Work, Jobs And Well-Being Across The Millennium

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Job Satisfaction Revisited. IUC Dubrovnik April 7th 2010 I took the title of this conference (relatively) seriously, and look at repeated crosscountry cross-sections of individuals to ask three "subjective" questions (with respect to OECD countries):

- 1) Has job quality been falling over time?
- 2) How can we understand the selfemployment puzzle?
- 3) What do we know about worker reciprocity/ organizational commitment?

All in one hour or less!

The data mostly come from the three "Work Orientations" waves of the ISSP (1989, 1997 and 2005). I consider OECD countries only.

This dataset is the gift that just keeps giving:

- Clark, A.E. (2005). "What Makes a Good Job? Evidence from OECD Countries". In S. Bazen, C. Lucifora, & W. Salverda (Eds.), *Job Quality and Employer Behaviour*. Basingstoke: Palgrave Macmillan.
- Clark, A.E. (2005). "Your Money or Your Life: Changing Job Quality in OECD Countries". *British Journal of Industrial Relations*, **43**, 377-400.
- Clark, A.E. (2009). "Worker Effort and Organisational Commitment in OECD Countries". PSE, mimeo.
- Clark, A.E. (2010). "Work, Jobs and Well-Being Across the Millennium". In E. Diener, J. Helliwell, & D. Kahneman (Eds.), *International Differences in Well-Being*. Oxford: Oxford University Press.

1) Work, Jobs And Well-Being Across The Millennium. Chapter 14 of:



Number of employees interviewed in OECD countries: ISSP Module on Work Orientations.

	1989	1997	2005
West Germany	622	648	531
Great Britain	675	545	469
USA	838	800	961
Hungary	641	626	437
Netherlands	681	1018	
Italy	586	475	
Norway	1305	1366	846
Sweden		793	866
Czech Republic		526	667
Poland		564	
New Zealand		695	812
Canada		546	520
Japan		607	428
Spain		387	556
France		700	1084
Portugal		843	1012
Denmark		600	1092
Switzerland		1727	662
Total	5348	13466	10943

The ISSP contains information on both job values and job outcomes. We can think of these as the β's and the X's in a Locke model of job satisfaction.

Respondents rank the importance of eight job characteristics, from "Not at all important" to "Very Important".

Calculate the evolution in job values between 1989, 1997 and 2005 for employees in five OECD countries (West Germany, Great Britain, USA, Hungary and Norway), and between 1997 and 2005 for 15 countries.

Values are stable: Women

ISSP 1989, 1997 and 2005 Job Values: Percentage Saying "Very Important"									
WOMEN									
	1989		1997		2005	1997		2005	
High Income	20.5		19.9		21.1	18.9	**	23.7	
Flexible Working Hours	19.5		18.7		17.7	18.4	**	21.4	
Good Opportunities for Advancement	23.0		20.6		21.7	18.8	**	22.7	
Job Security	61.4		62.4		61.2	58.0		58.2	
Interesting Job	48.2		49.7		50.1	52.7	*	55.2	
Allows to Work Independently	28.7		31.0		28.7	31.7		32.2	
Allows to Help Other People	22.7	*	25.5	**	29.5	27.2	**	30.9	
Useful to Society	25.4		24.9	**	31.2	24.5	**	29.5	



Values are stable: Men

MEN								
	1989		1997		2005	1997		2005
High Income	24.4		22.8		24.7	20.7	**	26.3
Flexible Working Hours	14.1		13.7	**	17.6	15.0	**	19.8
Good Opportunities for Advancement	22.4	*	19.5	**	24.5	18.7	**	23.2
Job Security	57.1		58.6		59.5	54.9		53.2
Interesting Job	45.6		47.0		48.2	50.1	*	50.9
Allows to Work Independently	31.6		30.8	*	34.0	32.1		33.9
Allows to Help Other People	15.4		15.3	**	24.5	18.2	*	22.7
Useful to Society	22.1	**	17.1	**	26.0	20.3	**	23.7



Outcomes have improved: Women

ISSP 1989, 1997 and 2005 Job Outcomes: Percentage Reporting the Characteristic in Question									
WOMEN									
	1989		1997		2005	1997		2005	
Income is high	15.3		15.5		16.4	16.0	**	19.0	
Prefer to spend less time in their job	35.4	* *	42.4	**	37.0	39.3	*	41.4	
Prefer to spend more time in their job	13.7	**	9.6	*	11.9	10.2		10.3	
Opportunities for advancement are high	18.2		17.6	**	23.4	17.7	**	22.3	
Job is secure	72.7	**	66.8	*	70.7	63.6	**	66.4	
Hard work	37.5	**	42.4		41.1	40.2		40.9	
Good job content	42.3	*	45.9		49.3	43.7	*	45.9	
Good relations at work	68.4		66.8		67.6	66.8		65.6	
High job satisfaction	39.5		37.4	**	45.9	41.1		42.0	



Outcomes have improved: Men

MEN								
	1989		1997		2005	1997		2005
Income is high	25.8	*	23.6	**	27.6	24.2	**	29.5
Prefer to spend less time in their job	37.4	* *	41.5	* *	36.7	41.0		40.6
Prefer to spend more time in their job	12.2		10.9		12.2	8.9		8.8
Opportunities for advancement are high	23.0	*	20.2	**	26.5	21.8	**	27.5
Job is secure	70.1	* *	63.5		64.0	61.2	*	63.4
Hard work	54.2		52.1		55.2	50.6		51.4
Good job content	41.6		40.2	*	43.9	41.5		41.6
Good relations at work	67.3		64.6	**	69.4	65.8		66.4
High job satisfaction	38.2		35.9	**	44.7	40.3	**	43.3



Changing job quality could be because of better jobs, or different types of workers (education, age, sex). See which is which via a regression of the job outcome in question on demographics, plus country and year dummies.

Regressions were run both with and without controlling for real income and hours of work: this allows us to answer the question:

"Has job satisfaction (for example) changed because of movements in income and hours, or because of something else?"

Proof that I really did this

	1989	9-2005	19	97-2005
	Standard	With income and hours	Standard	With income and hours
2005	0.064*	0.033	0.044**	0.024
	(0.027)	(0.030)	(0.015)	(0.017)
1997	-0.080**	-0.074*		
	(0.025)	(0.029)		
Male	-0.066**	-0.136**	-0.023	-0.065**
	(0.021)	(0.025)	(0.015)	(0.017)
30 to 44	0.030	-0.007	0.028	0.001
	(0.028)	(0.031)	(0.021)	(0.023)
45 to 65	0.122**	0.067*	0.124**	0.081**
	(0.030)	(0.033)	(0.022)	(0.024)
Married	0.095**	0.070**	0.129**	0.099**
	(0.023)	(0.025)	(0.016)	(0.017)
Years of Education	0.001	-0.006	0.006**	0.000
	(0.004)	(0.004)	(0.002)	(0.002)
Earnings (\$000) per month		0.105**		0.089**
		(0.016)		(0.009)
Hours per week		0.001		0.001
		(0.001)		(0.001)
West Germany	0.039	0.037	-0.269**	-0.312**
	(0.032)	(0.035)	(0.042)	(0.044)
Great Britain	-0.070*	-0.075*	-0.392**	-0.432**
	(0.032)	(0.034)	(0.043)	(0.045)
USA	0.145**	0.118**	-0.165**	-0.228**
	(0.029)	(0.031)	(0.037)	(0.040)
Hungary	-0.355**	-0.249**	-0.610**	-0.617**
	(0.032)	(0.046)	(0.042)	(0.049)
Norway			-0.343**	-0.372**
-			(0.036)	(0.037)
Sweden			-0.399**	-0.414**
			(0.038)	(0.040)
Czech Republic			-0.498**	-0.542**
-			(0.041)	(0.047)
New Zealand			-0.379**	-0.438**
			(0.039)	(0.049)
Canada			-0.390**	-0.448**
			(0.044)	(0.046)
Japan			-0.736**	-0.770**
-			(0.043)	(0.047)

Time and Space: Space



Time and Space: Time

Estimated Coefficients on "1997" and "2005"							
	1989.	1989-2005					
	1997	2005	2005				
Job satisfaction	-0.080**	0.064*	0.044**				
	(0.025)	(0.027)	(0.015)				
Income is High	-0.112**	-0.111**	0.080**				
	(0.025)	(0.027)	(0.015)				
Hours Preferences	-0.086**	0.070**	-0.005				
	(0.025)	(0.027)	(0.015)				
Opportunities for advancement are high	-0.044	0.060*	0.110**				
	(0.025)	(0.027)	(0.015)				
Job is secure	-0.205**	-0.184**	0.021				
	(0.026)	(0.027)	(0.015)				
Hard work	0.123**	0.165**	0.029				
	(0.028)	(0.027)	(0.016)				
Good job content	-0.027	0.023	-0.013				
	(0.027)	(0.028)	(0.016)				
Good relations at work	-0.027	0.026	0.035				
	(0.030)	(0.032)	(0.018)				

Time and SpaceTogether: Growing Inequality?

Country	1989-1997	1989-2005	1997-2005
West Germany	- (10%)	+(10%)	+
Great Britain	- (10%)	0	+
USA	0	0	+
Hungary	0	+	+
Norway	-	0	0
Sweden			0
Czech Republic			0
New Zealand			0
Canada			+
Japan			0
Spain			+
France			+(10%)
Denmark			-
Portugal			0
Switzerland			+

2) The puzzle of self-employment

- a) The broad picture is of a small fall in the selfemployment rate in OECD countries.
- b) ISSP Respondents are asked "Suppose you were working and could choose between different kinds of jobs. Which of the following would you personally choose"? Percentage replying "Being selfemployed" rather than "Being an employee" has also been falling.
- c) But the percentage who express a preference for self-employment is systematically three or four times higher than the actual self-employment rate.

	are Self-Employed P			Percentage of Working who Prefer Self-Employment to Employment			
	1989	1997	2005	<i>1989</i>	<i>1997</i>	2005	
West Germany	11.0%	11.9%	10.4%	51.4%	61.7%	44.3%	
Great Britain	11.7%	15.2%	12.9%	49.6%	46.2%	48.7%	
USA	12.1%	13.4%	13.3%	63.5%	72.3%	64.4%	
Hungary	5.9%	14.5%	9.0%	42.2%	58.8%	39.1%	
Norway	5.1%	9.8%	10.9%	26.6%	27.5%	28.4%	
Sweden		10.7%	10.3%		38.0%	31.8%	
Czech Republic		10.6%	14.9%		42.8%	30.7%	
New Zealand		9.2%	15.1%		63.4%	55.0%	
Canada		15.2%	8.6%		58.7%	55.6%	
Japan		16.8%	11.4%		42.7%	33.4%	
Spain		3.4%	14.3%		42.9%	33.9%	
France		8.9%	8.4%		42.7%	40.6%	
Portugal		23.6%	14.1%		76.3%	51.8%	
Denmark		6.5%	8.5%		26.1%	28.4%	
Switzerland		12.1%	10.1%		65.6%	47.2%	

Self-employment is more satisfactory than employment... and becoming more so

	1989-2005	1989-2005	1997-2005	1997-2005
Self-Employment	0.327**	0.377**	0.353**	0.302**
	(0.034)	(0.062)	(0.023)	(0.032)
Self-Employment*1997		-0.076		
		(0.081)		
Self-Employment*2005		-0.061		0.108*
		(0.085)		(0.046)

This is consistent with entry barriers to self-employment rising over time:

- i) The self-employment rate is falling;
- ii) More people want to be self-employed than are actually selfemployed; and
- iii) The satisfaction "premium" from self-employment is on the rise

3) Worker reciprocity

Here's something super-difficult to measure objectively: the quality of workers' relationships with the firm. There are three useful questions in the ISSP.

- 1) "I am willing to work harder than I have to in order to help the firm or organization I work for to succeed".
- 2) "I am proud to be working for my firm or organization".
- 3) "I would turn down another job that offered quite a bit more pay in order to stay with this organization".

All three are answered on a five-point qualitative scale (Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree).

What individual and country-level variables might explain worker reciprocity towards their firm?
Note that this is lop-sided: I have no information on firm reciprocity towards the worker.

Results:

- A) Commitment has risen over time.
- B) A number of individual-level variables are associated with higher levels of worker commitment: education, income, and marriage. So is religion.
- C) Trade unionists are less reciprocal (causality?).
- D) Relative income matters: commitment falls as others' income rises (Clark, A.E., Masclet, D., and Villeval, M.-C.,"Effort and Comparison Income". *Industrial and Labor Relations Review*, April 2010.).

There are huge country differences.



Can we explain the cross-country patterns?

A) Commitment falls with the unemployment rate; unaffected by inflation.

- **B) Is higher in larger countries**
- C) Is higher in countries where there is wage and price freedom
- D) But these only explain around 1/3 of the cross-country variation

Effort, rank and comparison income in the ISSP: Ordered Probits

	И	Willingness to work harder f othe f irm to succeed						
	(1)	(2)	(3)	(4)				
Own Income	0.052*** ^a	0.035***	0.054***	0.039***				
	$(0.011)^{b}$	(0.014)	(0.011)	(0.014)				
Income Rank		0.109**		0.096*				
		(0.055)		(0.056)				
Comparison		· · · ·	-0.039	-0.020				
Income			(0.034)	(0.035)				
Hours per	0.010***	0.010***	0.010***	0.010***				
Week	(0.001)	(0.001)	(0.001)	(0.001)				
Male	0.056**	0.070***	0.080**	0.080**				
	(0.026)	(0.027)	(0.032)	(0.032)				
Age	0.001	0.002	0.002	0.002				
-	(0.001)	(0.001)	(0.001)	(0.001)				
Married	0.068**	0.070***	0.070***	0.071***				
	(0.027)	(0.027)	(0.027)	(0.027)				
Years of	0.009**	0.010***	0.012***	0.011***				
Education	(0.004)	(0.004)	(0.005)	(0.005)				
Country dummies		· ·	Yes	·				
Number of obs.	9854	9854	9854	9854				
Log-Likelihood	-13441.2	-13439.1	-13440.3	-13438.9				

Conclusions

- I. Workers are becoming both more touchy-feely and more materialistic
- II. Job quality fell, then recovered: due to favourable movements in income, hours, promotion, relations at work, and job security
- III. Self-employment continues to be "better" than employment, and is arguably puzzling
- IV. Worker commitment is a fun variable to look at, and is arguably very important for productivity. It has mirrored satisfaction in its movement over time. It is pro-cyclical, and higher in "free" markets.