

# Does Public Sector Wage Setting Constrain Devolution?

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## ESRC Devolution Programme

- “Competition and Reform: Devolved Government and Public Sector Pay-Setting” with Bob Elliott, University of Aberdeen and Tony Scott, University of Melbourne
- This project is concerned with public sector pay in Scotland, Wales, Northern Ireland and the regions of England. It will analyse how it is set and how much control is currently exercised – and how much could be exercised in future – by devolved governments.



## A framework for our research

- Cost-benefit analysis of the public sector
- Benefits
  - outputs of public services
  - often these outputs would not emerge from the free market without some form of state intervention
  - difficult to measure (Atkinson review)
- (Labour) Costs
  - numbers of employees (or full-time equivalents) times
  - the average wage (or cost of compensation package) of these workers

## Share of Total Compensation Costs for the Public Sector as a Percentage of GDP

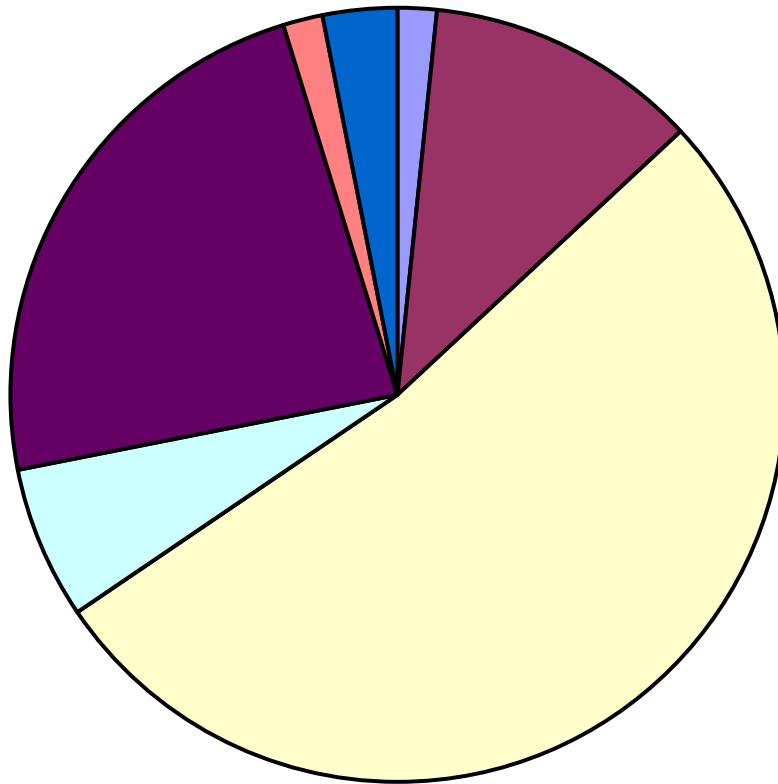
	1985	1990	1995	1996	1997	1998	1999	2000
Austria	11.36	10.99	11.96	11.68	10.37	10.27	10.26	
Belgium		10.82	11.60	11.54	11.39	11.28		
Czech Republic			7.14	7.73				
Denmark	18.37	18.08	16.99	16.39	16.19	16.44		
Finland		14.98	15.15	15.46	14.24	13.68	13.35	
France	11.83	10.95	11.06	11.16	11.03	10.97	11.03	
Germany	8.63	8.12	9.49	9.84	8.38	8.14	8.03	7.87
Ireland		7.65						
Italy		11.47	11.00	10.50	9.95	9.36	8.71	
Japan	11.59	12.50	9.06	10.13	7.04	6.95	6.89	
Luxembourg		5.80						
Netherlands	9.30	8.26	7.60	7.53	2.91	2.86	2.83	
New Zealand		11.19	9.42	9.45	9.60	9.87		
Norway			10.75	10.21	10.24	9.47		
Portugal		11.07	13.27	13.45	13.63	13.79	14.03	14.68
Spain	7.99	8.92	9.42	9.36	9.03			
Sweden	19.94	20.28	15.49					
Switzerland		10.00	11.05	11.22	10.97	10.67		
United Kingdom	12.20	11.96	8.78	8.29	7.84			

Source: OECD Public Management Service, 2001. Copyright OECD 2001. All rights reserved.

## Output and Employment in the Public Sector

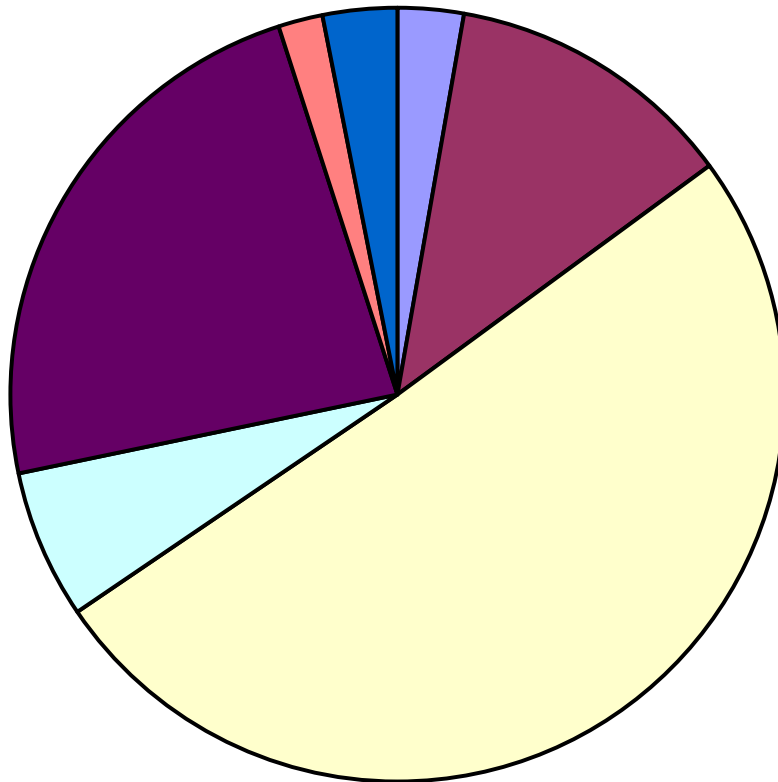
- Outputs – increasingly target (Public Service Agreements) driven – Scottish targets differ from those set by Westminster Departments
- Employment – surprisingly difficult to measure
  - Recent data revisions by ONS showed that
  - Since 1998, UK Public Sector Employment is up 583,000 in total to the first quarter of 2004;
  - over 80 per cent of the increase since 1998 has been in the health and education sectors

## Employment Within Public Sector - Scotland



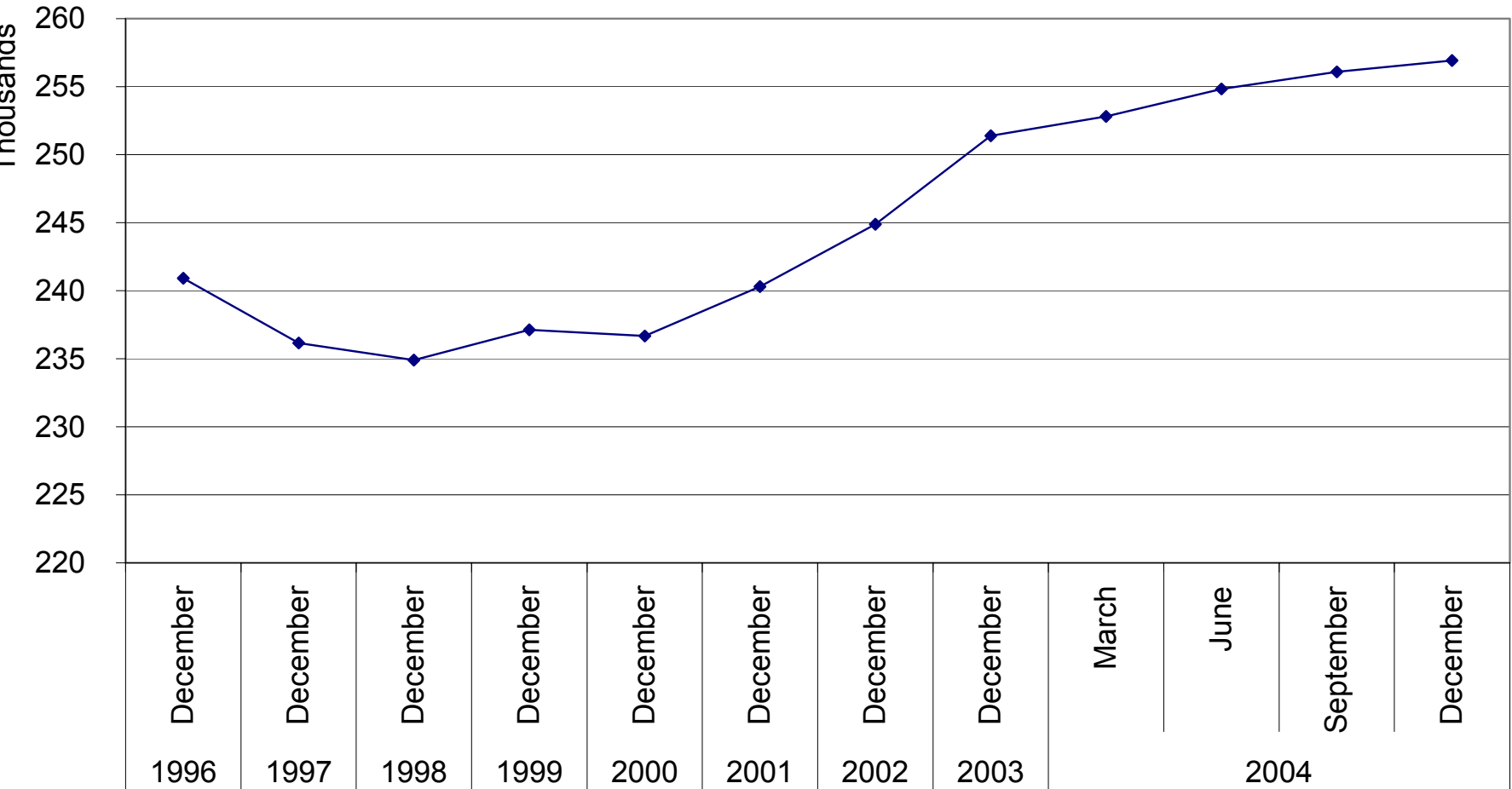
- Nationalised industry or state corporation
- Central government, Civil Service\*1
- Local government or council \*
- University, Polytechnic or other grant funded educational establishment
- Health authority or NHS trust
- Armed Forces
- Other kind of organisation

### Employment Within Public Sector - UK



- Nationalised industry or state corporation
- Central government, Civil Service\*1
- Local government or council \*
- University, Polytechnic or other grant funded educational establishment
- Health authority or NHS trust
- Armed Forces
- Other kind of organisation

### Local Authority Staff in Scotland 1996-2004



# Public Sector Wages and Devolution

- Structure of argument:
  1. Role of public sector pay
  2. Theory of public sector wage differentials
  3. Pay arrangements in the public sector
  4. How to analyse private/public wage differences
  5. Evidence from analyses
  6. Key questions
  7. Public sector wages and devolved government



## 1. Role of Public Sector Pay

- Public sector pay accounts for 55 percent of government current expenditure
- Pay serves to attract, retain and motivate staff
- Rates of pay in the public sector will have spill-over effects:
  - Will depress or bid-up pay in local markets
  - Will influence pay expectations of other employees



## 2. Theory of public sector wage differentials

### Why Different Wage Outcomes in the Public Sector?

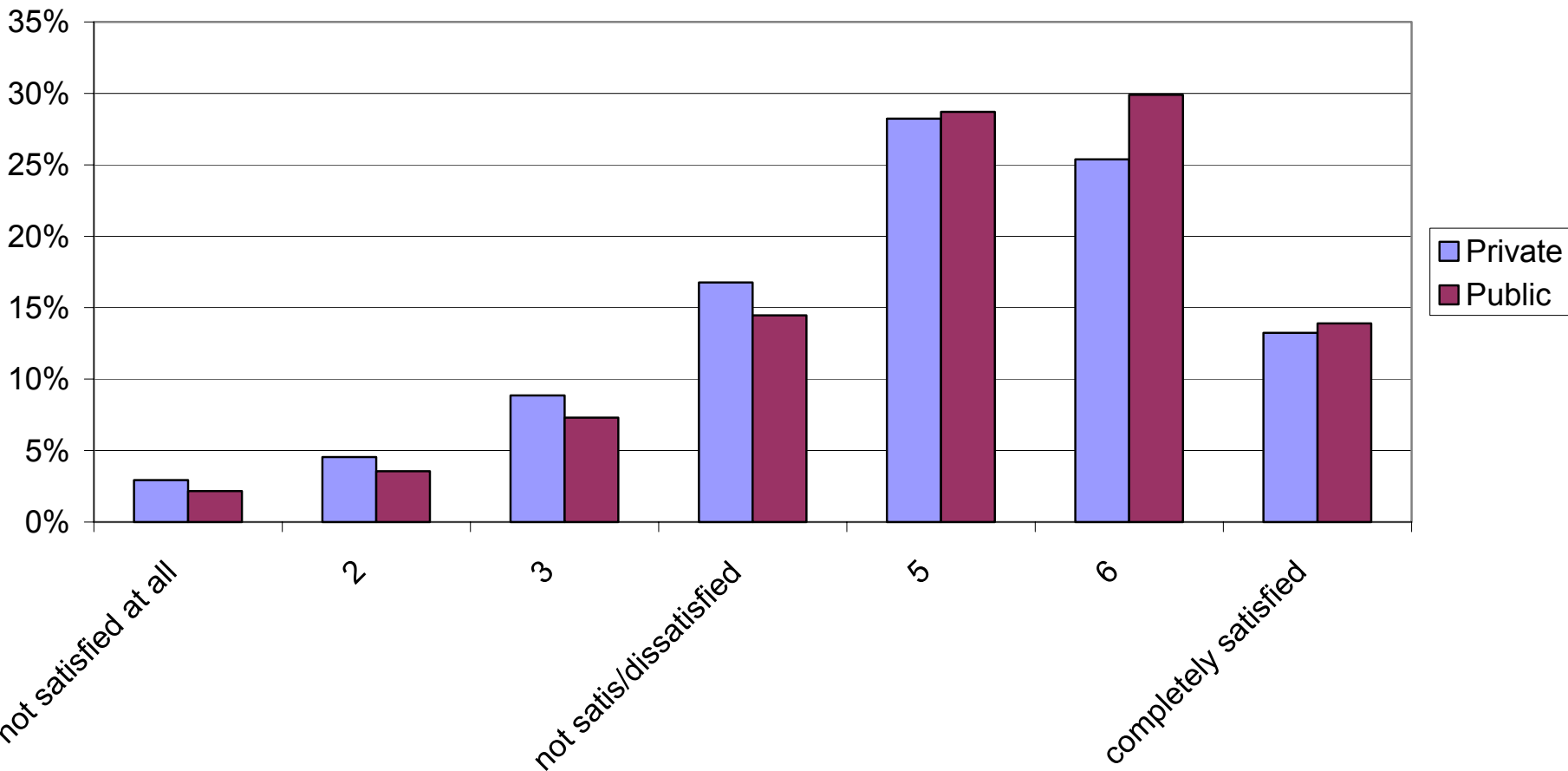
- Compensating differentials
  - Non-wage benefits
    - Pensions
    - Golden hellos and goodbyes
  - Risk
- Efficiency wages
- Union power
- Greater commitment to equality in public sector



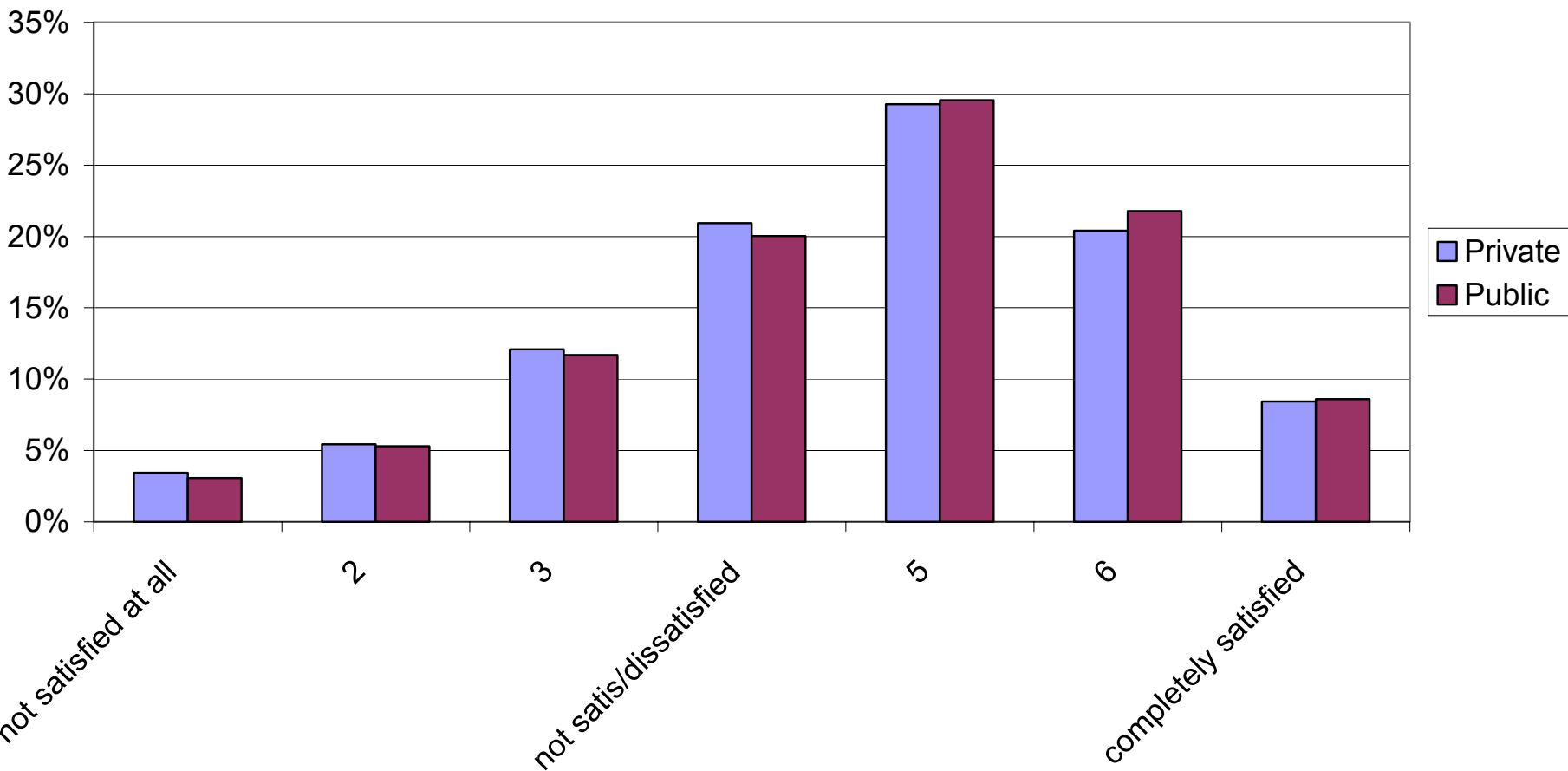
## Do the differentials compensate?

- Job satisfaction slightly higher in the public sector
- Income satisfaction about the same
- No difference in overall life satisfaction

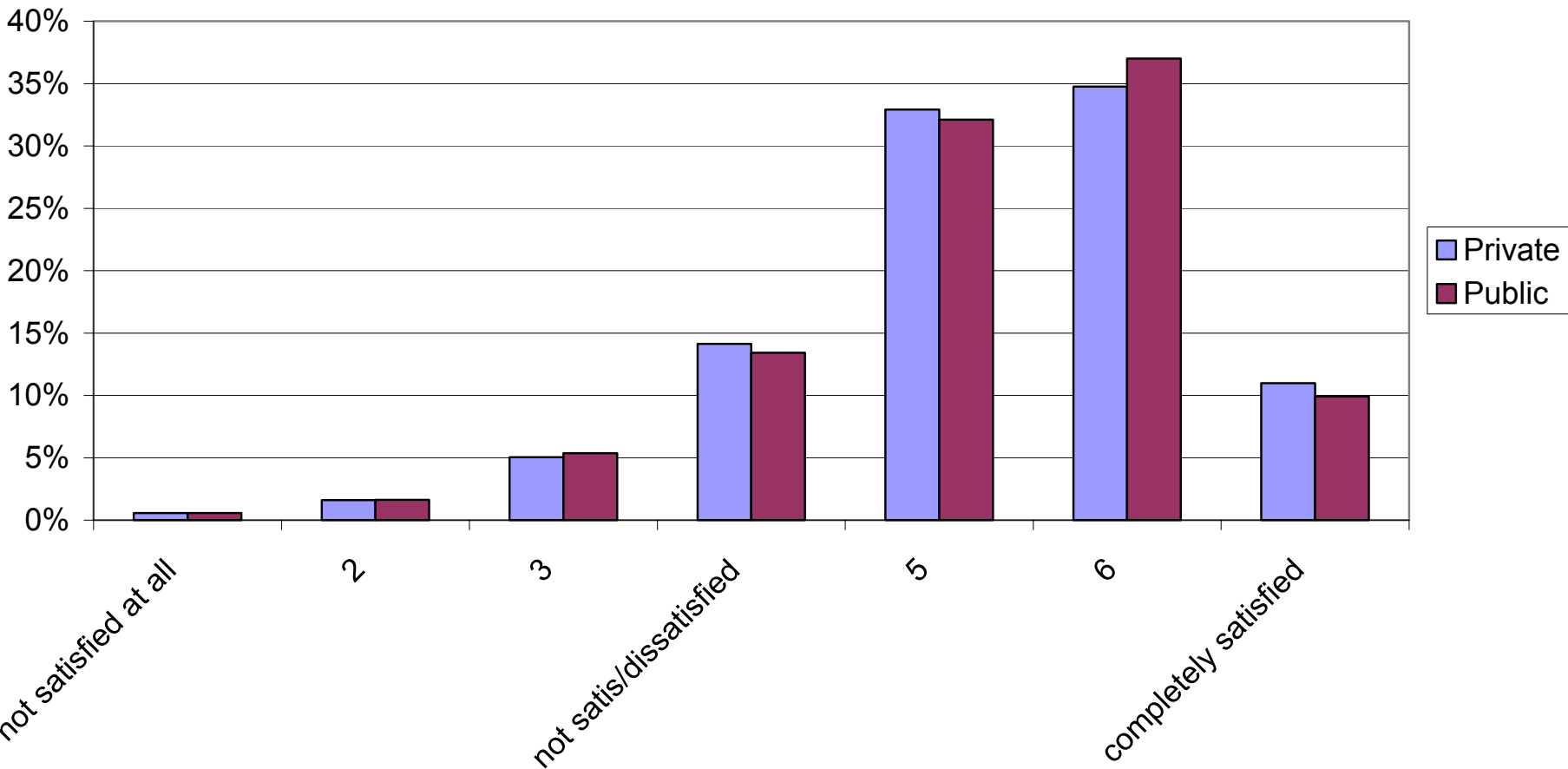
## Job Satisfaction in the Private and Public Sectors (Source: Pooled BHPS Data)



Income Satisfaction in the Private and Public Sectors  
 (Source: Pooled BHPS Data)



## Overall Life Satisfaction in the Private and Public Sectors (Source: Pooled BHPS Data)



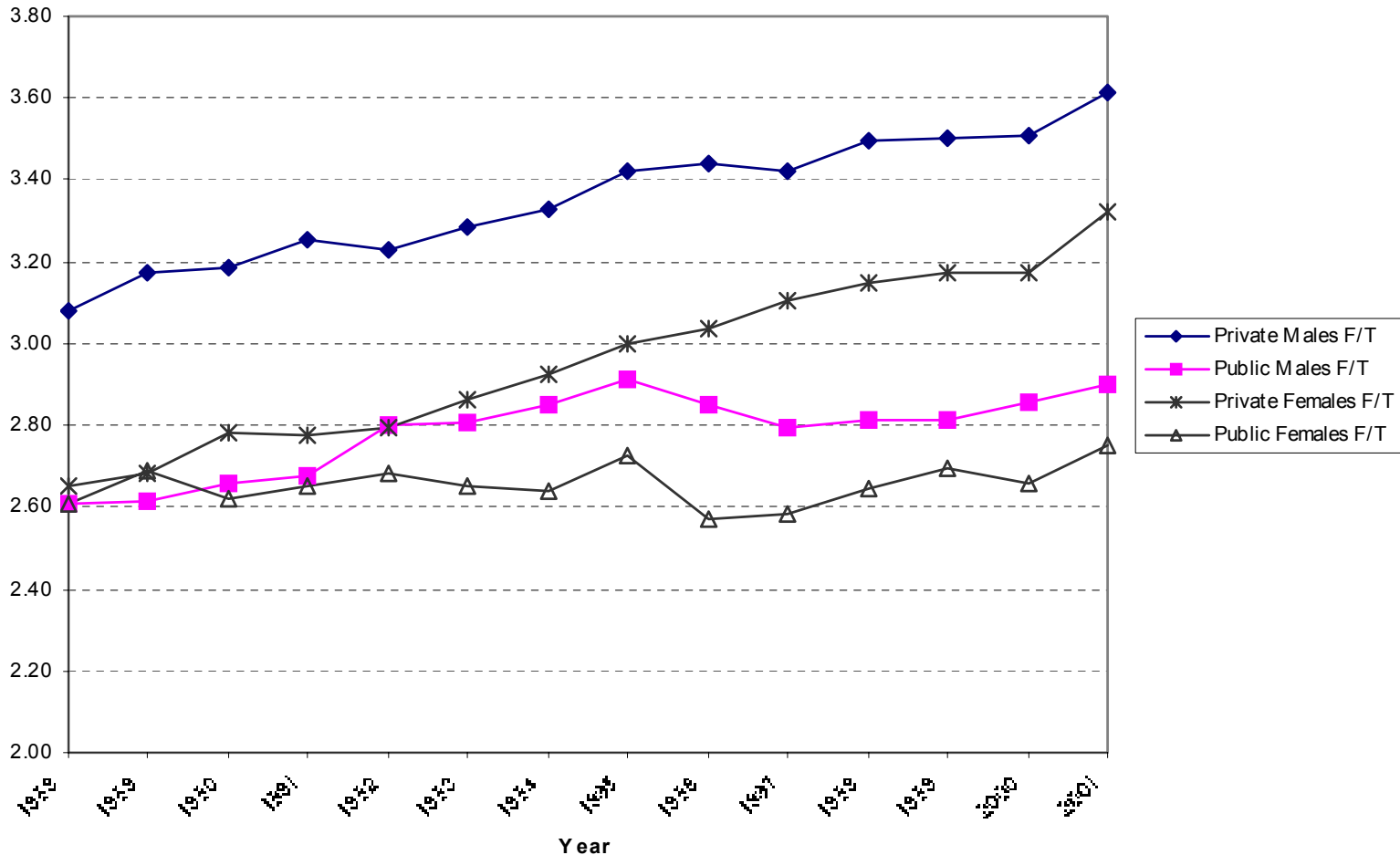


## Greater commitment to equity?

- Smaller wage gaps within public sector
- Demonstrate by taking ratio of wages at the 90<sup>th</sup> percentile to those at the 10<sup>th</sup> percentile
- Larger in the private sector
- Larger for men than women
- Increasing more rapidly in the private sector

# Earnings "Gap" by Sector and Gender

Figure 3: 90th/10th Decile Weekly Earnings





### 3. Pay arrangements in the public sector

- Huge mixture of bargaining arrangements
  - Review bodies
  - Collective bargaining
- Great variation in extent of local flexibility
- Wide variation in territorial coverage
- Unions generally resist greater local flexibility to reflect local labour market conditions
- Bargaining structures have largely been impervious to devolution

## Trade Unions and the Public Sector

- Trade Unions have a bigger influence over pay setting in the public sector and generally prefer national rates of pay
- Review Bodies set national rates of pay and national pay structures still dominate the public sector
- Much greater spatial differentiation of pay in the private sector
- Public sector overpays in the low cost, and attractive areas and underpays in the high cost and unattractive area

## Pay Arrangements in the Civil Service

- The Department of Work and Pensions (DWP), Ministry of Defence, Inland Revenue and Customs and Excise together employ over 300,000 of a total of 508,000 civil servants in 2001.
- With the exception of the DWP those departments and agencies which operate in more than one labour market do not appear to have attempted to construct pay systems that allow them to respond to differences in these markets.

Territorial Coverage and the System of Pay Setting by Public Sector Staff Group	No. of employees	Arrangements operated from	Territorial * Flexibility
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### UK- wide

#### Review bodies

Armed forces	210 000	1971	None
Nursing staff, midwives, health visitors and allied professionals (full-time equivalents)	500 000	1984	None
Doctors and dentists	145 000	1971	None
Senior salaries; judiciary, senior civil servants and senior officers - armed forces	6 000	1972	None

Territorial Coverage and the System of Pay Setting by Public Sector Staff Group	No. of employees	Arrangements operated from	Territorial * Flexibility
<b>Collective bargaining</b>			
<i>Centralised Index linking</i>			
Police service	150 000	1979	Limited
Fire service	42 000	1977	None
<i>Decentralised</i>			
Civil service	519 000	Early 1990s	Limited
<i>Centralised</i>			
NHS:			
Ancillary staff	100 000	Early 1950s	Limited
Administrative and clerical	160 000	Early 1950s	Limited
Professional, technical and scientific	65 000	Early 1950s	None
Ambulance staff	22 000	Early 1950s	Limited
Maintenance	20 000	Early 1950s	Considerable
Universities:			
Academic and related staff (pre 1992)	50 000	Early 1950s	Limited
Academic and related staff (post 1992)	40 000		Limited

England and Wales only
**Review bodies**

School teachers	485 000	1992
Prison officers	31 000	2002

**Collective Bargaining**
*Centralised Framework Agreement*

## Local authorities

Professional technical, administrative, clerical, manual	1,300 000	1997
Further education	56 000	1997
Craft workers	40 000	1997

Scotland only
**Collective bargaining**

School teachers	50 000	1992
Prison officers	4 500	2002

## Local authorities

Professional technical, administrative, clerical, manual	200 000	1997
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## 4. How to analyse private/public wage differences

- Micro or macro approach?
- Survey data - cross-sectional or longitudinal?
- Oaxaca decomposition – how much can wage differences be explained by observed differences in characteristics, how much by different returns to characteristics?



#### 4. How to analyse private/public wage differences

- Quantile regression – do those at the bottom end of the earnings distribution gain/lose more than those at the top end from being employed in the public sector?
- Difference-in-difference – evaluate policy by asking whether change in behaviour significant after policy introduced compared with changes in other area where policy change did not happen
- Track switchers – those who change between the private and public sector



## 5. Evidence from analyses

- Macro
  - Using macroeconomic data – often to make cross-country comparisons
  - Often these are calibrations – difficult to construct appropriate counter-factual
- Micro/survey
  - Most literature has focused on the “public sector premium”
  - “Raw” premium – difference between average public and private sector wage
  - “Adjusted” premium – difference in wage that cannot be explained by observable (or unobservable) individual characteristics e.g. education, tenure, marital status etc.

## Macro evidence

- Developing countries often have excessive levels of public sector employment
- “Less-developed economies, having ill-functioning mixed economies, are fertile breeding grounds for rent-seeking behaviour and patronage.”
- “The accumulation in little more than a decade of even a small proportion of the workforce in an unproductive ‘sink’ can sap the economy of its dynamism, eliminating improvements in living standards for all but the few who obtain rent-yielding jobs.”
- See: Public Sector Employment, Rent Seeking and Growth, Gelb, Knight and Sabot (1991), *Economic Journal*, vol 101, no 408



## More Macro Evidence

- Alesina et al. (2002) find strong positive effects of cutting back public employment on private investment. A one-percentage point cut in the ratio of the public-wage bill to GDP boosts the investment to GDP ratio by 0.48 percentage points on impact and by 2.56 cumulatively after five years.
- Alesina, A., S. Ardagna, R. Perotti and F. Schiantarelli (2002). Fiscal policy, profits and investment, *American Economic Review*, 92, 3, 571-589.

## Micro/survey evidence – Public Sector Premium

- How to measure “adjusted” premium
- Explain individual wages by observed characteristics - education, tenure, family characteristics etc.
- **And whether working in private or public sector**

### The Public Sector Premium in Selected Countries

Country	Premium	T statistic	Year
Canada	9%	2.65	1992-93
Germany	6%	4.71	1989-93
Italy	8%	3.19	1989-93
Japan	21%	2.71	1993
<b>UK</b>	<b>4%</b>	<b>2.67</b>	<b>1989-93</b>
USA	9%	13.67	1993

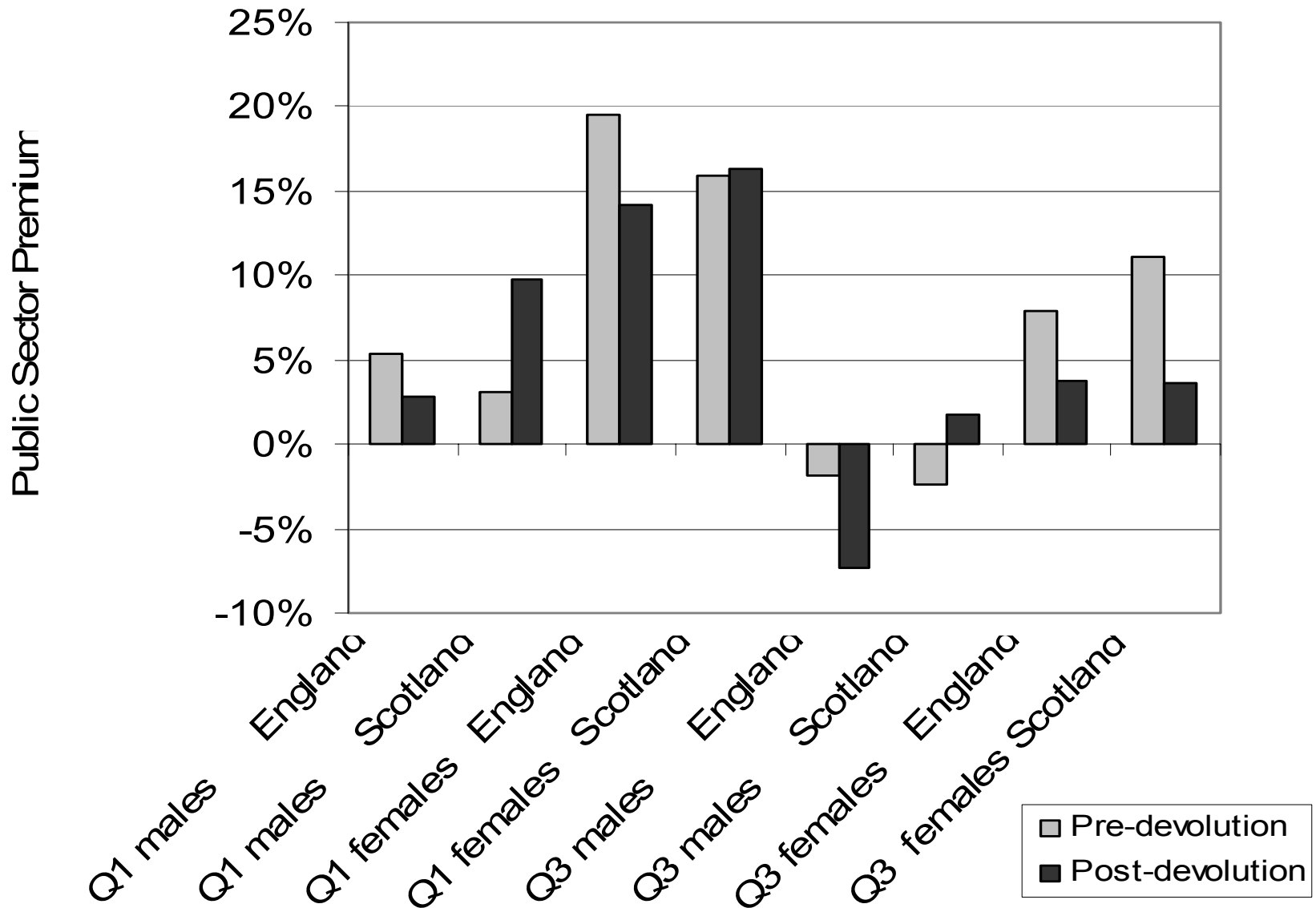
Source: Blanchflower (1996)

## Who most benefits from public sector employment?

- Low paid employees benefit more than highly qualified workers
- Women benefit more than men
- Central government more than academics!

## Premia Within Public Sector (BHPS 1991-95)

	Men	Women
Entire Public Sector	3.6	17.9
Civil service/central government	9.6	24.8
Local government	3.9	12.9
NHS/Higher education	-8.1	23.4
Nationalised Industries	-0.1	-0.13
Armed Forces	0.1	-0.1





## Do fiscal powers increase control over public sector wages?

- US evidence - states which limit local taxes have lower rates of public sector wage growth
- Effects most pronounced in years after limits imposed
- Fiscal Institutions and Public Sector Labour Markets - Poterba and Reuben NBER - Working Paper 6659



## 6 Public Sector Pay and Devolution

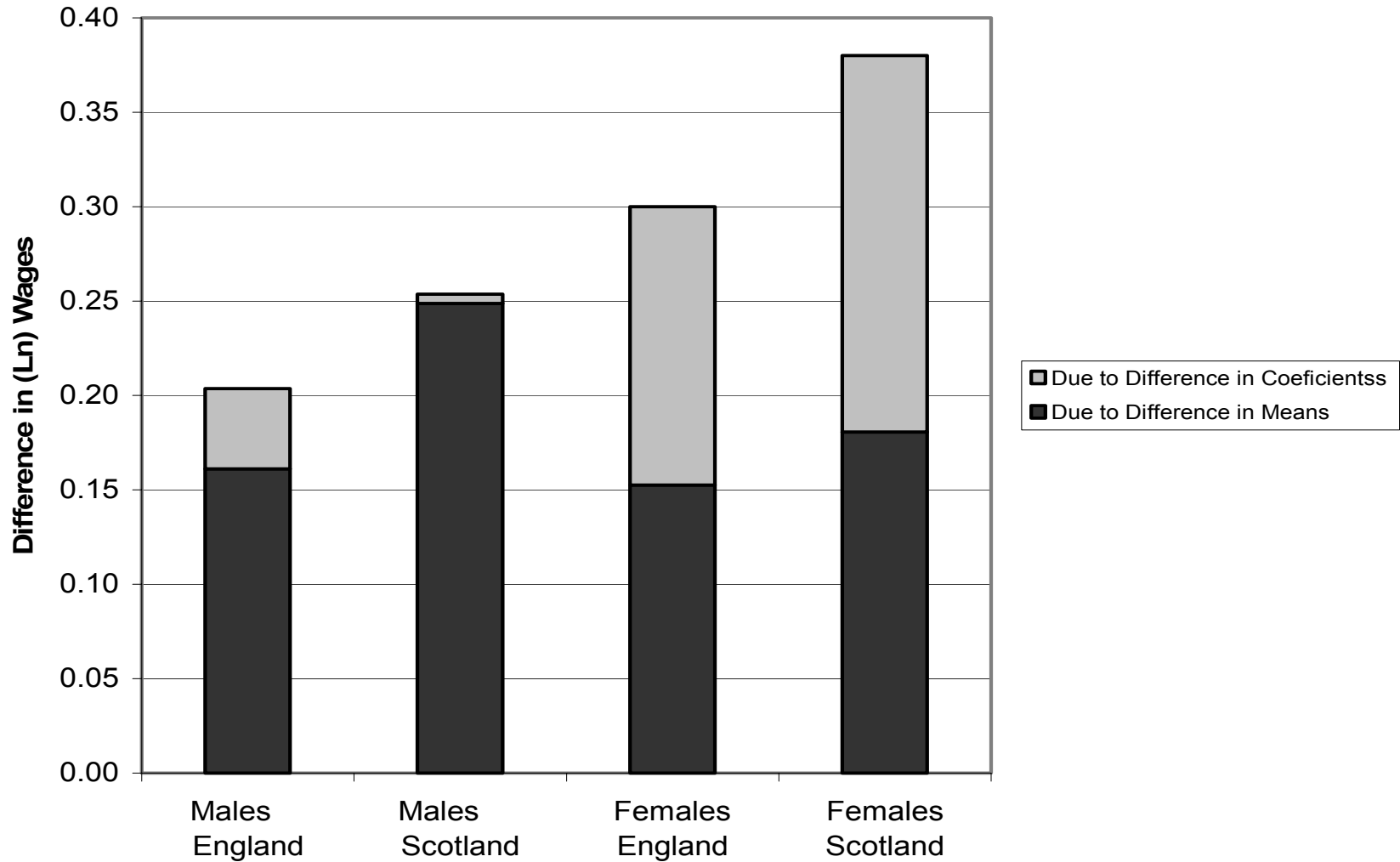
- Under the current spending regime (Barnett Formula, Comprehensive Spending Review) increased wage bills for the Executive have a direct (though usually undefined) opportunity cost
- But service delivery dependent on attracting, retaining and motivating staff



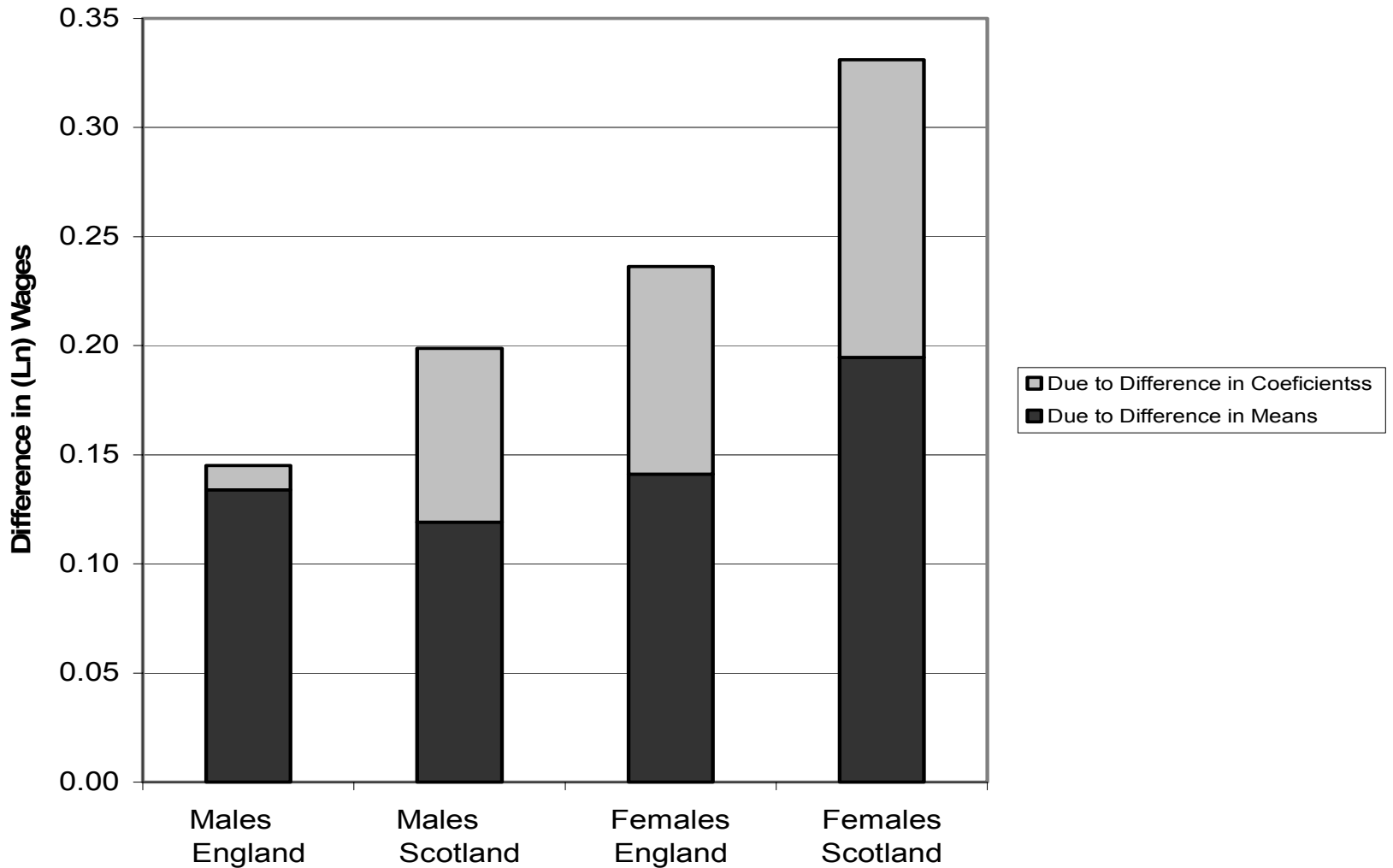
## Pre and Post Devolution Periods

- Compare adjusted premium pre and post devolution
- For males and females
- In England and Scotland
- This is similar to our subsequent “difference-in-difference” tests of the impact of devolution on public sector wages in Scotland

Pre Devolution



Post Devolution



## Change in adjusted premium at top and bottom of earnings distribution

	25 <sup>th</sup> Percentile		75 <sup>th</sup> Percentile	
	Men	Women	Men	Women
England	-3(5)	-5(14)	-5(-7)	-4(+4)
Scotland	+7(10)	+1(17)	+3(+1)	-8(+4)

Number in brackets is absolute value of adjusted differential in post devolution period



## 6. Key Questions

- Have public sector wages grown more/less rapidly in Scotland since devolution
  - than the public sector in the Rest of the UK?
  - than the private sector in Scotland?
- What would we expect? - that public sector wage rates in Scotland would fall relatively after devolution?

Has devolution changed the path of public sector pay in Scotland relative to other parts of GB ?

- Data – Labour Force Survey
- Methodology – difference in difference
- Conclusion - there has been *no significant difference* in public sector wage growth in Scotland compared with the rest of Great Britain in the period since devolution

## Devolved bodies have limited influence on UK-wide wage outcomes

- The 2002 Review Body for Nursing Staff records that both the Scottish Executive and National Assembly for Wales emphasised the weaker financial situation in their countries and while the Scottish submission emphasised the better recruitment and retention in this country, both submissions suggested that the pay awards should be designed to reflect their specific circumstances and plans for the NHS. Though the Review Body states it “favours a system that allows for greater pay differentiations both by geography and occupation where the evidence merits it. ... no such mechanism exists within the pay structure”.

Have public sector wage increases following devolution put the private sector in Scotland at a competitive disadvantage?

- No easy answer to this question – private sector may be having to pay higher than competitive rates to retain staff
- What we do know is that, using same methodology as before, relationship between public and private sector pay in Scotland has not changed since devolution

## 7. Public Sector Wages and Devolved Government

- Incentives facing the Scottish Executive
  - The Scotland Act does not permit the Scottish Parliament to save or borrow – hence it must largely spend its annual budget
  - The only option is how to allocate that spend between purchases (mostly of labour) within the public sector and purchases from the private sector
  - There are high political costs associated with reform of public sector bargaining mechanisms
- Public sector spending accounts for over 50 per cent of GDP in Scotland and the public sector deficit is around 10 per cent of GDP, but this has no obvious immediate economic cost
- Longer-run costs may be substantial, but difficult to identify and to demonstrate conclusively

## Does Public Sector Wage Setting Constrain Devolution?

- In an obvious sense it does – lower public sector wages would increase the opportunity set for the Parliament
- But huge political costs associated with failure to deliver public services
- But given the incentives facing the Parliament, the fact that there has been no substantial break with previous public sector wage outcomes is not surprising
- Substantial change in wage structures is only likely to occur if the funding mechanism is fundamentally altered