

# Comparing Public and Private Sector Earnings: An Academic's Toolkit

Keith A. Bender  
Department of Economics  
University of Wisconsin-Milwaukee

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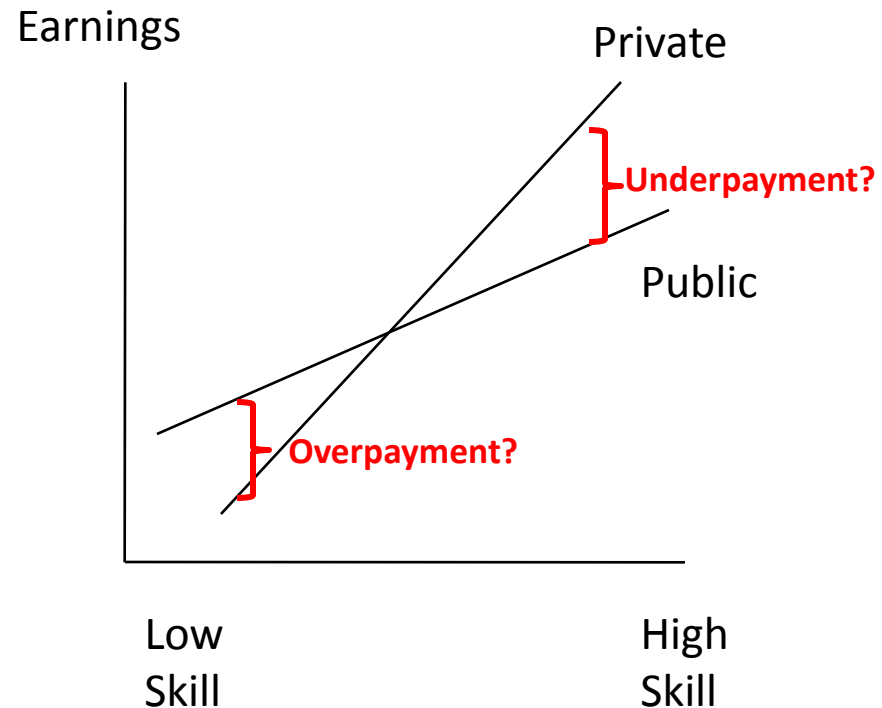
# What is the Research Question?

- Several possibilities
  1. “On average, do public sector workers earn more than private sector workers?”
  2. “Are the distributions across the two sectors the same? If not, then are public sector workers paid more or less at different parts of the distribution?”
  3. “What about other forms of compensation, such as pensions, health insurance, vacation time, etc?”
- Policy implications/motivations
  - Want an ‘efficiently operating’ public sector labor market.
  - Do not want to ‘overpay’ or ‘underpay’.
- Most of the academic literature focuses on first question.

# Why would wages differ?

- Average wages
  - Particular and/or different mix of occupations
  - High unionization
  - Political nature of public sector labor markets
- Differences in distributions
  - Similar list to above, but prediction is for a less dispersed distribution of earnings in the public sector
  - ‘Double Imbalance’
  - Policy Implications are different than if it is just average differences.

The ‘Double Imbalance’



# How do we test this? Method Matters

- Want an ‘apples’ to ‘apples’ comparisons
  - Try to control for differences across sectors:
    - Demographic characteristics (e.g. gender, race/ethnicity, education, age, experience, etc)
    - Occupations
    - Union status
    - Other job attributes (e.g. establishment size, shift work, hourly vs. salaried work, performance pay, technical skill, etc)
- Implies use of multivariate regression statistical techniques to adequately control for these differences.

# Data Issues

- Typically using large, nationally representative survey data: Current Population Survey, Panel Study of Income Dynamics, etc
  - Pros – more job and demographic information available than typical BLS data; multiple levels of government
  - Cons – survey data limitations such as correctly recording earnings data; does the worker know whether job is public or private

# Findings

- Generally, the US literature finds an overall public sector premium, largest for the Federal sector, smaller (negative?) for state and local government
- **Simple** Example from the March 2008 CPS

Average Hourly Wage Differential – Compared to Private Sector				
Controls for	Public	Federal	State	Local
Nothing	18.6%	47.4%	17.3%	10.4%
Gender, race	20.4	42.2	18.6	13.2
+Education	3.3	28.1	-1.9	-2.2
+union, age	-4.8	18.8	-8.1	-11.0
+occup, state	-4.5	15.7	-8.0	-10.0

# Distributional Differences

Hourly Wage Difference at Each Decile of the Distribution				
Decile	Public	Federal	State	Local
First	-1.8%	18.3%	-3.3%	-7.7
Second	-3.0	16.4	-6.3	-7.4
Third	-4.0	18.5	-7.4	-7.6
Fourth	-4.3	17.5	-9.5	-9.2
Fifth	-4.3	17.0	-10.0	-9.3
Sixth	-4.0	15.1	-9.8	-10.1
Seventh	-5.0	16.1	-9.8	-9.9
Eighth	-5.2	12.9	-11.4	-10.2
Ninth	-5.1	12.2	-11.4	-10.8

Controls for gender, race education, union status, age, occupation, and state residence.

# A Couple Words on Reform of Public Sector Pay Systems

- Attracted more economic research attention outside of US
  - particularly Europe
- Motivations:
  - Reduce government expenditures
  - Make the public sector ‘more efficient’ (i.e. more like the private sector labor market)
  - Offer more ‘pay for performance’, outsource jobs not ‘essential’ to government functions
- Study of Australia, Sweden and the UK showed:
  - Not much change in average wages or wage growth or public sector wage bill.
  - Some convergence in wage distributions across sectors – particularly in the UK



# Thank you!

Please feel free to contact me with any questions:

Keith Bender  
Department of Economics  
UW-Milwaukee  
PO Box 413  
Milwaukee, WI 53201  
Email: [kabender@uwm.edu](mailto:kabender@uwm.edu)  
Phone: 414-229-4761

# References

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