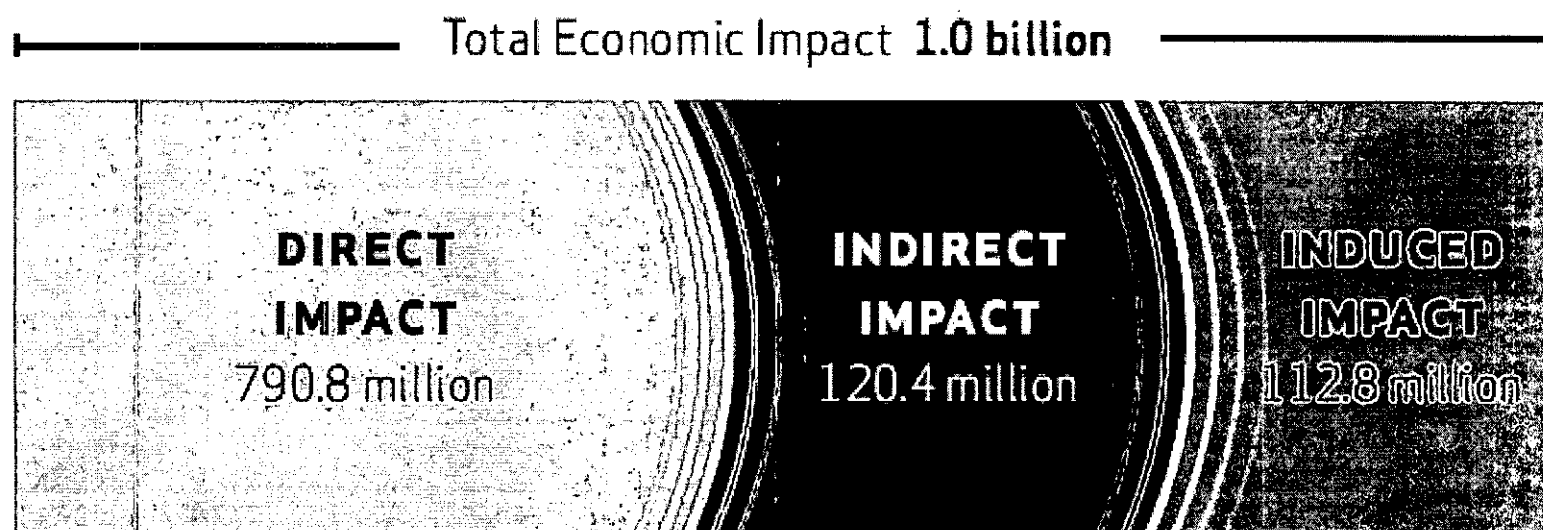
What is IMPLAN?

- IMPLAN is an input-output modeling software originally developed for a USDA Forest Service project, now used for many types of analysis.
- It represents relationships among various sectors in the economy as a matrix. It estimates how an initial event reverberates through the economy.
- IMPLAN was used to estimate the following economic impacts: jobs, incomes, value added, total output, and tax revenue.



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Alaska Results: Total Economic Impact



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Alaska Results: Tax Revenue Impact

Federal Tax	87.5 million
State/Local Tax	67.8 million
Other Corporate Taxes	0.2 million
Total	\$155.5 million



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Alaska Results: Economic Impacts by Industry

- Industries with most jobs supported
 - Health Care and Social Assistance: 1,354 jobs
 - Retail Trade: 1,331 jobs
 - Accommodation and Food Services: 839 jobs
- Industries where greatest economic impact felt
 - Health Care and Social Assistance: \$119 million
 - Retail Trade: \$97 million
 - Real Estate, Rental, Leasing: \$51 billion



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Alaska Results: Economic Impacts by Industry

Industry	Employment Impact (# Jobs)	Value Added Impact (\$ millions)	Income Impact (\$ millions)	Output Impact (\$ millions)
Health Care and Social Assistance	1,354	\$75.0	\$74.2	\$119.1
Retail Trade	1,331	64.4	50.9	97.0
Accommodation and Food Services	839	26.7	23.8	50.0
Other Services (Except Public Administration)	479	14.2	13.3	27.1
Real Estate and Rental and Leasing	452	33.8	28.2	50.8
Professional, Scientific, and Technical Services	229	11.8	11.5	23.2
Arts, Entertainment, and Recreation	229	6.2	5.6	10.8
Finance and Insurance	227	24.2	23.3	43.9
Public Administration	196	10.1	10.1	20.7
Transportation and Warehousing	187	11.4	10.8	22.0

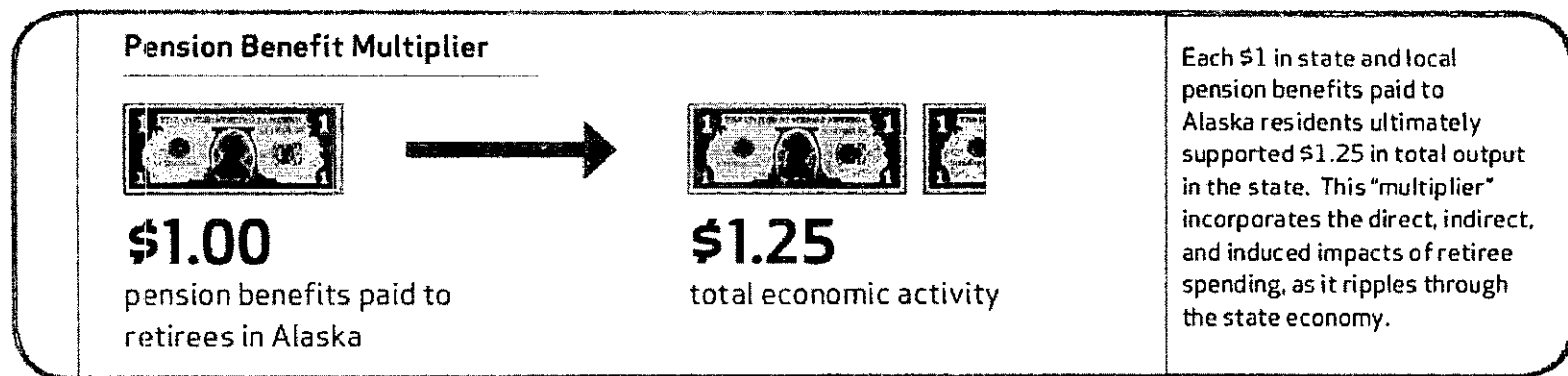


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Alaska Results:

Pension Expenditure Multiplier

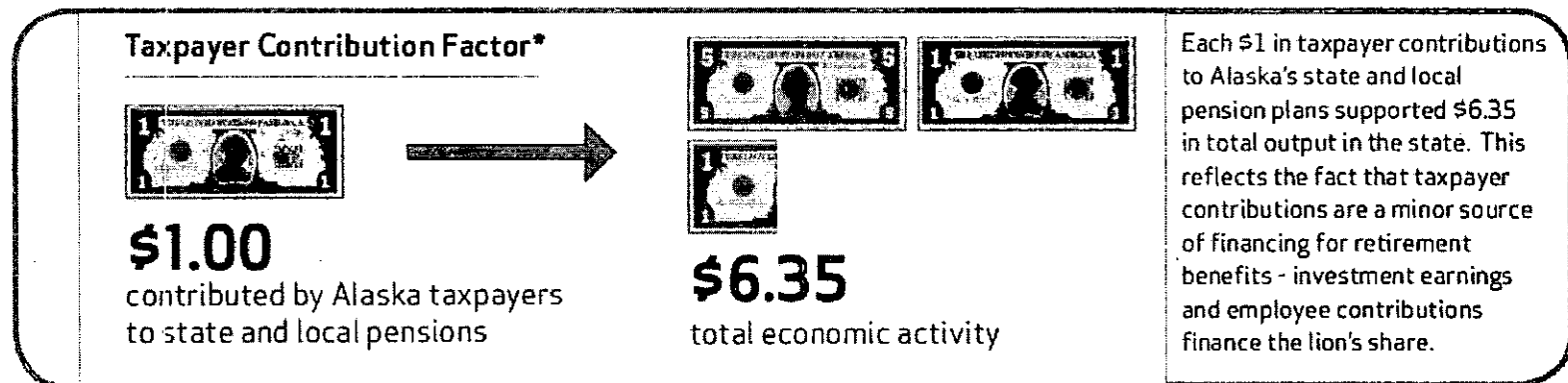
- What is the total economic impact of each dollar paid out in pension benefits?
- An expenditure multiplier measures the size of the “ripple effect” of retirees’ expenditures



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Alaska Results: Taxpayer Contribution Factor

- What is the “return” on each dollar taxpayers “invest” in state/local pension plans?
- Because employee contributions and investment earnings finance most of the benefits, this factor is large...



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Conclusions

- State and local pension plans have a large economic footprint in the U.S. and Alaska.
- State and local pensions have significant ripple effects – one retiree's spending becomes someone else's income.
- State and local pensions have sizable multipliers – up-front investment of taxpayer dollar goes a long way.



Conclusions

- State and local pensions do more than provide a critical source of reliable income for 7.3 million retired Americans and 35,000 retired Alaskans.
- They support 2.5 million American jobs and \$358 billion in national economic activity.
- They support 6,270 Alaskan jobs and \$1 billion in economic activity.
- Pensions are “automatic stabilizers” – retirees can continue to spend on basic needs, providing important stimulus during these tough times.

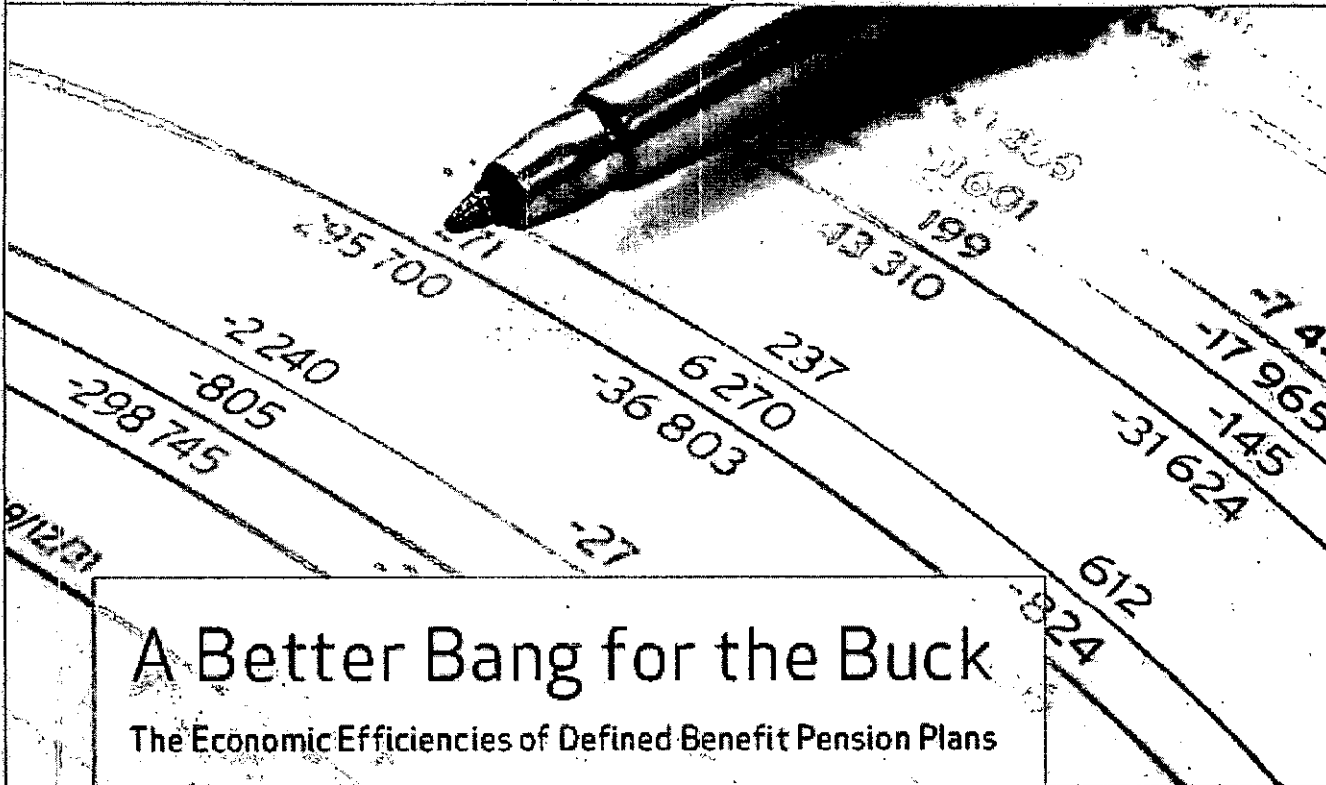


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A Better Bang for the Buck

The Economic Efficiencies of Defined Benefit Pension Plans

by Beth Almeida and William B. Fornia, FSA

August 2008

Research Question: Why We Did this Study

- Evaluate claims that “DC plans save money”
- How do the costs of delivering retirement benefits through each type of plan compare?
 - Apples-to-apples comparison
 - Calculate the cost to deliver the same level of retirement benefits
 - DB plan
 - DC plan



Methodology: What We Did

- We model a population of 1,000 female teachers who work for 30 years - their final salary is \$50,000
- We define a “target” retirement benefit - about \$2,200/month – at age 62, which is adjusted for inflation
- We calculate the cost to fund this benefit through a DB plan structure, then through a DC plan structure



Results:

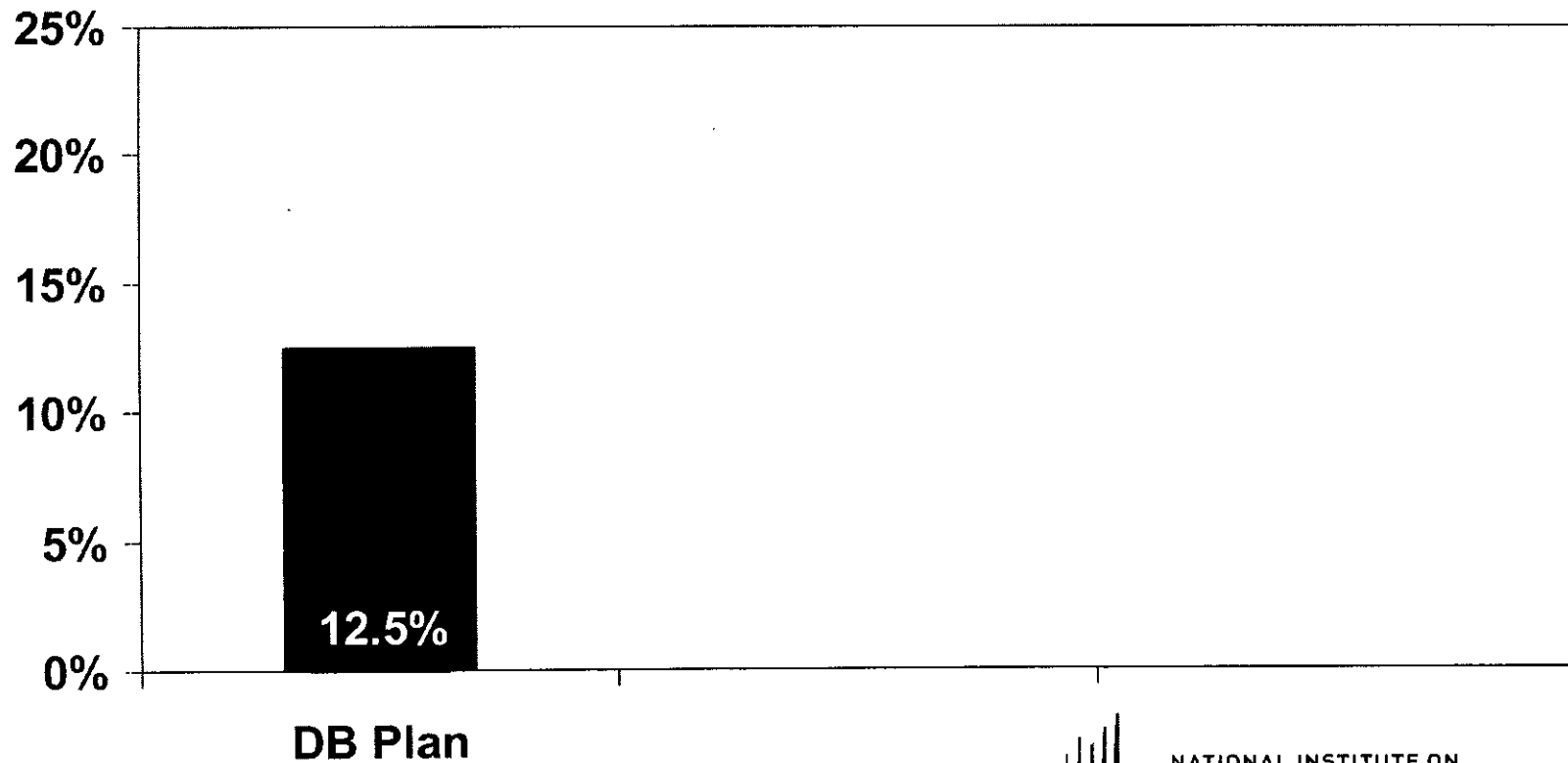
What We Found

- The DB approach saves money compared to the DC approach. Three reasons ...
 1. DB pension plans pool “longevity risks”
 2. DB pension plans can maintain a better diversified portfolio because, unlike individuals, they do not age
 3. DB pension plans achieve better investment returns because of professional asset management and lower fees



Our DB Plan Costs 12.5% of Payroll

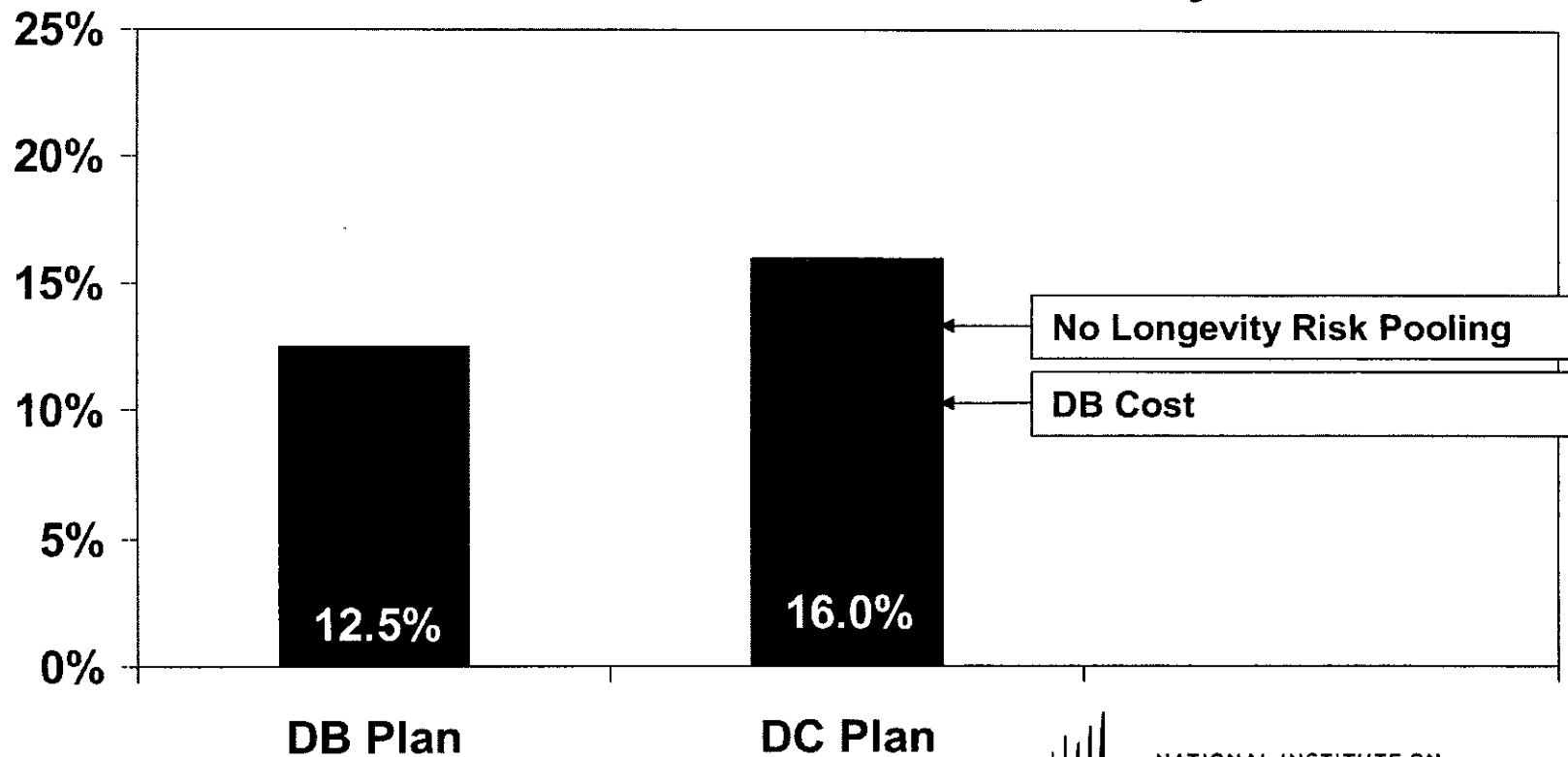
Cost of DB Plan as % of Payroll



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Lack of Longevity Risk Pooling in DC Plans Adds Cost

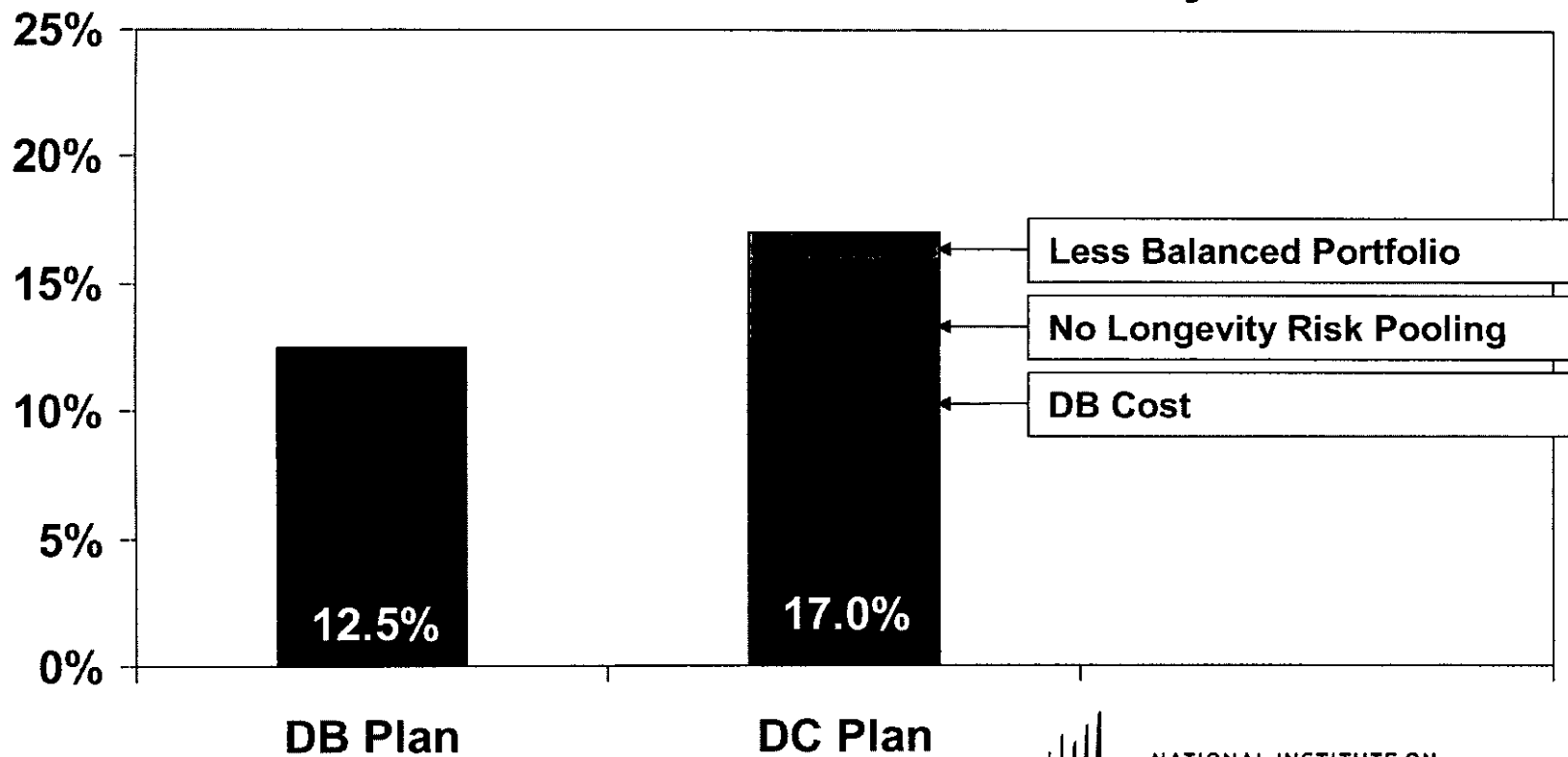
Cost of DB and DC Plan as % of Payroll



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Age-Based Portfolio Shift in DC Plans Adds Costs

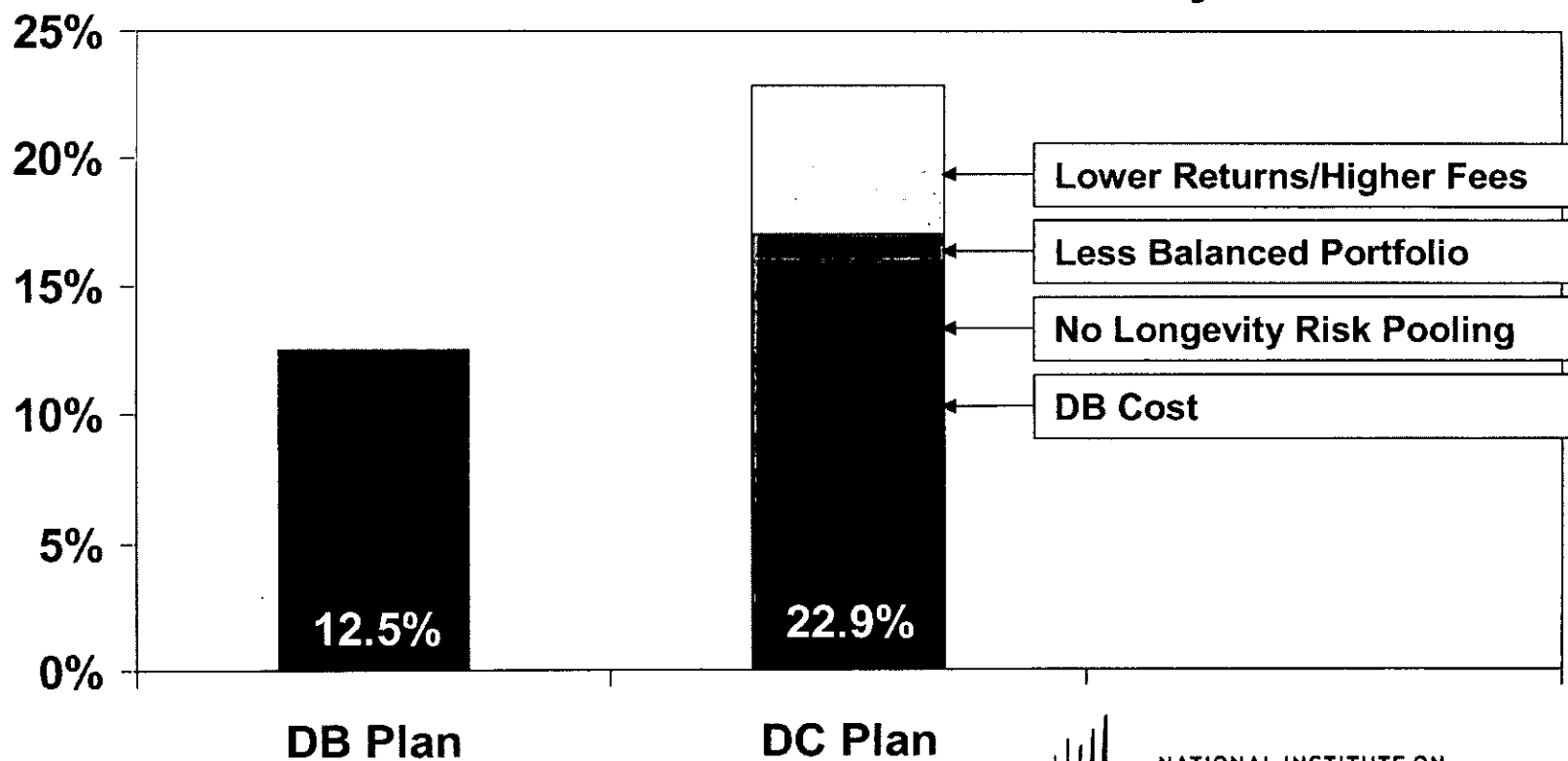
Cost of DB and DC Plan as % of Payroll



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Lower Returns/Higher Fees in DC Plans Adds Cost

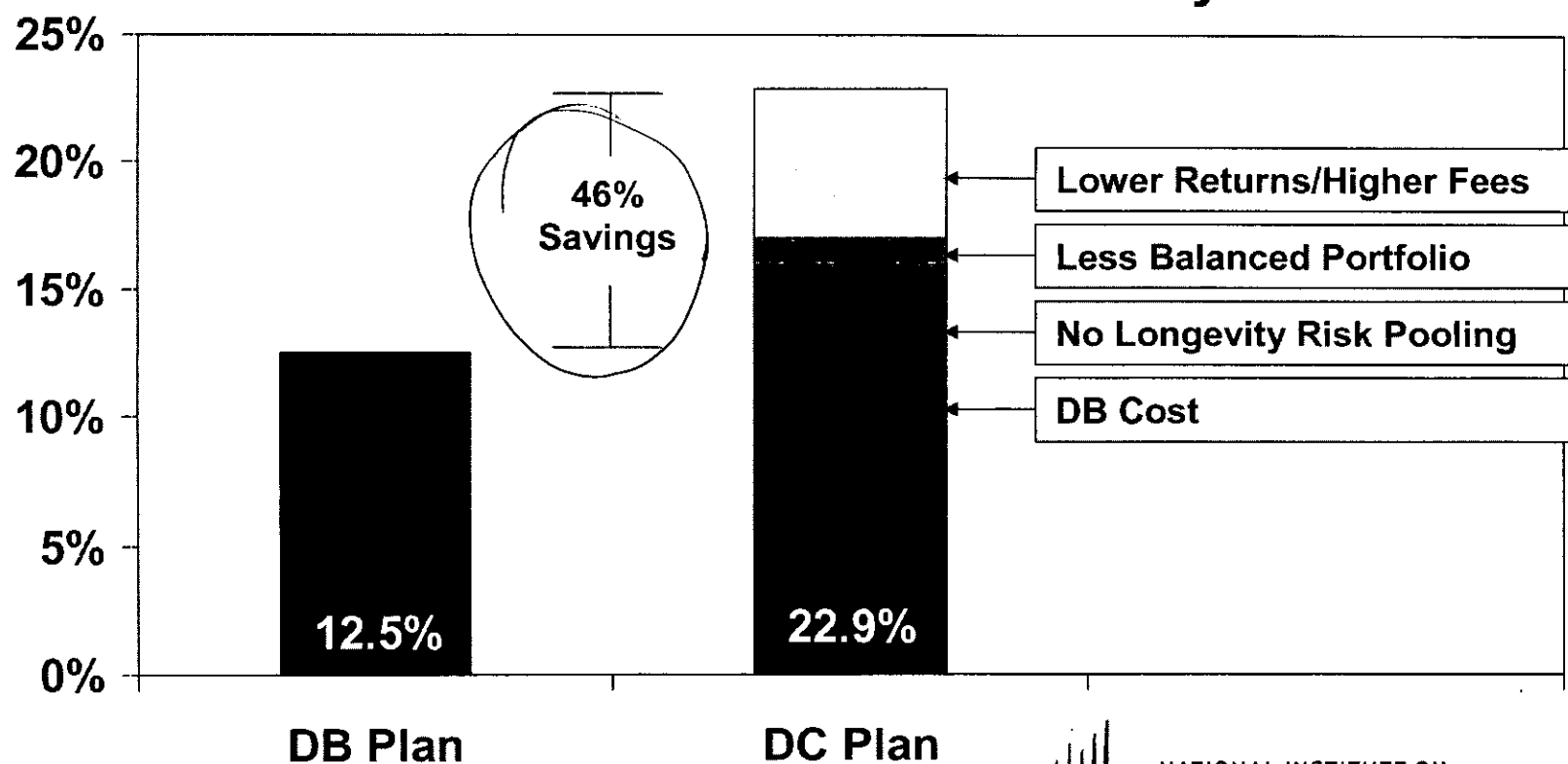
Cost of DB and DC Plan as % of Payroll



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DB Plan Can Deliver Same Benefit at About Half the Cost of DC Plan

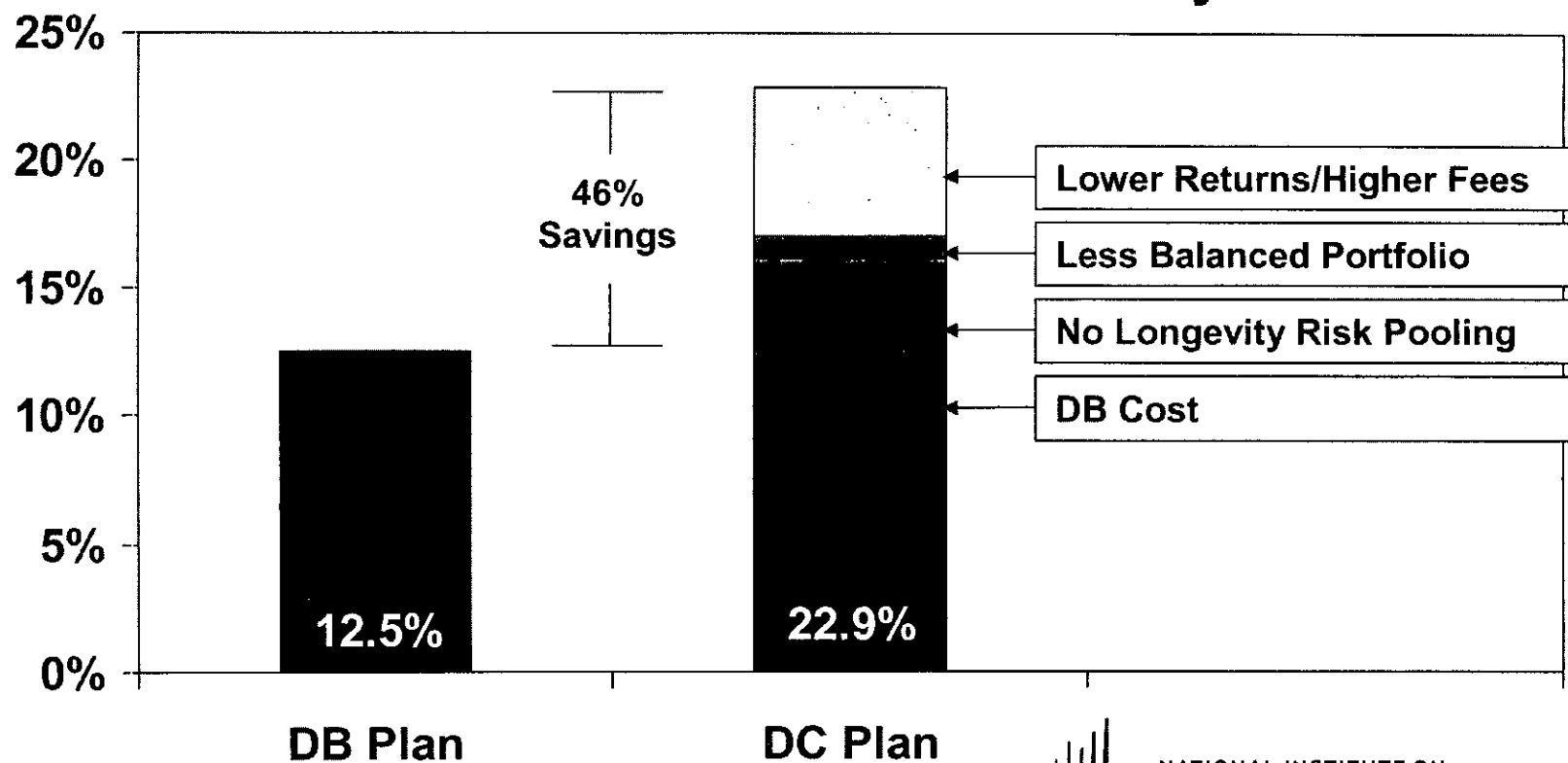
Cost of DB and DC Plan as % of Payroll



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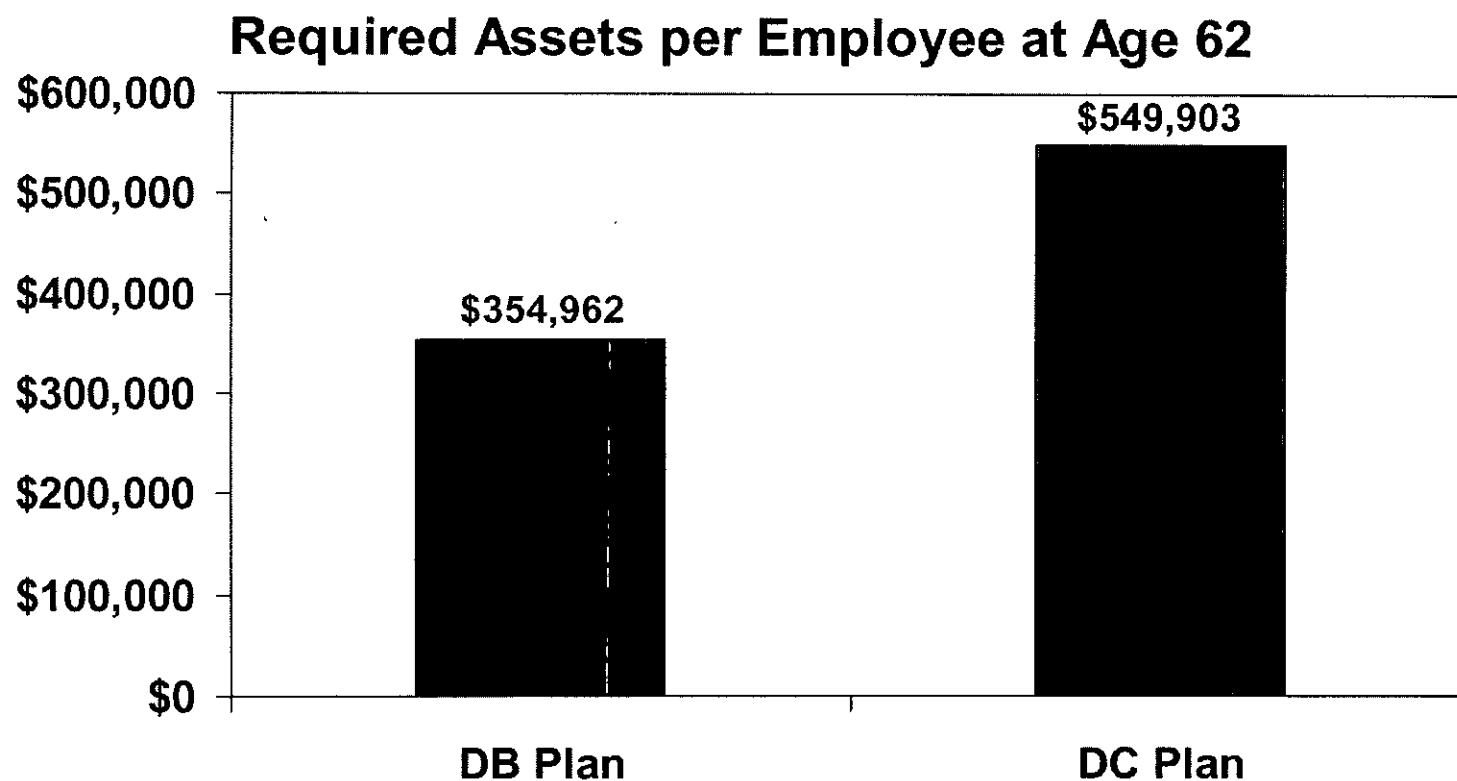
DB Plan Can Deliver Same Benefit at About Half the Cost of DC Plan

Cost of DB and DC Plan as % of Payroll



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DB Plan Can Do More with Less



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Report Conclusions

- DB plans have built-in economic efficiencies – provide a “better bang for the buck”
- These efficiencies drive significant cost savings for taxpayers and employers
- Decision makers should continue to carefully evaluate claims that “DC plans will save money”



Questions, Comments & Contact Info

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Beth Almeida
Executive Director
balmeida@nirsonline.org



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SENATE COMMITTEE REPORT

DATE: 2/27/09

FURTHER: Finance

DATE TURNED
IN TO OFFICE: 3/24/09

State Affairs Committee considered SENATE BILL NO. 23

SB 23 REPEAL DEFINED CONTRIB RETIREMENT PLANS

"An Act repealing the defined contribution retirement plans for teachers and for public employees; providing a defined benefit retirement plan for teachers and public employees; making conforming amendments; and providing for an effective date."

and recommends:

- be replaced with SCS or CS _____ (_____)
- adopt previous SCS or CS SB23 (LIC)
- attached amendment(s)
- adopt _____ Letter of Intent
- further referral to _____ Committee

SENATE BILL:
 Same Title
 New Title

HOUSE BILL:
 Same Title
 Technical Title Change
 New Title w/ SCR # _____


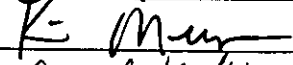
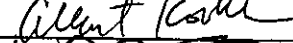

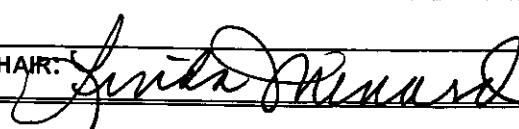
NEW FISCAL NOTE(S):

Department	Date	Fiscal	Indet.	Zero	FN#
DOA	3/23/09	✓			

PREVIOUS FISCAL NOTE(S):

Department	Date	Fiscal	Indet.	Zero	FN#
DOA	3/24/09	✓			1

APPROPRIATION - no fiscal note

SIGNATURES AND RECOMMENDATIONS	PRINTED LAST NAME	DO PASS	DO NOT PASS	NO REC	AMEND
	PARKMAN	X			
	Meyer	X			
	Koolah			X	
	French	X			
CHAIR: 	MENARD	X			