The rise in pay for performance among higher managerial and professional occupations in Britain: eroding or enhancing the service relationship?

Article

Supplemental Material

APPENDIX

Further analyses on the complement/substitution effect

Our interpretation is that, because service class occupations have certain job characteristics that entail a certain employment relationship, the rise in PFP should benefit them the most financially by acting as a bonus, while for other occupational classes, since they entail less valuable human assets and their work is more easily controlled, PFP will substitute base pay, acting more as a piece rate where the employee does not receive the full value of their PFP. Thus PFP is more consistent with 'rent sharing' in service class occupations but 'risk sharing' in other occupational classes. To get more insight on this assertion, we report three robustness checks in this Online Appendix. First, we examine differences within more detailed occupational classes. The rationale here is that the results presented thus far for the service class are largely driven by managerial categories, who are perhaps better able to bargain for PFP to not substitute for base pay, but not necessarily professionals, in effect concealing differences within 'big classes'. Second, we examine differences across industries. The rationale here is that since economic rents are larger in some sectors relative to others (e.g., finance and business services vs. the public sector where there are no profits) and PFP is more likely to be found in such sectors, the occupational class-based patterns we found might be driven by certain sectors. Third, we examine differences within occupational classes between whether covered by a collective bargaining agreement or not. The rationale here is that unions may help to ameliorate the substitution effect for non-service class occupations and reduce class-based differences in the balance between complement and substitution across occupational classes within the unionised relative to the nonunionised sectors. In the fixed-effects analyses, we find very little substantive differences from the main analysis in Table 4. They underline our main conclusion that the rise in PFP has been broadly beneficial to service class occupations across the board in financial terms, and broadly negative for other occupational classes.

1

Table A1. The substitution or complement effect on earnings of PFP across occupational micro classes

	(1) OLS	(2) FE
Higher managerial and administrative	1.192***	0.948***
	(0.001)	(0.092)
Higher professional - traditional	1.344***	0.964***
	(0.006)	(0.035)
Higher professional - new	1.540***	1.295***
	(0.004)	(0.365)
Lower professional and higher technical – traditional	1.394***	0.979***
	(0.005)	(0.076)
Lower professional and higher technical - new	1.353***	0.970***
	(0.011)	(0.050)
Lower managerial and administrative	1.409***	1.008***
	(0.004)	(0.039)
Higher supervisory	1.800***	0.981***
	(0.136)	(0.154)
Intermediate clerical and administrative	1.813***	0.983***
	(0.022)	(0.068)
Intermediate sales and service	0.979***	0.816***
	(0.029)	(0.075)
Intermediate technical and auxiliary	1.900***	0.923***
	(0.089)	(0.197)
Intermediate engineering	1.209***	0.757***
	(0.117)	(0.102)
Lower supervisory	0.734***	0.491***
	(0.126)	(0.064)
Lower technical craft	0.808***	0.542***
	(0.045)	(0.043)
Lower technical process operative	1.560***	0.845***
	(0.119)	(0.109)
Semi-routine sales	1.216***	0.814***
	(0.041)	(0.135)
Semi-routine service	1.358***	0.786***
	(0.102)	(0.068)
Semi-routine technical	0.820***	0.504***
	(0.109)	(0.070)
Semi-routine operative	0.934***	0.385***
	(0.079)	(0.059)
Semi-routine agricultural	0.873*	0.449*
	(0.445)	(0.182)
Semi-routine clerical	1.536***	0.767***
	(0.137)	(0.109)
Semi-routine childcare occupations	0.939	0.268*
	(0.533)	(0.106)
Routine sales and service	0.715***	0.342**
	(0.171)	(0.106)
Routine production	0.740***	0.379***
	(0.102)	(0.048)
Routine technical	0.527***	0.342***
	(0.045)	(0.041)
Routine operative	0.949***	0.529***
	(0.066)	(0.044)
Routine agricultural	0.425	0.255
	(0.510)	(0.169)
R^2	0.688	0.929
Observations	962,664	871,161

Table A2. The substitution or complement effect on earnings of PFP across occupational classes by industrial sector

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		OLS estimates				FE estimates		
	Industry	Services	Finance/business services	Public services	Industry	Services	Finance/business services	Public services
Higher man/prof	1.157***	1.452***	1.211***	1.526***	1.013***	0.987***	0.953***	1.050***
	(0.002)	(0.004)	(0.002)	(0.008)	(0.019)	(0.027)	(0.117)	(0.082)
Lower man/prof	1.365***	1.448***	1.313***	2.114***	0.980***	0.976***	0.969***	1.157***
	(0.007)	(0.007)	(0.006)	(0.008)	(0.023)	(0.046)	(0.062)	(0.170)
Intermediate	1.602***	1.410***	1.527***	1.335***	1.074**	0.944***	0.932***	0.555***
	(0.042)	(0.030)	(0.036)	(0.046)	(0.357)	(0.093)	(0.089)	(0.161)
Supervisory/technical	0.841***	0.845***	1.350***	0.515***	0.527***	0.578***	0.740***	0.494***
	(0.037)	(0.062)	(0.205)	(0.073)	(0.042)	(0.091)	(0.111)	(0.062)
Semi-routine	0.903***	1.170***	1.636***	0.977***	0.481***	0.867***	0.521	0.443***
	(0.040)	(0.032)	(0.130)	(0.091)	(0.057)	(0.031)	(0.285)	(0.080)
Routine	0.638***	0.681***	1.057***	0.521***	0.352***	0.364***	0.401**	0.348***
	(0.032)	(0.044)	(0.245)	(0.065)	(0.047)	(0.052)	(0.137)	(0.059)
R^2	0.717	0.608	0.723	0.435	0.965	0.938	0.924	0.941
N	192245	232019	192563	345837	175051	209311	174382	312417

Table A3. The substitution or complement effect on earnings of PFP across occupational classes by unionisation

	(1)	(2)	(3)	(4)
	OLS estimates		FE estimates	
	Non-union	Union	Non-union	Union
Higher man/prof	1.231***	1.134***	0.954***	0.994***
	(0.001)	(0.002)	(0.105)	(0.015)
Lower man/prof	1.380***	1.609***	0.990***	0.829***
	(0.004)	(0.008)	(0.051)	(0.071)
Intermediate	1.415***	1.720***	0.879***	0.873***
	(0.025)	(0.022)	(0.061)	(0.065)
Supervisory/technical	1.061***	0.654***	0.619***	0.546***
	(0.065)	(0.045)	(0.060)	(0.048)
Semi-routine	1.083***	1.278***	0.770***	0.686***
	(0.047)	(0.041)	(0.061)	(0.074)
Routine	0.751***	0.652***	0.452***	0.334***
	(0.058)	(0.037)	(0.051)	(0.044)
R^2	0.725	0.483	0.928	0.966
N	489033	473631	438859	432302

Notes: Predicted differences in PFP and non-PFP jobs within occupational classes derived from an interaction between occupational class category and a pay for performance amount. All models include a common set of controls (see text) which are omitted to save space. Statistical significance * p<0.05, ** p<0.01, *** p<0.001. Robust standard errors in parentheses.