

## **An Anatomy of Public Sector Unions**

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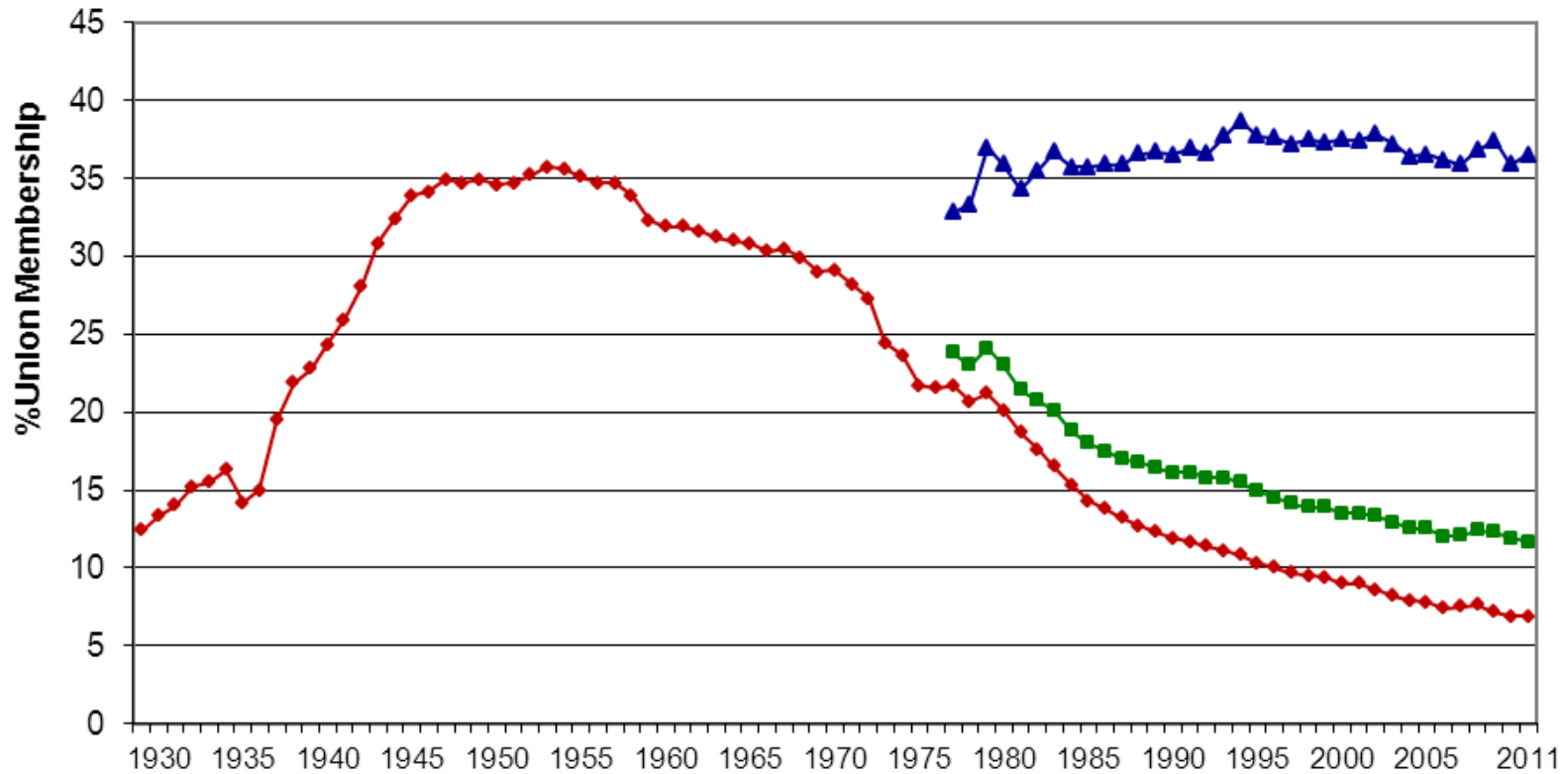
## 1. Overview

- I will present descriptive data on public sector union membership, coverage, and wages, with some comparisons to the private sector.
- The data are compiled from the monthly Current Population Surveys (CPS), the household survey on which official BLS union data are compiled.
- Much of the data available on-line at [www.unionstat.com](http://www.unionstat.com) or in the annual *Union Membership and Earnings Data Book* (both joint with Dave Macpherson).
- I will provide descriptive data on how public sector wages and employment changed during 2000-2010 in high versus low union states.
- Will provide overview and mention issues in evaluating union-nonunion and public-private wage and benefit comparability. Others will look at this in greater detail.
- Finally, I will discuss differences in union and nonunion governance and its implication for unions in the private and public sectors.

## **2. US Union Membership, Coverage, and Density**

- In the following figures, I show data on union membership, density, and wages
- These are based on two questions in the CPS, identical since 1977
- All wage and salary workers are asked if they are a member of a labor union or of an employee association similar to a union (during 1973-76 “employee assoc” not included).
- Non-members (but not members) are then asked if they are covered by a union or employee association contract on their primary job (not asked this in 1973-76).
- Following BLS, we define membership based on answering yes to the first question. Union representation (coverage) refers to workers who are either members (regardless of coverage) or non-members covered by a CBA
- The CPS union questions do a good job in measuring private sector unionism
- The CPS does a relatively poor job measuring public sector unionization since it measures some members not covered (e.g., NC teachers who are members of the NEA; federal members without collective bargaining). And many public workers may not know whether or not they are covered by a CBA, thus introducing reporting error.
- Union **membership** is calculated by “blowing up” each union member by the Census sampling weight.
- Union **density** is members divided by W&S employment in the relevant sector (as a %)
- CPS sample sizes of public sector workers in small states are not large, so there is a good bit of year-to-year sampling variation.

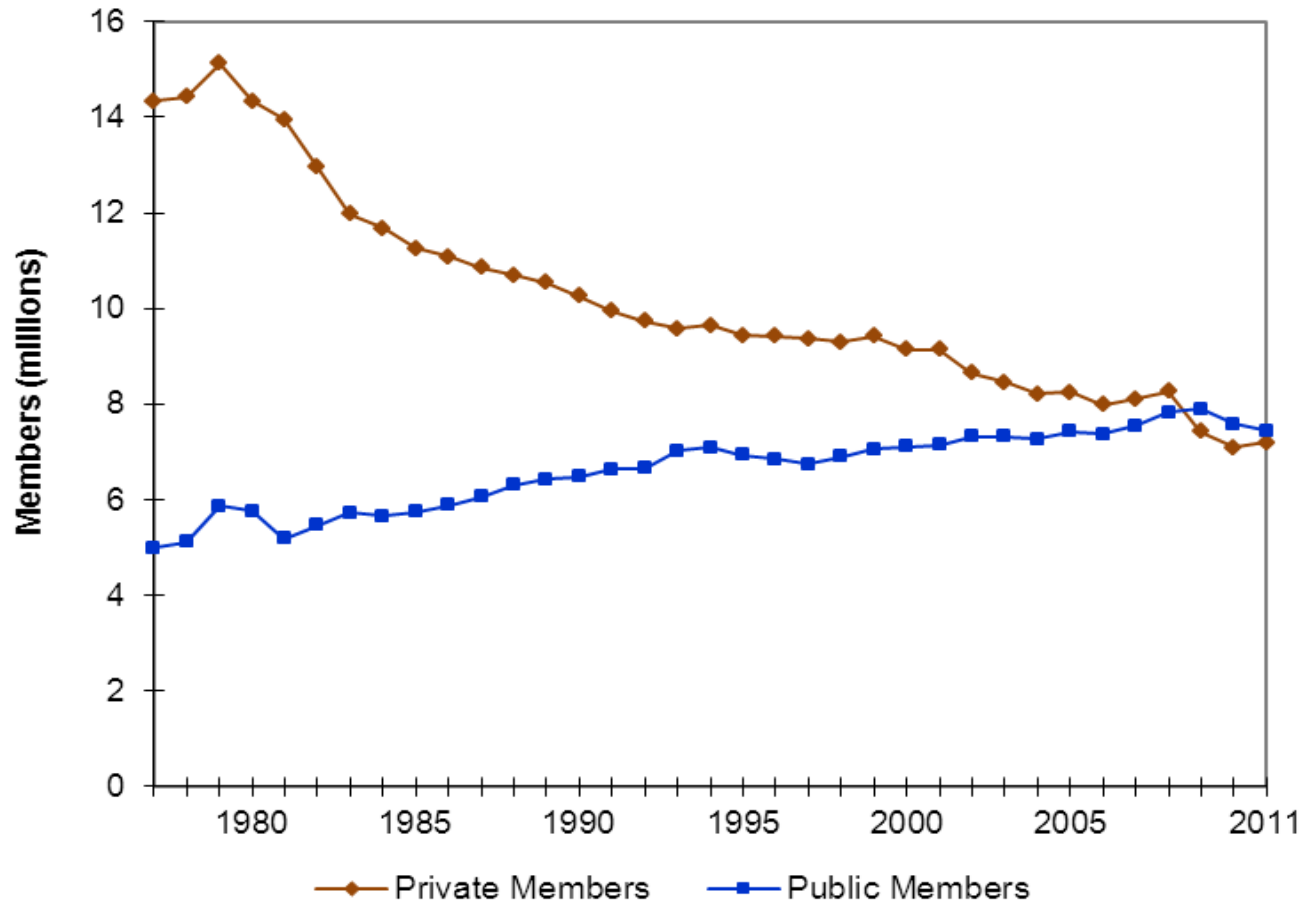
**Figure 1: U.S. Private Sector Union Density, 1929-2011\*  
Total and Public Sector Union Density, 1977-2011\* (\*Jan-Aug 2011)**



—◆— Private %Union      —▲— Public %Union      —■— Total %Union

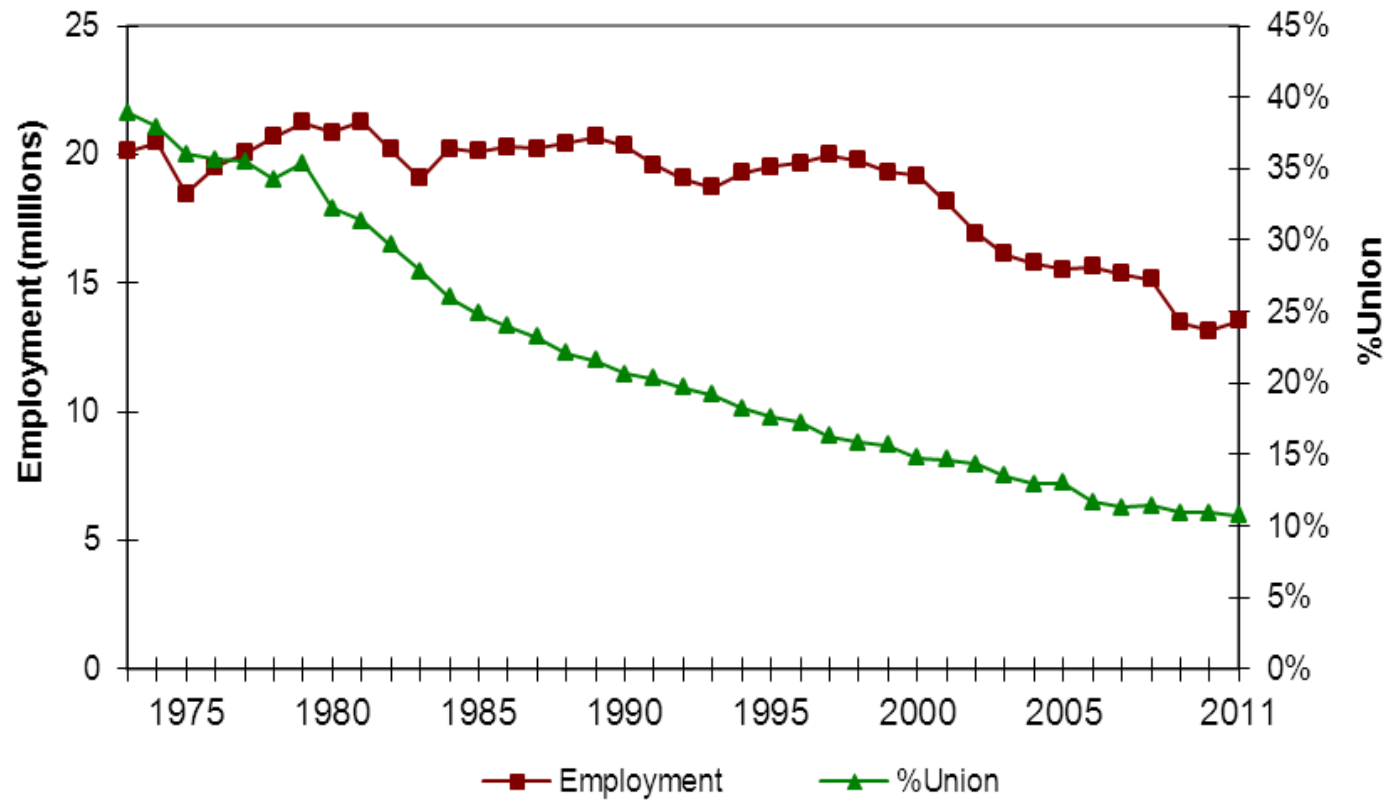
1983	Total 20.1%	Private 16.5%	Public 36.7%
2010	Total 11.9%	Private 6.9%	Public 35.9%
2011*	Total 11.7%	Private 6.9%	Public 36.5%

**Fig. 2: Private and Public Union Membership, 1977-2011\***



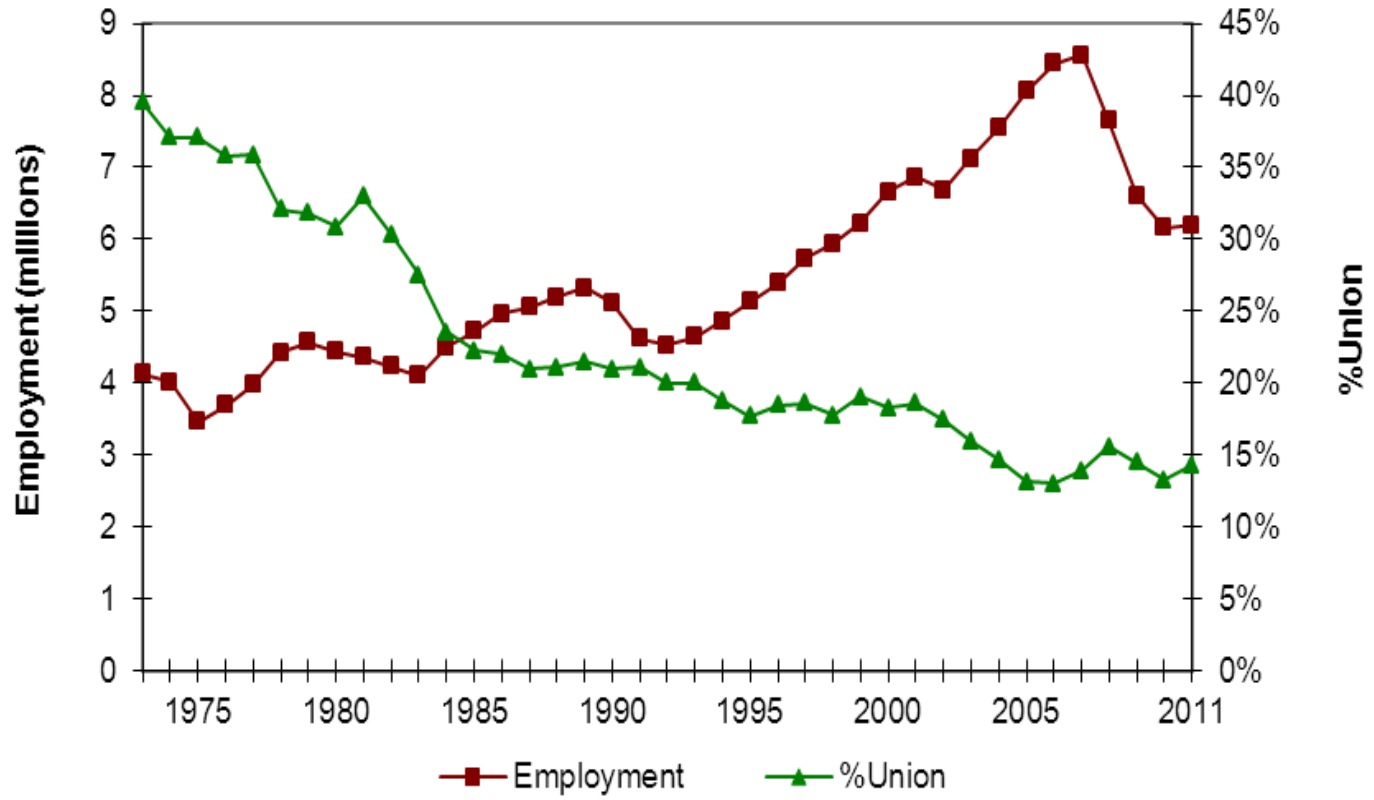
1983	Private Members 11.98 million	Public Members 5.74 million
2010	Private Members 7.09 million	Public Members 7.62 million
2011*	Private Members 7.20 million	Public Members 7.44 million

**Fig. 3a: Employment and Union Density in Private Manufacturing, 1973-2011\***



1973	Emp 20.1 m.	%Mem 38.9%
1983	Emp 20.2 m.	%Mem 29.7%
2010	Emp 13.3 m.	%Mem 10.7%
2011*	Emp 13.5 m.	%Mem 10.7%

**Fig. 3b: Employment and Union Density in Private Construction, 1973-2011\***



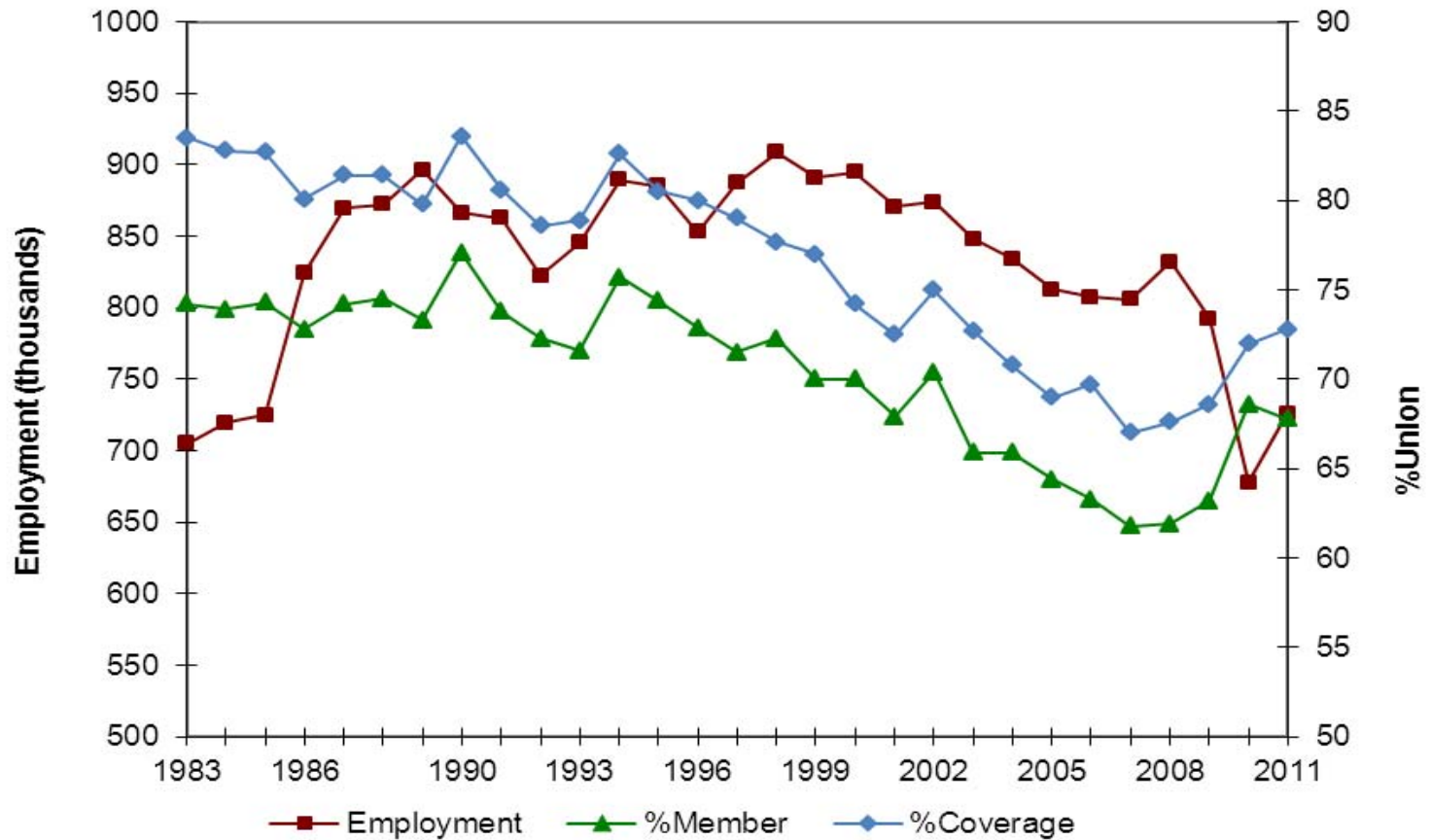
1973	Emp 4.13 m.	%Mem 39.5%
1983	Emp 4.11 m.	%Mem 27.5%
2010	Emp 6.10 m.	%Mem 13.1%
2011*	Emp 6.20 m.	%Mem 14.3%

**Fig. 4a: Federal (non-postal) Employment and Union Density, 1983-2011\***



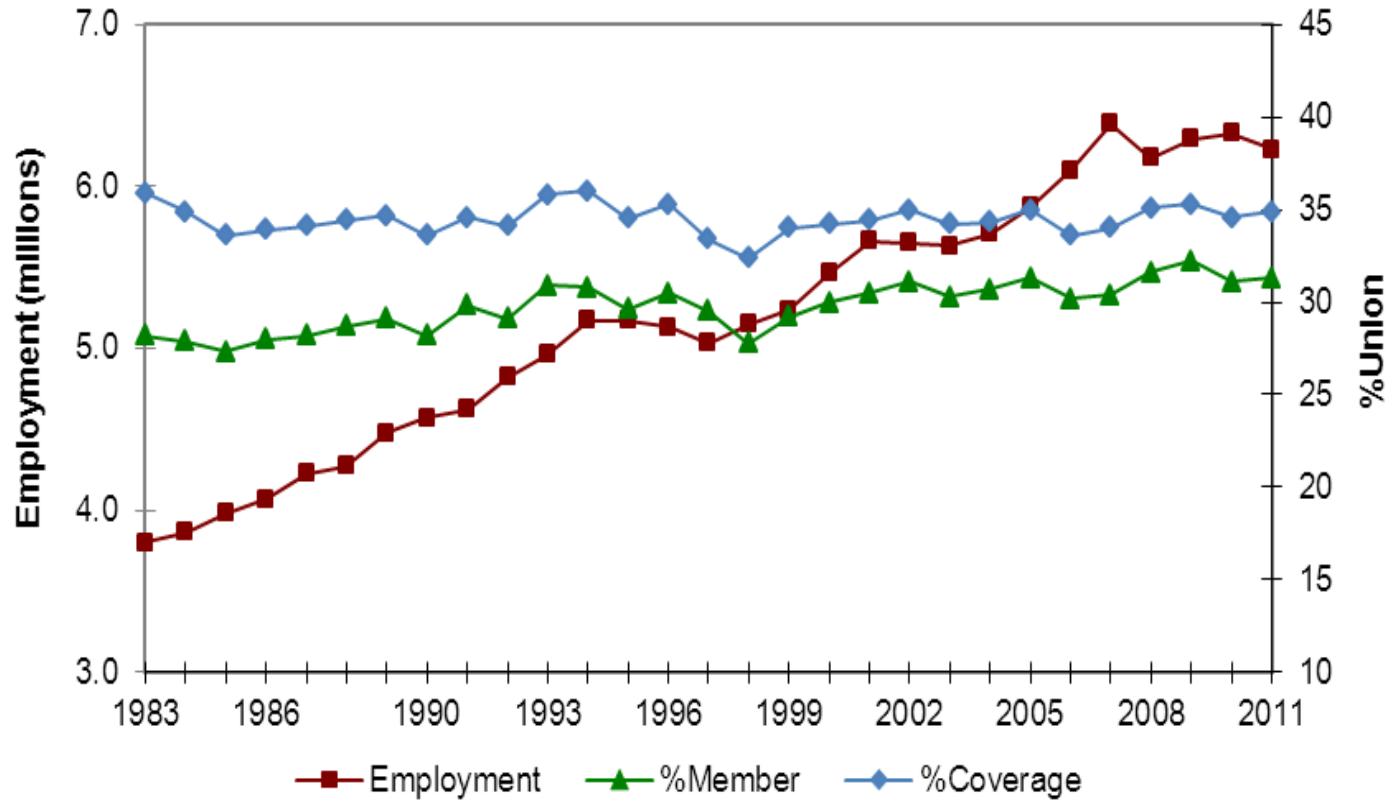
1983	Emp 2.4 m.	%Mem 19.4%	%Cov 29.4%
2010	Emp 3.0 m.	%Mem 17.3%	%Cov 22.3%
2011*	Emp 2.9 m.	%Mem 17.9%	%Cov 23.5%

Fig. 4b: Postal Employment and Union Density, 1983-2011\*



1983	Emp 705.2 t.	%Mem 74.2%	%Cov 83.5%
2010	Emp 678.1 t.	%Mem 68.6%	%Cov 72.0%
2011*	Emp 726.2 t.	%Mem 67.8%	%Cov 72.8%

**Fig. 4c: State Government Employment and Union Density, 1983-2011\***



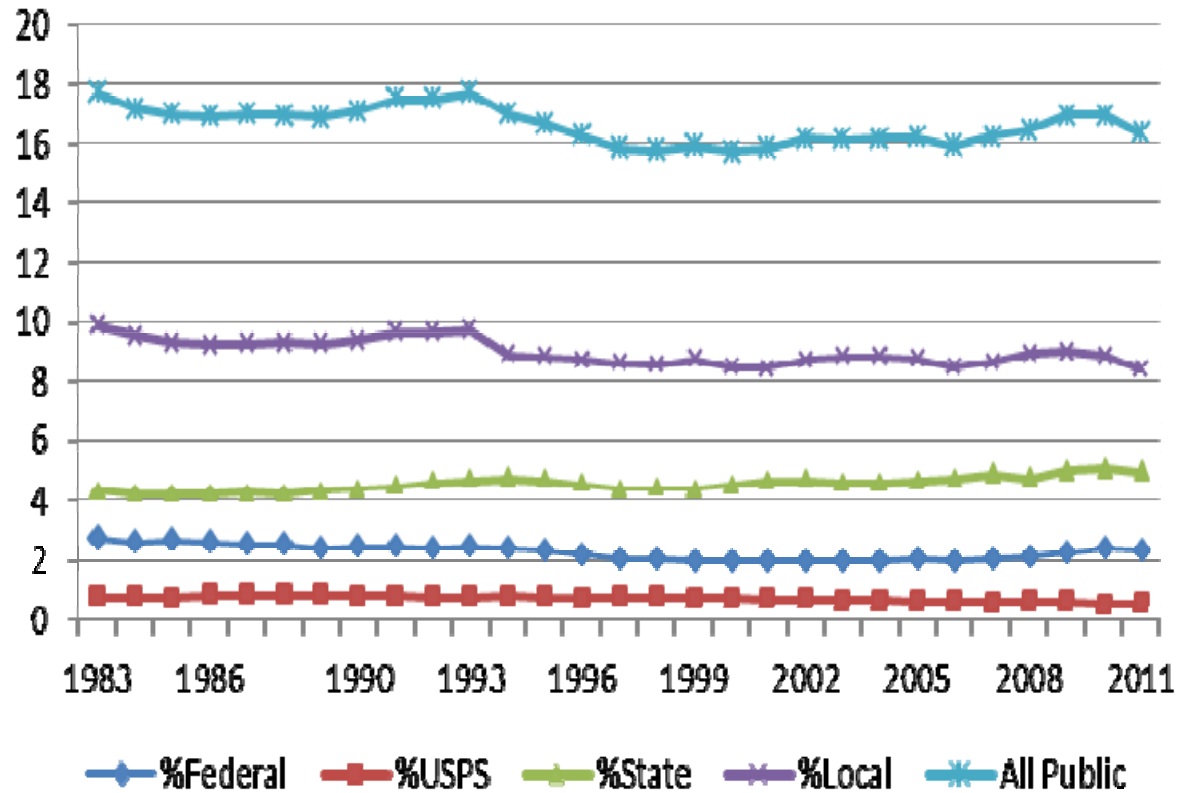
1983	Emp 3.8 m.	%Mem 28.2%	%Cov 35.9%
2010	Emp 6.3 m.	%Mem 31.1%	%Cov 34.6%
2011*	Emp 6.2 m.	%Mem 31.3%	%Cov 34.9%

Fig. 4d: Local Government Employment and Union Density, 1983-2011\*



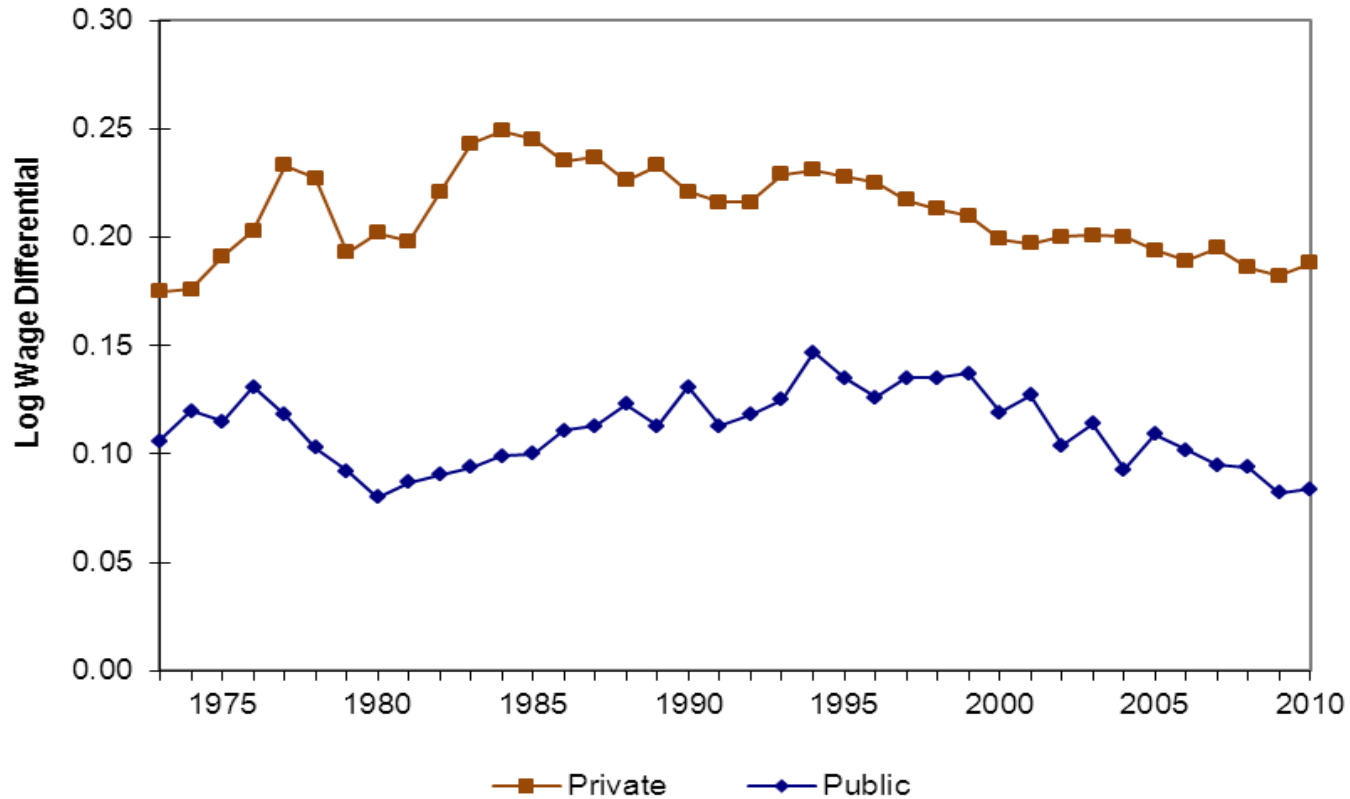
1983	Emp 8.7 m.	%Mem 42.2%	%Cov 51.0%
2010	Emp 11.0 m.	%Mem 42.3%	%Cov 45.9%
2011*	Emp 10.5 m.	%Mem 42.6%	%Cov 46.1%

**Fig. 4e: FPSL Public Employment Shares (%), 1983-2011**



1983 USPS 0.6% Federal 2.7% State 4.3% Local 9.9% Total 17.7%  
 2010 USPS 0.5% Federal 2.4% State 5.1% Local 8.9% Total 17.0%  
 2011\* USPS 0.6% Federal 2.3% State 5.0% Local 8.4% Total 16.3%  
 Note: Federal excludes USPS. Source: CPS ORG files, 1983-2011 (Jan-Aug).

**Fig. 5: Private and Public Sector Union Wage Premiums, 1973-2010**

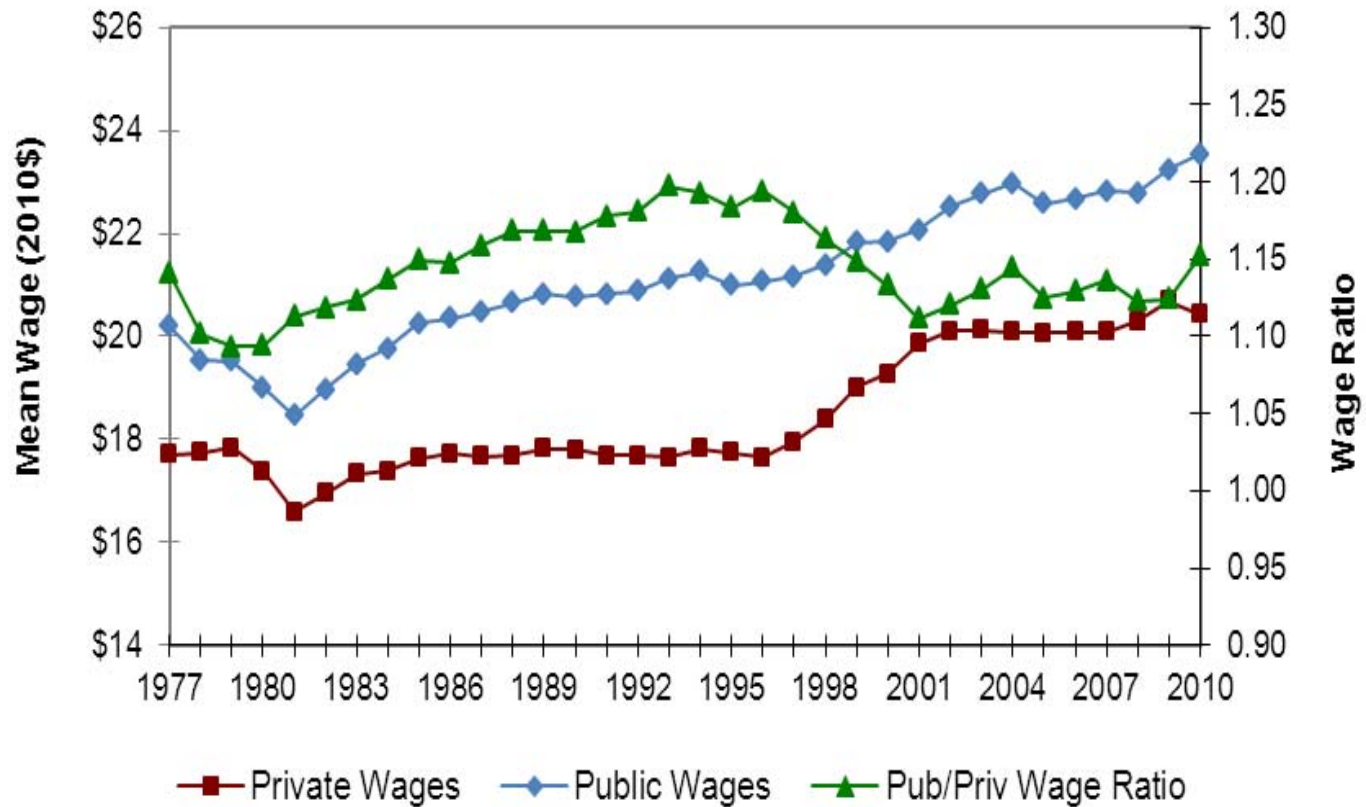


Public sector union-nonunion wage differentials lower than in private sector. Since mid-1990s, union premiums have gradually declined in public and private sectors.

2010 estimates:      private .188 log points      public .084 log points

Source: B.T. Hirsch & D.A. Macpherson, *Union Membership and Earnings Data Book*, BNA, 2011.

**Fig. 6: Public and Private Wages (2010\$) and Public/Private Wage Ratios, 1977-2010**



Pub/Priv Wage Ratio	1977: 1.14	2011: 1.15
Public Wages (2010\$)	1977: \$20.20	2011: \$23.54
Private Wages (2010\$)	1977: \$17.71	2011: \$20.42

In short, no rise in relative public sector pay during the 2000s.

## Cross-State Evidence for 2000 to 2010, Public Sector Wages, Employment, and Debt

### 1. Have Public Sector Wages Risen More in High Union than in Low Union States?

Answer: No significant relationship

$$\begin{aligned} \% \Delta \text{Wage}_{\text{pub}} &= .073 + .015 \% \text{Union}_{\text{pub}} & n &= 50 \\ & (2.96) \quad (0.24) & R^2 &= .001 \end{aligned}$$

### 2. Have Public Sector Wages Risen More Quickly in States with Growing Union Density

Answer: Yes, but public sector density has not been rising on average and it's difficult to interpret this as causal

$$\begin{aligned} \% \Delta \text{Wage}_{\text{pub}} &= .074 + .016 \% \text{Union}_{\text{pub}} + .465 \Delta \% \text{Union}_{\text{pub}} & n &= 50 \\ & (3.11) \quad (0.26) \quad (1.98) & R^2 &= .078 \end{aligned}$$

### 3. Has Public Sector Employment Risen More in High Union than in Low Union States?

Answer: No, public employment growth slightly lower in more highly unionized states

$$\begin{aligned} \Delta \ln \text{Emp}_{\text{pub}} &= .151 - .015 \% \text{Union}_{\text{pub}} & n &= 50 \\ & (4.91) \quad (-1.89) & R^2 &= .069 \end{aligned}$$

*Note: all % terms are "proportions" (divided by 100); t-ratios in parentheses.*

#### 4. Is Public Sector Debt Greater in High Union than in Low Union States?

Answer: Yes, an end of FY 2009 ranking on state public debt per capita is lower (i.e. higher debt) in more unionized states. A 10 percentage point higher union density is associated with an almost 5 place lower debt ranking.

$$\begin{array}{l} \text{Debt Ranking} = 41.3 - 47.5 \% \text{Union}_{\text{pub}} \quad n = 50 \\ \quad \quad \quad (11.96) \quad (-5.22) \quad \quad \quad R^2 = .362 \end{array}$$

Source: U.S. Census Bureau, Tax Foundation

I did not examine changes in debt over time for high and low union states.

As we all know, state fiscal problems during this great recession have hit union and nonunion states, the southeast and states with housing booms being particularly hard hit, most of which have little public collective bargaining.

Public sector unions have served as convenient scapegoats for state fiscal woes and been subject to opportunistic political attacks. We face substantive issues involving state finances, both in union and nonunion states. The attacks are a poor substitute for effective governing and for seriously addressing the plethora of problems faced by governments at all levels.

## ***Evaluation of Public-Private Wage and Benefits Comparability***

Punch-line: With exception of USPS, one does not observe large average public **wage** premiums.

**State and local** public workers have earnings **somewhat lower** than private workers with similar measured attributes. The “**controls**” **matter** and “**job**” **comparisons** are difficult.

Most important difference is **not level** of pay but a **more compressed distribution** in public sector.

**Lower skill** workers/jobs are **paid more** generously in public sector

**Higher skill** workers/jobs are **paid less** generously in public sector

Public sector **benefits** higher than in private sector, but valuation of benefits difficult.

**Defined benefit (DB) pensions** more prevalent in public sector; these benefits accrue to long-tenured but not short-tenured workers. DB pensions provide strong incentives for workers not to leave “early” (may make sense given “firm-specific” nature of public human capital) and incentives not to stay “late” in career (which may not make sense).

By standard estimates **federal** pay somewhat higher than private. But estimates sensitive to treatment of **occupation** and accounting for private **area wage differences** (DC high wage/price area).

**Estimation issues** in wage comparability analyses: Job tasks. Choice of controls (union status). Etc.

Comparability analysis should look **not just at wages**, but also at benefits, job tasks and working conditions, job security, quit rates, queues (applications per opening), wage gains (losses) on shifting between the public and private sectors, etc.

### *Union vs. Nonunion Governance, Dynamism, and Competition in the Private Sector*

- **Nonunion governance** provides high degree of **management discretion**, constrained by employer norms; government regulations/mandates; and incentives and constraints produced by market forces (financial viability and need to attract and retain qualified employees)
- **Union governance** subject to the above constraints, plus: **formalized governance structure** that relies on collective bargaining, explicit contracts, and structured channels for worker voice; **reduced managerial discretion**. CB contracts permit considerable employer discretion in daily operation of a workplace, discretion/flexibility is constrained with substantive changes in wages, pay methods, benefits, job assignments, working conditions requiring negotiation with union.
- **Union governance** by design is **deliberative** and often slow to respond to change. Sluggish governance is partly due to union democracy. Rank and file must approve union leaders and negotiated agreements.
- **Union governance** may be advantageous in static or slow-moving economic environments, but is **less well-suited the more dynamic and competitive** the economic environment.
- Decline in private sector unionism has coincided with increasing competitiveness and dynamism.

### ***Implications of “Deliberative” Union Governance for the Public Sector***

- State and local governments are fixed in location and over time (i.e., less dynamic). They face less competition than do private companies. By design, governance is political and deliberative.
- Optimal governance in the public sector may well differ from that in the private sector
- Union and nonunion public sector workplaces often look a lot more alike than do private sector union versus nonunion workplaces. Union governance is less of a “big deal” in the public sector.
- Public sector representation provides a collective voice for workers that is often effective and useful (or not) in improving the workplace and quality of governance. It can place checks on arbitrary and inefficient administrative and managerial behavior (or not).
- Even absent full CB rights, public sector representation may provide limited voice for workers. Public unions have influence absent CB (e.g., NC teachers, federal workers).
- Union representation can be particularly appropriate for workforces with “career” or long-tenured jobs, common to the public sector (and rightly so). Most public workers care deeply about their “mission” and the public good; a vehicle for employee voice is essential.
- Major caveat: Public unions influence the political process, both electoral outcomes and public policies. I am not sure how one limits or can isolate public union political influence while at the same time retaining the positive role they can and often do play in public workplaces.