

# Hidden Debt, Hidden Deficits: How Pension Promises are Swallowing State Budgets

December 2016

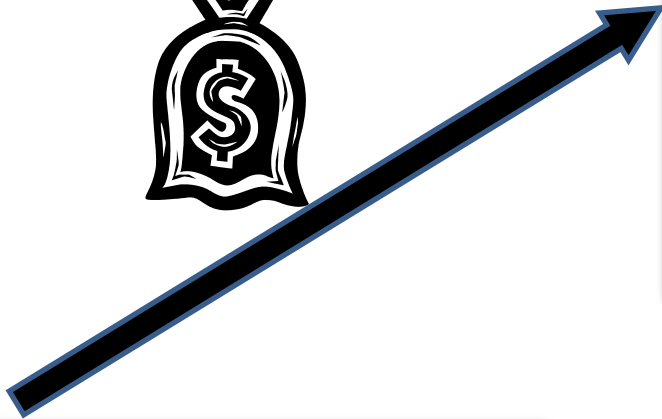
**Joshua D. Rauh**

**Ormond Family Professor of Finance, Stanford GSB  
Senior Fellow, Hoover Institution**

# PLAN FOR TODAY

- Introduction: Pensions and Government Budgets
- Back to College
  - Finance 101: Assets and Liabilities
  - Governmental Accounting 101: How to Make Your Liabilities Disappear
  - Finance 102: Measuring Liabilities
  - The Finance Approach to Governmental Liabilities
- Discussion: Do lawmakers and members of the public have the information they need to make sound decisions?

# A BALANCED BUDGET?



For Privacy Notice, get form FTB 1131.

## Resident Income Tax Return 1

Fiscal year filers only: Enter month of year end: month \_\_\_\_\_ y

Your first name \_\_\_\_\_ Initial \_\_\_\_\_ Last name \_\_\_\_\_

If joint tax return, spouse's/RDP's first name \_\_\_\_\_ Initial \_\_\_\_\_ Last name \_\_\_\_\_

Address (number and street, PO Box, or PMB no.) \_\_\_\_\_

City (If you have a foreign address, see page 7.) \_\_\_\_\_

Date of Birth \_\_\_\_\_

Your DOB (mm/dd/yyyy) \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  Spouse's



# A BALANCED BUDGET?

\$19,000 per year when I retire

\$45,000 per year when I retire

\$85,000 per year when I retire

\$100,000 per year when I retire



For Privacy Notice, get form FTB 1131.

## Resident Income Tax Return

Fiscal year filers only: Enter month of year end: month \_\_\_\_\_ y

Your first name \_\_\_\_\_ Initial \_\_\_\_\_ Last name \_\_\_\_\_

If joint tax return, spouse's/RDP's first name \_\_\_\_\_ Initial \_\_\_\_\_ Last name \_\_\_\_\_

Address (number and street, PO Box, or PMB no.) \_\_\_\_\_

City (If you have a foreign address, see page 7.) \_\_\_\_\_

Date of Birth  Your DOB (mm/dd/yyyy) \_\_\_\_/\_\_\_\_/\_\_\_\_  Spouse's



# PENSIONS AND BUDGETING

- 13 state constitutions require funding according to actuarial standards (Shnitser 2015)
  - These are the “strongest” provisions
- Other states have statutes that specify funding requirements
  - Sometimes weaker than actuarial (e.g. IL, KY)
- Some have apparently no legally binding requirements
  - New Jersey skipped funding most plans for 2010-11

# WELCOME TO FINANCE 101

- Suppose you borrow \$100,000 due in 2026, zero interest
- You spend \$50,000 on a vacation
- You invest the remaining \$50,000 in a portfolio of stocks and bonds
- A week later, you go to a bank to apply for a mortgage on a house you are buying
- The bank wants to know your assets and liabilities



# NET WORTH

- From the loan, you have liabilities of \$100,000
- You have assets of \$50,000 in stocks and bonds
- If you have no other assets, then your net worth is **-\$50,000**

# WHAT ABOUT YOUR INVESTMENTS?

- Actual Historical Returns

<i>All statistics for 1926-2014</i>	Average Annual Return	Compound Annualized Return
(a) Common Stocks	12.1%	10.1%
(b) Long-Term Government Bonds	6.1%	5.7%
(c) = 60% (a) + 40% (b)	9.7%	8.3%

Source: *Stocks, Bonds, Bills, and Inflation* (Ibbotson 2015)



# DOES INVESTMENT HISTORY MATTER FOR YOUR NET WORTH?

- Finance theory clearly says: NO
- Bank doesn't care whether the \$50,000 assets are in stock or bonds or cash
- Bank is not going to credit you today for a good future...
- ... that might resemble the past, but might not
- Thank you for attending Finance 101!

# WELCOME TO GOVERNMENTAL ACCOUNTING 101

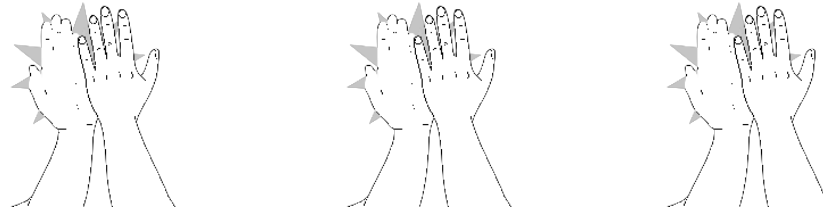
- Suppose you (the government) borrow \$100,000 from your employee, due in 2026
  - e.g. promise of one year of a pension
- Spend \$50,000 on current activities
- You invest the remaining \$50,000 in a pension fund of stocks and bonds
  - And private equity and hedge funds
- The general public wants to know your assets and liabilities



# DON'T WORRY, BE HAPPY

- A diversified portfolio of stocks and bonds has returned over 8% per year over the past 90 years
  - Indisputable historical fact we learned in Finance 101
- Let's be “conservative” and assume 7.5%
  - Money (more than) doubles every 10 years since  $(1+7.5\%)^{10} = 2.06$
- Governmental Accounting says: **Your government has no debt**
- \$50,000 in funds today will grow to be enough to repay \$100,000 in 2026, right?

- And, you can make more of these promises to employees and still claim to run a balanced budget



- Thank you for attending Governmental Accounting 101!
- Finance Question: What is wrong with this logic?

# DO THEY REALLY DO THIS?

- Yes. Governmental Accounting Standards Board (GASB) effectively says ...

Discount your liabilities at an expected return on plan assets\*

\* UNLESS your actuaries say your assets are going to RUN OUT... in which case, discount the liabilities covered by the assets at the expected return, and those not covered by the assets at a high-grade bond yield (GASB Statements 67/68)

- Examples

CalPERS 7.50%

Florida Retirement System 7.65%

CalSTRS 7.50%

Texas Teachers 8.00%

- I call this “expected return discounting”

# WELCOME TO FINANCE 102

- In this course, we will learn two things
  1. Past performance is no guarantee of future performance
  2. A dollar received at some point in the future is worth less than a dollar received today. How much less depends on:
    - How far in the future we are talking about
    - Whether the future dollar is a guarantee (safe) or an expectation (risky)

# MARKETS TELL US THE PRICE OF GUARANTEED PROMISES

- Treasury bond yields
- A pension is a promise to pay an employee a certain, pre-specified amount. It's a bond.
- So if we're not planning to default on the promise, we have to use default-free rates
- Ask any insurance company that sells annuities.
- Thank you for attending Finance 102!

# THE FINANCE APPROACH TO GOVERNMENTAL LIABILITIES

A HOOVER INSTITUTION ESSAY

## Hidden Debt, Hidden Deficits

HOW PENSION PROMISES ARE CONSUMING STATE AND LOCAL BUDGETS

**JOSHUA D. RAUH**

---

Most state and local governments in the United States offer retirement benefits to their employees in the form of guaranteed pensions. To fund these promises, the governments contribute taxpayer money to public systems. Even under states' own disclosures and optimistic assumptions about future investment returns, assets in the pension systems will be insufficient to pay for the pensions of current public employees and retirees. Taxpayer resources will eventually have to make up the difference.



# STATE AND LOCAL PENSIONS, FISCAL YEAR 2014 (564 PLANS)

**GASB 67**  
**Discount Rate**  
**7.41%**

GASB = Governmental Accounting Standards Board

# STATE AND LOCAL PENSIONS, FISCAL YEAR 2014

(564 PLANS)

**GASB 67  
Discount Rate**

**7.41%**

**Average  
Treasury Yield**

**2.75%**

As of the reporting date of  
each plan, at the average  
horizon of each plan's  
payments

GASB = Governmental Accounting Standards Board

# STATE AND LOCAL PENSIONS

(564 PLANS)

## GASB 67 Standards

<b>Total Pension Liability</b>	<b>(\$4,798)</b>
<b>Assets</b>	<b>\$3,607</b>
<hr/>	
<b>Unfunded Liability</b>	<b>(\$1,191)</b>
<b>Funding Ratio</b>	<b>75.2%</b>

\$ Amounts in Billions

GASB = Governmental Accounting Standards Board

# STATE AND LOCAL PENSIONS

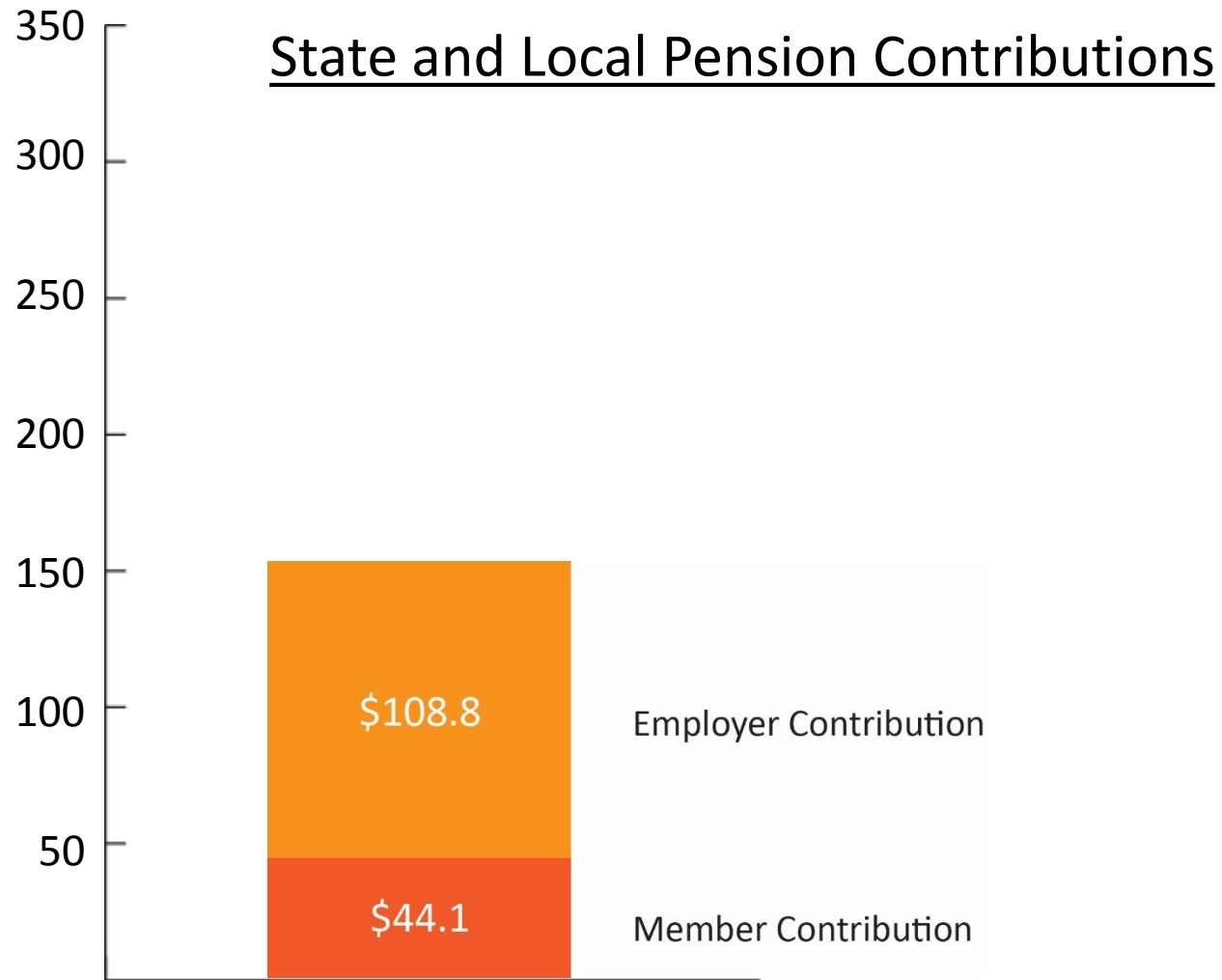
(564 PLANS)

	<b>GASB 67 Standards</b>	<b>Market Value Standards</b>
<b>Total Pension Liability</b>	<b>(\$4,798)</b>	<b>(\$7,019)</b>
<b>Assets</b>	<b>\$3,607</b>	<b>\$3,607</b>
<b>Unfunded Liability</b>	<b>(\$1,191)</b>	<b>(\$3,412)</b>
<b>Funding Ratio</b>	<b>75.2%</b>	<b>51.4%</b>

\$ Amounts in Billions

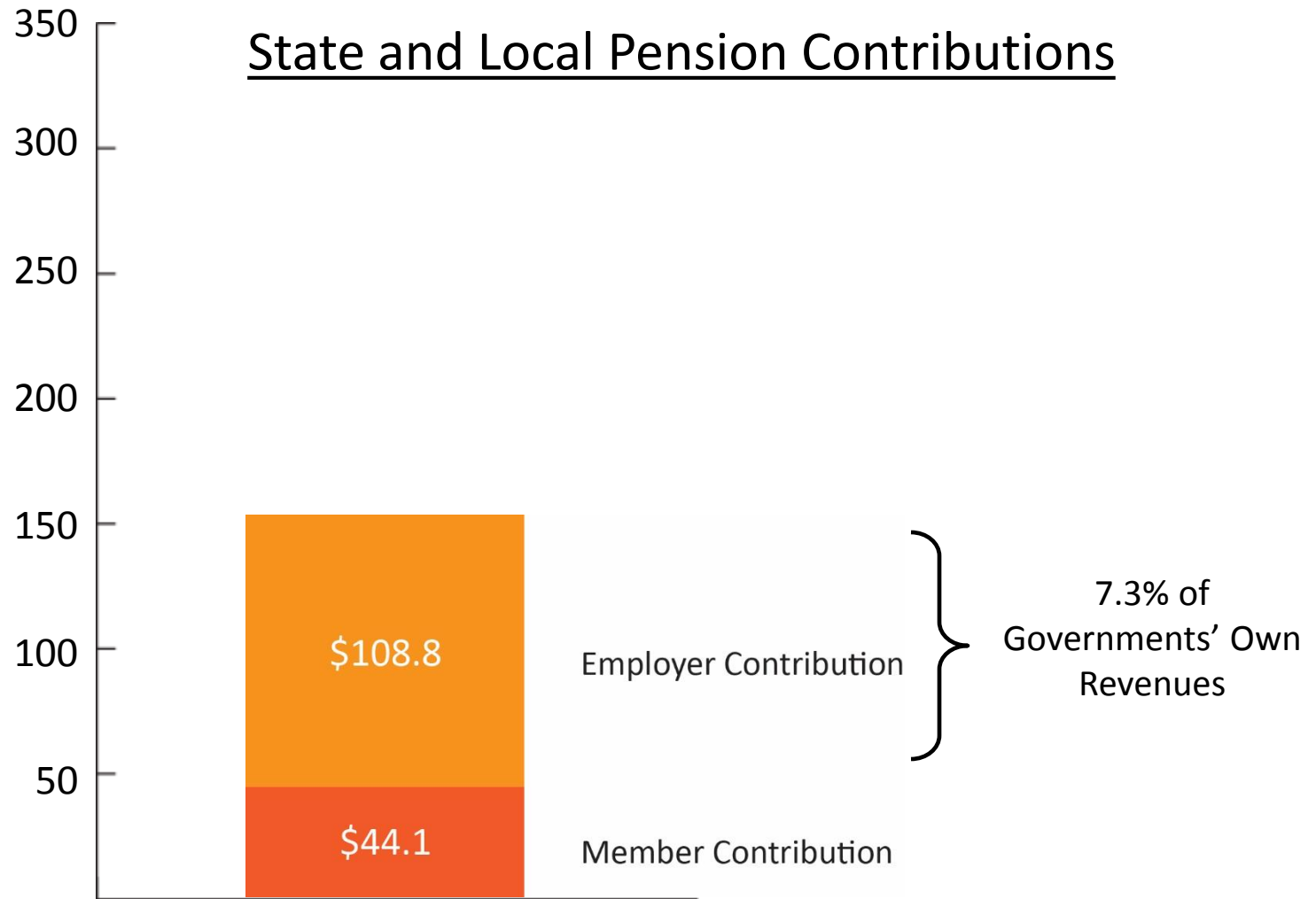
GASB = Governmental Accounting Standards Board

# BUDGETARY FLOWS: CASH BASIS



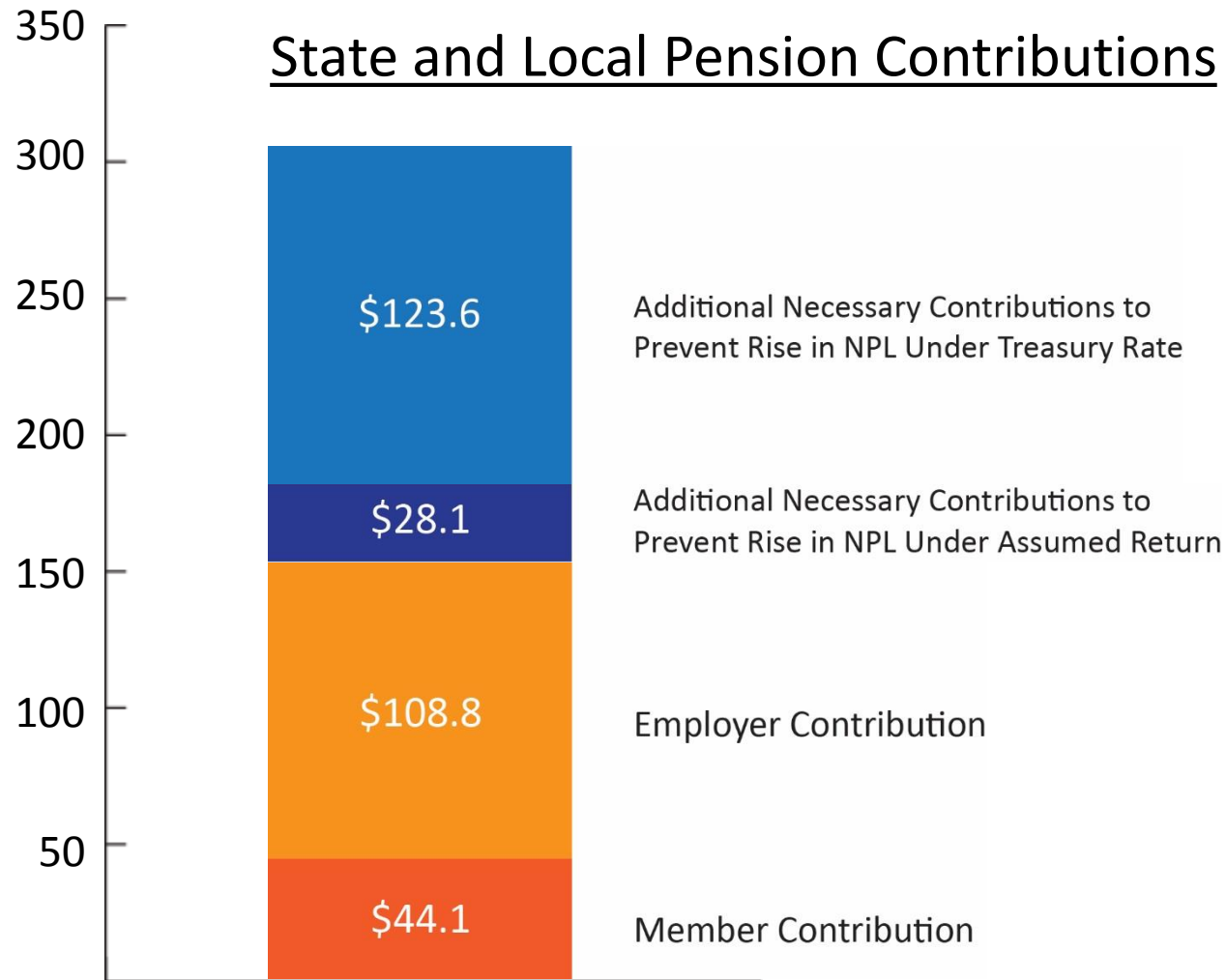
\$ billions, FY 2014

# BUDGETARY FLOWS: CASH BASIS



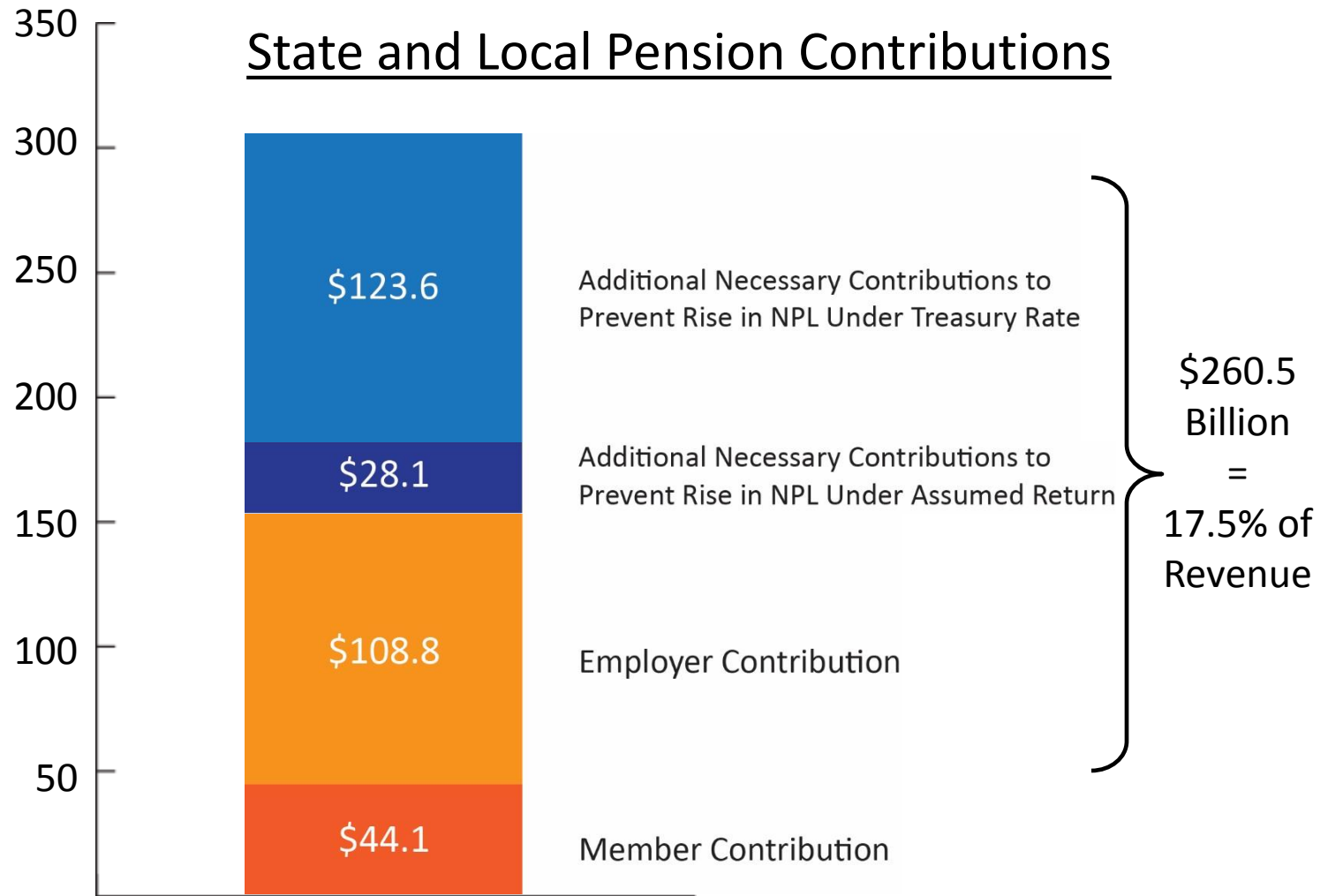
\$ billions, FY 2014

# BUDGETARY FLOWS: CASH VS ACCRUAL



\$ billions, FY 2014

# BUDGETARY FLOWS: CASH VS ACCRUAL

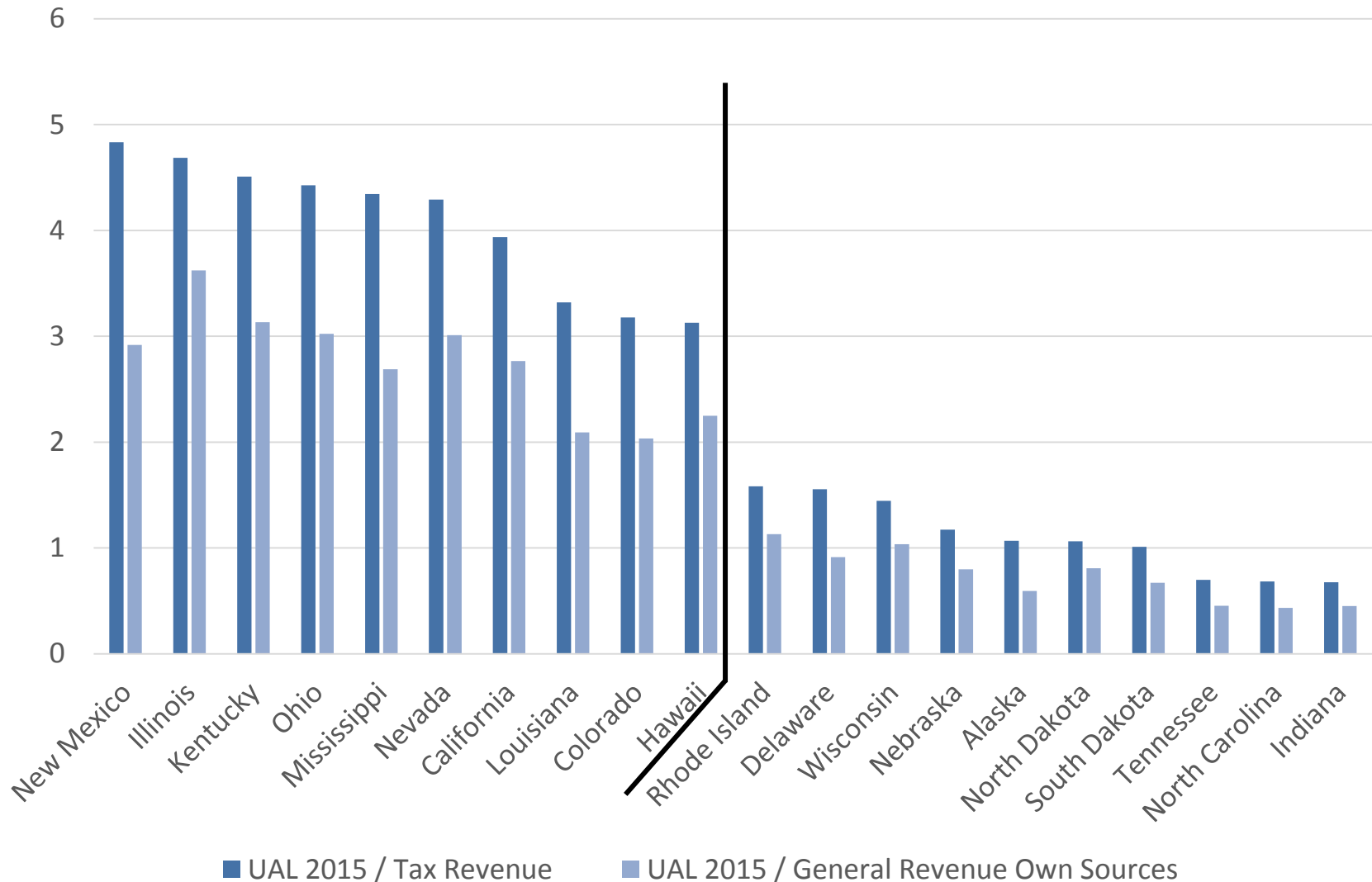


\$ billions, FY 2014



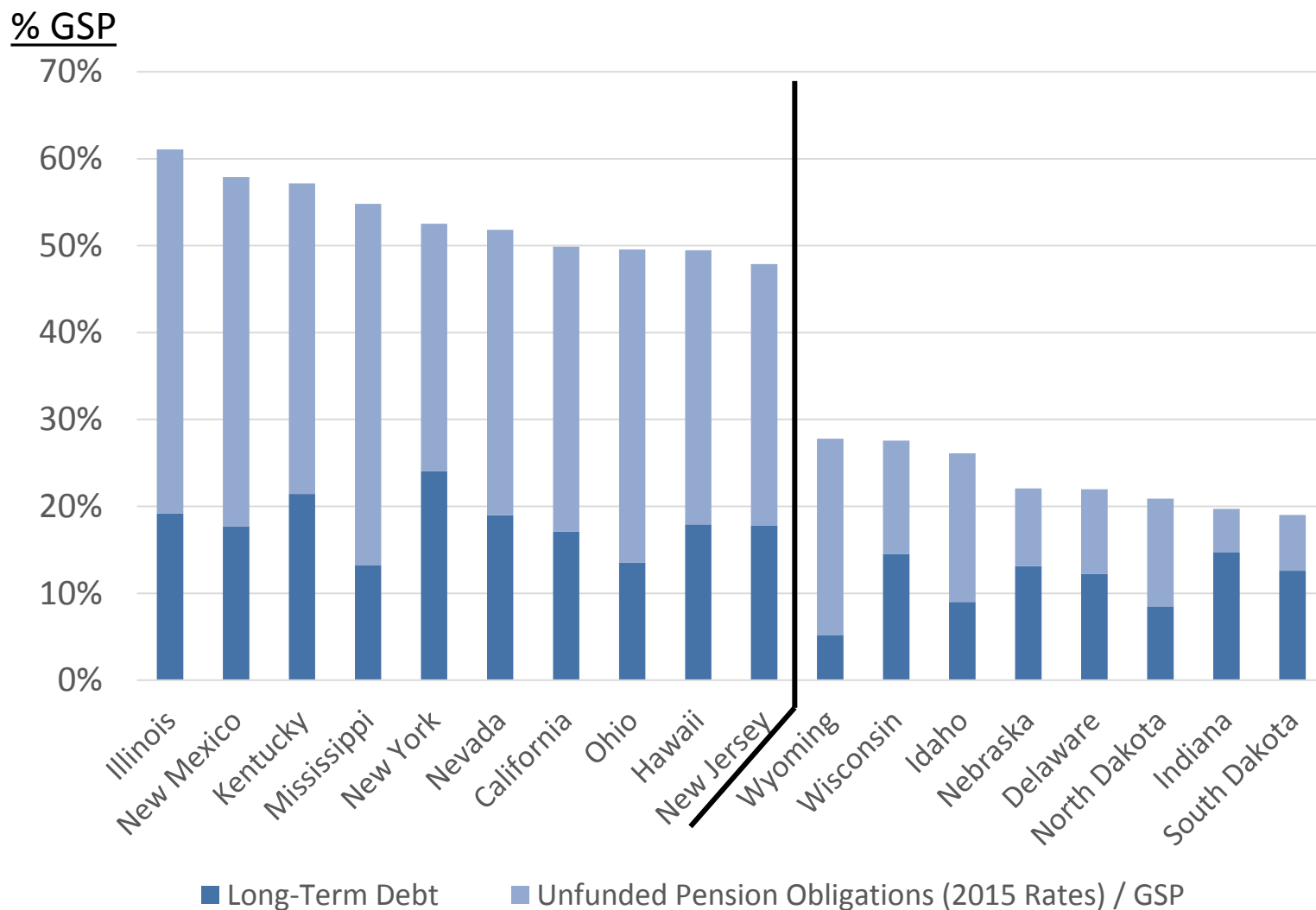
# 2015 UNFUNDED PENSIONS / REVENUE: WORST AND BEST 10 STATES

Multiple



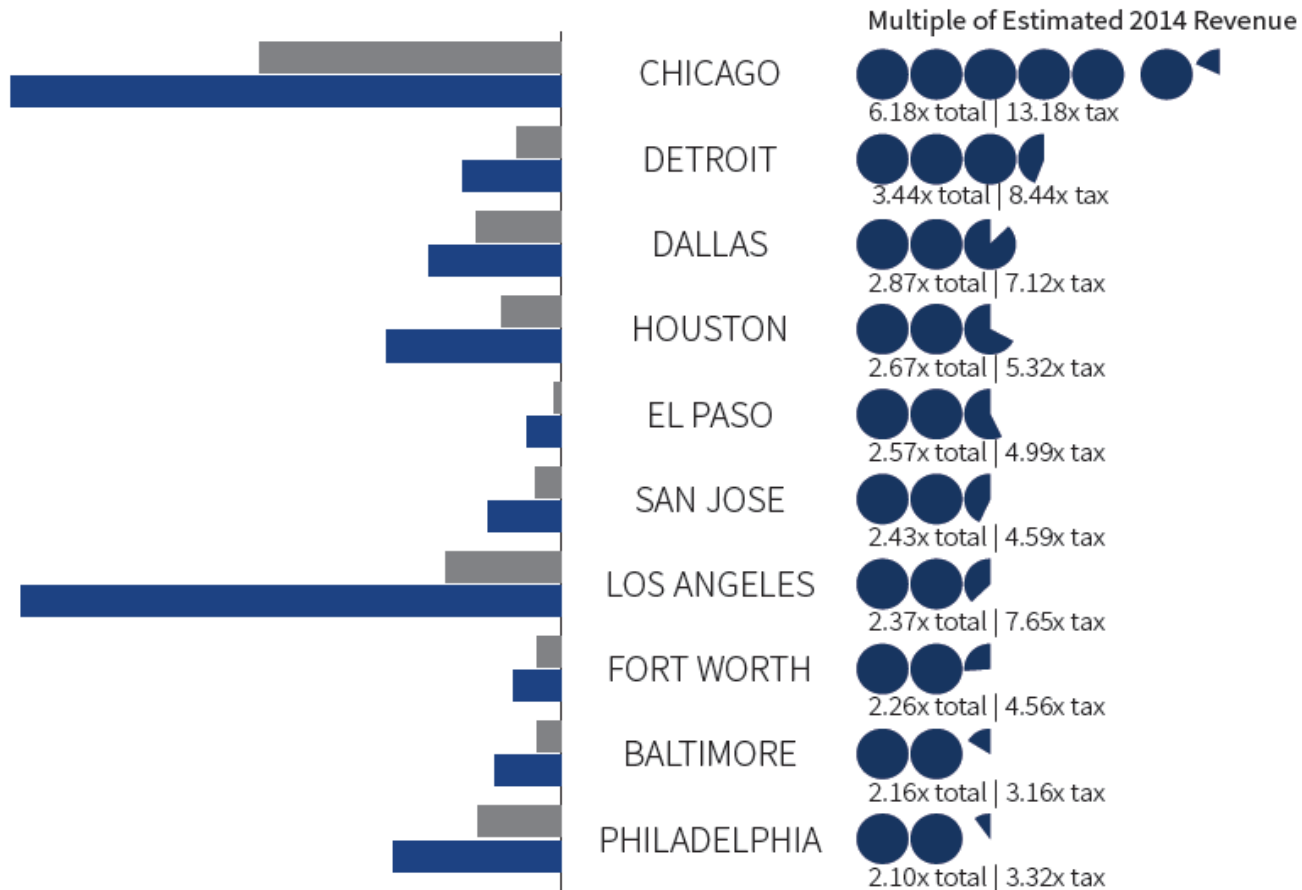
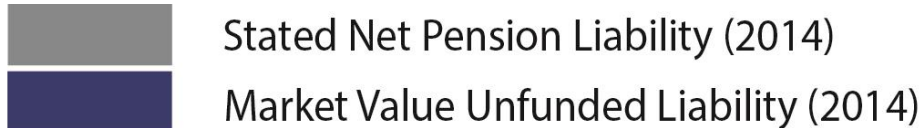
Note: Revenue figures are from Census of State and Local Government Finances (2013)

# 2015 DEBT & UNFUNDED PENSIONS / GSP: WORST AND BEST 10 STATES



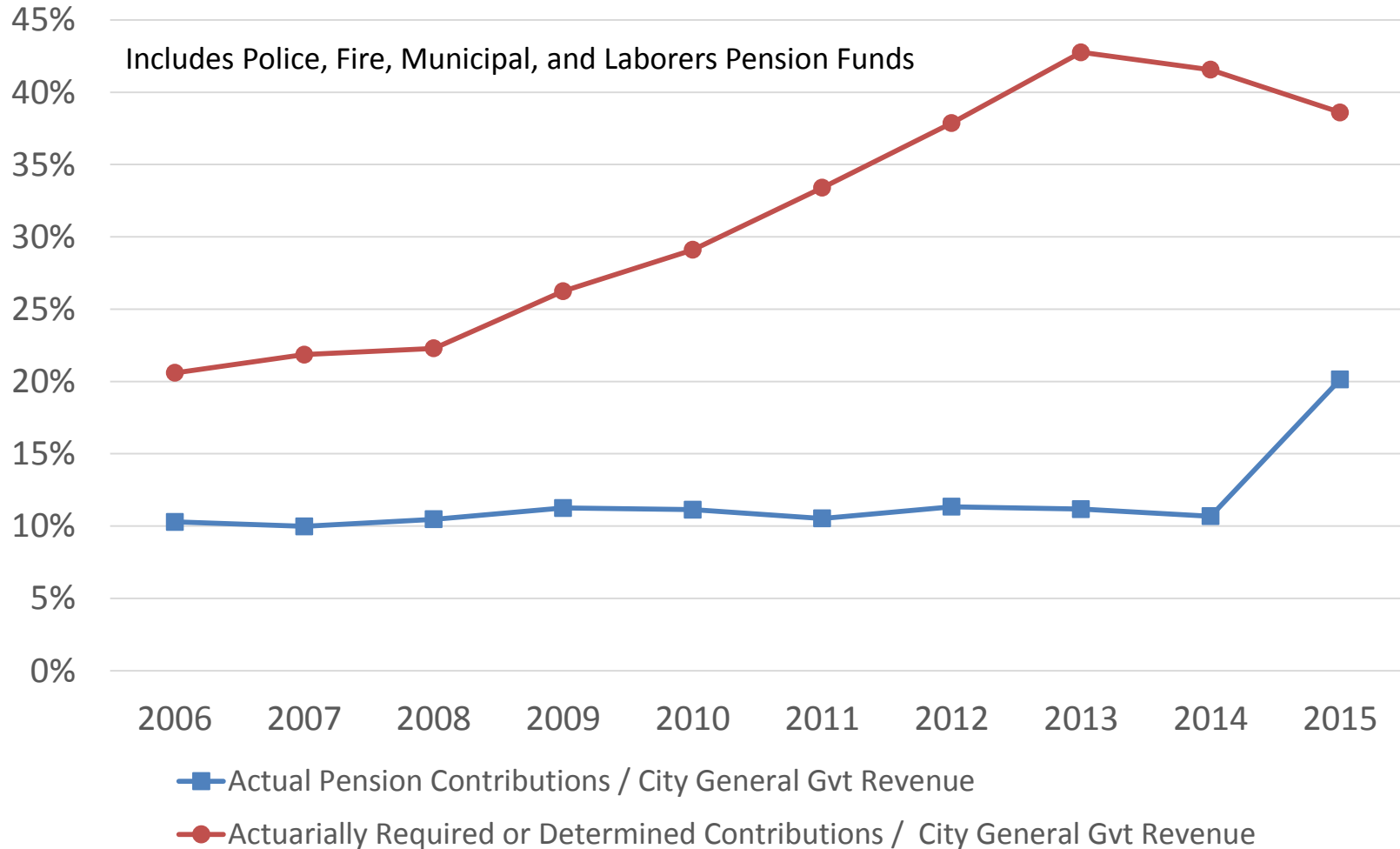
Note: GSP figures are from Bureau of Economic Analysis (2015)

# UNFUNDED LIABILITIES VS. OWN REVENUES: WORST 10 LARGE CITIES

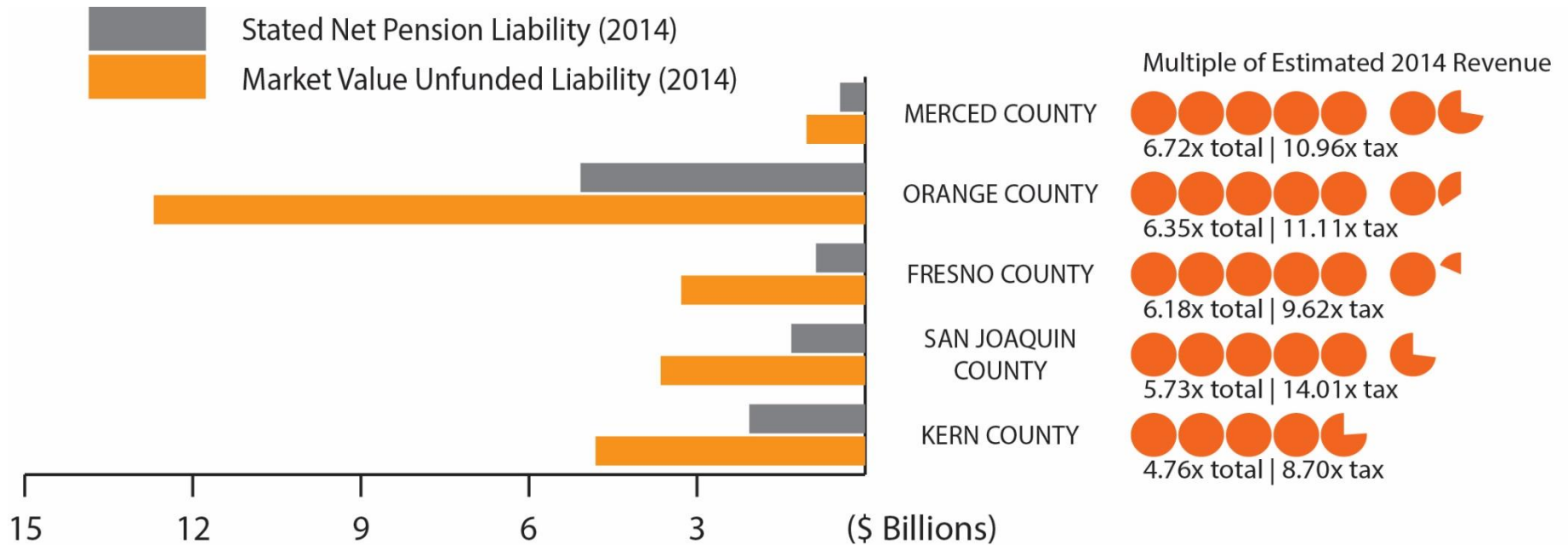


# CHICAGO: ACTUAL VS REQUIRED CONTRIBUTIONS

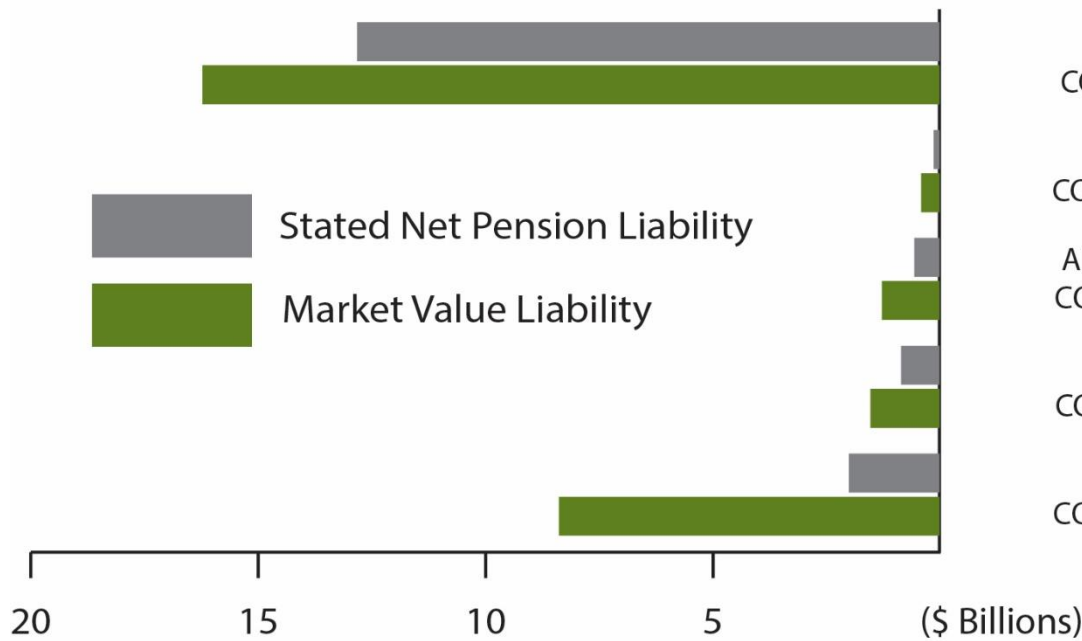
% of General Revenue



# COUNTY PENSIONS IN RELATION TO OWN REVENUE: WORST 5 IN CALIFORNIA



# COUNTY PENSIONS VS. OWN REVENUE: WORST 5 OUTSIDE CALIFORNIA



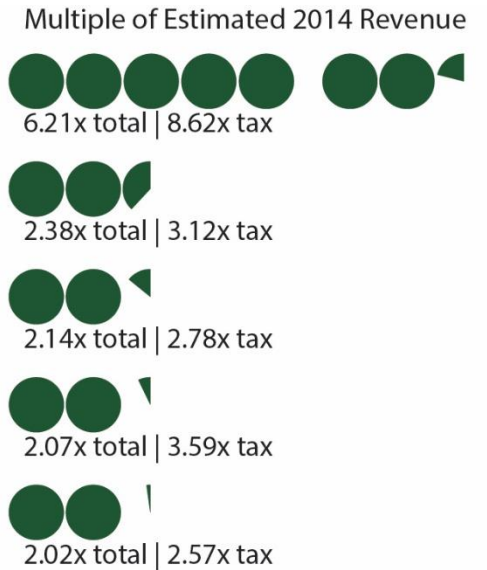
COOK  
COUNTY (IL)

EL PASO  
COUNTY (CO)

ALLEGHENY  
COUNTY (PA)

WAYNE  
COUNTY (MI)

FAIRFAX  
COUNTY (VA)



# CAN PENSIONS BE CHANGED?

- Distinction between
  - Previously accrued pension benefits (ABO); and
  - Right to keep earning benefits under same formula as when the employee was hired
- Federal frameworks: ERISA (1974) and the IRC (1986)
  - Have been interpreted to protect accrued benefits but not future accruals
  - However, ERISA “exempts governmental plans from its authority” and state plans are also exempt from the IRC’s anti-cutback rule (Monahan (2013))
- Legal protection is therefore essentially a state matter

# PROTECTIONS

- State constitutional protections
  - N.Y. Const. Art V, § 7
  - Ill. Const. art. XIII, § 5 (“pension protection clause”)
  - Also AK, AZ, MI, HI, LA
- Non-constitutional contract protections
  - Many other state courts have found that a contract exists (e.g. CA, MA, OR. etc)



# SOME REFORM ATTEMPTS

- Rhode Island RIRSA of 2011
    - COLAs much reduced, retirement ages increased for most employees
    - Future benefits: reduced DB benefit plus a DC plan
    - ~90% of savings preserved in settlement
  - San Jose “Measure B” of 2012
    - Current workers could choose: lower pension or stay in current plan and let contributions rise
    - Provisions were rolled back substantially in 2015
  - San Diego “Proposition B” of 2012
    - All current worker pensions preserved
    - 401(k) plans for new non-safety workers
    - somewhat reduced pensions for new public safety workers
  - Utah’s 2011 Move to Pension Choice
    - New hires choose between 401(k) and hybrid, state contribution has 10% cap
    - Around 60% failed to make an active choice and defaulted into the hybrid plan
- Very little non-DB overall

# NATIONAL REFORM APPROACHES

- The following have been proposed and debated
  - Secure Annuities for Employees (SAFE) Deferred Annuity Plans
  - Public Employee Pension Transparency Act (PEPTA)
  - Tax deductible pension bonds in exchange for pension reform
  - Pension Benefit Guaranty Corporation (PBGC) for Public Plans

# CONCLUSION

- Even with GASB 67/68 changes, massive government debt is hidden in the “expected return” of DB promises
  - Unfunded liability as of 2014: \$3.4 trillion
- Current methods → inaccurate costs and budgets
  - Hinder sound decisions by citizens and lawmakers
- No state or local government that sponsors a DB plan truly runs a balanced budget
  - Cash basis: state and local governments contribute 7.5% of revenues
  - Accrual basis: pensions cost 17.5% of state and local government revenues, and growing
- Challenging legal and political environment for reform