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Public Sector Wages in Alberta: How do these Compare to Other Provinces and to the Private Sector?

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Theoretical Considerations

- Public sector wages may exceed those in the private sector because of:
 - higher levels of observable income-generating attributes among individuals (e.g., education)
 - higher levels of unobservables (e.g., language ability)
 - efficiency wages
 - higher rates of public sector unionization
 - inelastic demand for government services
 - lack of labour market discipline
 - compensating differentials for disamenities



- But public sector wages could be lower owing to:
 - public scrutiny
 - monoposony power of governments
 - compensating differentials for amenities (e.g., risk aversion)
 - better non-wage benefits



Existing Literature

- Tends to be dated and/or uses aggregate definitions of the public sector and/or does not address the differentials by province and/or does not address business cycle effects
- The literature does suggest, however, that public sector premiums tend to be positive, higher for federal employees, females, and those at the lower tail of the wage distribution



Data and Methodology

- Data are from the master files of the March LFS, 2006-2017
- Data allow the disaggregation of public employees into:
 - public employees not in administration (e.g., teachers, health care and social workers)
 - federal administration
 - provincial administration
 - local administration
 - Aboriginal and international administration (ignored)



- Simple OLS and unconditional quantile models are estimated
- Oaxaca-Blinder decompositions are then used to compare
 - mean wage differentials
 - differentials at the 10th, 25th, 50th, 75th, and 90th quantiles of the overall wage distribution
- Results are mainly for Canada and Alberta



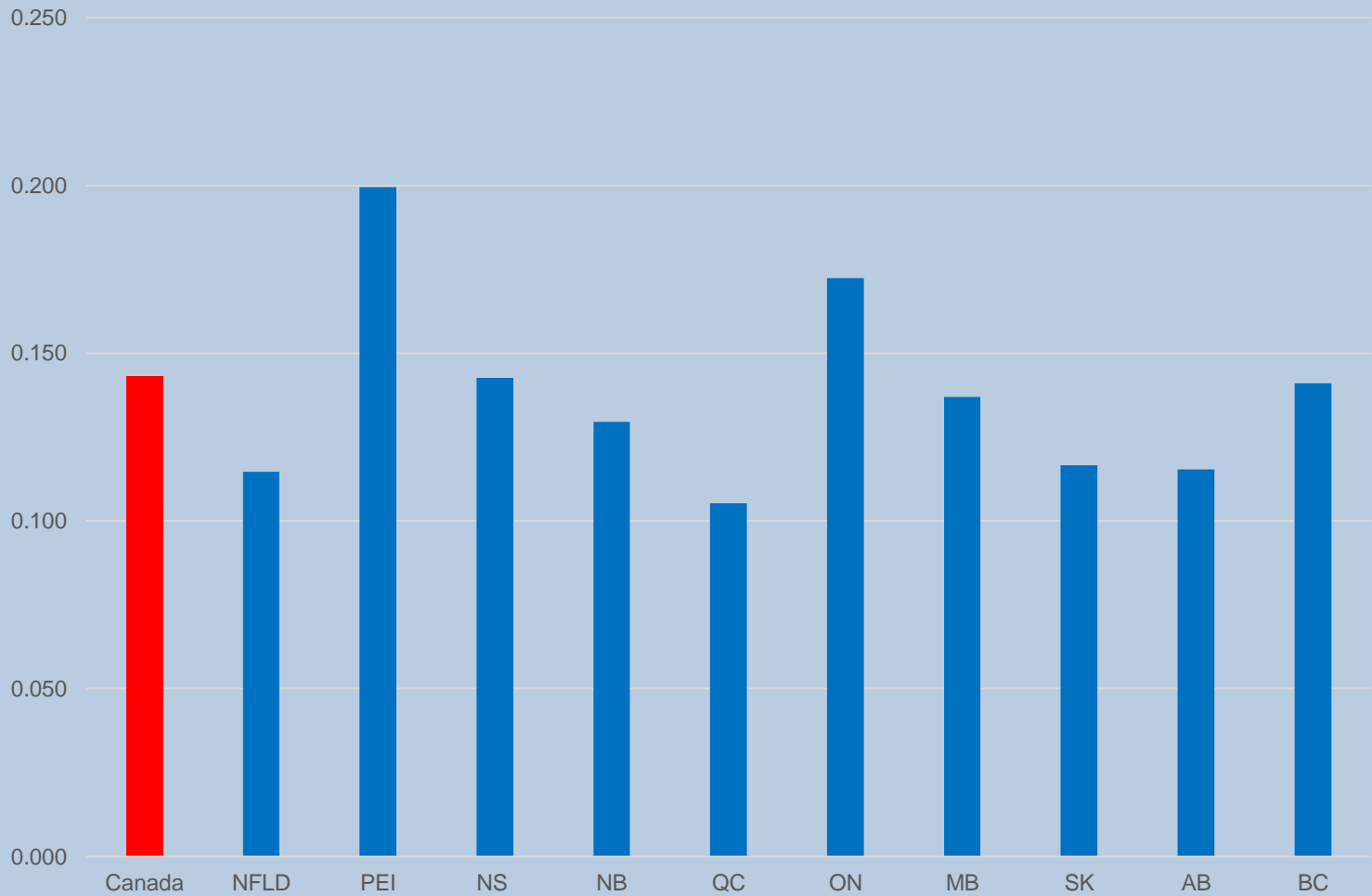
Results

Public Sector Log Real Wage Premiums, OLS, Canada



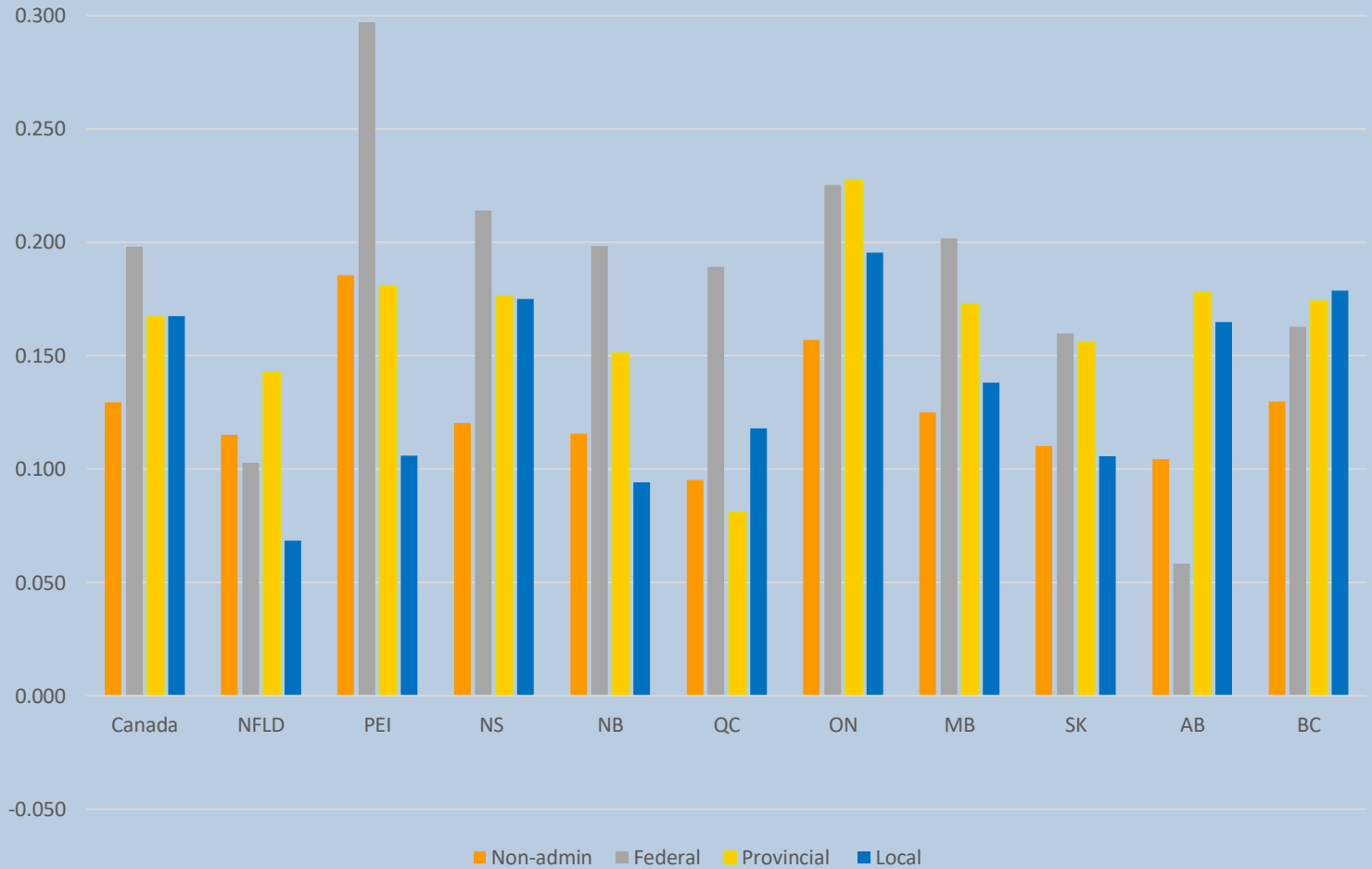


Public Sector Log Real Wage Premiums, OLS, Canada and Provinces





Public Sector Log Real Wage Premiums, OLS, Disaggregated, Canada and Provinces





Competition Between the Sectors?

Table 5: Public sector real wage premiums by public sector job type, Canada and Alberta, limited samples (standard errors are in parentheses)

	Canada				Alberta		
	All	100+	500+	30+	All	50+	10+
Model 1							
Public employee	0.143 *** (.0020)	0.143 *** (.0024)	0.138 *** (.0032)	0.137 *** (.0042)	0.115 *** (.0061)	0.128 *** (.0109)	0.100 *** (.0202)
R ²	0.3447	0.3542	0.3485	0.3169	0.3105	0.3357	0.2717
Model 2							
Public employee, not administration	0.130 *** (.0022)			0.128 *** (.0046)	0.104 *** (.0066)		0.062 *** (.0219)
Federal	0.198 *** (.0039)			0.183 *** (.0063)	0.058 *** (.0141)		0.085 ** (.0339)
Provincial	0.167 *** (.0046)			0.147 *** (.0071)	0.178 *** (.0147)		0.162 *** (.0350)
Local	0.167 *** (.0043)			0.133 *** (.0073)	0.165 *** (.0116)		0.164 *** (.0270)
R ²	0.3454			0.3182	0.3115		0.2756
Sample size	499,469	388,050	157,850	110,100	56,550	13,950	3,950
Number of occupations represented	501	147	45	36	500	32	6
Notes:	See notes for Table 2.						



Public Sector Wages & the Business Cycle

Public Sector Log Real Wage Premiums, Alberta, OLS, by Public Employee Type and Year

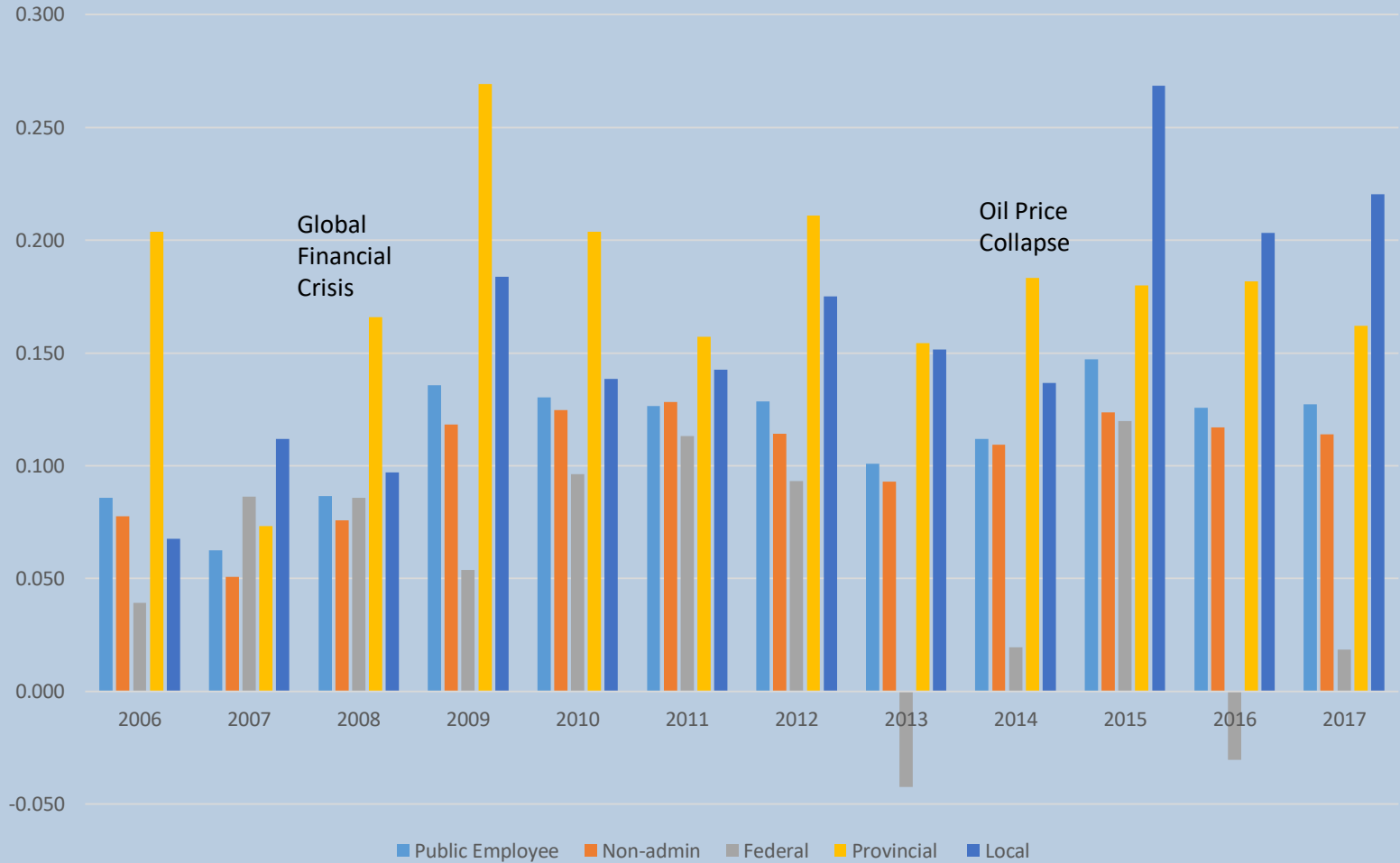




Table 6b: Correlation coefficients, Alberta, public sector wage premiums and unemployment and employment rates (current, lagged 6 months and lagged 12 months)

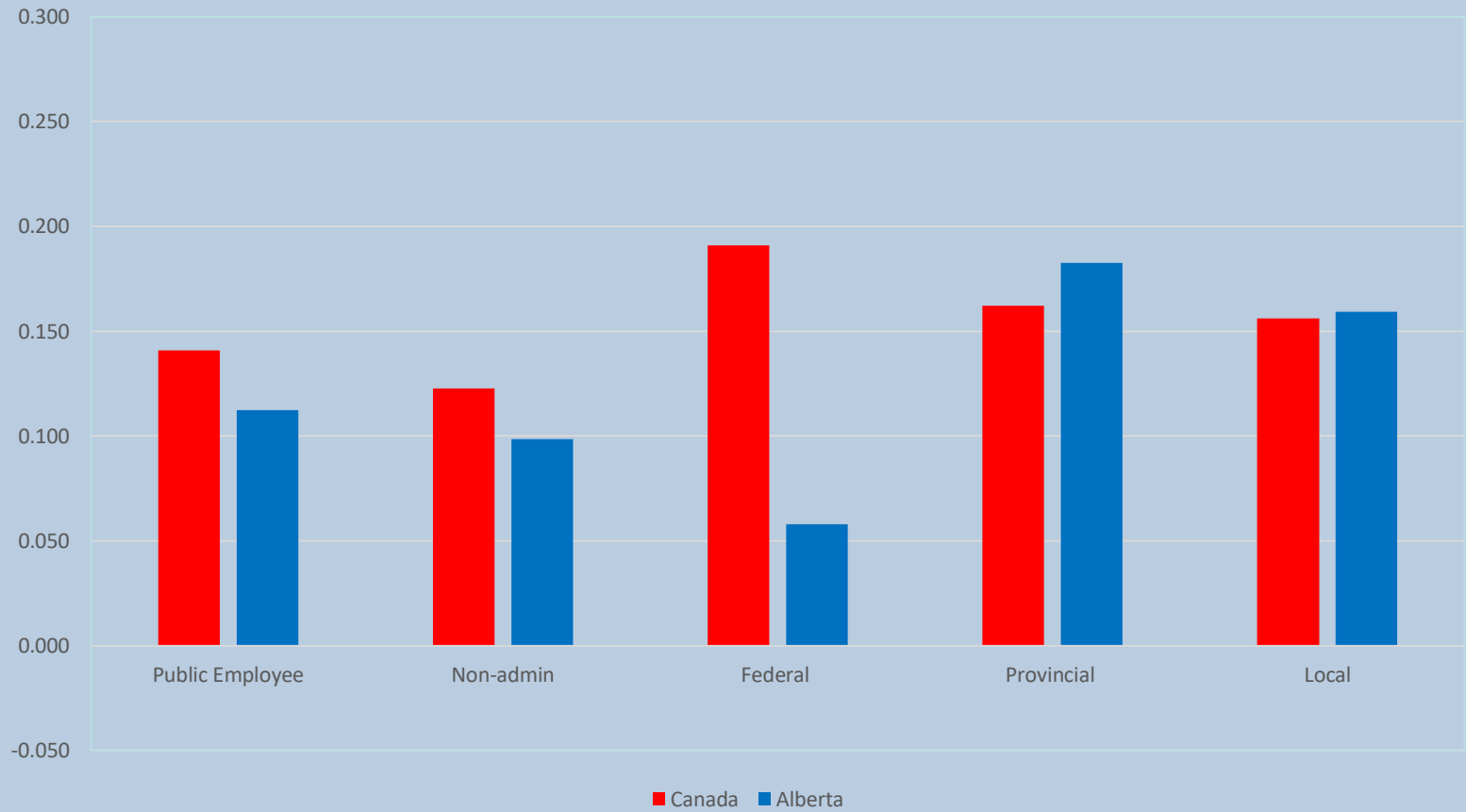
	Unemployment Rate			Employment Rate		
	Current	6 month lag	12 month lag	Current	6 month lag	12 month lag
Model 1						
Public Employees	0.726	0.534	0.596	-0.681	-0.390	-0.359
Model 2						
Public employee, not administration	0.734	0.605	0.702	-0.716	-0.472	-0.438
Federal	-0.197	-0.128	0.001	0.329	0.109	0.106
Provincial	0.275	0.026	-0.032	-0.177	0.163	0.245
Local	0.673	0.454	0.471	-0.658	-0.383	-0.414

Notes: Public sector premiums are from the coefficients in Table 6a. Unemployment and employment rates are from Statistics Canada (2018).



OB Decompositions of Mean Wages

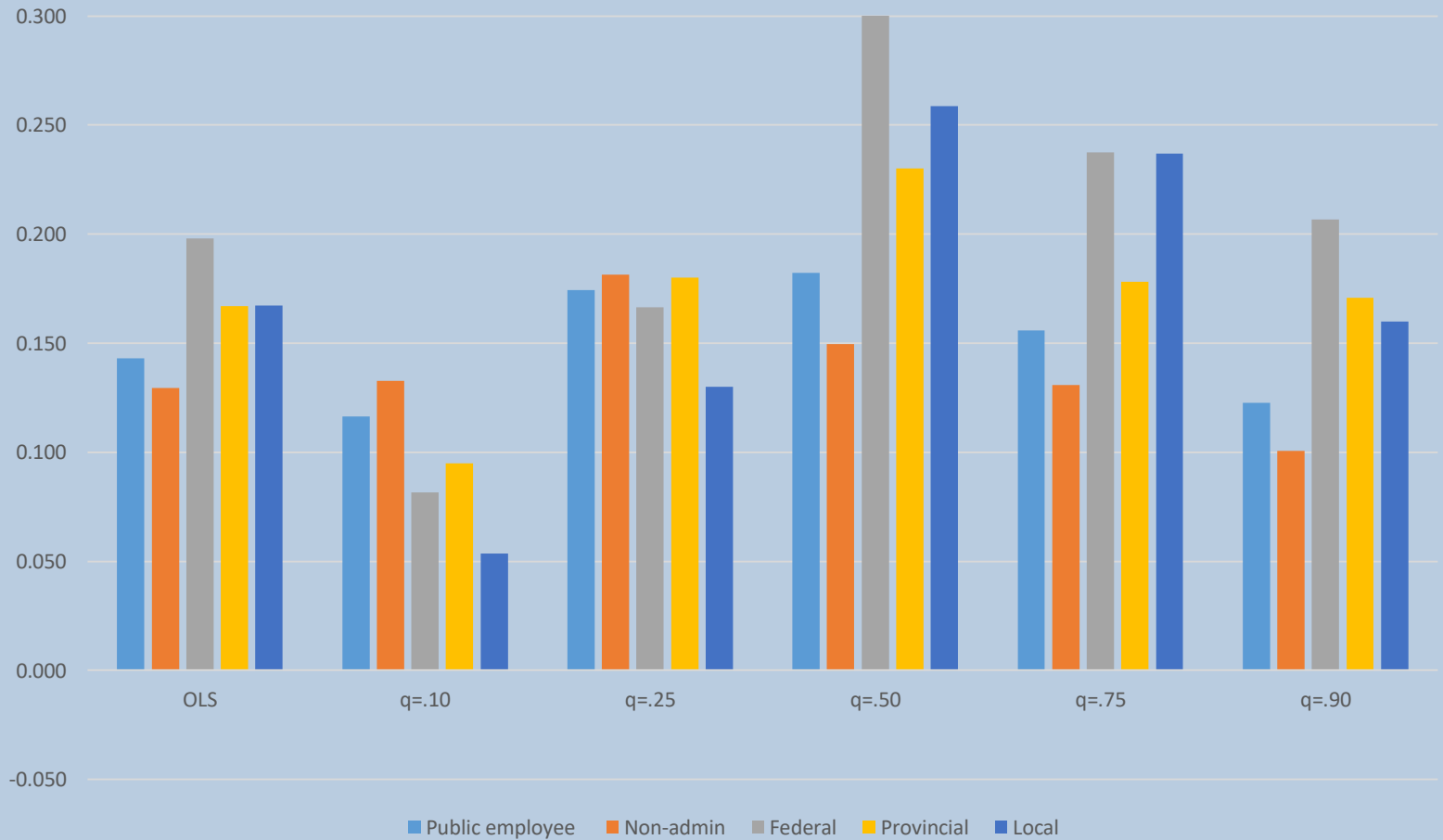
OB Decompositions of Log Real Wages, OLS Unexplained Portion, Canada and Alberta





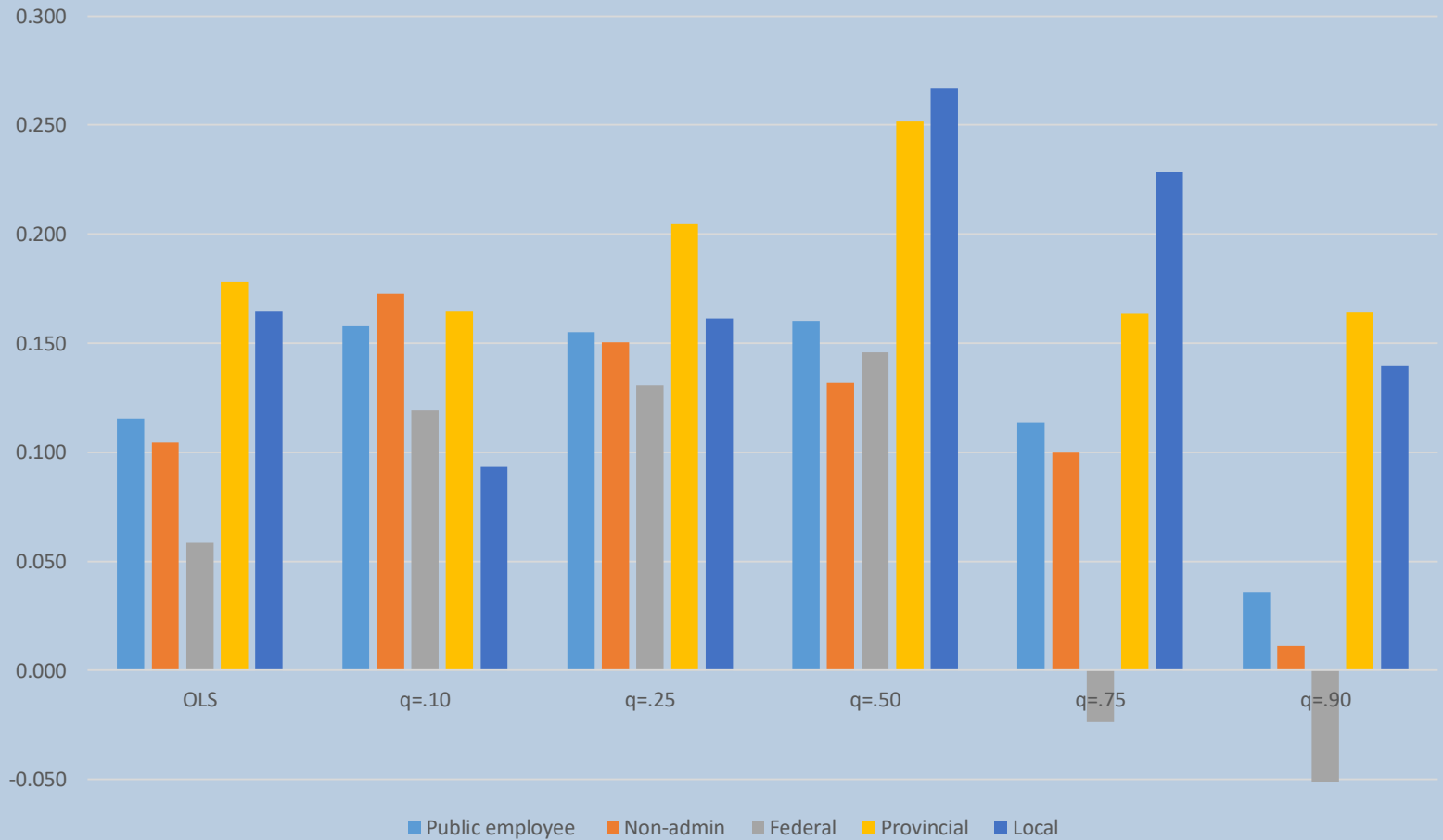
Unconditional Quantile Regressions

Public Sector Log Real Wage Premiums, Unconditional Quantile Regressions, Canada





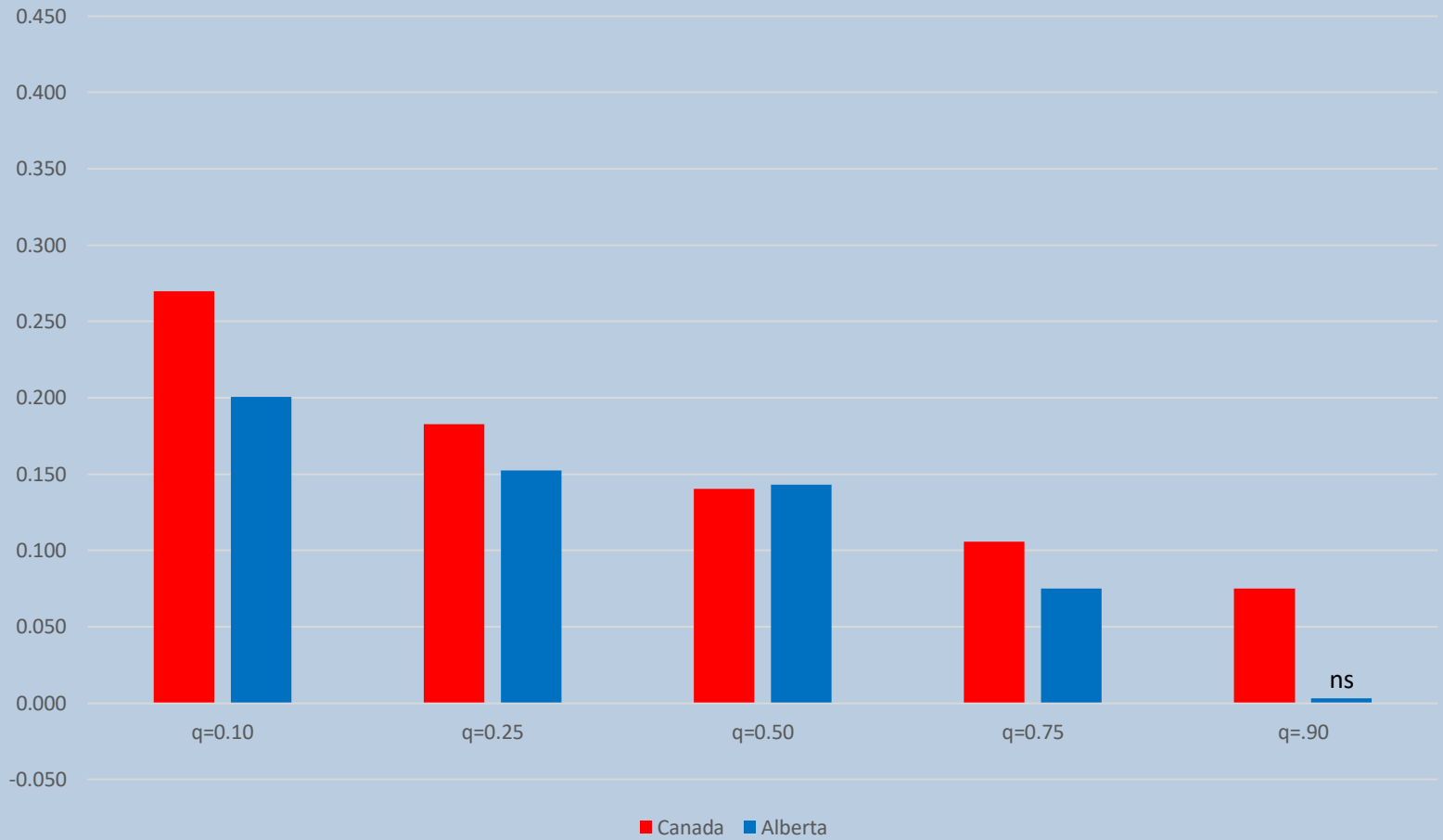
Public Sector Log Real Wage Premiums, Unconditional Quantile Regressions, Alberta





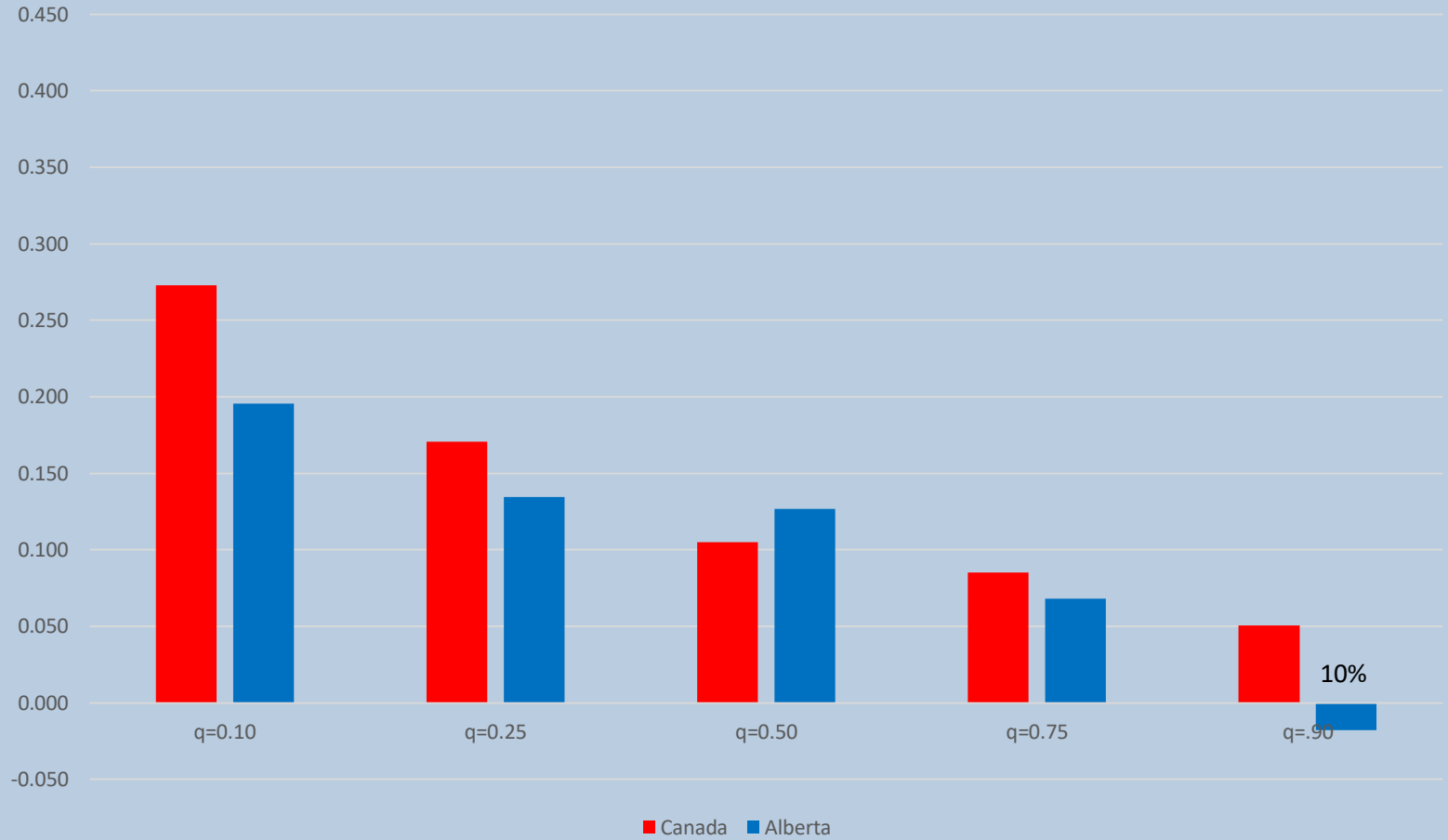
OB Decompositions of UQRs

OB Decompositons of Log Real Wages, UQR,
Unexplained Portion, Public Employees



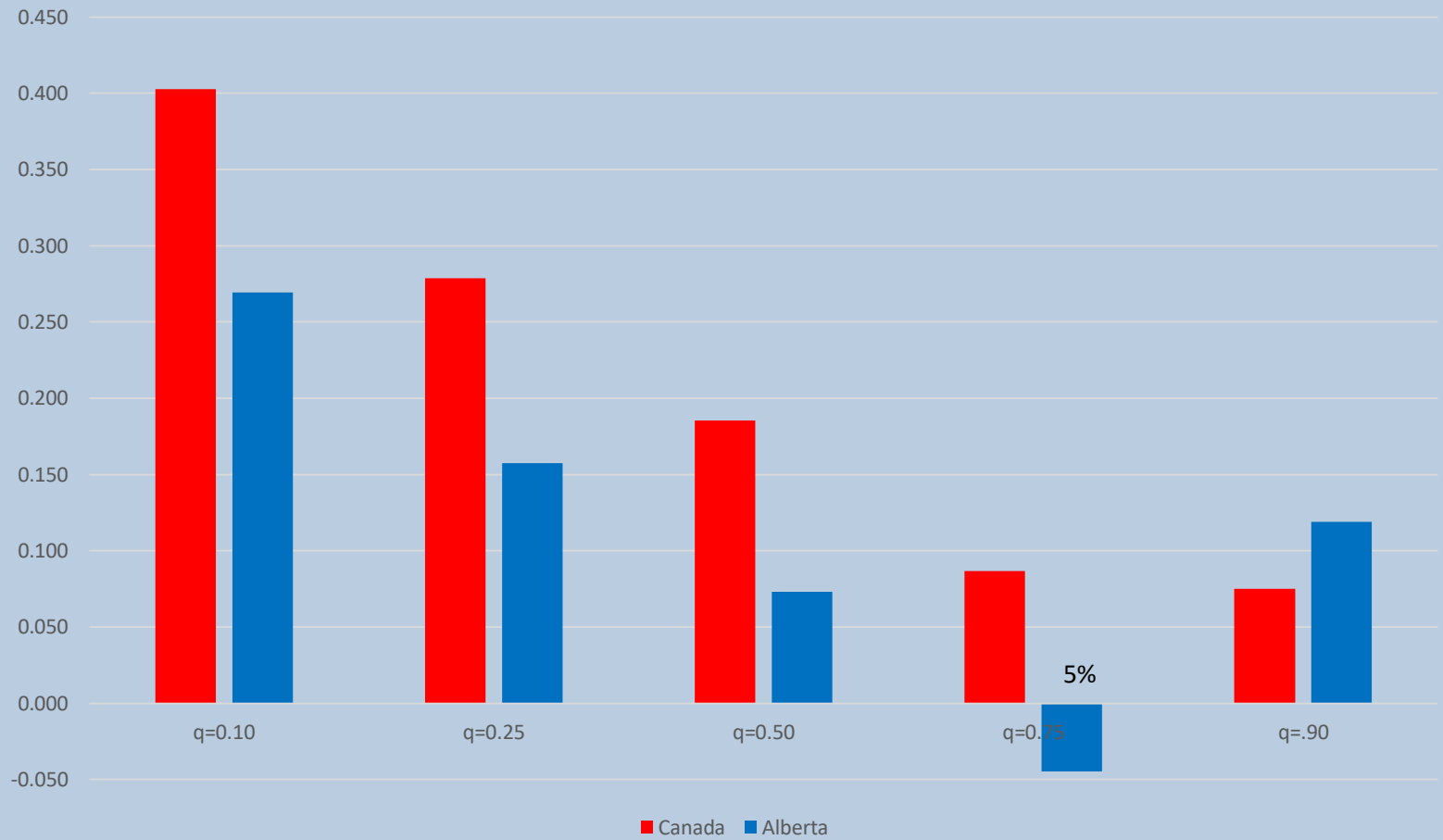


OB Decompositons of Log Real Wages, UQR, Unexplained Portion, Public Employees - Not Administration



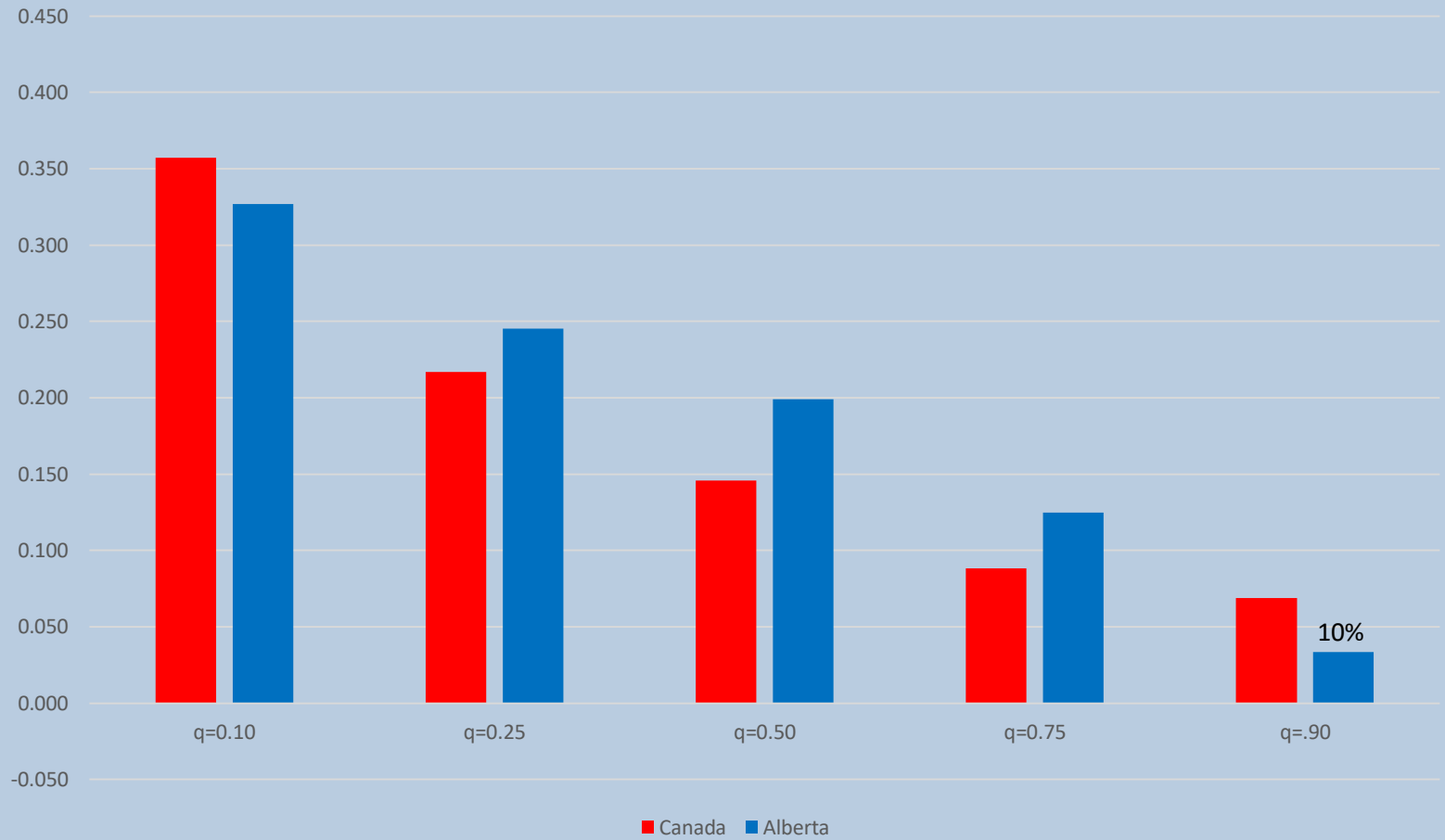


OB Decompositons of Log Real Wages, UQR, Unexplained Portion, Federal





OB Decompositons of Log Real Wages, UQR, Unexplained Portion, Provincial





OB Decompositons of Log Real Wages, UQR, Unexplained Portion, Local





Conclusions and Policy Implications

- There is overall a public sector wage premium in Canada and Alberta and for almost all definitions of the public sector
- These premiums are similar using different estimation techniques
- These public sector wage premiums differ by
 - public sector definition
 - province
 - year



- Premiums tend to be higher at the lower tail of the wage distribution
- For Alberta, there is some evidence that the premiums are countercyclical
- For policy purposes, any cuts to public sector wages must be implemented carefully – across-the-board cuts risk the loss public sector workers and the provision of public services

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Thank you!