NEW Research

Pensionomics 2016: Measuring the Impact of DB Pension Expenditures

Webinar
Sept. 14, 2016
Agenda

• Introductions
• Research Review
• Q&A
Webinar Logistics

• Attendees in listen only mode.

• Questions welcome! Type in using “Question” function on control panel and we will read aloud, respond.

• Audio, technical issues during webinar, call GoToWebinar at 1-800-263-6317.

• Replay will be posted in Members Only section of NIRS web site.
Speakers

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Executive Director
National Institute on Retirement Security

Jennifer Brown
Report Author & Manager of Research
National Institute on Retirement Security
Why This Study?

• Measure the economic “ripple effect” of defined benefit (DB) pension plans.

• Retirees with a reliable pension can maintain spending throughout their retirement years, regardless of economic ups and downs acting as an economic stabilizer.

• Quantify the economic impact of pension spending on the U.S. economy that will be constrained as the population ages.
Pensionomics 2016: What We Found

• In 2014, expenditures from public and private pension benefits supported:
  
  – $1.2 trillion in economic output nationwide
  – 7.1 million jobs that paid $354.8 billion in income
  – $627.4 billion in value added nationally
  – $189.7 billion in federal, state, and local tax revenue
What is the total economic impact of each dollar paid out in pension benefits?

Pension Expenditure Multiplier

$1.00 pension benefits paid to retirees with DB pension income

$2.21 total output

*Caution should be used in interpreting this number. See the Technical Appendix for details.*
What is the “return” on each dollar taxpayers “invest” in state and local pension plans?

**Taxpayer Investment Factor***

$1.00 contributed by taxpayers to state and local pensions over 30 years

$9.19 total output

* Caution should be used in interpreting this number. See the Technical Appendix for details.
## Overview of Public and Private Pension Payments in the U.S.

### Table 1. Public and Private Sector Pension Benefits, 2014

<table>
<thead>
<tr>
<th></th>
<th>State and Local</th>
<th>Federal</th>
<th>Private Sector</th>
<th>Total*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiaries</td>
<td>9.6 million</td>
<td>2.6 million</td>
<td>12.1 million</td>
<td>24.3 million</td>
</tr>
<tr>
<td>Average Benefit</td>
<td>$26,455</td>
<td>$30,302</td>
<td>$15,520</td>
<td>$21,413**</td>
</tr>
<tr>
<td>Total Benefits</td>
<td>$253 billion</td>
<td>$78.8 billion</td>
<td>$187.9 billion</td>
<td>$519.7 billion</td>
</tr>
</tbody>
</table>


* Totals may not add up exactly due to rounding.

** Total average benefit represents a weighted average of public and private sector benefits.
Pension Plans’ Economic Impact

- Pension plans can support economic activity through several channels, for example…
  - Benefit channel – retirees’ expenditures create incomes for others in the economy
  - Investment channel – the investment of pension assets provides capital to businesses to develop products, invest in new technologies, create jobs.

- This study focuses on the benefit channel
Methodology

• Began with benefit payment data from the Census Bureau on state & local plans, the CPS for private plans, and OPM for federal plans.

• Estimated taxes paid out of benefits using data from CBO, BEA, and NCSL.

• Adjusted benefit payment data to account for migration of retirees from one state to another.

• Estimated the economic and tax impacts of retiree expenditures, using IMPLAN input-output modeling software and data package.
What is IMPLAN?

- Used to estimate impacts on: jobs, income, value added, total output, and tax revenue.

- An input-output modeling software and data package developed for a USDA Forest Service project, now used for many types of analysis.

- Represents relationships among various sectors in the economy as a matrix & estimates how an initial event reverberates through the economy.
Types of Economic Impact

DIRECT
Businesses gain revenue from first round spending.
In this case, consumer spending, e.g., car purchase at auto dealership

INDIRECT
$ flows up the supply chain, e.g., manufacturers and goods transport

INDUCED
Owners and employees of affected businesses spend their earnings
Results: DB Pensions Support $1.2 Trillion in Economic Activity

- State & Local: $559.70 Billion
- Federal: $174.40 Billion
- Private: $417.10 Billion
Results: DB Pensions Support 7.1 Million American Jobs

- State & Local: 3,432,326
- Federal: 1,069,457
- Private: 2,549,295
## Results: DB Pensions Support $354.8 Billion in Labor Income

<table>
<thead>
<tr>
<th></th>
<th>State and Local Pensions</th>
<th>Federal Pensions</th>
<th>Private Pensions</th>
<th>Total Labor Income Supported*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Impact</td>
<td>$70.5 billion</td>
<td>$22.0 billion</td>
<td>$52.4 billion</td>
<td>$144.9 billion</td>
</tr>
<tr>
<td>Indirect Impact</td>
<td>$48.5 billion</td>
<td>$15.1 billion</td>
<td>$36 billion</td>
<td>$99.7 billion</td>
</tr>
<tr>
<td>Induced Impact</td>
<td>$53.7 billion</td>
<td>$16.7 billion</td>
<td>$39.9 billion</td>
<td>$110.2 billion</td>
</tr>
<tr>
<td><strong>Total Labor Income Impact</strong>*</td>
<td><strong>$172.7 billion</strong></td>
<td><strong>$53.8 billion</strong></td>
<td><strong>$128.3 billion</strong></td>
<td><strong>$354.8 billion</strong></td>
</tr>
</tbody>
</table>

*Totals may not add up exactly due to rounding.
Results: DB Pensions Support $627.4 Billion in Value Added

<table>
<thead>
<tr>
<th></th>
<th>State and Local Pensions</th>
<th>Federal Pensions</th>
<th>Private Pensions</th>
<th>Value Added Supported*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Impact</td>
<td>$128.5 billion</td>
<td>$40 billion</td>
<td>$95.5 billion</td>
<td>$264 billion</td>
</tr>
<tr>
<td>Indirect Impact</td>
<td>$82.7 billion</td>
<td>$25.8 billion</td>
<td>$61.4 billion</td>
<td>$169.8 billion</td>
</tr>
<tr>
<td>Induced Impact</td>
<td>$94.2 billion</td>
<td>$29.4 billion</td>
<td>$70 billion</td>
<td>$193.6 billion</td>
</tr>
<tr>
<td><strong>Total Value Added Impact</strong>*</td>
<td><strong>$305.4 billion</strong></td>
<td><strong>$95.2 billion</strong></td>
<td><strong>$226.8 billion</strong></td>
<td><strong>$627.4 billion</strong></td>
</tr>
</tbody>
</table>

*Totals may not add up exactly due to rounding.
Results: Economic Impacts by Industry

- Industries with most jobs supported:
  - **Real estate** establishments
    - 382,812 jobs
    - $75.3 billion in output
  - **Private hospitals**
    - 330,057 jobs
    - $49.0 billion in output
  - **Full-service restaurants**
    - 295,539 jobs
    - $13.3 billion in output
Results: DB Pensions Support $189.7 Billion in Tax Revenue

Table 6. DB Pensions Support $110.4 Billion in Federal Tax Revenue

<table>
<thead>
<tr>
<th></th>
<th>State and Local Pensions</th>
<th>Federal Pensions</th>
<th>Private Pensions</th>
<th>Federal Tax Revenue*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes Paid by Beneficiaries on Benefits</td>
<td>$10.6 billion</td>
<td>$3.3 billion</td>
<td>$7.9 billion</td>
<td>$21.8 billion</td>
</tr>
<tr>
<td>Tax Revenue Resulting from Retiree Expenditures</td>
<td>$43.1 billion</td>
<td>$13.4 billion</td>
<td>$32 billion</td>
<td>$88.6 billion</td>
</tr>
<tr>
<td><strong>Total Federal Tax Revenue Impact</strong>*</td>
<td><strong>$53.7 billion</strong></td>
<td><strong>$16.7 billion</strong></td>
<td><strong>$39.9 billion</strong></td>
<td><strong>$110.4 billion</strong></td>
</tr>
</tbody>
</table>

*Totals may not add up exactly due to rounding.

Table 7. DB Pensions Support $79.3 Billion in State and Local Tax Revenue

<table>
<thead>
<tr>
<th></th>
<th>State and Local Pensions</th>
<th>Federal Pensions</th>
<th>Private Pensions</th>
<th>Total State and Local Tax Revenue*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes Paid by Beneficiaries on Benefits</td>
<td>$10.3 billion</td>
<td>$3.2 billion</td>
<td>$7.7 billion</td>
<td>$21.1 billion</td>
</tr>
<tr>
<td>Tax Revenue Resulting from Retiree Expenditures</td>
<td>$28.3 billion</td>
<td>$8.8 billion</td>
<td>$21 billion</td>
<td>$58.2 billion</td>
</tr>
<tr>
<td><strong>Total State and Local Tax Revenue Impact</strong>*</td>
<td><strong>$38.6 billion</strong></td>
<td><strong>$12 billion</strong></td>
<td><strong>$28.7 billion</strong></td>
<td><strong>$79.3 billion</strong></td>
</tr>
</tbody>
</table>

*Totals may not add up exactly due to rounding.
Results: Pension Expenditure Multiplier

What is the total economic impact of each dollar paid out in pension benefits?

Pension Expenditure Multiplier

$1.00
pension benefits paid to retirees with DB pension income

$2.21
total output
Just as contributions from employees and employers have an expanded impact through the compounding of investment earnings over time, a similar dynamic occurs when retirees spend their pension checks. When a retiree receives a pension benefit, s/he spends it on goods and services in the local community. These expenditures have a “ripple effect” in the economy, as one person’s expenditures become another person’s income.

Measuring the National Economic Impact of DB Pension Plans

This study measures the economic impact of pension benefits paid by public and private pension plans nationally, as well as the economic effects of state and local plans within each state economy. Our analysis rests on the recognition that expenditures have a “multiplier” effect in a regional or national economy. When money is spent at a local business to purchase, say, groceries, that initial purchase generates even more income. First, some of the money spent circulates back to the businesses that manufactured, transported, and otherwise contributed to the production of those goods. Second, the proprietors of these businesses and their employees will spend more money at other businesses, spurring another round of income generation. Thus, with each new round of spending, additional revenue is generated, sustaining jobs, incomes, total output, and tax revenue to the local community. Examples of retirees and the impact of their spending on local businesses are illustrated in sidebars in this report.

In addition, local economies benefit not only from pension spending by residents, but from pension checks spent in other localities. That is, the economic benefits generated by pension spending in one region “leak” to and are captured by other regions.

Our analysis is focused on the expenditure effects of pension benefits, measuring the economic impacts that result when expenditures made by retirees ripple throughout the economy. Because pension benefits are permanent sources of income—in that they cannot be outlived—we would expect the economic impacts to be larger than those of temporary income increases.

For this reason, we would expect the economic impacts of pension benefit expenditures to be larger than those out of, for example, unemployment insurance benefit payments. It should also be noted that this study measures the gross economic impacts of pension benefit expenditures, rather than the net economic impacts. For a detailed explanation, see the Technical Appendix.

Because taxpayers and elected officials have an interest in gauging the ultimate economic impact of each tax dollar “invested” in a state or local pension plan, we calculate a proxy measurement of the total economic impact attributable to each dollar in employer pension contributions made by the taxpayer, called the “taxpayer investment factor.” Details follow.

Data and Methodology

The data used for our analysis comes primarily from two sources: the U.S. Census and IMPLAN. We used data for 2014, as it was the most recently available at the time of our analysis.

Data on state and local pension plans comes from the Census Bureau’s Annual Survey of Public Pensions, which is a representative sample of state and local DB pension plans in the United States. This survey provides data on revenues, expenditures, financial assets, and membership for state and local pension plans on a national basis and in each of the states. Federal pension data comes from data published by the U.S. Census Bureau.

Note: Author’s analysis of data from U.S. Census Bureau.
What is the “return” on each dollar taxpayers “invest” in state and local pension plans?

**Taxpayer Investment Factor**

$1.00 contributed by taxpayers to state and local pensions over 30 years

$9.19 total output
State-by-State Analysis of Impact from State & Local Pensions
Results: Economic Impacts by State

**Key Findings**

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

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

In 2014, expenditures stemming from state and local pensions supported...

- 101,370 jobs that paid $4.8 billion in wages and salaries
- $115.5 billion in total economic output
- $2.4 billion in federal, state, and local tax revenues

In the state of Florida.

Each dollar paid out in pension benefits supported $6.67 in total economic activity in Florida.

Each dollar “invested” by Florida taxpayers in these plans supported $65.13 in total economic activity in the state.

**Overview**

Expenditures made by states and local governments provide a steady economic stimulus to Florida communities and the state economy. In 2014, $101,370 residents of Florida received a total of $115.5 billion in pension benefits from state and local pension plans.

The average pension benefit received was $1,857 per month or $22,284 per year. These benefits provide retirement income for most basic needs in retirement.

Between 1999 and 2014, 27.9% of Florida’s pension fund revenues came from employer contributions, 24.9% from employee contributions, and 70.1% from investment earnings. Contributions, investments, and employee contributions—what taxpayer based contributions—have historically made up the bulk of pension funding needs.

**Impact on Jobs and Income**

Retiree expenditures stemming from state and local pension benefit payouts supported 101,370 jobs in the state. The total income to state residents supported by pension expenditures was $4.8 billion.

To put these economic impacts in perspective, in 2014, Florida’s unemployment rate was 6.8%. The fact that DB pension expenditures supported 101,370 jobs is significant, as it represents 5.6% of the population in Florida at that time.

**Economic Impact**

State and local pension funds in Florida and other states paid a total of $115.5 billion in benefits to Florida residents in 2014. Retirees’ expenditures from these benefits supported a total of $13.1 billion in total economic output in the state, and $484 billion in economic activity in the state.

$4.8 billion in direct economic impacts were supported by separate initial contributions. An additional $65.13 in indirect impact resulted when these benefits purchased additional goods and services.

$30 billion in indirect impacts occurred when workers employed by businesses as a result of the direct and indirect impacts made expenditures.

**Total Economic Impact $13.1 billion**

![Graph showing economic multipliers]
State Fact Sheets Downloadable at www.nirsonline.org
Example of a Retiree from California

• Linda is newly-retired 62 year old, African American woman with DB pensions from private & public sector jobs.

• Nearly all of her $3,300/month pension goes to housing costs.
Real Estate Investing: California

- CalSTRS $7.5 billion invested in California real estate supporting 79,000 CA jobs.

- 170,000 jobs in CA California supported by CalPERS’ real estate investments that total $7.2 billion.
Questions?

National Institute on Retirement Security
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