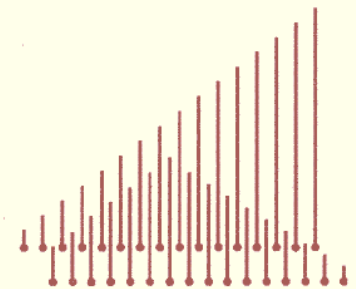# Not So Dissatisfied After All? The Impact of Union Coverage on Job Satisfaction

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4th November 2013

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of Economic and
Social Research

Motivation

- Controversy surrounding links between unionisation and job satisfaction
- Well-established negative correlation between union membership and job satisfaction
  - Not necessarily puzzling
- Mixed results from efforts to isolate the causal effect of unionisation
  - Panel estimation: mixed results
  - Cross-sectional IV: often NS effects
- Literature traditionally focused on union membership
- But better to focus on coverage to capture union causal effects
- Therefore revisit the issue focusing on union coverage for members and non-members
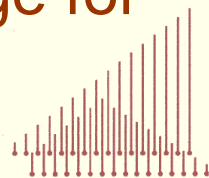
Preview of Findings

- Confirm negative association between union membership and job satisfaction
- Also negative association between union coverage and job satisfaction
- But with person FE coverage is positive and significant for satisfaction with pay and hours
  - Both for members and non-members
- Coverage remains negative significant for sat with security
- Going from OLS to FE coverage is 'more positive' for satisfaction of members and non-members
  - Implies selection into coverage by dissatisfied
- In dynamic model new coverage is associated with higher job satisfaction on all 5 dimensions (pay, hours, security, work itself, overall).
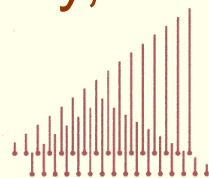
Importance of Person FE (1)

- Importance of person in measurement of subjective wellbeing

  - Personality (Diener and Lucas, 1999)

  - Twin genomic variation (Lykken and Tellegen, 1996)

  - Income and family composition effects on life satisfaction fall to near zero when add person FE (Ferrer-i-Carbonell and Frijters, 2004)

  - Even true for unemployment and happiness (Gerlach and Stephan, 1996)
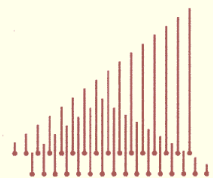
Importance of Person FE (2)

- Worker sorting into union status

    - Personality? No evidence

    - But assume returns to union homogeneous across workers then, for a given level of poor working conditions, net returns likely perceived greater for those with predisposition to dissatisfaction

    - Implies downward bias to impact of coverage on satisfaction if fail to account for person FE

    - Time-varying dissatisfaction. Cf Ashenfelter Dip with pre-union dip followed by bounce back (Powdthavee, 2011)

Direction of Union Effects on JSat

- Workers sort into coverage are likely less satisfied. Hypothesise that person FE accounts for some – but not all - of this dissatisfaction.
- Union positive causal impact if coverage improves employee's terms and conditions relative to uncovered counterfactual
- Union negative causal impact if
  - union relies on voice-induced complaining to strengthen bargaining hand
  - Union increases information flow to workers about 'poor' management
  - Union fails to meet expectations, eg. ineffectual
    - Importance of reference point for jsat
- Union wage premium as a potentially confounding factor

Empirical Literature: x-sec

- Union dissatisfaction due to workplace heterogeneity
    - Disappears with control for climate (Bender and Sloane, 1998).

- Union dissatisfaction driven by worker selection into union membership (Bryson et al., 2004)

- Dissatisfaction confined to union members in uncovered workplaces (Bryson et al., 2010)
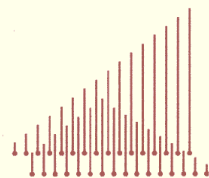
Empirical Literature: panel

- Union dissatisfaction among members persists when account for person FE (Heywood et al., 2002)
  - Effect actually larger in FE than OLS!

- Initial positive impact of new unionisation dies out quickly (Powdthavee, 2011)
  - Perhaps voice-induced complaining cuts in?
  - But no worse off compared to non-union

- Covered members less satisfied with work itself and job security than uncovered employees (Green and Heywood, 2010
 - Still the case conditioning on person and job FE
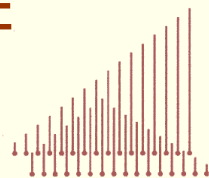
Our contributions

- Focus on coverage not membership. Expect muted effects due to non-excludable nature of union good
  - Though free-riders may be more sat cause don't pay

- Explicit comparisons between OLS and person FE models
  - Average effect of unionisation
  - Account for attrition

- 5 job sat measures
  - Potential offsetting effects on wages and security

- Market and non-market sectors

- Extended timeframe to 2007
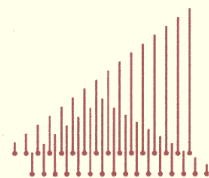
Estimation

- OLS and person FE. FE = demeaned OLS

- FE uses within person over-time variation allowing for correlation between unobservable person FE and RHS Xs

- Account for correlation of observations within person over time with clustering, robust estimator

- Unbalanced panel accounting for attrition with dummy for out-movement (Wooldridge, 2002)
  - Unable to weight analyses; enter stratifiers directly

- Standard controls. Sensitivity to inclusion of potentially endogenous variables.
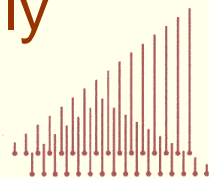
Data

- BHPS, 17 waves 1991-2007

- Observations on leavers excluded if they rejoin
  - Leaving as an absorbing state

- Sample restricted to employees aged 20-60

- Movement out of employee status not an absorbing state
  - Those who resume employment status retained

- Estimation sample circa N=58,000 person-year observations on 8,000 individuals
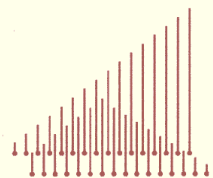
Descriptives for Job Satisfaction Dependent Variables (7 point scales)

Satisfaction with:	security	work	hours	pay	overall
mean	5.297	5.458	5.180	4.810	5.352
standard deviation	1.568	1.344	1.469	1.588	1.324
skewness	-1.064	-1.212	-0.853	-0.731	-1.216
kurtosis	3.503	3.503	3.136	2.673	4.279
N of observations	59978	60374	60380	60316	60433
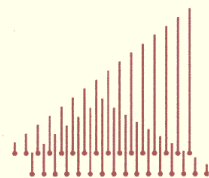
Union Status

Union or staff association recognized at workplace?	n of observations	column %
yes	27838	40.4
no	26945	39.1
missing data	14094	20.5
Total	68877	100
If union recognized, is respondent a member?		
yes	17459	25.3
no	10351	15.0
membership data missing	28	0.1
no union recognized	26945	39.1
union recognition missing	14094	20.5
Total	68877	100
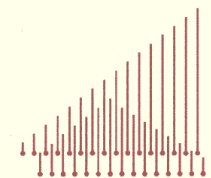
Results (1): Coverage Effects, Whole Econ

model	OLS		FE		$b_{fe}-b_{ols}$
1)full controls	b (s.e.)	t	b (s.e.)	t	
- overall sat	**-.11 (.02)**	**4.82**	.01 (.02)	0.46	0.122
- pay sat	-.02 (.03)	0.77	**.12 (.03)**	**4.16**	0.136
- job security	**-.25 (.03)**	**9.64**	**-.07 (.03)**	**2.66**	0.180
- work sat	**-.15 (.02)**	**6.08**	-.02 (.02)	0.85	0.062
- hours sat	.00 (.03)	0.16	**.09 (.03)**	**3.60**	0.087
2) omit job chars.+					
- overall sat	**-.12 (.02)**	**5.43**	.02 (.02)	0.74	0.141
- pay sat	-.02 (.03)	0.63	**.12 (.03)**	**4.37**	0.308
- job security	**-.24 (.03)**	**8.91**	-.05 (.03)	1.90	0.184
- work sat	**-.14 (.02)**	**5.99**	-.02 (.02)	0.71	0.127
- hours sat	.00 (.03)	0.16	**.09 (.03)**	**3.70**	0.090
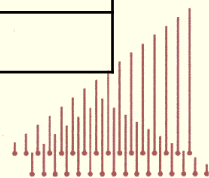
Results (2): Membership Effects, Whole Econ, ref= uncovered sector, full controls

model		OLS		FE		b_{fe}-b_{ols}
		b (s.e.)	t	b (s.e.)	t	
- overall sat	mem	**-.17 (.03)**	**6.36**	**-.07 (.03)**	**2.15**	0.105
	fre	-.03 (.03)	1.04	**.06 (.03)**	**2.40**	0.088
- pay sat	mem	-.04 (.03)	1.49	**.09 (.04)**	**2.7**	0.138
	fre	.02 (.03)	0.50	**.13 (.03)**	**4.41**	0.116
- job security	mem	**-.29 (.03)**	**9.31**	**-.14 (.04)**	**3.89**	0.155
	fre	**-.19 (.03)**	**6.91**	-.03 (.03)	1.06	0.164
- work sat	mem	**-.21 (.03)**	**7.29**	**-.08 (.03)**	**2.51**	0.127
	fre	**-.07 (.03)**	**2,41**	.02 (.03)	0.67	0.082
- hours sat	mem	**-.07 (.03)**	**2.21**	.06 (.03)	1.83	0.124
	fre	**.10 (.03)**	**3.71**	**.11 (.03)**	**4.23**	0.011
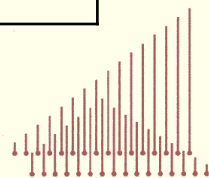
Results (3): Dynamic Coverage Effects (ref: left coverage)

	Pay		security		work		hours		overall	
union:	B	|t|	b	|t|	b	|t|	b	|t|	b	|t|
Both now & last yr	-0.019	(0.45)	-0.068	(1.65)	**-0.141**	**(3.71)**	-0.047	(1.19)	**-0.083**	**(2.20)**
Neither now nor last yr	**-0.123**	**(2.97)**	-0.0003	(0.01)	**-0.099**	**(2.63)**	**-0.088**	**(2.20)**	-0.064	(1.69)
New – now but not last yr	**0.271**	**(4.76)**	**0.135**	**(2.50)**	**0.262**	**(5.24)**	**0.203**	**(3.83)**	**0.243**	**(4.96)**
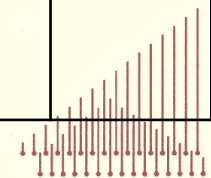
Conclusions

- Negative association between unionisation and job sat
- But with person FE coverage is positive and significant for satisfaction with pay and hours
    - Both for members and non-members
- Coverage remains negative significant for sat with security
- Going from OLS to FE coverage is 'more positive' for satisfaction of members and non-members
    - Implies selection into coverage by dissatisfied
- In dynamic model new coverage is associated with higher job satisfaction on all 5 dimensions (pay, hours, security, work itself, overall).
- Results consistent with union bargaining effects leading to higher pay and preferred hours schedules relative to uncovered counterfactual
- Effects not confined to members as anticipate given non-excludable union goods