The Effects of Age and Job Protection on the Welfare Costs of Inflation and Unemployment

Abstract

We extend the happiness literature on the welfare costs of inflation and unemployment by looking at age and job market characteristics. Our findings confirm that the relative welfare cost of unemployment versus inflation is higher than one and much higher in intermediate age cohorts and in low job protection countries. This might contribute to explain the higher concern for the level of economic activity of central bankers in countries with younger population and more flexible labour markets. Our findings seem to show that individual preferences, endogenously determined by job market rules, affect, in turn, financial institutions' behaviour.

1. Introduction

Evaluating the relative cost of unemployment versus inflation is of foremost importance for economists and policymakers[1]. In order to maximize the population's welfare it is fundamental to know which one, between the two, has the highest impact on people's lives. The effectiveness of economic policies is usually evaluated on the basis of welfare indicators which arbitrarily assign certain weights to the two bads. A useful convention for our analysis may be the so called "Misery Index"[2] which calculates countries' well being levels with a simple unweighted sum of the unemployment and inflation rates. Its implicit (and strong) assumption is that a one percent rise in inflation and unemployment generate the same welfare loss.

One of the most influential papers in this literature (Di Tella et al., 2001) shows that the Misery Index underestimates the relative cost of unemployment. With a two stage approach the authors demonstrate that policymakers should trade off a one percent reduction in unemployment with a 1.66 percent increase in inflation in order to maintain life satisfaction constant. This finding contradicts the Misery Index hypothesis that the two "bads" have to be considered as perfect substitutes. A main point of the paper is that the cost of unemployment is higher also because it does not affect only unemployed individuals. In fact, the latter is given by the sum of two components: the psychological cost of being unemployed (which affects only jobless people)[3] and the disutilities due to the cost of supporting the unemployed and the fear of becoming unemployed (which affect the non unemployed population).

A question we pose in this paper is whether the different behaviors of economic institutions in the US, UK and Europe do reflect citizens' different concern for unemployment, even though

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[1] The discussion on the unemployment-inflation trade-off is probably one of the oldest and most controversial in the economic discipline. Is the Phillips curve really vertical in the long run? Is it linear or non-linear? For the most recent contribution and the discussion on "grease" and "sand" effects in the price and wage setting mechanisms see Akerlof, Dickens and Perry (1996), Wyplosz (2001) and Dickens (2001).

[2] The Misery Index has first been used by Robert Barro in the 1970's, although some people credit it to Arthur Okun. It is simply the sum of unemployment and inflation rates.

[3] See Frey and Stutzer (2002), Clark and Oswald (1994), L. Winkelmann and R. Winkelmann (1998), Feather (1990) and Darity and Goldsmith (1996).

differences which emerge when comparing, for instance, the main targets declared in the statutes of the ECB and the Federal Reserve are not always supported by robust empirical evidence (Sardoni and Wrai, 2005; Cobham, 2006). The EU has found strong consensus for the creation of an independent Central Bank with a clear anti-inflationary stance and no explicit consideration for an unemployment target. [4] The statute of the Federal Reserve, instead, lists six main monetary policy objectives, does not fix any clear inflation target and claims that the monetary policy should sustain economic growth and fight price increases at the same time. Beyond Central Banks consider also that the UK government has based its decision not to enter the MU also on the basis of the fear of the impossibility of pursuing autonomously an active employment policy.[5]

Under the above mentioned considerations, interesting questions arise about the relationship among market rules, individual preferences and policymakers' behaviour.

Our paper may help to shed light on these questions.

Our argument is that, only by estimating the relative welfare costs of unemployment and inflation by different age and job market characteristic splits we may outline differences in preferences and political pressures which in turn affect the behaviour of economic institutions. Using individual observations from the Eurobarometer Survey (1975-2002) we find that the relative cost of unemployment versus inflation is markedly higher in central age classes and in countries with lower employment protection (EPL).

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[4] De Grauwe (2005) evidences two main reasons for the ECB's approach which he considers relatively more conservative and concerned about inflation. The first has to deal with the emphasis put in the 80's on the central bank's independence (Barro-Gordon, 1984) and the call for a more conservative central banker (see Rogoff, 1985). The second refers to the role played by Germany in shaping the EMU and the Eurosystem.

[5] Gordon Brown, as Chancellor of the Exchequer, in 1997 set out five economic tests on which any decision about UK membership of the EMU should be based: i) Cyclical convergence: are business cycles and economic structures compatible so that we and others could live comfortably with euro interest rates on a permanent basis?; ii) Flexibility: if problems emerge is there sufficient flexibility to deal with them?; iii) Investment: would joining EMU create better conditions for firms making longterm decisions to invest in Britain?; iv) Financial services: what impact would entry into EMU have on the competitive position of the UK's financial services industry, particularly the City's wholesale markets?; v) Employment and growth: in summary, will joining EMU promote higher growth, stability and a lasting increase in jobs?

The Executive HM Treasury Report (1997) concluded as follows: "We need to demonstrate sustainable and durable convergence before we can be sure that British membership of EMU would be good for growth and jobs. Joining before such convergence is secured would risk harming both".

Looking at these results we may infer that the progressive aging of the European society, and its higher job market rigidity, have progressively increased the constituency of those groups (retired workers, insiders with high job protection) which downweight the relative cost of unemployment versus inflation. This is much less so in countries with higher job market flexibility and younger population. Even though our data cover only EU countries, the observed findings on the relatively higher psychological cost of being unemployed and the general population fear of unemployment in EU countries with lower job protection lead us to infer that also other countries with similar features, such as the US, should share stronger political pressure for more active anti-unemployment policies.

2. Data, variables and econometric methodologies

Our source is the Eurobarometer Survey[6] which contains information on self-reported life satisfaction of more than 634,000 individuals from 1975 to 2002. With respect to Di Tella et al. (2003) we extend the analysis beyond 1992 and include new countries (Norway from 1990 to 1996, Finland from 1993, Sweden and Austria from 1994). Macroeconomic data are extracted as three year moving-averages centered in *t-1* in order to reduce possible measurement errors and because it takes time for people to realize changes in the macroeconomic environment. The source of unemployment rates is the OECD Center for Economic Performance dataset, while data on inflation are from the World Bank's World Development Indicators. Table 1 provides a detailed description of the variables used.

Our target is to calculate the Trade-Off Indexes of inflation versus unemployment for different age groups and for countries with different levels of EPL. More specifically, the Trade-Off Index (TOI)

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[6] Our database is not a panel dataset such as in the German Socioeconomic Panel (GSOEP) and the British Household Survey Panel (BHPS). As a consequence, it is impossible to partially disentangle direct from reverse causality by measuring fixed effects which proxy time invariant inherited traits affecting individual happiness, net of the impact of the variables under observation in this paper (Ferrer-i-Carbonell & Frijters, 2004; Clark et al., 2006). However,

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expresses the ratio between the social cost of unemployment and the social cost of inflation and is computed as follows:

$$TOI = \frac{\text{Cost of Unemployed} + \text{Cost of Unemployment}}{\text{Cost of Inflation}} = \frac{(\gamma + \varphi)}{\psi}$$

where γ is the regression coefficient of unemployed individuals in the life satisfaction estimate, φ the coefficient of the unemployment rate and ψ that of the inflation rate. As age cohorts we consider the 25th (28 year old) and the 50th (41 year old) percentile of the age of sample respondents at the beginning of the investigation period. We divide the remaining 50% of the sample by taking into account the 65 year threshold which should discriminate between active population and retired workers. This allows us to measure the cost of unemployment also for those aged above 64 who are still participating to the labour market and not only that of retired people, for whom this cost should obviously be lower. Hence, the definition of the over 64 class helps us to proxy the cost of unemployment for individuals close to the retirement age or already retired.[7] As it is well known, though, this is not the case for all professional activities and for all investigated countries. In fact, in our sample only around 60% of those aged above 64 declare to be retired.

The institutional framework split is based on the index of job protection provided by the OECD Employment Outlook (1999)[8]. The index captures the strictness of employment protection laws. As thresholds delimiting low and high job protection groups we take respectively the 35th and 65th

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consider that the specific focus of our research, an inquiry on the effects of the unemployment status under different job market conditions which requires sufficient variation in country-years, is possible only on the Eurobarometer.

[7] Consider that also retired workers may suffer from an increase in the general level of unemployment due to intergenerational altruism within or outside their families and to concerns for a fiscal effect of higher unemployment levels on their pensions.

[8] Chapter 2, Table 2.6, page 67. The index varies from 0 to 30: higher values imply higher job protection. Data are available for three periods: 1956-1984 (source: Lazear 1990), 1985-1990 (source: OECD), 1991-2002 (source: OECD). These sources are used also by Nickell and Nunziata (2005). Using as reference the labour standard index (OECD 1989-1994) which includes measures of working time, fixed-term contracts, employment protection, minimum wages and employees representation rights, we obtain very similar classifications (see also Nickell, 1997).

percentiles of the OECD indicator[9]. Basing our taxonomy on this index we classify Ireland, UK, France (in the 1980s), the Netherlands, Finland (in the 1990s) and Denmark (from 1984) in the low job protection group. On the opposite Italy, Greece, Spain, Portugal and France (in the 1990s) fall into the high protection group[10]. We focus on this index as we expect higher job protection to reinforce insiders' position and therefore to reduce the more general population fear of unemployment.

We focus our analysis on two different methodologies. First, we use ordered probit models with cluster adjusted standard errors to regress the individual happiness levels on country and year dummy variables, the set of individual standard controls listed in Table 1 (among which the dummy variable for being unemployed), three macroeconomic variables (namely the GDP per capita in international US\$ and three-year averages f unemployment and inflation rates). In this first exercise we run regressions on the full sample of individuals and use slope dummy variables for the two macroeconomic variables by age and EPL subgroups in order to capture the different effect of the two "bads" on individuals with different characteristics. Therefore, the equation we calculate is the following:

$$H_{ijt} = \alpha_j + \lambda_t + \sum_{k=1}^{K} \beta_k MICRO_{kijt} + \sum_{l=1}^{L} \gamma_l MACRO_{ljt} + \varepsilon_{ijt}$$

where H_{ijt} is the happiness level of the individual i (i=1,…,n) living in country j (j=1,…,m) in period t, α_j and λ_t are respectively country and year dummy variables, $MICRO_{kijt}$ the set of personal controls listed in Table 1 and $MACRO_{ljt}$ the macroeconomic variables which include the

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[9] We cautiously omit from the two subgroups country/years with central values of the indicator to reduce the noise created by measurement errors on the indicator itself.

[10] A sensitivity analysis performed using the Labour Standard Index (1989-1994) provided by OECD (1999) excludes France from the sample but the substance of our results is unchanged. Estimates are omitted for reasons of space and are available upon request.

slope dummy variables for age and EPL subgroups. The second methodology consists of running separate regressions by age and EPL subgroups, without using slope dummy variables.

Tables 2 and 3 show that the results obtained with the two different approaches present an important regularity: the impact of the general level of unemployment on life satisfaction seems to be highly influenced by age cohorts and employment protection since the Trade-Off Index is highest for the 42-64 age group and for low EPL coutries.[11] We have three final remarks. First, even if we are interested in capturing the effect of age *per se* (since retired people and students have the same voting rights as working people), we have run one-stage regressions with only employed persons in the sample, the results being unchanged. Second, it would be interesting to check for assets and for family instead of personal income, since the impact of unemployment might considerably diminish if the spouse has a high salary. Unfortunately, the Eurobarometer does not provide this kind of information. Third, although most of countries with high employment protection provide higher benefits aimed at supporting and requalifying unemployed workers, in some countries like Denmark the so-called "flex-security" approach combines low firing costs with generous benefits aimed at requalifying and re-employing displaced workers.

The natural extension of this research will be to disentangle the effect of employment protection from that of social security. However, since in Western Europe only Denmark seems to be characterized by both flexibility and social security (or, if we adopt a broader classification, the

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[11] As further robustness checks we use four additional methodologies which confirm our results. (1) With the first we replicate the two-stage procedure performed by Di Tella et al. (2001), the only difference being that we do not include the variable "number of children" because it is not available after 1988. Since the objective of our analysis is to study the effect of age cohort and job market characteristic splits, in the first stage we perform one regression for each category. Then, we calculate the average prediction error for each country-year by category and use these data to perform separate second-stage regressions by sample split. The three remaining robustness checks are aimed at testing whether our findings on age cohort and job protection persist when the two variables affecting costs of inflation and costs of unemployment are jointly considered. (2) Under the second methodology we run four one-stage separate regressions by age groups in which participation to the two (low and high) job protection groups is introduced as a slope dummy variable. (3) Under the third we run a single one-stage overall sample regression with both age and job protection slope dummies. (4) Under the fourth, age and job protection slope dummies in the single overall sample regression are interacted. Results are omitted for reasons of space and are available upon request. They confirm that the effects of age and job protection on the cost of unemployment are remarkably stable and independent from each other.

phenomenon is however limited to very few country-years) we do not dispose at the moment of sufficient information to test this new phenomenon.

3. Age, employment protection and economic policies

Are political and economic institutions aware of the different psychological costs of unemployment in low and high job protection countries? Some useful information on this point may be drawn by observing Charters and behaviour of different Central Banks and the decision process of the UK government about participation to the MU. In the debate on monetary policy strategies economists often contrast the Fed and the ECB for their different attitudes toward price stability. While the Federal Reserve Act[12] gives the same importance to price stability and employment, the European Central Bank Statute[13] clearly defines low inflation as the fundamental priority of the Bank[14].

Before drawing conclusions we must nonetheless consider the time distance and the different cultural environments in which the two Statutes have been written, although nothing prevented the Fed to change its one over time. Furthermore, empirical analyses based on the Taylor's rule fail to capture such difference in the recent behaviour of the two Central Banks (see Sardoni & Wrai, 2005; Cobham, 2006), even though the analysis of the minutes seems, however, to reveal a superior concern of the FED for active employment policies. Many factors contribute to shape institutions around the world, their statues and priorities an their economic performances. Among them, the

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[12] *Federal Reserve Act (1913)*, Section 2A - Monetary Policy Objectives: "The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates."

[13] *Protocol on the Statute of the European System of Central Banks and of European Central Bank. Objectives and tasks of the ECB (1992). Article 2: "*In accordance with Article 105(1) of this Treaty, the primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, it shall support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community as laid down in Article 2 of this Treaty. The ESCB shall act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources, and in compliance with the principles set out in Article 4 of this Treaty."

[14] Since 2003, the ECB adopts the following definition of price stability: inflation is "below but close to 2% over the medium term" (ECB 2003, p. 51). Before 2003, the ECB defined it as a yearly increase in the harmonized index of consumer prices (HICP) below 2%, where "below 2 %" could be anything (even a negative inflation rate). Galí and

demographic structure and the level of employment protection might help to explain, among other things, why some central banks have developed a stronger antinflationary stance than others.

In Table 4 we can see that the European countries which contributed the most in shaping the ECB and its policies (and which are characterised by older population and higher employment protection) displayed lower inflation and higher unemployment rates with respect to the UK and the US over the period 1995-2004. The United Kingdom, with its younger population and, especially, its very low EPL index, presents a much lower unemployment rate and a slightly higher inflation than in average EMU countries. A stronger fear of unemployment may have played some role in the British authorities' decision of not taking part to the MU[15]. Finally, the United States are characterised by much younger population, a lower share of over 65 with respect to EMU countries and by an EPL index close to zero.

If our results hold true even for countries outside the considered sample, and taking into account that the lobbying power of the elderly is notoriously bigger[16], we may infer that the higher concern for real outcomes in the US could be partially explained by the different pressures that lobbies exert on policy makers. Finally, it is reasonable to think that developing countries, which have a very low share of over 65 and usually low levels of job protection, may be more concerned with promoting economic growth at the expense of a possible higher inflation[17]. To sum up, the traditional macroeconomic view considers people's preferences as given and largely independent of time and institutional change (see Darity and Goldsmith, 1996). In the light of our empirical findings it seems legitimate to question this assumption. Preferences are strongly influenced by demographic

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others (2004) see this change of definition as a possible "preparatory move before an eventual increase in the target inflation rate".

[15] See footnote 5 in the paper.

[16] For theoretical contributions on the effect of lobbies on economic policy decision see Posen (1995) and Piga (2005). The elderly have more leisure time, they are more stick to their own interests and have a greater ability to organize their fights. "The elderly are politically powerful because they are more single-minded. That is, while young citizens disperse their political capital among many issues, the old tend to vote with very few things in mind" (Mulligan and Sala-i-Martin, 2003).

[17] For example, Brazil and India's shares of over 65 are respectively 5.9% and 5.1%. Reducing the Indian unemployment rate by 1% would mean providing four or five million people with a new job, which might worth (in case a short term unemployment/inflation trade-off is assumed to exist) an increase of the inflation rate well above 1 percentage point.

and institutional variables which, for example, can affect the individual costs of inflation and unemployment. Anyway, it is important to stress that policymakers have the possibility of acting on preferences by affecting a country's demographic structure and its institutional setting[18].

4. Conclusions

Policymakers should not forget that voters' relative preferences over inflation and unemployment are sharply heterogeneous across age cohorts and are endogenous with respect to changes in the institutional setting, especially if we consider job market regulation. Furthermore, authorities should consider that, when it comes to inflation and unemployment, two radically different things are compared. On the one side we have an "illness" which affects directly only some individuals (unemployment) but creates additional costs and engenders fear of contagion in many others. On the other side we have a pervasive factor (inflation) which affects everyone (even though individuals may have different capacity to insulate from it). In this perspective, age and job protection are two fundamental variables explaining the heterogeneity of the individuals' relative preferences on inflation and unemployment, since "probabilities of contagion" from the "unemployment illness" for those actually employed are markedly different when the two above mentioned factors vary.

Following this intuition we demonstrate in the paper that the negative effect of unemployment on individual happiness is much lower for those individuals that, for age class and institutional framework, are less likely to be affected by such illness (or have relatively reduced consequences from the infection). This implies that an average marginal rate of substitution between unemployment and inflation, calculated on the entire sample population (1.91 with a 91 percent higher weight on unemployment) hides dramatically different rates of substitutions according to different age cohorts and domestic job market rules. Such heterogeneity may push the index well

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[18] Obviously, demographic policies require much more time than changes in the institutional setting.

above two for low job protection countries and to one and below for high job protection ones. This

may help to understand part of the variability of institutional designs and policymakers' behaviour

in countries which differ in demographics and labour market rules.

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APPENDIX

Table 1: Description of the variables used

Variable	Source	Description
Life satisfaction	Eurobarometer	Self-declared life-satisfaction level from 1 (not at all satisfied) to 4 (very satisfied)
Unemployed	Eurobarometer	Dummy variable (DV) which takes value 1 if the respondent is unemployed, 0 otherwise
Selfemployed	Eurobarometer	DV which takes value 1 if the respondent is self-employed, 0 otherwise
Retired	Eurobarometer	DV which takes value 1 if the respondent is retired, 0 otherwise
Student	Eurobarometer	DV which takes value 1 if the respondent is student, 0 otherwise
Home	Eurobarometer	DV which takes value 1 if the respondent is responsible for home and is not working, 0 otherwise
Male	Eurobarometer	DV which takes value 1 if the respondent is male, 0 otherwise
Age	Eurobarometer	Age of the respondent in years
Age squared	Eurobarometer	Square of the respondent's age in years
Middle education	Eurobarometer	DV which takes value 1 if the respondent has 15-18 years of education, 0 otherwise
High education	Eurobarometer	DV which takes value 1 if the respondent has more than 18 years of education, 0 otherwise
Married	Eurobarometer	DV which takes value 1 if the respondent is married, 0 otherwise
Divorced	Eurobarometer	DV which takes value 1 if the respondent is divorced, 0 otherwise
Separated	Eurobarometer	DV which takes value 1 if the respondent is separated, 0 otherwise
Widowed	Eurobarometer	DV which takes value 1 if the respondent is widowed, 0 otherwise
Income 2nd quartile	Eurobarometer	DV which takes value 1 if the respondent belongs to the 2nd income quartile, 0 otherwise
Income 3rd quartile	Eurobarometer	DV which takes value 1 if the respondent belongs to the 3rd income quartile, 0 otherwise
Income 4th quartile	Eurobarometer	DV which takes value 1 if the respondent belongs to the 4th income quartile, 0 otherwise
GDP	World Bank	GDP per capita in 2000 constant international US $
Inflation	World Bank	Inflation rate, three-year moving average
Unemployment	OECD	Unemployment rate, three-year moving average

Table 2: One Stage Life-Satisfaction Equations, by Age Sub-Groups

	One stage, by (sub) sample					One stage, with slope dummies				
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
	general	<29	29-41	42-64	>64	<29	29-41	42-64	>64	complete
Unemployed	-0.50	-0.49	-0.54	-0.50	-0.25	-0.50	-0.50	-0.50	-0.50	-0.50
	(0.01)	(0.01)	(0.01)	(0.01)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
U	-1.91	-1.55	-2.05	-2.64	-1.00	-1.97	-1.86	-1.81	-2.04	-1.61
	(0.13)	(0.32)	(0.25)	(0.21)	(0.31)	(0.13)	(0.13)	(0.13)	(0.13)	(0.15)
Π	-1.40	-1.75	-1.90	-1.30	-0.76	-1.39	-1.45	-1.37	-1.40	-1.42
	(0.08)	(0.19)	(0.16)	(0.14)	(0.20)	(0.08)	(0.08)	(0.09)	(0.08)	(0.10)
DV u 28						0.32				
						(0.08)				
DV π 28						-0.06				
						(0.07)				
DV u 29_41							-0.20			-0.51
							(0.06)			(0.09)
DV π 29_41							0.19			0.13
							(0.06)			(0.08)
DV u 42_64								-0.30		-0.54
								(0.06)		(0.10)
DV π 42_64								-0.06		-0.03
								(0.06)		(0.08)
DV u 65									0.67	0.19
									(0.09)	(0.12)
DV π 65									0.02	0.01
									(0.08)	(0.10)
(Pseudo) R2	0.09	0.09	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09
Number of obs.	404,578	74,479	110,623	149,329	70,147	404,578	404,578	404,578	404,578	404,578
Trade-Off Index	1.72	1.17	1.36	2.42	1.63	1.49	1.77	1.83	1.35	*

Legend: results from multinomial ordered-probit regressions. Robust standard errors are in parentheses. Inflation and unemployment rates are three-year moving averages. All regressions include country and year dummies (France and 1975 are the base), time trend, GDP per capita (in 2000 constant US$) and personal characteristics (see Table 1). DV u (age class): slope dummy on the unemployment variable for individuals belonging to the given age class; DV π (age class): slope dummy on the inflation variable for individuals belonging to the given age class; 28: individuals younger than 29; 29_41: individuals in the 29_41 age class; 42-64: individuals in the 42_64 age class; 65 individuals older than 64.
* The Trade-Off Index is reported in Table 6.

Table 3: One Stage Life-Satisfaction Equations, by EPL Sub-Groups

	One stage, by (sub) sample			One stage, with slope dummies
	1	**2**	**3**	**4**
	All sample	low EPL	high EPL	All sample
Unemployed	-0.50	-0.52	-0.39	-0.47
	(0.01)	(0.01)	(0.01)	(0.01)
U	-1.91	-3.76	0.39	0.25
	(0.13)	(0.46)	(0.28)	(0.22)
Π	-1.40	-2.28	-1.99	-1.49
	(0.08)	(0.35)	(0.16)	(0.12)
DV u Low EPL				-2.41
				(0.33)
DV π Low EPL				0.85
				(0.17)
(Pseudo) R^2	0.09	0.08	0.03	0.10
Number of obs.	404,578	136,849	128,406	256,485
Trade-Off Index	1.72	1.88	*	**

Legend: results from multinomial ordered-probit regressions. Robust standard errors are in parentheses. Inflation and unemployment rates are three-year moving averages. All regressions include country and year dummies (France and 1975 are the base), time trend, GDP per capita (in 2000 constant US$) and personal characteristics; DV u Low EPL: unemployment slope dummy variable for individuals in low job protection countries; DV π Low EPL: inflation slope dummy variable for individuals in low job protection countries. * Unemployment is not significant in the estimate. **The Trade-Off Index is reported in Table 6.

Table 4: Population age and EPL index in selected countries

Country	Avg popul. Age	% Popul. over 65	EPL index	Inflation	Unemployment
Germany	42.6	17.8	20	1.41	8.77
Italy	42.2	19.3	23	2.75	10.34
France	39.1	16.5	21	1.56	10.68
EMU	41.2	17.2	17.8	2.40	9.86
United Kingdom	39.3	15.9	2	2.62	6.04
United States	36.5	12.3	1	2.46	5.06

Legend: Average population age is from the CIA World Facts Book (2006). The percentage of population over 65 is from the World Bank's WDI (2003). The EPL is from the OECD Employment Outlook (1999) and refers to the average situation in the late 1990s. Unemployment and Inflation rates are averages over the period 1995-2004.