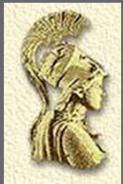


# The Relationship between Absence from Work & Job Satisfaction in Greece

**Katerina Grimani  
& Stavros Drakopoulos**



National & Kapodistrian University of Athens  
Department of Philosophy & History of Science

# Purpose of this study

- Investigate the casual relationship between Absence from wok and Job Satisfaction

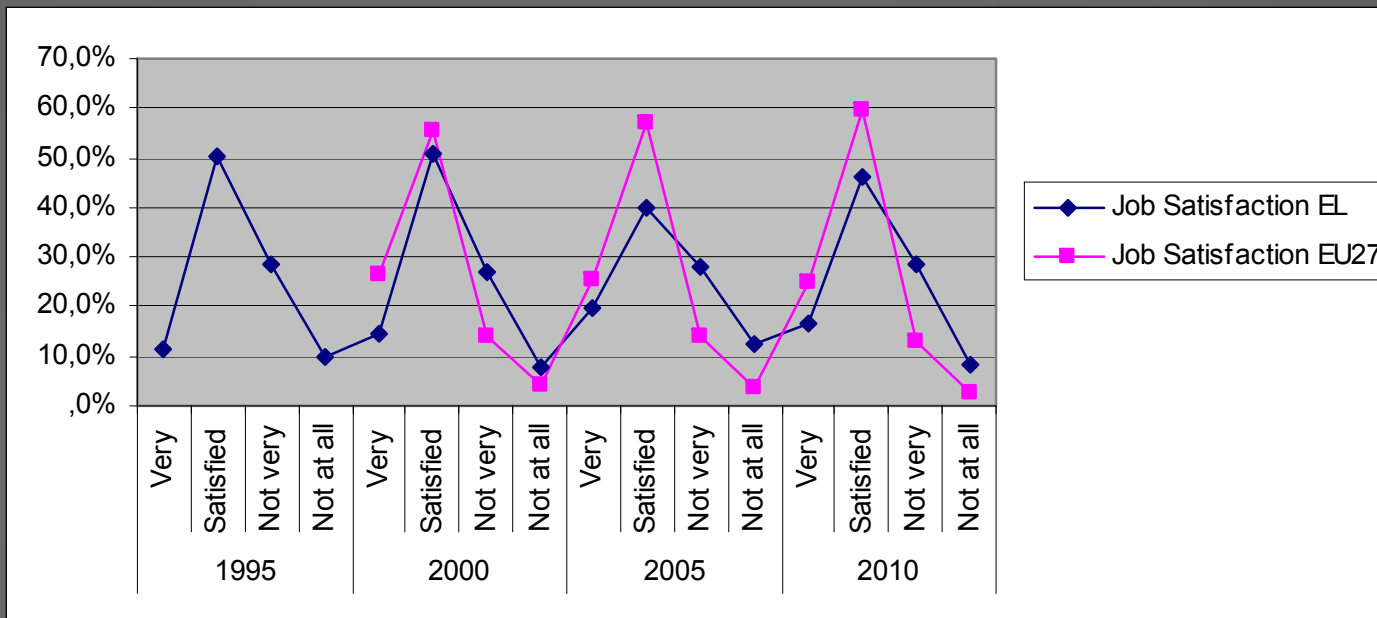
# Definitions

- Job Satisfaction → “the difference between the reward employees receive and the reward they believe they should receive” (Robbins et al., 2003)
- Absence → “non attendance at work when attendance was scheduled or clearly expected”
  - ⇒ *Absence due to sickness*
  - ⇒ *Absence due to accidents*
  - ⇒ *Voluntary Absence*

*(Brown & Sessions, 1996)*

# Job Satisfaction: Evidence for Greece

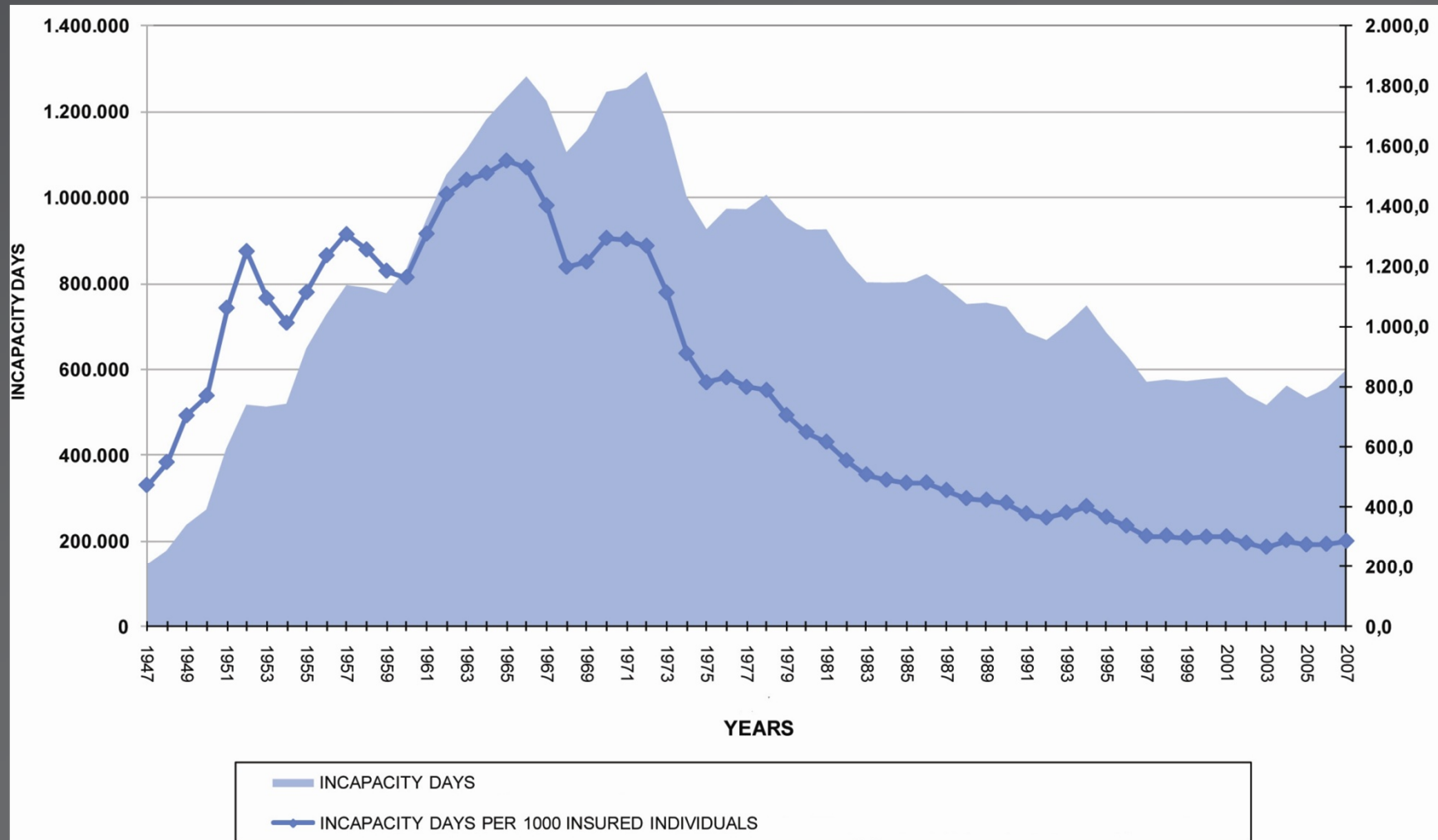
- No data of official public databases of Greece
- 5th European Working Condition Survey (2010): **16,8% very satisfied, 46,4% satisfied, 28,6% not very satisfied, 8,3% not at all satisfied**
- The percentage of job satisfaction in Greece is lower than in 27 EU countries average



# Absenteeism: Evidence from Greece

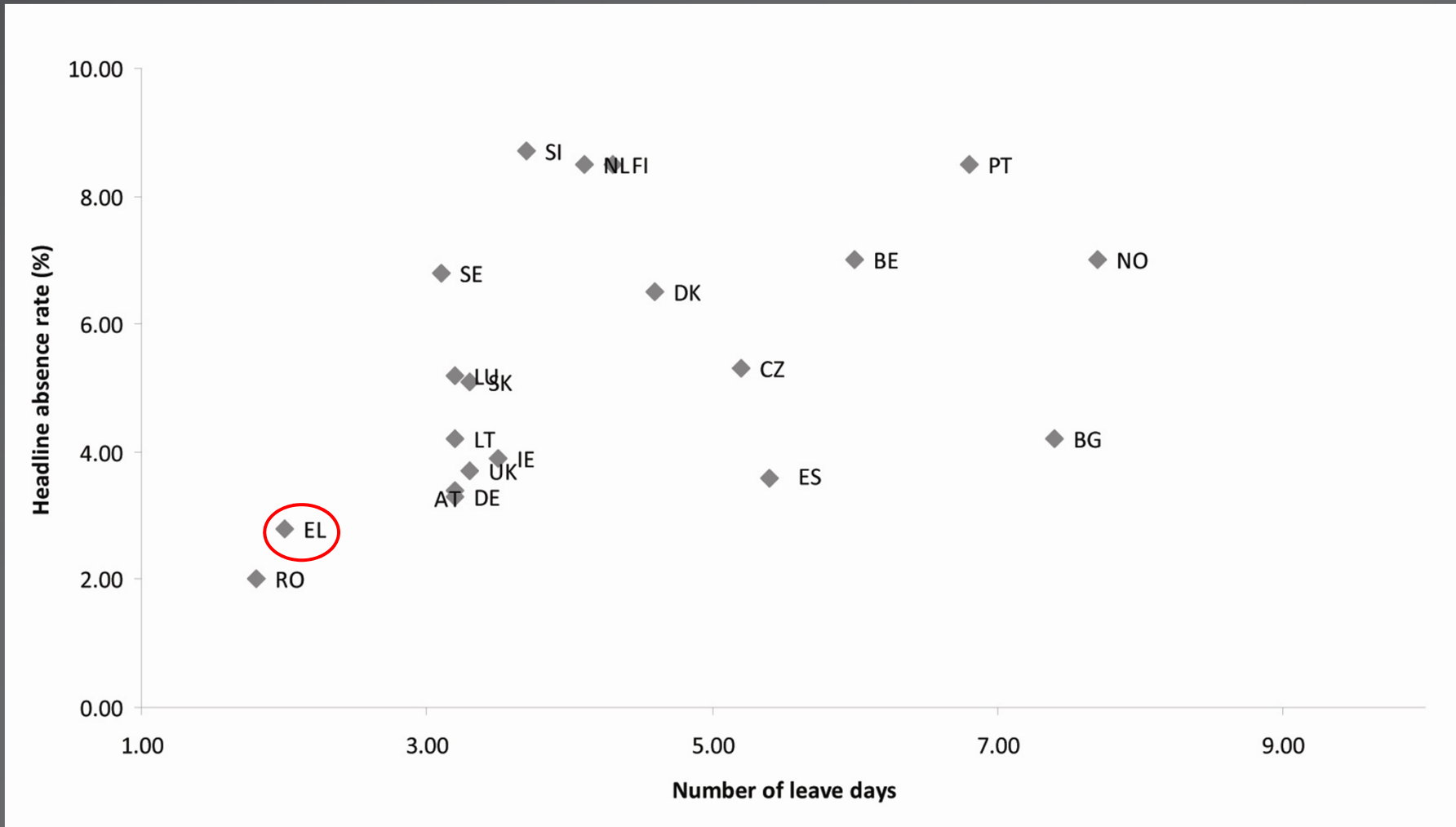
- Greek Statistical Service provides No data
- Some primary data from IKA:
  - ⇒ **6.337.686** *subsidy days for illness (2006)*
  - ⇒ **556.848** *subsidy days for occupational accidents (2006)* &  
**600.831** *subsidy days for occupational accidents (2007)*
  - ⇒ **3.700.647** *days for maternity leave (2006)*
  - ▶ Insufficient (IKA insured employees)
  - ▶ Need to be processed

# Incapacity Days 1947-2007



Source: IKA, 2007

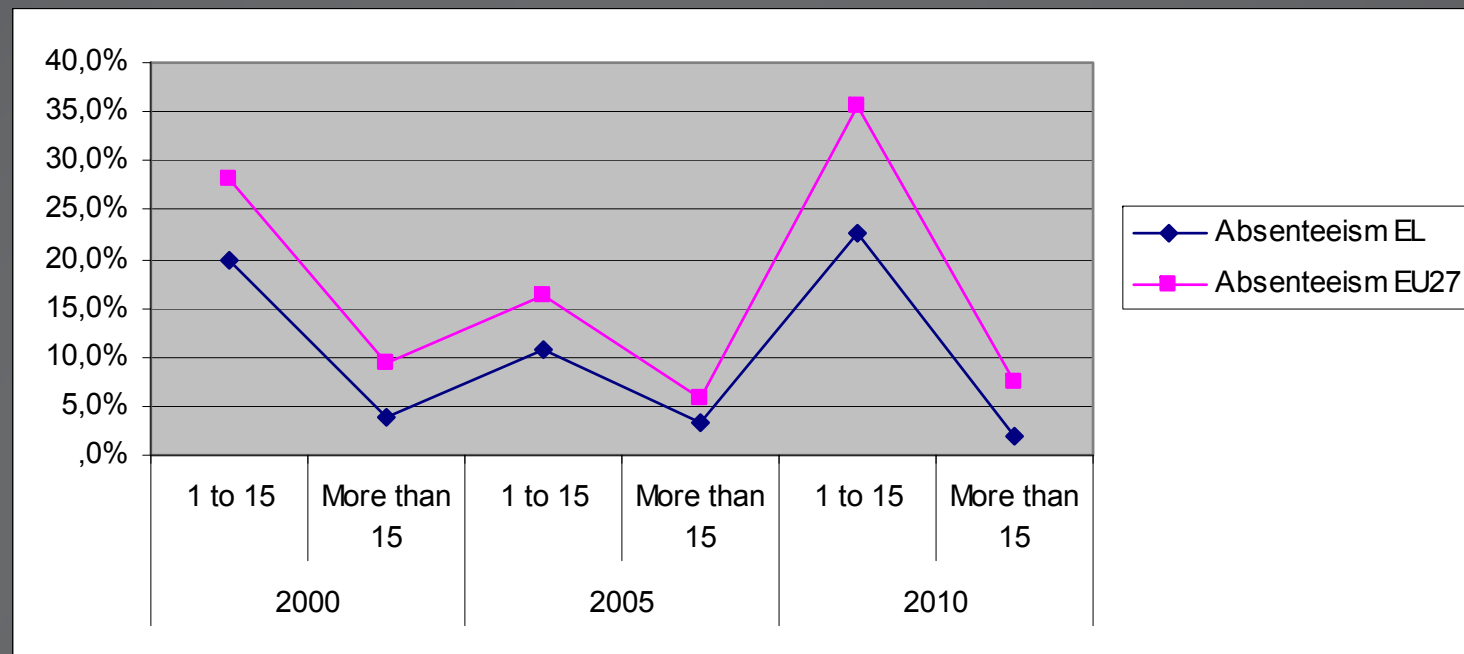
# Number of leave days across countries



Source: European Foundation for the Improving of Living & Working Conditions, 2010

# Absenteeism: Evidence for Greece

- 5th European Working Condition Survey (2010): 22,7% 1 to 15 days & 2% more than 15 days
- The percentage of absent in Greece is lower than in 27 EU countries average





# Absence from Work and Job Satisfaction relationship (1)

- Absenteeism → complex issue influenced by multiple causes (personal & organizational)
- No universal agreement concerning the relationship between absenteeism & job satisfaction (inconsistent connection)

# Absence from Work and Job Satisfaction relationship (2)

- Some researchers find no relationship between the two (Goldberg & Waldman, 2000), while others find a weak negative relationship (Farrell & Stamm, 1988)
- Conflicting findings due to sampling error, measurement reliability, scale inadequacies
- Absence and job satisfaction are more strongly related under some conditions, e.g. blue collar workers (Spector, 2000)

# Data & Methodology

- European research survey => 1001 participants (Greece-UK), 45-65 years old (SOCIOOLD project)
- STATA → Tobit model (more sensitive, consistent, reliable and less biased than the OLS model (Sturman, 1996))

$$A_j = \alpha_1 + \alpha_2 JS_j + \alpha_3 X_j + \varepsilon_A$$

Depended variable: Injury Absenteeism

Basic Independent variable: Job Satisfaction

Other independent variables: *age, gender, type of employment, education level, industry dummies, career*

# Demographics

- 547 males; 454 females
- 35% secondary education; 30% tertiary
- 89% no absence due to injury; 3% 1 to 15 days; 8% more than 15 days
- 3,3% fixed-term job; 3,4% temporary job; 59% permanent job
- 39,5% worked in other services; 17% worked in engineering & manufacturing industries
- 25% following a career path

# Model output

Variable	OLS		TOBIT	
	Coef.	t-stat	Coef.	t-stat
Age	.1694638	0.42	-.1760954	-0.08
Males	10.49176	2.34 **	99.09221	3.46 **
fixedcontr~t	-7.031383	-2.70 **	-37.14601	-0.50
temporaryc~t	2.279484	0.56	42.00175	0.64
Educlow	1.639077	0.45	14.08396	0.42
Educmiddle	9.25437	1.92	55.70413	1.89
Lnjobsatisf	-4.918878	-4.08 **	-21.58677	-4.22 **
industrydu~1	-8.424329	-1.44	23.11932	0.28
industrydu~2	-.19483	-0.03	62.61307	1.27
industrydu~3	-4.242494	-0.67	14.00291	0.34
industrydu~5	2.818667	0.33	79.01094	1.52
industrydu~6	2.095163	0.25	-10.37384	-0.16
industrydu~7	-.9018672	-0.16	26.22377	0.75
Dummyuk	20.12243	4.18 **	121.3065	4.15 **
wealth_5	-2.714202	-0.72	-28.145	-0.91
_cons	-24.66702	-0.99	-487.9872	-3.65 **
N	1001		1001	
R <sup>2</sup>	0.0664			
Pseudo R <sup>2</sup>			0.0288	
F( 15, 985)	1.82			
Log likelihood			-932.03101	

# Results

- OLS regression & Tobit model => strong negative relationship between Injury Absenteeism & Job Satisfaction
- According to theory, all of the predictors should relate to absenteeism, but only four had significant relationship (males, job satisfaction, fixed contract and uk)

# Endogeneity

- Theoretically, Job Satisfaction can simultaneously be affected by injury absenteeism

$$JS_j = \gamma_1 + \gamma_2 X_j + \gamma_3 Z + \epsilon_{js}$$

- Z variable has to be highly correlated with Job Satisfaction but does not affect Injury Absenteeism directly. Z variable: *“spouse’s contribution to the overall household income”*

$$A_j = \alpha_1 + \alpha_2 \hat{JS}_{prj} + \alpha_3 X_j + \epsilon_A$$

# Model output

	OLS		TOBIT	
Variable	Coef.	t-stat	Coef.	t-stat
Age	-.353554	-0.84	-3.436051	-1.04
Males	22.86924	1.87	177.7451	2.95 **
fixedcontr	7.901691	0.74	53.6337	0.53
temporaryc	16.69592	1.44	125.7885	1.37
Educlow	-2.6915	-0.55	-12.76569	-0.32
Educmiddle	6.268631	1.38	41.30185	1.25
Lnjobsatisf_pr	-15.7264	-1.80	-91.46024	-1.98 *
industrydu~1	-7.624397	-1.49	33.36843	0.39
industrydu~2	1.85126	0.32	82.10118	1.57
industrydu~3	-2.532072	-0.41	19.81656	0.46
industrydu~5	8.687869	1.01	119.4528	1.97 *
industrydu~6	10.76065	0.98	44.27452	0.59
industrydu~7	.7557147	0.12	35.03581	0.95
Dummyuk	37.46283	2.39 *	249.2506	3.09 **
wealth_5	4.226295	0.85	11.68954	0.27
_cons	-31.66521	-1.13	-558.8731	-3.88 **
N	1001		1001	
R <sup>2</sup>	0.0325			
Pseudo R <sup>2</sup>			0.0214	
F( 15, 985)	1.78			
Log likelihood			-939.03839	
<i>spouseincd~y</i>	<i>.0560978</i>	<i>0.74</i>	<i>.3807709</i>	<i>0.53</i>



# Marginal effects for the expected value of $y$ conditional on being uncensored

	Marginal effects after tobit	
Variable	dy / dx	z
Age	-0.5627758	-1.04
Males *	28.80202	3.00 **
Fixedcontr *	9.343577	0.50
Temporaryc *	23.8949	1.19
Educlow *	-2.078074	-0.32
Educmiddle *	6.866331	1.24
Lnjobsatisf_pr	-14.97987	-1.99 *
industrydu~1 *	5.680767	0.37
industrydu~2 *	14.6514	1.45
industrydu~3 *	3.298136	0.45
industrydu~5 *	22.343	1.74
industrydu~6 *	7.605327	0.56
industrydu~7 *	5.791401	0.95
Dummyuk *	39.7737	3.16 **
wealth_5 *	1.928511	0.27
$y$	108.96221	

(\*) dy / dx is for discrete change of dummy variable from 0 to 1

# Results

- OLS regression: nonsignificant negative relation between injury absenteeism and job satisfaction
- Tobit model: weak negative relation between injury absenteeism and job satisfaction
  - ⇒ Non significant negative relationship between age & injury absenteeism
  - ⇒ Significant relation between gender & injury absenteeism (males have higher absence percentages than females)
  - ⇒ Permanent worker exhibit less absenteeism rates
  - ⇒ Middle educated workers are more prone to absenteeism
  - ⇒ Injury Absenteeism higher for UK than for Greece
- Marginal effects do not differ from the level effects (tobit regression) in terms of significance

# Conclusion

- Weak negative relationship between injury absenteeism and job satisfaction using Tobit model.
- Low level of employee job satisfaction is associated with an increase in the number and frequency of absent days
- Absenteeism => more systematic research & comparisons with similar findings from other countries

# Thank You for your Attention!

e-mail: [grimaniaik@phs.uoa.gr](mailto:grimaniaik@phs.uoa.gr)  
[sdrakop@phs.uoa.gr](mailto:sdrakop@phs.uoa.gr)



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