Beyond Eurosclerosis

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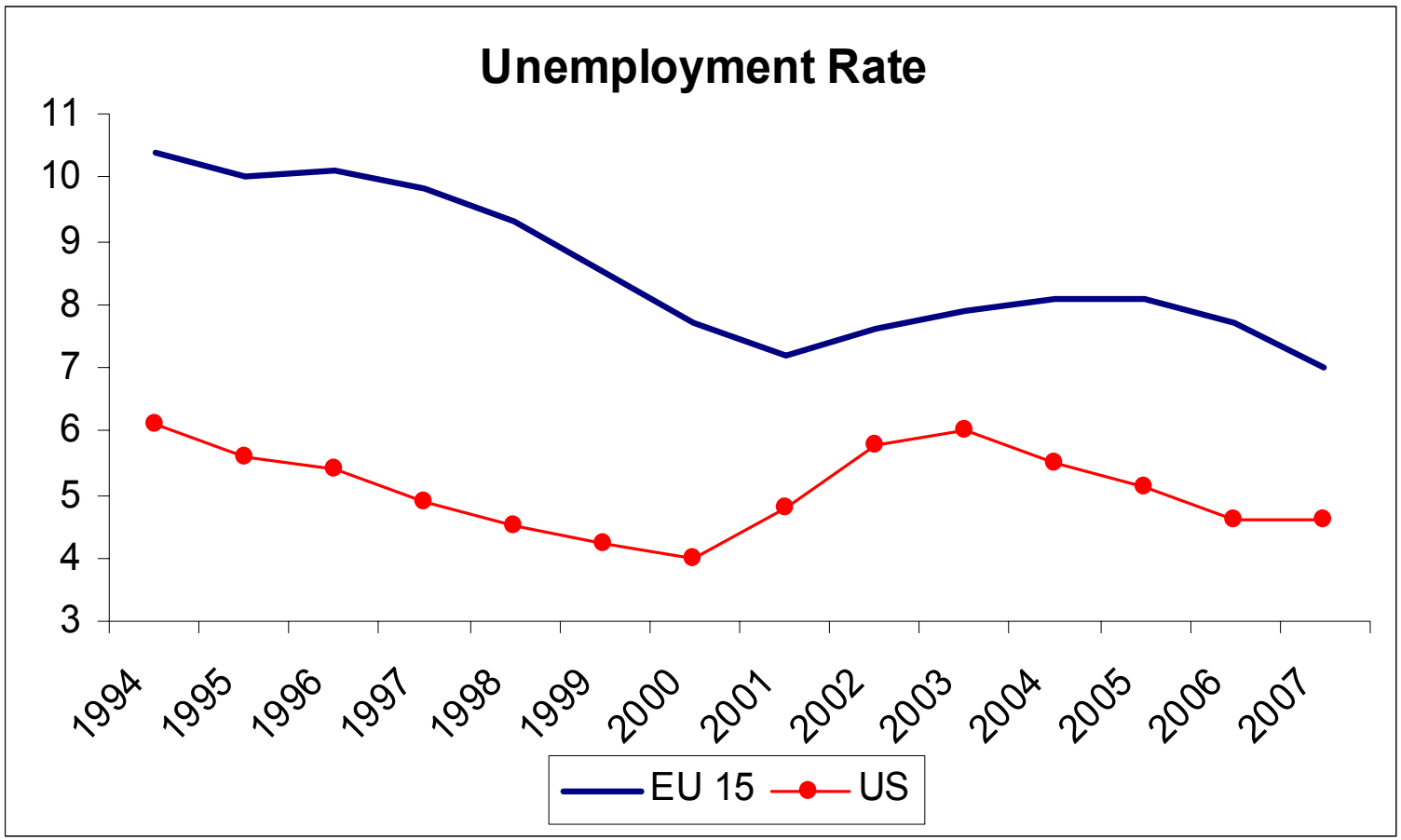
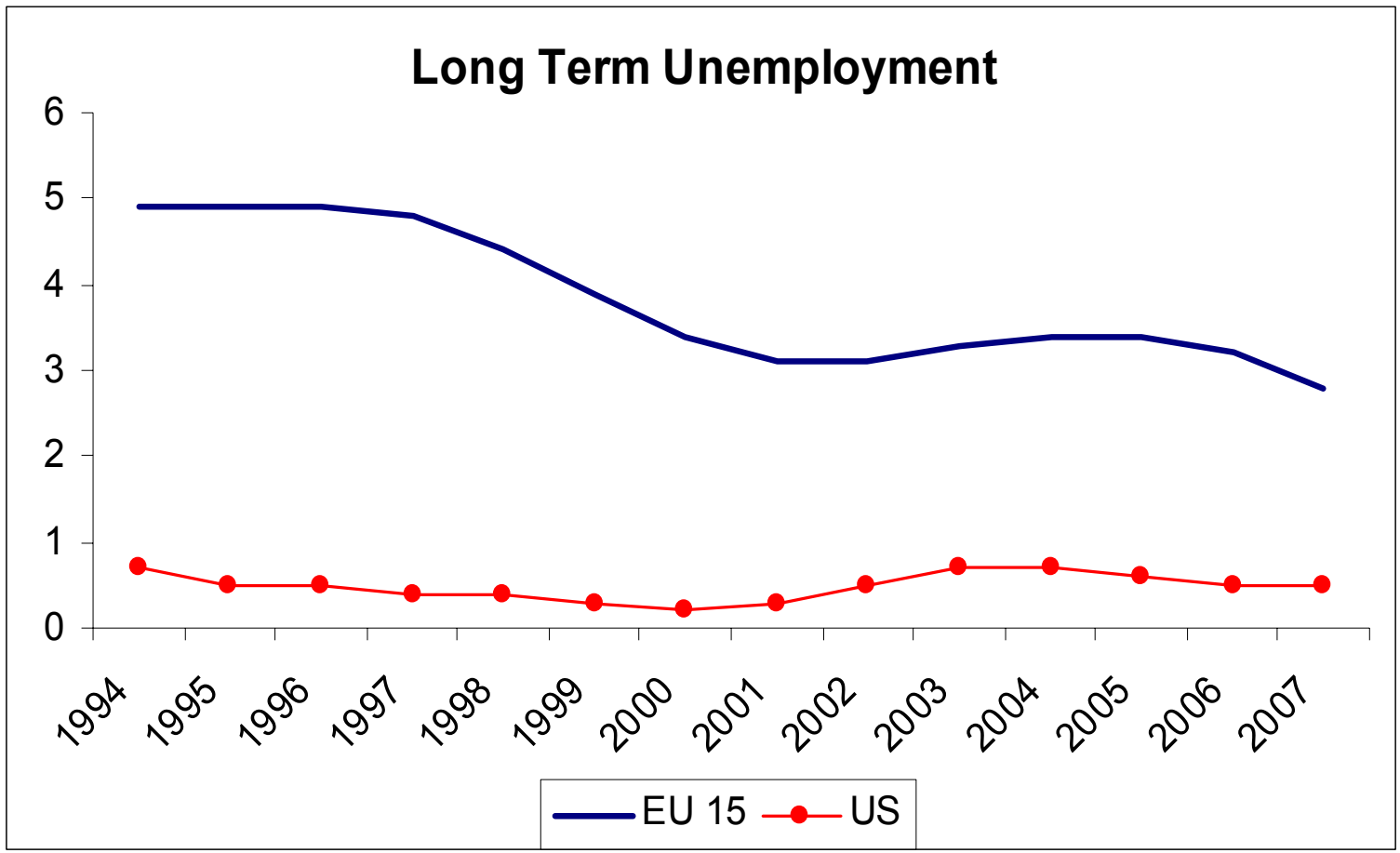
1994 OECD Jobs Study

- “The labour market has become particularly worrying in Europe… (…) in comparatively *inflexible* Europe, *on the other hand*, both relative employment and unemployment rates deteriorated”.
- “The high incidence of long-term unemployment in most EC countries is associated with *low inflow rates into unemployment*. The opposite relationship – low incidence of long-term unemployment and high inflows into unemployment – holds for North America”.
- ….**Eurosclerosis** synonimous of high unemployment and low mobility

Since then


Unemployment Rate
11
10
9
8
7
6
5
4
3
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
EU 15
US

…Since then


Long Term Unemployment
6
5
4
3
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0
1994
1995
1996
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2004
2005
2006
2007
EU 15
US

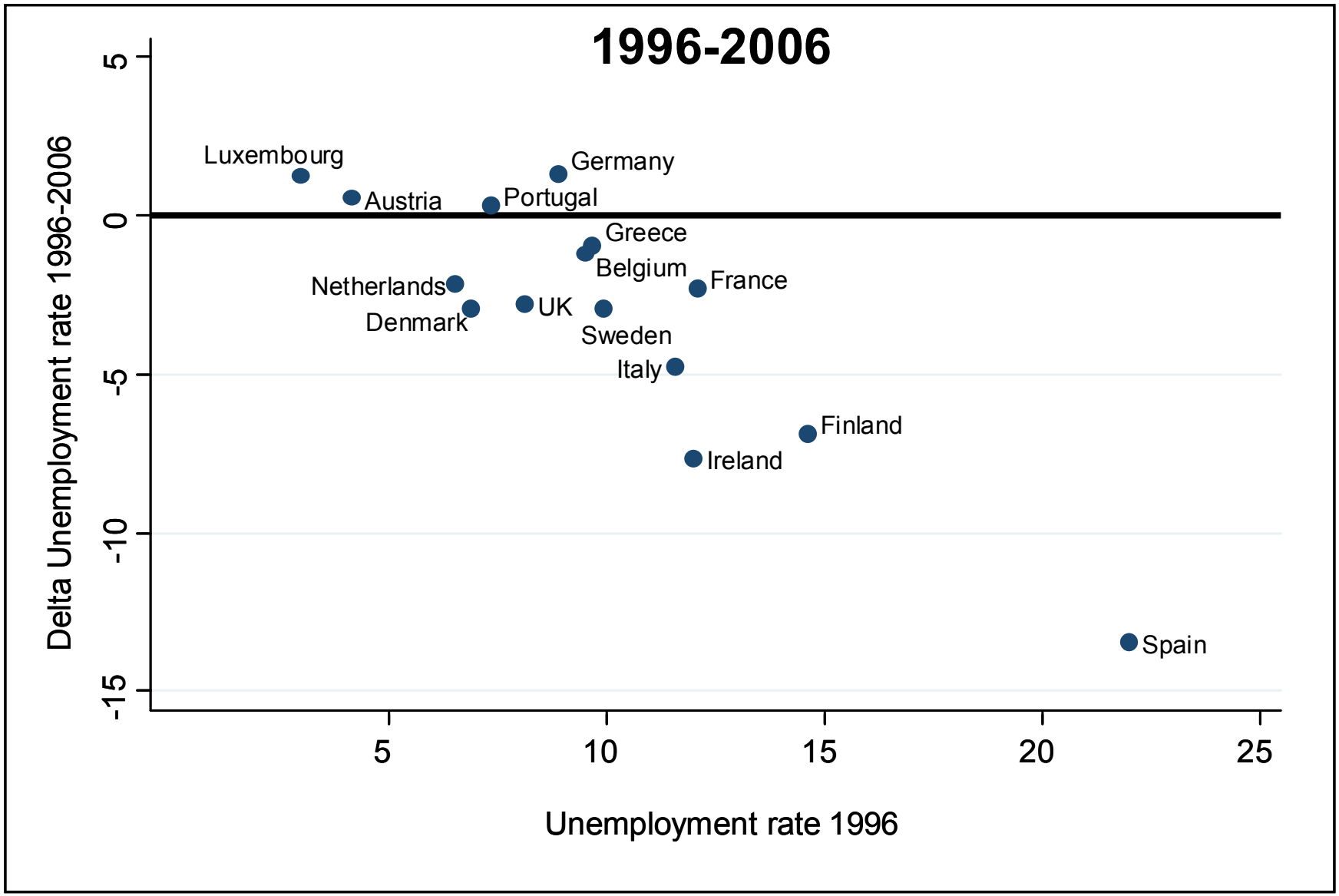
Literature

- Large literature and cross-country employment-unemployment (Bean,1994;Snower De la Dehesa, 1996; Nickell and Layard,1999; Layard, Nickell and Jackman, 1991 and 2005;Nickell, Nunziata and Ochel, 2005; Blanchard and Wolfers, 2000)
- Still large literature on European Unemployment (e.g., Blanchard, 2006) as if we were still in the mid-1990s
- Large literature on temporary contracts-duality (Saint-Paul, 2000; Boeri and Garibaldi, 2007)
- Surprisingly **no literature on declining unemployment and increasing mobility.** Messina and Vallanti (2007) on mobility and institutions

Outline

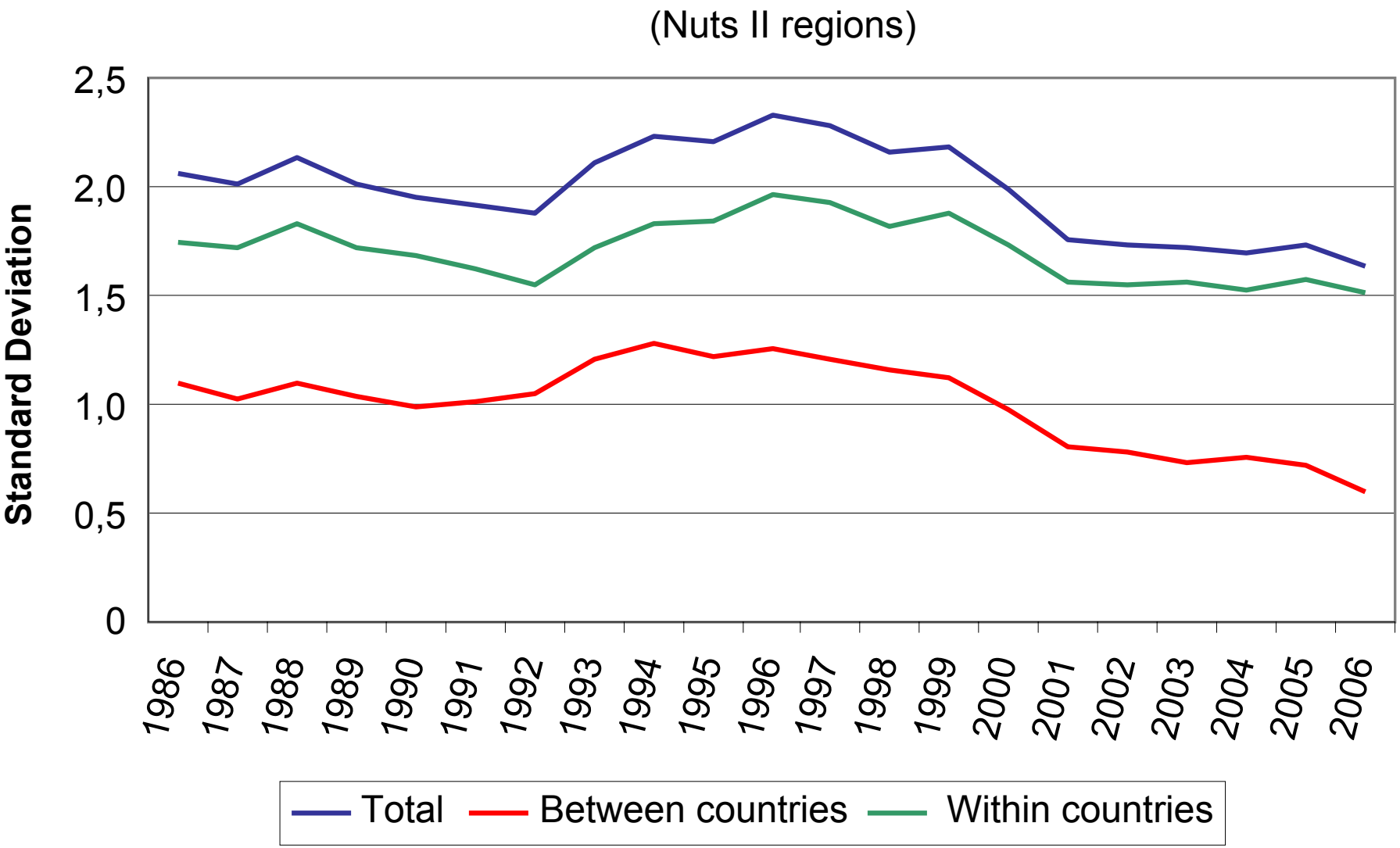
- Was it a true Decline?
- The other side of the coin: Labour Market Mobility.
- A closer look at Reforms
- Perceptions of Europeans about their Labour Market

Decline in 11 countries out of 15

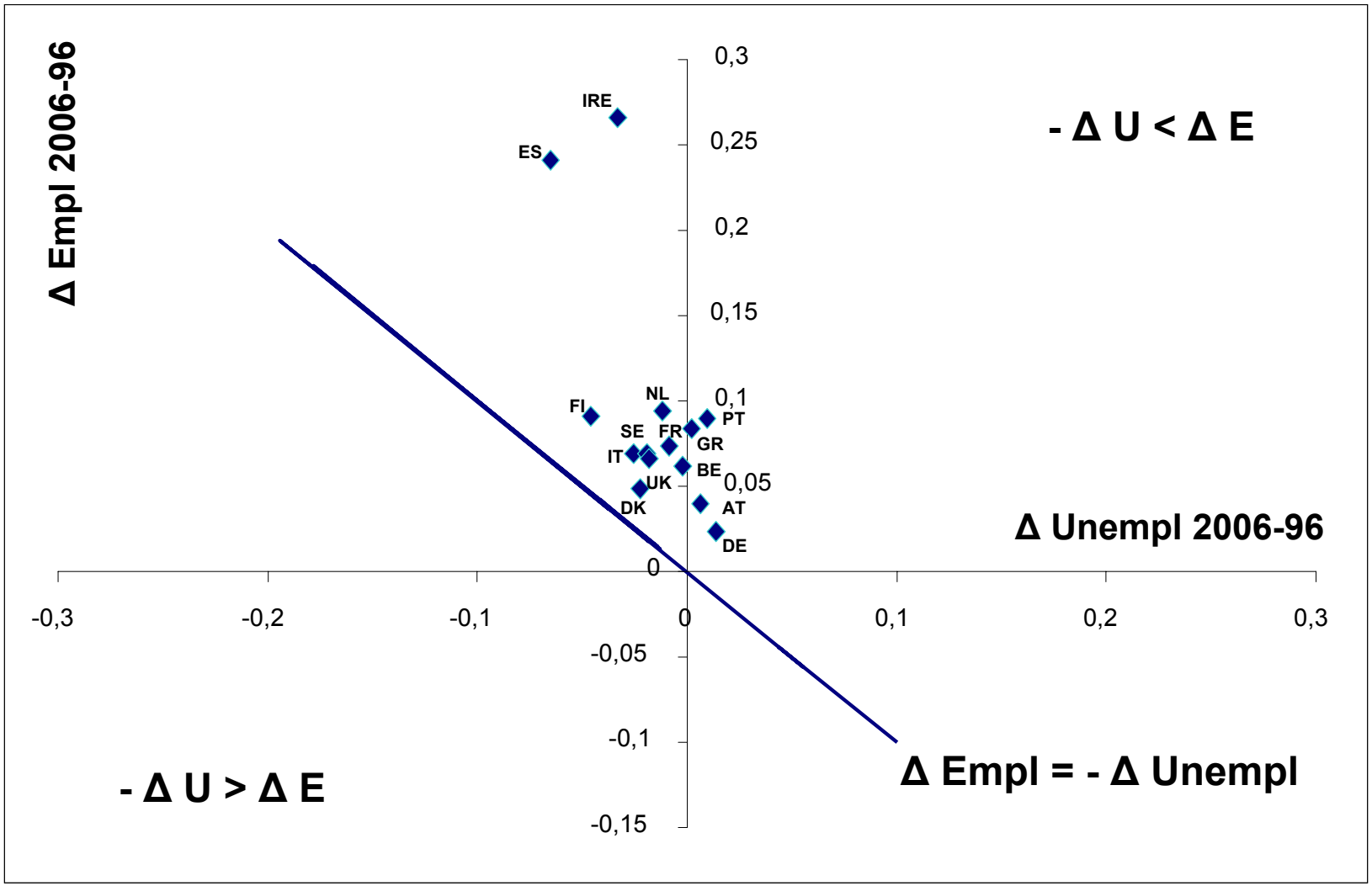


Source: European Labour Force Survey.

Declining variation also within EU countries since the mid 1990s



It is not inactivity. It is employment



Unemployment and Employment expressed as a fraction of the working age population

Discouraged Workers remain constant during U decline

Year	Discouraged Workers (thousands)	Unemployed Individuals (thousands)
1994	424	13962
1995	431	11487
1996	390	11399
1997	442	11592
1998	502	10446
1999	344	9425
2000	425	8346

Source: LFS

Countries: BE, DK, FR, GR, IE, IT, ES, PT

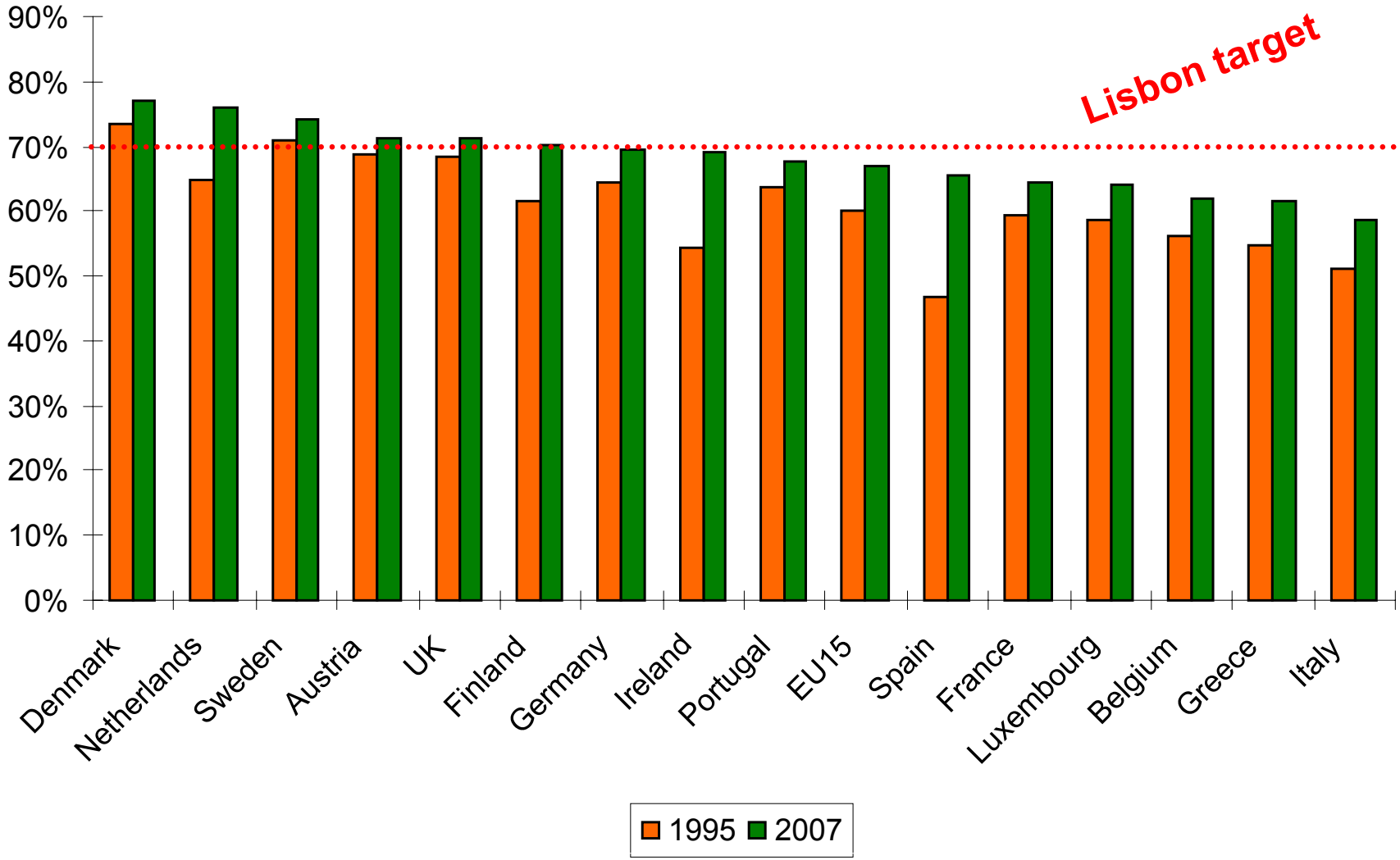
Year	Discouraged Workers (thousands)	Unemployed Individuals (thousands)
2001	321	8508
2002	326	9190
2003	350	9623
2004	372	10397
2005	586	10606
2006	571	10106
2007	492	9092

Source: OECD

Countries: AT, BE, DK, FR, DE, GR, IE, ~~IT~~, LU, NL, ES

Lisbon is no longer a mirage

Employment to population rates and the distance from the Lisbon Employment Target



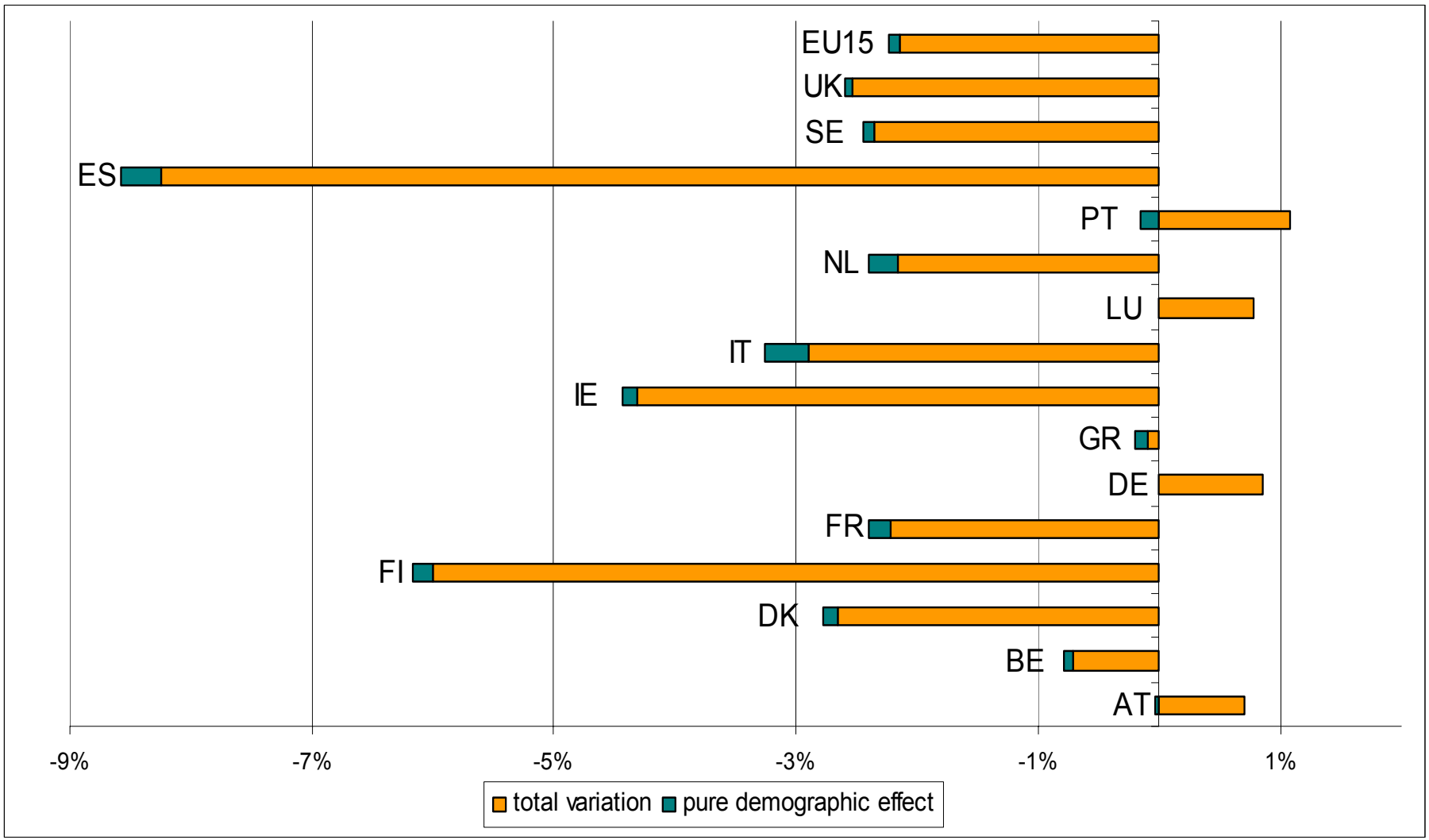
Source: Eurostat

Not associated to Demographic Developments

- Lower unemployment could simply be related to demographics.
- Insofar as unemployment rates are higher for the young people than for the other age groups, the ageing of Europeans may involve a reduction of unemployment.
- Is this the reason why we no longer see mass unemployment in Europe?

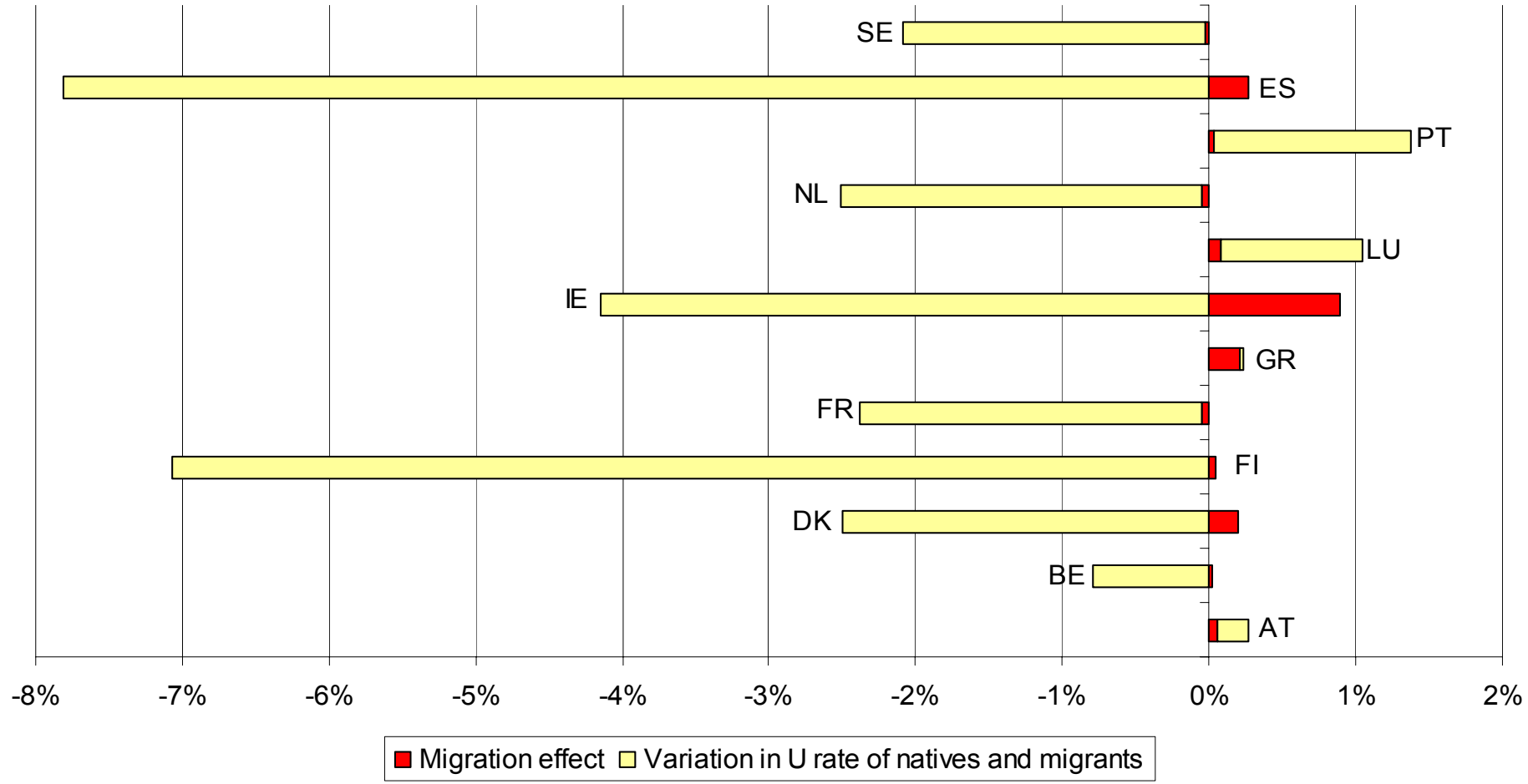
No. It isn't

1995-2007 Variation of Unemployment as a % of the Working Age Population



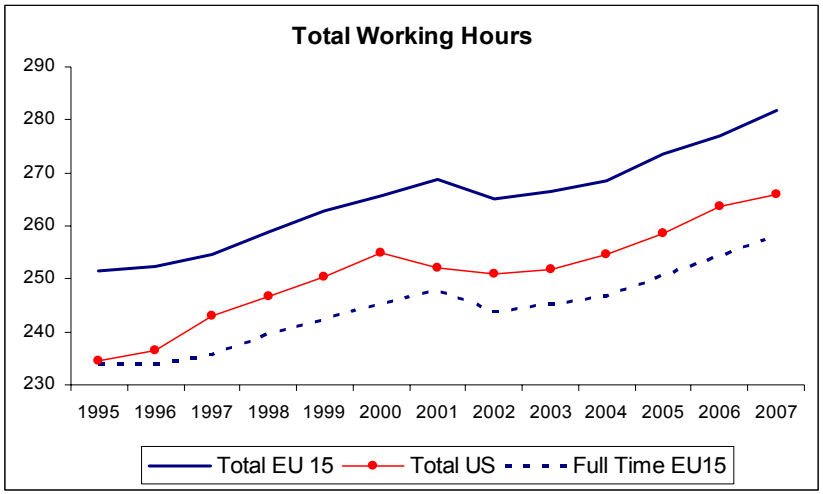
Also more migrants, but they have higher unemployment rates than natives

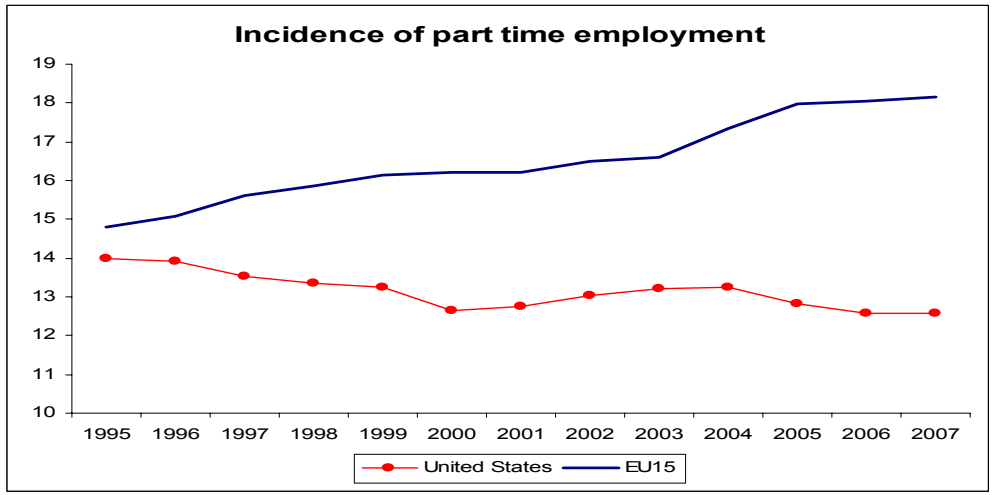
1995-2007 Variation of Unemployment as a % of the Working Age Population



Notes: No observations for DE, IT and UK

Part Time was important





	Change 1995-2007		
	Hours	Employment	Total Working Hours
Full	-1.2%	10.7%	9.4%
Part Time	1.0%	53.1%	54.7%
Total	-3.7%	17.8%	13.1%
Full time contribution (part time constant at 1995 values)			8.6%
Part time contribution (full time constant at 1995 values)			4.5%

Source: ELFS

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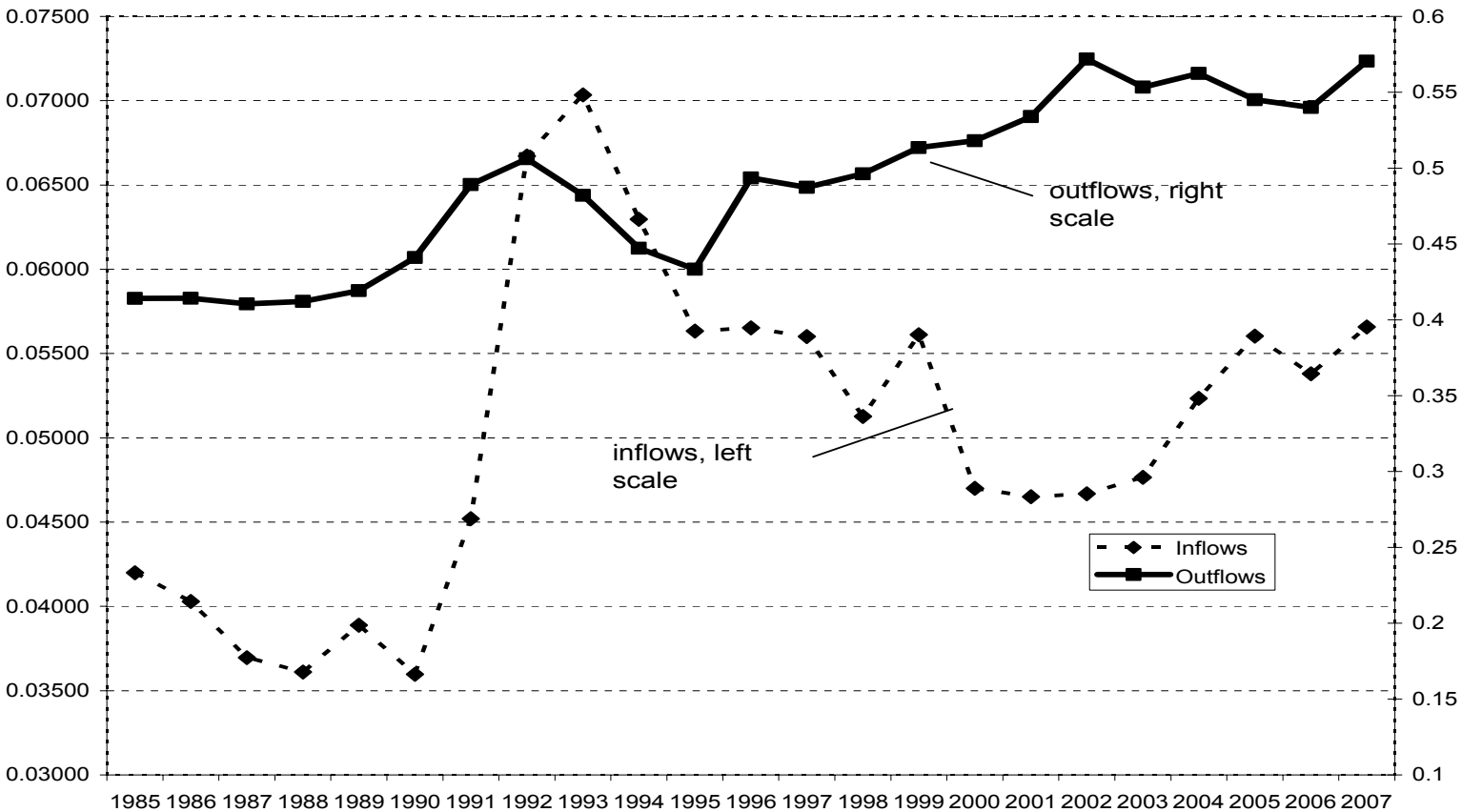
What happened to Flows?

Look at inflows and outflows

3 measures of mobility:

1. Unemployment turnover (proxy inflows and outflows)
2. Mobility Indexes for Transition Matrices
3. Job-to-job shifts among dependent employment

Unemployment declined with larger inflows/outflows



Inflows or Outflows?

- st is the inflow rate; ft is the outflow rate
- ut=st/(st+ft)
- Pissarides and Petrongolo (2008)
- $\Delta ut = cont\ \Delta st + cont\ \Delta ft$
- $\Delta ut = (1-ut)ut-1\ \Delta st/st - ut(1-ut-1)\ \Delta ft/ft-1$

It's Mainly the Outflows

Decade	Job Finding rate \1 ft	Separation rate \2 st	Change in unemployment \3 Δut	Contribution job finding cont ft/Δut	Contribution separation cont st/Δut
1985-95	0.4218	0.0537			
1996-05	0.5115	0.0522	2.04	0.85	0.15

\1 Average job finding rate

\2 Average job separation rate

\3 Change in state unemployment ut=st/(st+ft)

Source: Authors' calculation based on Pissarides and Petrongolo

Let us look at transition matrices Example of Spain

	Employment $_t$	Unemployment $_t$	Inactivity $_t$
Employment $_{t-1}$	91.8	4.0	4.2
Unemployment $_{t-1}$	44.6	39.4	15.9
Inactivity $_{t-1}$	3.0	1.7	95.2

Yearly Average
2001 – 2004

Out of 100 hundred unemployed, 45 find a job within a year ….
…and 16 leave the labour market altogether
another 39 remain unemployed….

1986 – 1989

	Employment $_t$	Unemployment $_t$	Inactivity $_t$
Employment $_{t-1}$	92.7	4.0	3.3
Unemployment $_{t-1}$	30.8	62.2	7.0
Inactivity $_{t-1}$	2.1	1.9	96.0

Mobility Index = (S- tr(M))/(S-1)

where S denotes the number of labour market states and tr(M) the trace of the transition matrix

25%

In Spain more mobility across labour market states than 15-20 years ago

Mobility Index

37%

2001 – 2004

	Employment $_t$	Unemployment $_t$	Inactivity $_t$
Employment $_{t-1}$	91.8	4.0	4.2
Unemployment $_{t-1}$	44.6	39.5	15.9
Inactivity $_{t-1}$	3.0	1.7	95.2

Shorrock Mobility Indexes

•	3x3 Shorrock Mobility Index (%)		2x2 Shorrock Mobility Index (%)	
	1985-95	1996-04	1985-95	1996-04
Austria	35,2	38,0	11,0	12,1
Belgium	24,9	34,7	7,2	8,5
Finland	36,7	40,3	16,0	17,2
France	34,1	33,5	17,6	13,7
Greece	24,3	21,8	7,1	7,9
Ireland	24,2	29,2	10,3	10,4
Italy	33,1	33,9	10,7	10,8
Luxembourg	36,1	34,8	6,8	6,9
Netherlands	35,4	43,2	14,8	12,8
Portugal	32,2	33,1	9,2	9,5
Spain	26,1	32,3	14,4	15,4

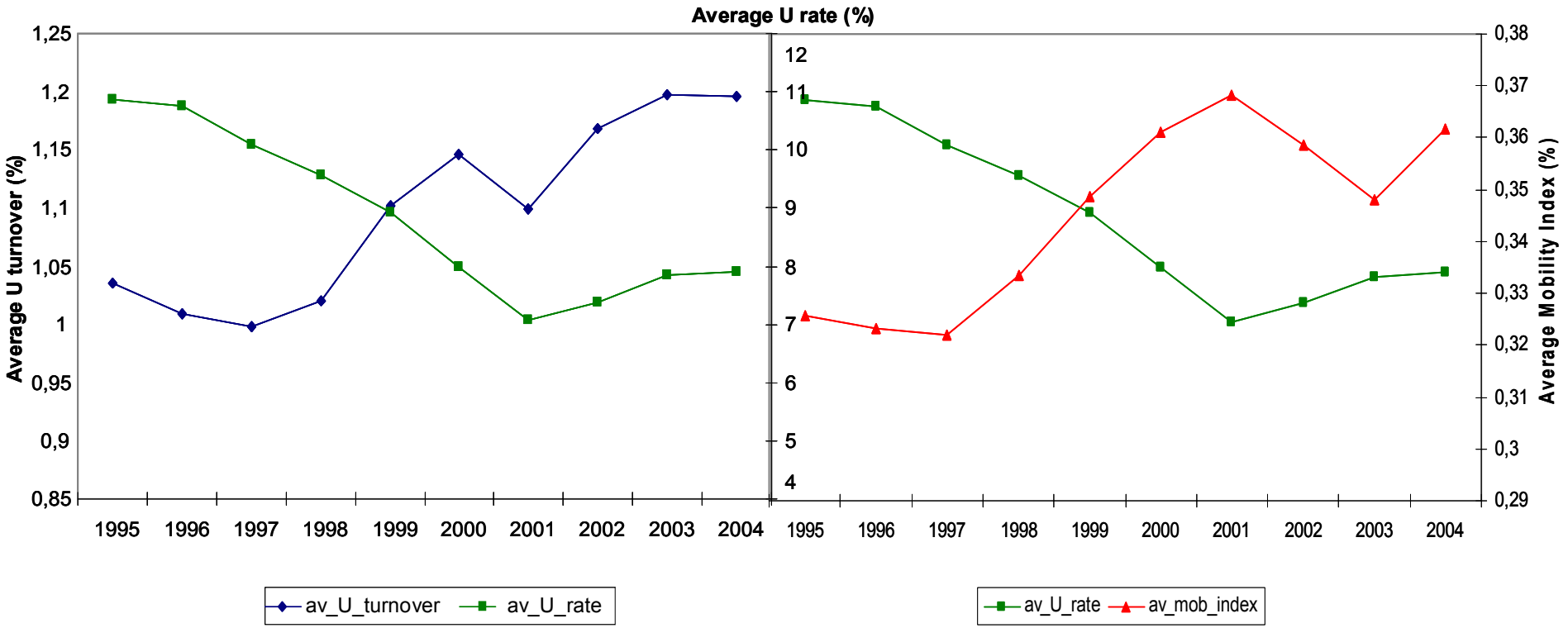
Increase in mobility in 8 (9) out of 11 countries

Ergodic Level

Country	1985-1995		1996-2004	
	Current level of Unemployment (%)	Ergodic level of Unemployment (%)	Current level of Unemployment (%)	Ergodic level of Unemployment (%)
Austria	3,62	5,1	4,07	3,9
Belgium	9,12	8,0	7,90	6,5
Spain	19,70	16,9	14,97	11,6
Finland	8,46	15,2	10,54	9,2
France	10,34	9,7	10,59	9,8
Greece	7,91	8,3	10,27	9,8
Ireland	15,29	15,1	6,31	8,4
Italy	11,25	8,3	10,22	5,9
Luxembourg	2,30	2,1	2,94	2,9
Netherlands	8,35	5,8	4,22	4,0
Portugal	6,19	4,7	5,51	6,1
EU11	9,32	11,6	7,96	7,1

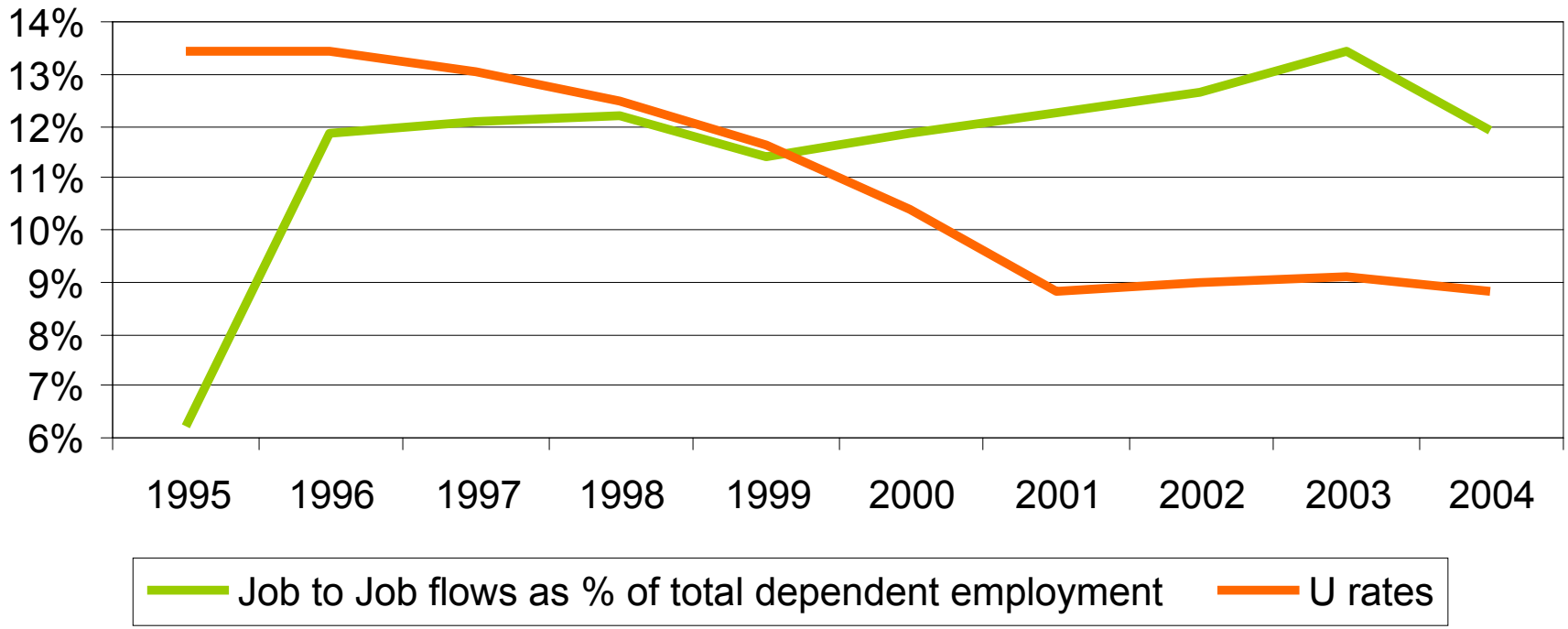
Decline in EU11 and in 8 countries

Two Sides of Same Coin:
Increase in mobility at declining unemployment



The same with job-to-job shifts

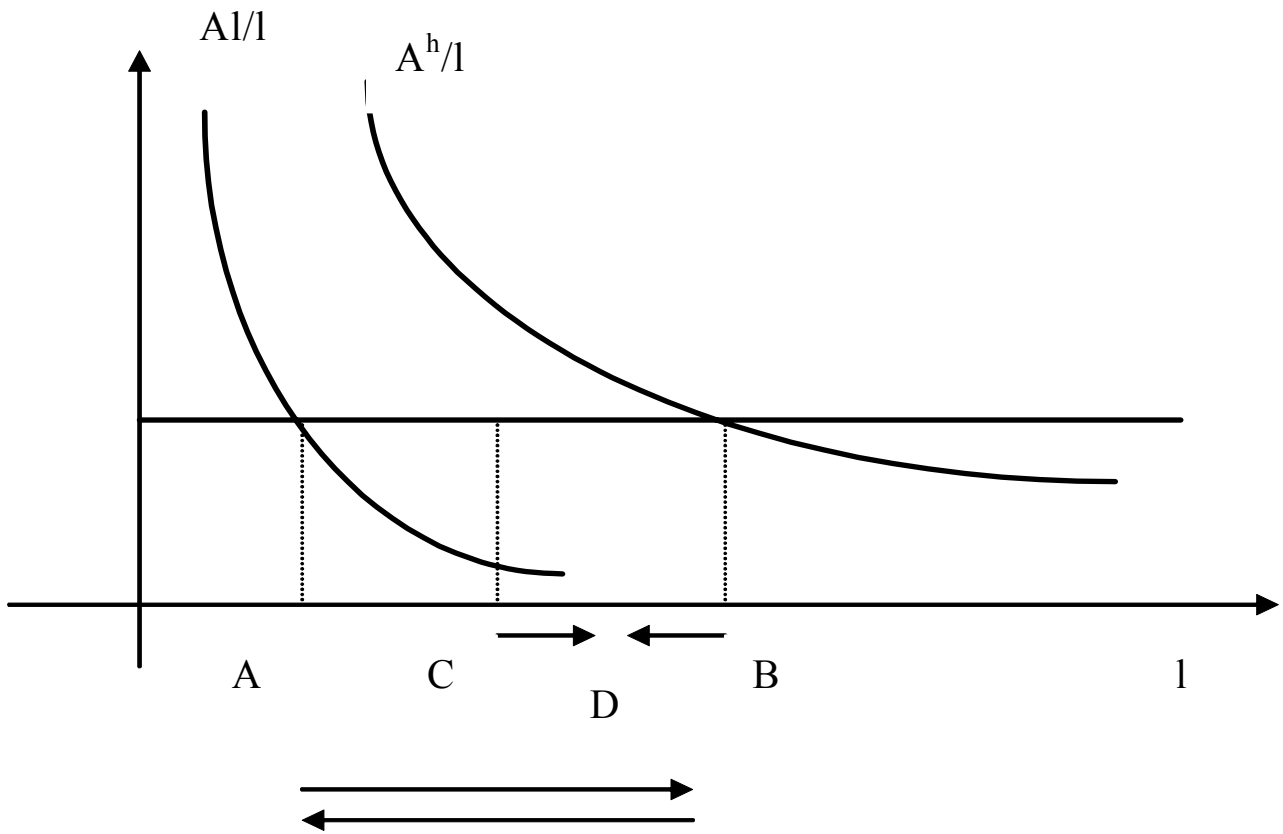
(as a percentage of employees in 9 EU countries)



EU Countries: Be, Dk, Es, Fi, Fr, Gr, It, Lu, Pt.

Notes: Proxy hirings minus inflows into employment

Mobility, EPL, (un)employment



Why did mobility increase?

- Multivariate analysis (across countries and over time) of the determinants of mobility

$$Y_{it}=\alpha_i+\gamma_t+\beta_1 EPL_{it}+\beta_2 UB_{it}+\beta_3 \Delta GDP_{it}+\beta_4 U_{it-1}+\varepsilon_{it}$$

- Reduction in the generosity of Unemployment Benefits (UBs), and in the strictness of Employment Protection Legislation (EPL), notably for *temporary contracts,* increased mobility, however measured.
- Controlling for fixed country and year effects, GDP growth and lagged unemployment.

More controls

- **$Yit=\alpha i+ \gamma t +\beta 1 EPLit+\beta 2 UBit+ \beta 3 \Delta GDPit+ \beta 4 Uit-1$**
- **$+ \beta 5 TAXit + \beta 6 PMKTit -+\beta 7 INDit+\varepsilon it$**
- **Tax wedge**
- **Product Market Competition**
- **Industry Share**

	Mobility Index (3x3 Matrix)				Mobility Index (2x2 Matrix)	
	(1)	(2)	(3)	(4)	(5)	(6)
Unemployment Benefit - Oecd Index	-0,003	-0,003	-0,003	-0,003	0,001	0,001
	(-6,69)***	(-6,71)***	(-6,71)***	(-6,73)***	(1,27)	(1,29)
Employment Protection Legislation - Oecd Index	-0,047		-0,046			
	(-7,24)***		(-7,19)***			
Employment Protection Legislation (Regular Empl.) - Oecd Index		-0,021		-0,023	-0,016	-0,017
		(-2,75)***		(-2,64)***	(-2,37)***	(-2,53)***
Employment Protection Legislation (Temporary Empl.) - Oecd Index		-0,024		-0,026	-0,003	-0,003
		(-7,38)***		(-7,33)***	(-1,20)	(-1,28)
GDP growth rate	0,001	0,001			-0,001	
	(0,78)	(0,82)			(-0,91)	
Total Unemployment (1 year before)			-0,001	-0,001		-0,001
			(-0,34)	(-0,35)		(-0,12)
Constant	0,549	0,547	0,552	0,548	0,153	0,153
	(19,2)	(16,89)	(19,39)	(16,91)	(5,58)	(5,55)
Number of Observations	588	588	588	588	596	596

Dprobit regression, country and year dummies 1985-2004.

Mobility Index: More Controls

	Mobility Index (3x3 Matrix)			
	(1)	(2)	(3)	(4)
Unemployment Benefit - Oecd Index	-0.004***	-0.004***	-0.003***	-0.003***
	(-3.838)	(-3.840)	(-3.132)	(-3.002)
Employment Protection Legislation - Oecd Index	-0.044***			
	(-3.225)			
Employment Protection Legislation (Regular Empl.) - Oecd Index		-0.025	-0.026*	-0.017
		(-1.570)	(-1.658)	(-0.970)
Employment Protection Legislation (Temporary Empl.) - Oecd Index		-0.022***	-0.013*	-0.013*
		(-3.174)	(-1.712)	(-1.696)
GDP growth rate	-0.000	-0.000	0.001	0.001
	(-0.099)	(-0.032)	(0.564)	(0.426)
Tax wedge	-0.592***	-0.590***	-0.405**	-0.292
	(-3.229)	(-3.179)	(-2.108)	(-1.291)
Product Market Regulation			-0.031***	-0.031***
			(-2.875)	(-2.897)
Share of Manufacturing sector over total employment				0.006
				(0.009)
Constant	0.803***	0.810***	0.832***	0.633***
	(8.558)	(7.924)	(8.250)	(3.245)
Number of Observations	167	167	165	165

	Unemployment Turnover			
	(1)	(2)	(3)	(4)
Unemployment Benefit - Oecd Index	-0,016	-0,017	-0,015	-0,016
	(-3,10)***	(-3,31)***	(-2,89)***	(-3,13)***
Employment Protection Legislation - Oecd Index	-0,223		-0,224	
	(-3,15)***		(-3,18)***	
Employment Protection Legislation (Regular Empl.) - Oecd Index		-0,259		-0,291
		(-3,17)***		(-3,63)***
Employment Protection Legislation (Temporary Empl.) - Oecd Index		-0,101		-0,096
		(-2,84)***		(-2,71)***
GDP growth rate	-0,024	-0,021		
	(-2,19)***	(-1,91)**		
Total Unemployment (1 year before)			-0,0002	-0,0002
			(-2,37)***	(-2,54)***
Constant	2,270	2,620	2,379	2,820
	(7,17)	(7,48)	(7,38)	(7,91)
Number of Observations	160	160	160	160

Dprobit regression, Country and year dummies 1985-2004.

Unemployment Turnover: More Controls

	Unemployment Turnover				
	(1)	(2)	(3)	(4)	(5)
· Oecd Index	-0.017***	-0.018***	-0.019***	-0.014***	-0.016***
	(-3.102)	(-3.309)	(-3.586)	(-2.776)	(-3.065)
Legislation - Oecd Index	-0.223***				
	(-3.149)				
Legislation (Regular Empl.) - Oecd					
		-0.260***	-0.264***	-0.070	-0.069
		(-3.168)	(-3.242)	(-0.770)	(-0.765)
Legislation (Temporary Empl.) - Oecd					
		-0.102***	-0.092**	-0.091***	-0.120***
		(-2.839)	(-2.557)	(-2.673)	(-3.155)
	-0.024**	-0.021*	-0.023**	-0.031***	-0.034***
	(-2.192)	(-1.911)	(-2.092)	(-2.899)	(-3.139)
			-1.675*	1.149	0.654
			(-1.681)	(0.983)	(0.545)
ector over total employment				0.129***	0.129***
				(4.063)	(4.067)
ion					0.091*
					(1.745)
	2.344***	2.712***	3.398***	-1.149	-1.270
	(7.096)	(7.416)	(6.222)	(-0.933)	(-1.035)
s	160	160	160	160	158

	Yearly Job to Job Flows as a % of Total Dependent Empl.			
	(1)	(2)	(3)	(4)
Unemployment Benefit - Oecd Index	-0,051	-0,056	-0,069	-0,069
	(-1,65)	(-1,50)	(-2,20)**	(-2,22)**
Employment Protection Legislation - Oecd Index	-2,049		-1,754	
	(-4,11)***		(-3,91)***	
Employment Protection Legislation (Regular Empl.) - Oecd Index		-0,074		0,764
		(-0,10)		(1,15)
Employment Protection Legislation (Temporary Empl.) - Oecd Index		-0,979		-0,890
		(-3,85)***		(-3,92)***
GDP growth rate	-0,072	-0,063		
	(-0,76)	(-0,66)		
Total Unemployment (1 year before)			0,001	0,001
			(3,08)***	(3,11)***
Constant	18,879	16,206	16,432	12,427
	(8,63)	(6,11)	(8,24)	(5,24)
Number of Observations	469	469	461	461

Dprobit regression, Country and year dummies 1985-2004.

Job to Job Shifts: More Controls

	Yearly Job to Job Flows as a % of Total Dependent Employment				
	(1)	(2)	(3)	(4)	(5)
Unemployment Benefit - Oecd Index	-0.278	-0.241	-0.456*	-0.461*	-0.437*
	(-1.165)	(-1.013)	(-1.917)	(-1.948)	(-1.827)
Employment Protection Legislation - Oecd Index	-3.413				
	(-0.989)				
Employment Protection Legislation (Regular Empl.) - Oecd Index		-6.473	-6.679	-9.988*	-10.956**
		(-1.335)	(-1.438)	(-1.915)	(-2.054)
Employment Protection Legislation (Temporary Empl.) - Oecd Index		-1.148	-0.655	-0.458	-0.891
		(-0.652)	(-0.387)	(-0.271)	(-0.484)
GDP growth rate	-0.169	-0.284	-0.528	-0.472	-0.656
	(-0.262)	(-0.436)	(-0.839)	(-0.752)	(-0.999)
Tax Wedge			-1.685***	-2.020***	-2.100***
			(-3.085)	(-3.390)	(-3.484)
Share Manufacturing Sector over total employment				-2.617	-3.045
				(-1.372)	(-1.559)
Product Market Regulation					3.024
					(0.947)
Constant	69.485***	78.800***	148.987***	210.625***	231.643***
	(4.396)	(4.275)	(5.174)	(3.952)	(3.793)
Number of Observations	124	124	124	124	122

Quantitatively

- A reduction of EPL of one point (e.g., Spain moving to Finland) increases mobility by 4 base points
- A reduction of UB by 10 points (e.g., Denmark moving to Belgium) increases unemployment turnover by 1.6 base points

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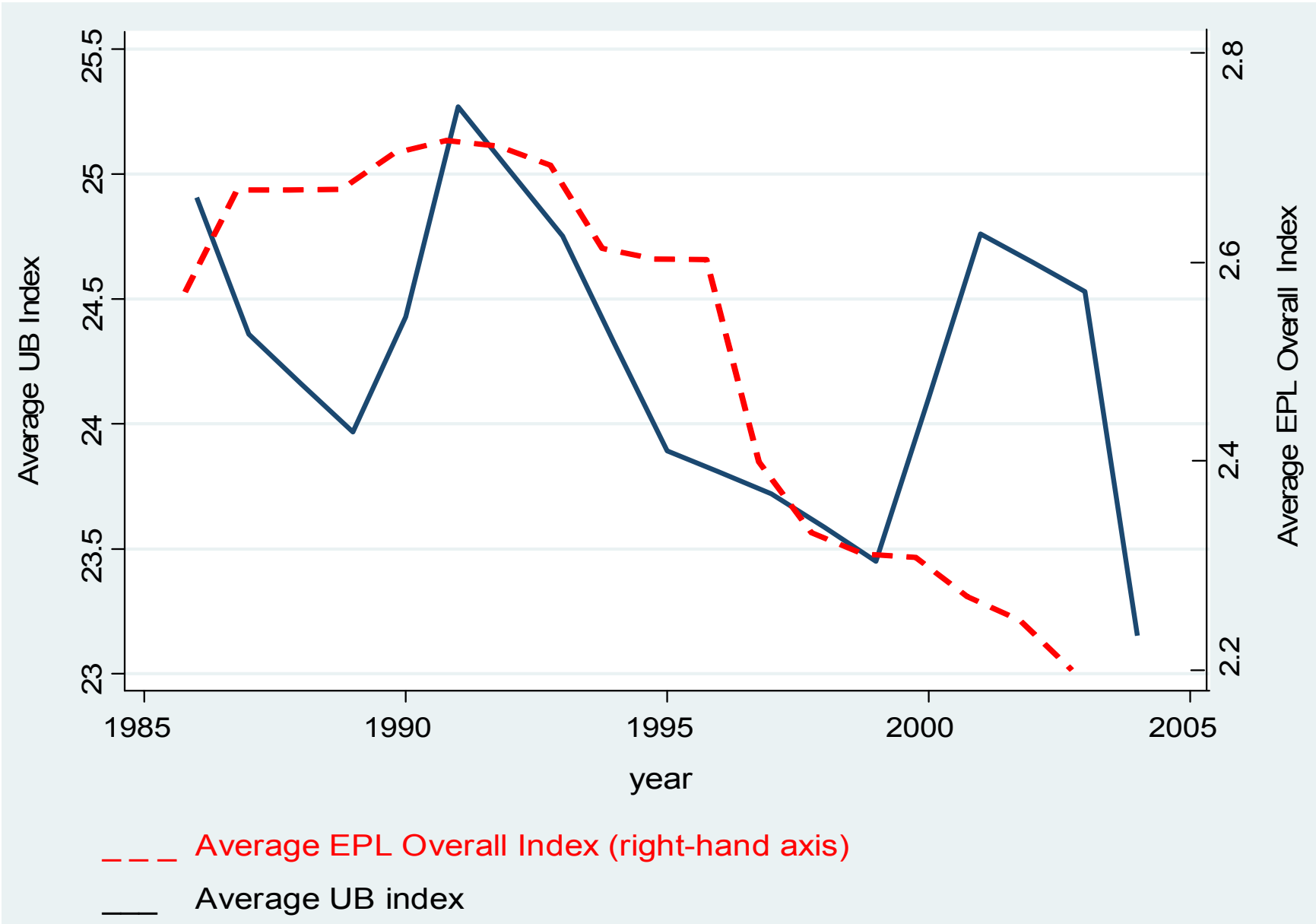
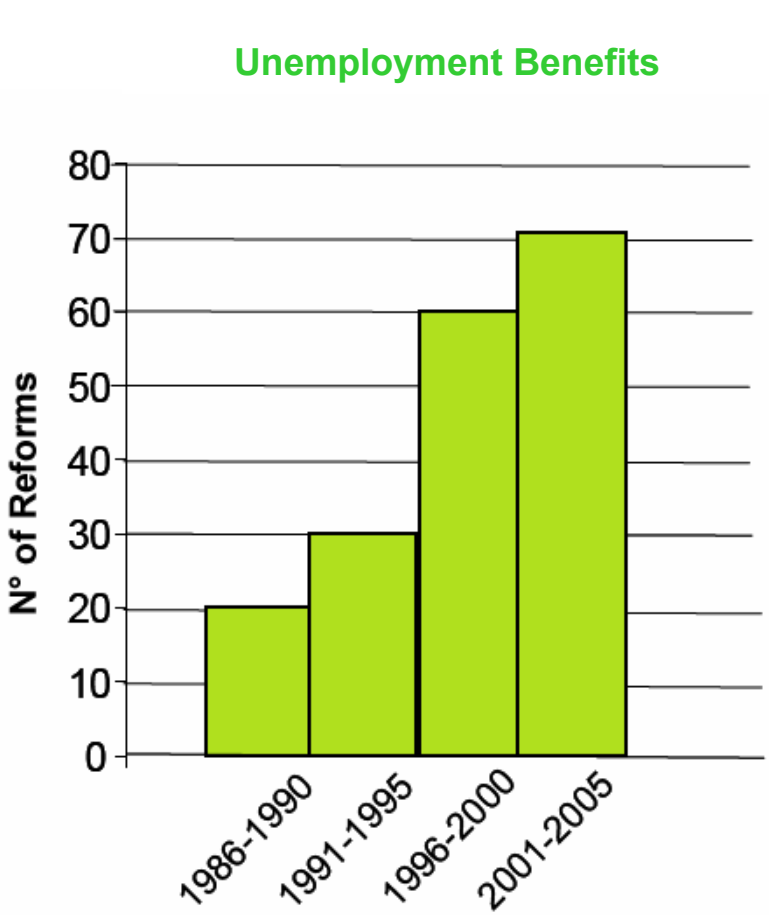
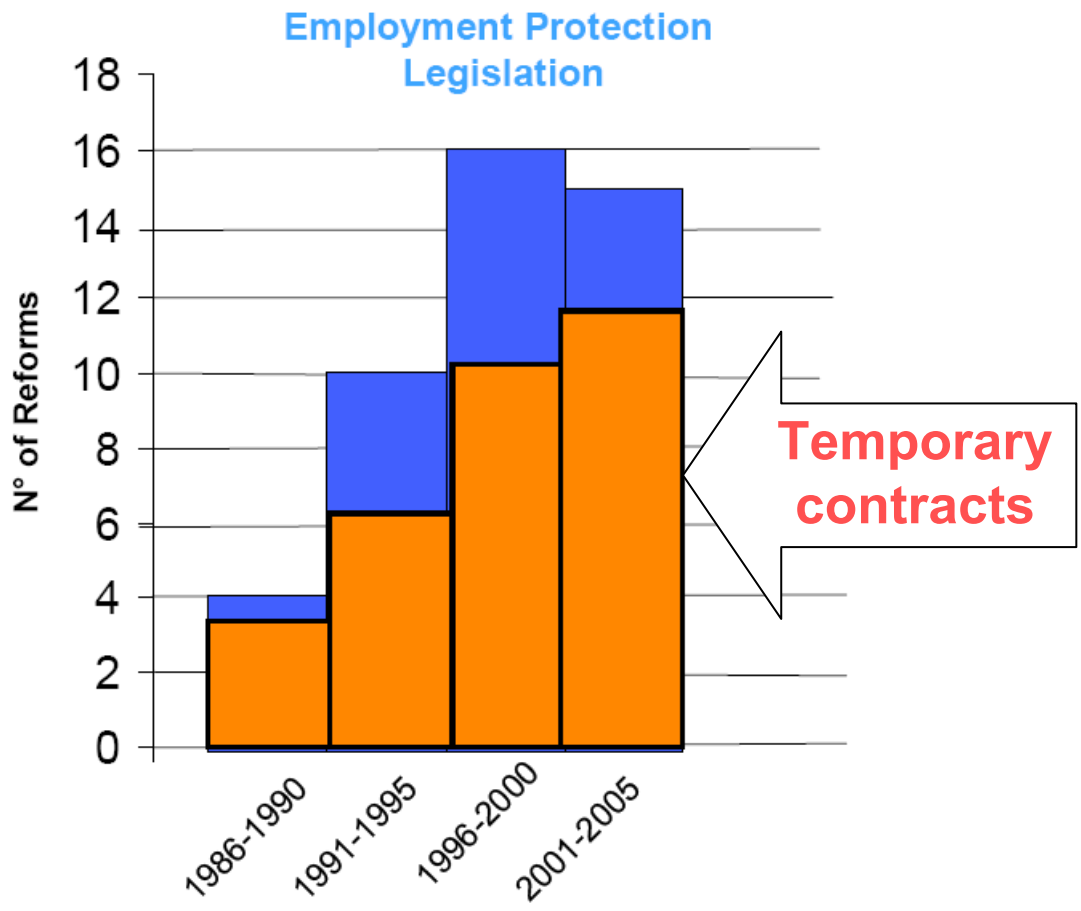
EPL and UB index for EU



Acceleration of reforms reducing EPL and UBs





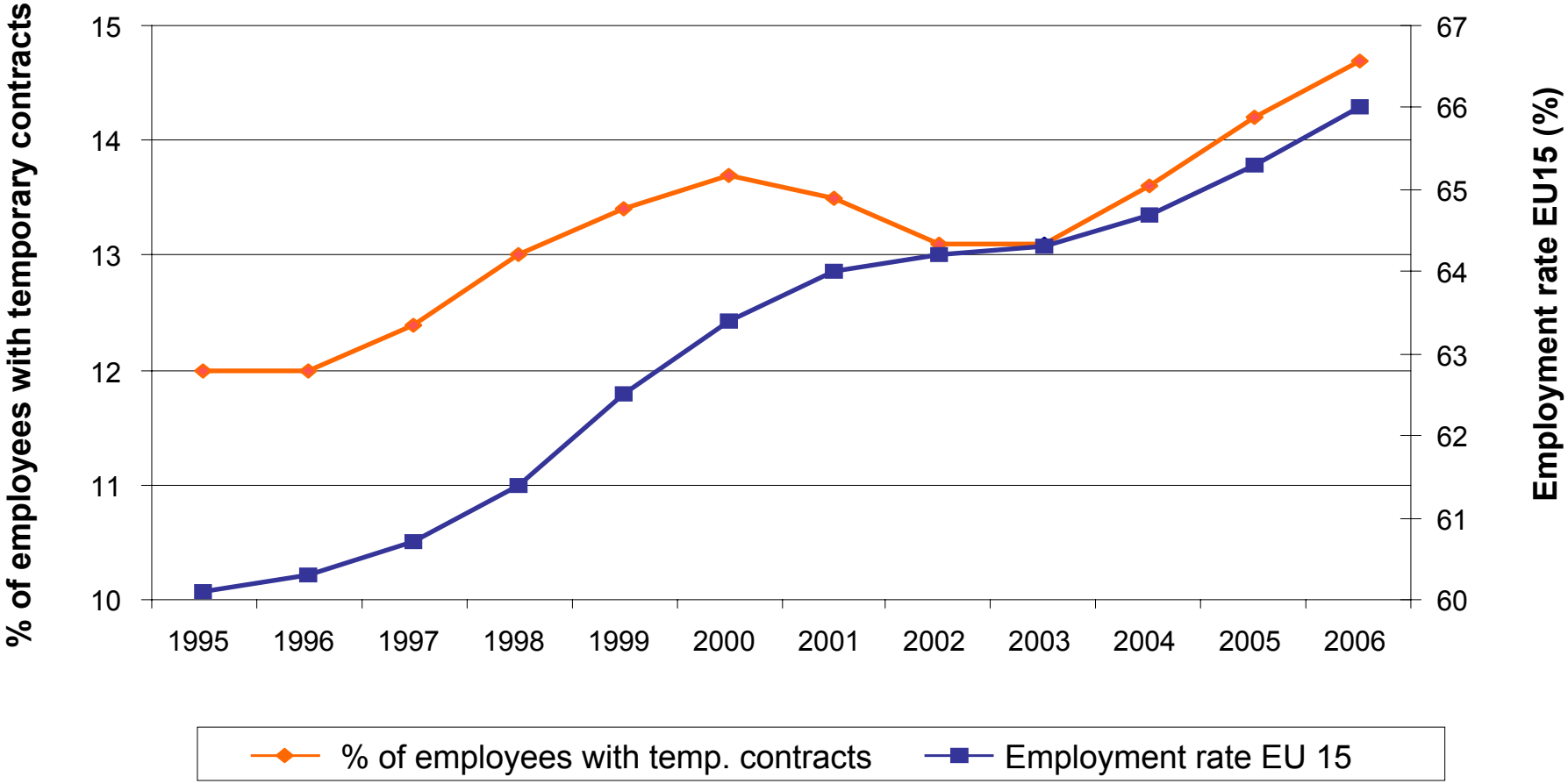
Countries: EU 14

Radical Reforms Decreased EPL Protection and Reduced Non employent Benefits

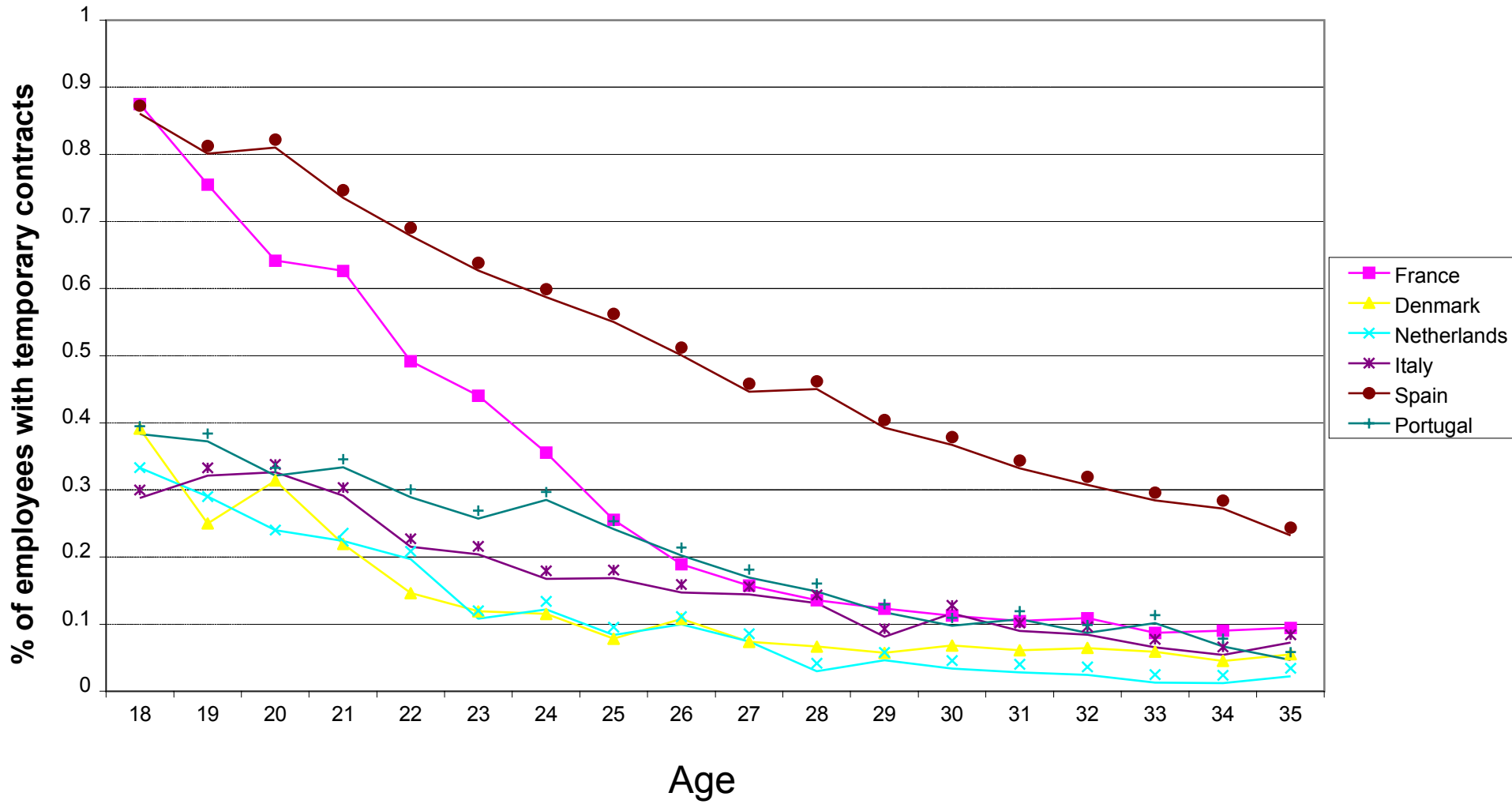
		Decreasing protection; increasing rewards from participation.				Increasing protection; decreasing rewards from participation.				Total per row	Of which decreasing (%)
		1986-90	1991-95	1996-00	2001-05	1986-90	1991-95	1996-00	2001-05		
	piecemeal	5	7	14	12	8	7	20	18	91	42%
EPL	radical	-	4	4	2		2	1	1	14	71%
	piecemeal	9	24	75	94	10	8	21	19	260	78%
NEB	radical	1	2	3	7	-	-	-	1	14	93%

Source: Frdb Reform Database

The growth of temporary employment in Europe



A port of entry?…



… or a dead end?

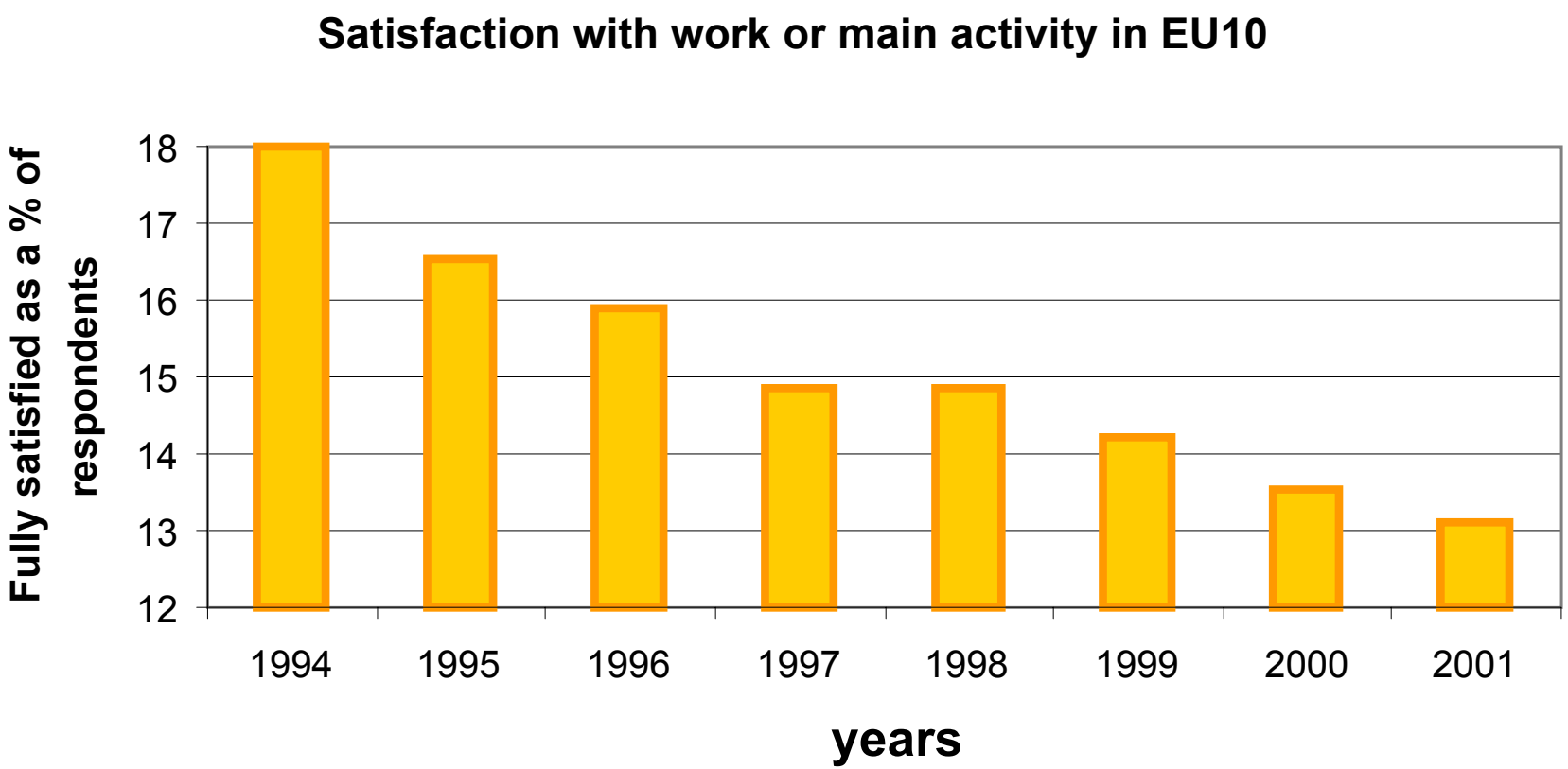
Spain

2003 \ 2004	Permanent Contracts	Fixed Term Contracts	Unemployment	Inactivity
Permanent Contracts	97,2	1,1	1,0	0,7
Fixed Term Contracts	4,8	82,6	9,0	3,5
Unemployment	2,5	20,1	67,0	10,4
Inactivity	0,4	2,4	3,9	93,3

Outline

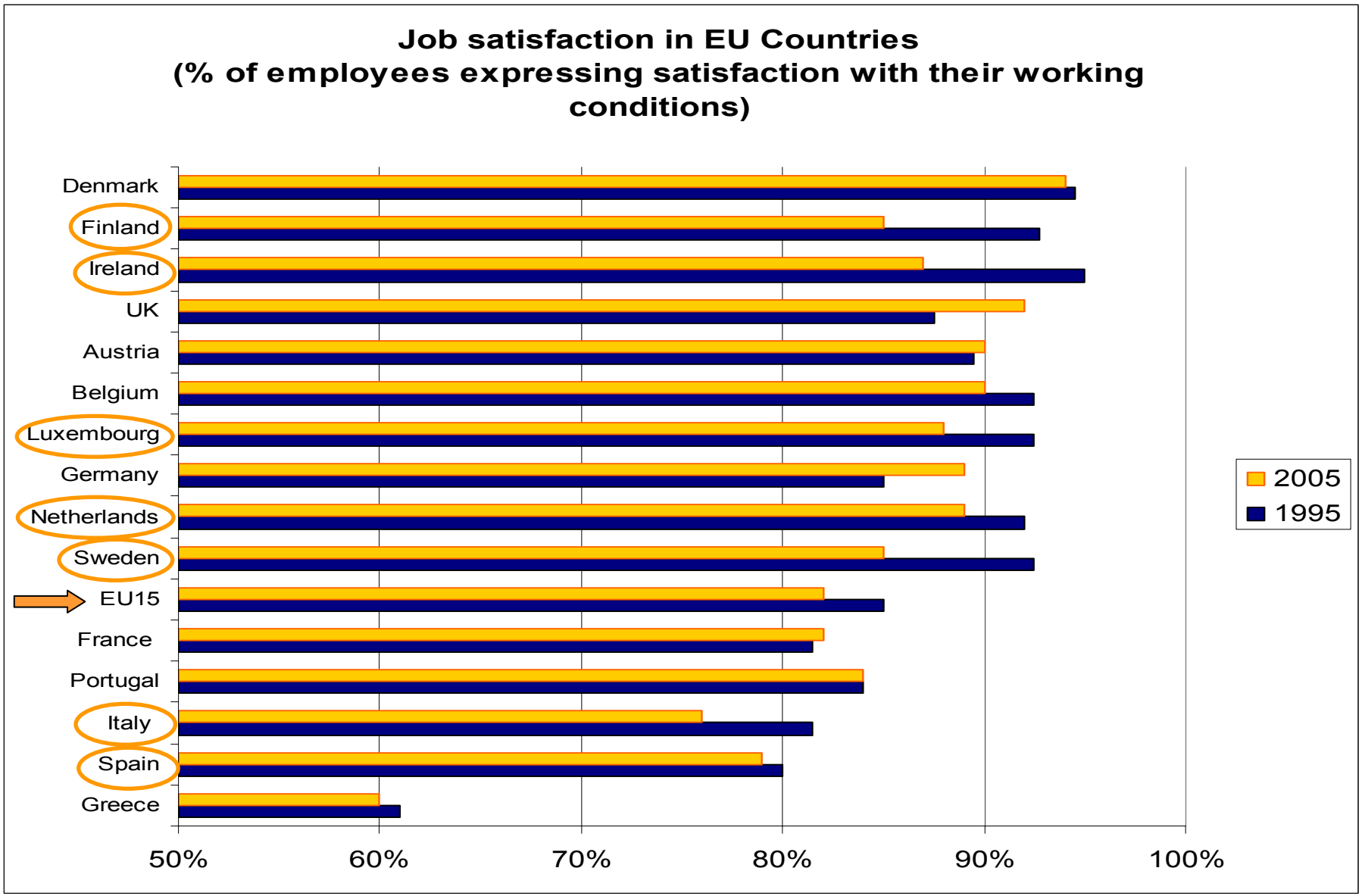
- Was it a true Decline?
- Labour Market Mobility and Institutions
- A closer look at Reforms
- Perceptions of Europeans about their Labour Market

…Europeans are unhappy



Source: ECHP

Declining job satisfaction notably in the countries with the strongest unemployment decline



Source: www.eurofund.europa.eu

Characteristics of those satisfied

	Job satisfaction
Male	-0,008
	(-1,36)
Under 30	-0,018
	(-2,64)***
Over 50	-0,002
	(-0,20)
Permanent contract worker	0,089
	(12,47)***
Permanent contract worker (year 2000)	-0,030
	(-4,30)***
Permanent contract worker (year 2005)	-0,045
	(-5,76)***
Male (year 2000)	-0,012
	(-1,56)
Male (year 2005)	-0,003
	(-0,34)
Under 30 (year 2000)	0,011
	(1,35)
Under 30 (year 2005)	0,003
	(0,30)
Over 50 (year 2000)	0,017
	(1,44)
Over 50 (year 2005)	0,003
	(0,24)
Number of Observations	40519

Source: **EWCS (1995, 2000 and 2005)**

The role of Wage growth and Mobility

Job Satisfaction		
	(1) satisfied	(2) satisfied
Male	0.002	-0.002
	(0.237)	(-0.239)
Under 30	-0.016*	-0.020**
	(-1.822)	(-2.158)
Over 50	0.004	0.014
	(0.346)	(1.239)
Permanent contract worker	0.075***	0.073***
	(8.630)	(7.706)
Mobility index	-0.173*	-0.070
	(-1.785)	(-0.668)
Male (year 2000)	-0.002	-0.004
	(-0.213)	(-0.381)
Male (year 2005)	-0.003	0.001
	(-0.292)	(0.097)
Under 30 (year 2000)	0.015	0.020*
	(1.423)	(1.806)
Under 30 (year 2005)	-0.000	-0.004
	(-0.037)	(-0.287)
Over 50 (year 2000)	0.022	0.015
	(1.624)	(1.007)
Over 50 (year 2005)	0.004	-0.005
	(0.289)	(-0.315)
Permanent contract worker (year 2000)	-0.030***	-0.025**
	(-3.238)	(-2.436)
Permanent contract worker (year 2005)	-0.042***	-0.046***
	(-4.193)	(-4.279)
wage_growth		-0.008*
		(-1.828)
Observations	26767	23592
Country Dummies	Yes	Yes

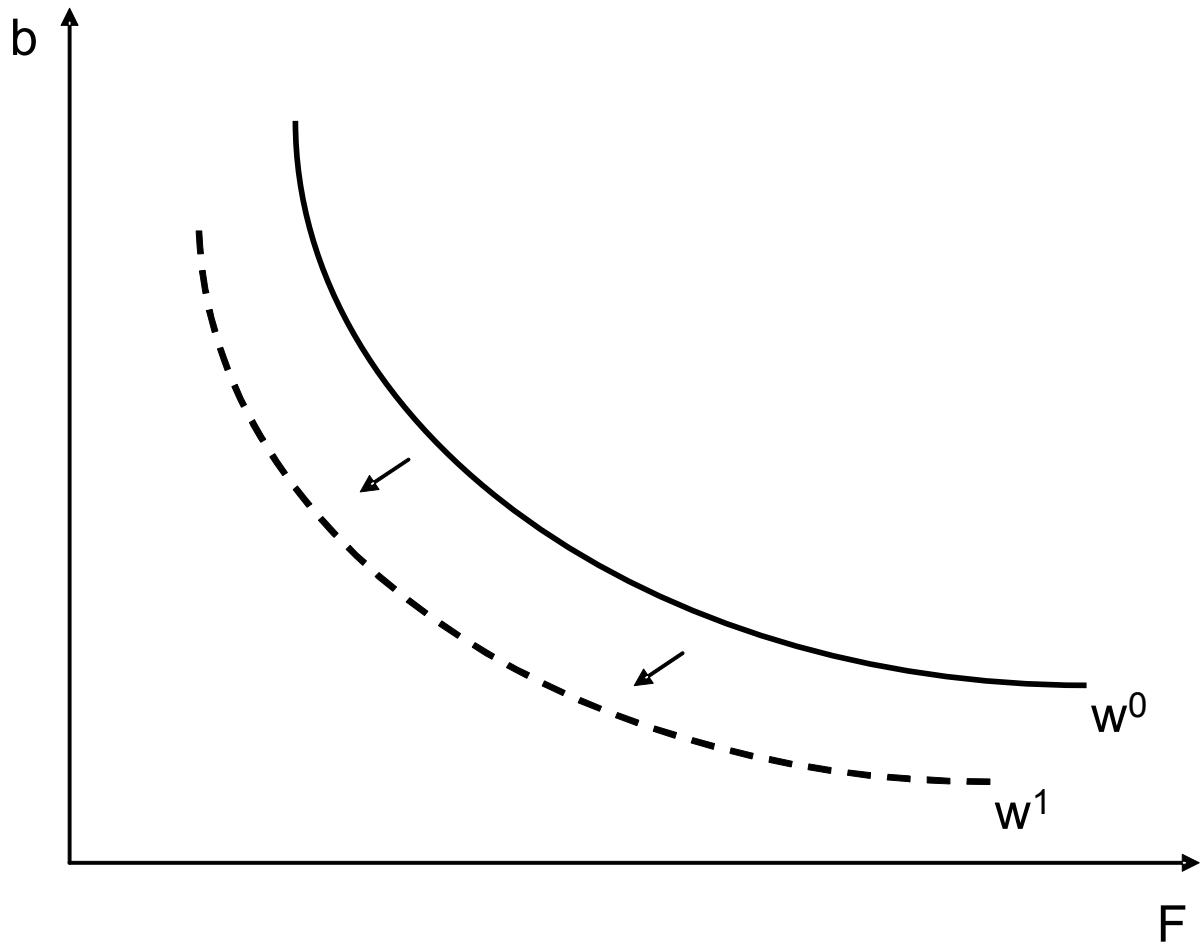
Why are also Permanent Workers Increasingly unhappy?

- Flexicurity trade-off. Value of employment is increasing in UBs (b) and EPL (F) via Nash bargaining

$$(r+\delta)\,W = b\,(1-\beta) + \beta\,y + r\,F + \delta\,U$$

- Decline in both b and F entails shift to a lower indifference curve

The flexicurity tradeoff at constant productivity



The costs of job-to-job shifts and wage setting

- Present discounted value of a job

$$W = w(1-\gamma) + \beta[\delta\alpha\, w(1-\gamma) + \delta\,(1-\alpha)\, b + (1-\delta)\, w(1+\gamma)]$$

where γ is wage tenure profile, **w** is market wage, δ is job destruction rate, α is job creation rate and **b** is (flow) value of non-employment

- Value of employment *decreases* the more with job destruction the steeper the wage-tenure profile

$$d^2W/(d\delta\, d\gamma) = \beta(1-\alpha)w < 0$$

- Value of employment *increases* the less with job creation the steeper the wage-tenure profile

$$d^2W/(d\alpha\, d\gamma) = -\beta\delta w < 0$$

How to make Europeans happier about lower unemployment?

- Moving along the flexicurity tradeoff (but costly for public finance!)
- Providing tenure-tracks to stable jobs
- Reform wage setting (decentralisation, closer links wages-productivity)
- (of course) higher wages via higher labour productivity.

Final Remarks

- European unemployment decline and increased mobility are two sides of the same coin
- Related to changing institutional landscape: less UB and EPL rather than drive to flexicurity
- Deteriorating perceptions of citizens in spite of lower unemployment are not so puzzling then.