Positive or Negative Policy Feedbacks? Explaining Popular Attitudes Towards Pragmatic Pension Policy Reforms

Juan J. Fernández^{1,*} and Antonio M. Jaime-Castillo²

Abstract: Recent decades have seen increased interest in public attitudes towards public pension policies. Most previous research, however, relies heavily on dependent variables that fail to reflect the effective alternatives being discussed in most affluent democracies. This article seeks to improve our understanding of public attitudes towards pragmatic welfare policy options by examining cross-national differences in attitudes towards (i) cuts in old-age pension benefits, (ii) increases in social security contributions, and (iii) increases in the statutory retirement age. We test predictions of the dominant positive policy feedback theory and the alternative negative policy feedback theory. These approaches argue that policies induce consequences and attitudes that reinforce (positive feedback) or undermine (negative feedback) past policymaking trajectories. Empirical results obtained by multilevel analyses from a sample of 27 European countries are consistent mainly with the negative feedback approach. In countries with higher statutory retirement ages, citizens are more likely to support a postponement of retirement. However, in countries with higher elderly poverty, citizens are less likely to support cuts in pension benefits. In countries with higher social security contributions, citizens are less likely to support further increases in these contributions.

Introduction

In response to the prominence of pension policy in government agendas, scholarly interest in the attitudes of Europeans towards public pension policies is increasing. The majority of available studies, however, relies heavily on evidence regarding the extent of pension spending (Blekesaune and Quadagno, 2003; Kohli, 2008; Busemeyer, Goerres and Weschle, 2009) and general sources of financing (Gelissen, 2001) that fails to reflect the effective alternatives under discussion in most European countries. According to most observers, the most pragmatic pension policy measures in the current demographic and economic context involve a combination of cuts in pension benefits, increases in social security contributions, and increases in the statutory retirement age (Myles and Quadagno, 1997; Myles and Pierson, 2001; Whiteford and Whitehouse, 2006). Hence, our understanding of popular attitudes of Europeans towards the main current options being discussed in the pension policy arena is fairly limited.

In fact, although domestic experts and international organizations increasingly call for pragmatic pension policy reforms (Queisser, 2000; Casey, 2009), European countries display substantial cross-national variation with regard to popular support for pragmatic pension policy measures (Figure 1). According to a 2006 Eurobarometer (European Commission, 2007) analyzed in this study, the highest national percentage of support for increasing contributions is about two times greater than the lowest national percentage of support. In addition, the highest national percentage of support for postponing retirement and lowering pensions are, respectively, about four and five times greater than the lowest national percentage for each of these measures.

Given the disconnect of welfare attitudes research to critical choices in the contemporary political economy of European countries, as well as the limited attention paid

¹Department of Economic History and Institutions, University Carlos III of Madrid, 126, 28903 Spain and

²Department of Sociology, University of Málaga, Ejido, 6, 29071 Spain. *Corresponding author. Email: jjfgonza@clio.uc3m.es

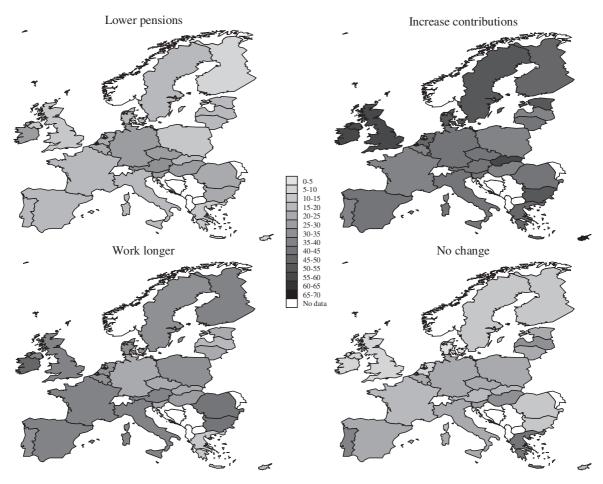


Figure 1 Percentage of population that supports each of the four reform measures, 2006

towards pragmatic pension policy measures (for exceptions, see Boeri et al., 2001; Lynch and Myrskylä, 2009), this article examines two empirical questions: Why do the increasingly common calls for pragmatic pension reforms not translate into uniform patterns of support for the three main measures across European countries? And, specifically, what is the relationship between past policy choices and public attitudes towards increases in social security contributions and the retirement age, as well as cuts in pension benefits?

In answer, this study examines the determinants of support for three concrete and pragmatic pension policy options. It conducts a multilevel analysis of attitudes about reductions in average pension benefits, increases in the statutory retirement age and increases in social security contribution rates as mechanisms for strengthening the financial health of public pension systems. The sample includes 27 countries and uses the 2006

Eurobarometer (European Commission, 2007) as the main data source.

The article tests predictions of the dominant positive policy feedback and the alternative negative policy feedback approaches. The approaches explain cross-national variations in welfare attitudes by focusing on the self-reinforcing (positive feedback) and self-undermining (negative feedback) consequences of existing policies. The positive feedback approach argues that policies induce adaptive sunk costs, material interests, and normative expectations that induce citizens to support reform measures that bolster a long-term policy trajectory (Pierson, 1993, 2000; Mau, 2003; Mettler and Soss, 2004). The negative feedback approach, outlined by Weaver (2010), argues that policies induce unforeseen costs and grievances which, in turn, trigger perceptions of self-interest in reform measures that thwart the previous policy trajectory.

Theoretical Background

Since the early 1990s, after decades of intense research into the influence of individual-level characteristics on mass political preferences, analysts have turned their attention to supra-individual dimensions (Weakliem, 2005; Svallfors, 2007, 2011). In this period, scholars have focused on the possibility that existing policies generate positive policy feedback by inducing individual preferences that reinforce a trajectory of policy reforms. However, existing policy structures may also induce negative policy feedback (Weaver, 2010) because unintended consequences of certain legislation may trigger popular support for changes in the policy trajectory. Given the potential (co)existence of positive and/or negative feedback, we present predictions in this section derived from both approaches.

Positive Policy Feedbacks

The policy feedback literature builds on the historical institutionalist principle that the 'rules of the game' in political fields structure political preferences and political participation. Since the earliest contributions of historical institutionalism, the overarching principle that policies affect politics (for predecessors, see Lowi, 1964; Heclo, 1974) has been interpreted to mean that formal institutions condition strategies and behavior leading to lock-in processes (Esping-Andersen, 1990; North, 1990; Skocpol, 1992). In this view, political and policy rules shape not only future outcomes, but induce effects that concur with previous tendencies. As Myles and Pierson wrote in relation to the pension politics of structural reform, 'each step along a path produces consequences which make that path more attractive in the next round and raises the cost of shifting to an alternative path'

(2001: p. 321). In other words, modern politics are characterized by positive policy feedback where past decisions lead to self-reinforcing dynamics.

The literature has underlined three mechanisms for policy feedback effects on the general public (Pierson, 1993, 2000; Mettler and Soss, 2004). First, policies create interests among their beneficiaries. In this regard, Campbell (2003) shows that increases in the generosity of US social security contributed to the mobilization of pensioners, who pressed for further congressional support for aging policies (see also Skocpol, 1992). Second, policies induce adaptive expectations. Actors design their strategies based on pre-existing institutional structures, creating sunk costs in the institution. Third, policies provide a source of information and meaning by helping to categorize long-range historical trends. For instance, policies forge norms of fairness and justice in society (Svallfors, 2007). Generous welfare states foster communitarian values and strong cultural commitment to social reciprocity and mutual obligation (Mau, 2003; Larsen,

Despite the extensive theoretical contributions, empirical results from the positive policy feedback approach remain inconsistent (Svallfors, 2011). Some studies, seeking to test Esping-Andersen's (1990) predictions of the attitudinal effects of welfare regimes, have found a positive association between the level of welfare generosity and average welfare demand, while others have not (for reviews, see Kumlin, 2007; Jordan, 2010).² However, this empirical debate is still unsettled and the positive policy feedback approach remains a theoretical cornerstone in welfare attitudes research (e.g. Wendt et al., 2009). We therefore make predictions based on this approach concerning pragmatic pension policy measures. Accordingly, if policies, in response to a uniform exogenous shock (e.g. population aging), induce material and normative interests in certain policy structures, public opinion should support measures that reinforce past domestic policy trends and, ultimately, crossnational policy differences.

This literature argues that generous public pension systems increase 'beneficiary consciousness' and personal interest in high benefits. Hence, the population of countries with generous benefits should be less likely to support pension cuts. Similarly, because large tax burdens create a constant awareness of the moral need for social justice and mutual reciprocity, they should affect tolerance towards additional tax increases. Therefore, the population of countries with higher social security contributions is more likely to accept further increases.

H1a: Countries with more generous public pension systems are less likely to support cutbacks in pension benefits.

H2a: Countries with higher social security contributions are more supportive of increases in those contributions.

Finally, policy feedback may also occur in relation to the retirement age. Because individuals establish their career strategies by taking the statutory retirement age into consideration, citizens in countries with lower retirement ages have less chance to adapt those strategies to potential increases. Hence, the population of countries with lower statutory retirement ages should be less likely to support increases in those provisions.

H3a: Countries with lower statutory pensionable ages are less supportive of increases in the pensionable age.

Negative Policy Feedbacks

Although the positive policy feedback framework has remained dominant in historical institutionalism analysis, it has been increasingly criticized due to its over-determinism (Béland, 2010). In this line of thought, Bonoli and Palier (2007) and Weaver (2010) notice that since the mid-1990s public pension systems have been more substantially reformed than initially predicted by positive feedback theorists (Pierson, 1994; Esping-Andersen, 1996). Most clearly, lock-in processes can be averted through energetic political mobilization, coalition formation and framing. As noted by Thelen (2004) and Streeck and Thelen (2005), policy challengers achieve incremental changes in many contexts which, cumulatively, can produce structural departures from the pre-existing policy regime.

Likewise, lock-in processes may also be averted precisely due to the consequences of pre-existing policies. In many instances, the minimalist historical institutionalist principle that 'policies affect politics' can be confirmed; whereas in others, the maximalist principle that 'policies only bolster past tendencies' is disconfirmed. A general instance of this occurs when existing rules generate outcomes with the capacity to undermine their long-term sustainability. Following this reasoning, Weaver (2010) argues compellingly the need to examine the presence of negative policy feedback as realistic possibilities in many fields. In this view, negative feedback constitutes 'consequences of policy that tend to undermine rather than reinforce the political, fiscal, or social sustainability of a particular set of policies' (Weaver, 2010: p. 137).

Building on the seminal work of Weaver,³ we argue that policies produce negative feedback effects due to the recurrence of unforeseen outcomes in social life. Unforeseen or unintended outcomes constitute common

sources of social change resulting from the very human features of error, ignorance, and short sightedness (Merton, 1936). For this reason, although polities build institutions with the expectation that they will endure, unforeseen consequences may undermine individual interests in their persistence. We underline, in relation to pension welfare politics, two sources of negative policy feedbacks in particular: unforeseen costs and unintended grievances. First, in designing new institutions policymakers commonly lack vision or information about the long-term costs of new policies. Later, as evidence of unforeseen negative policy outcomes emerges, widespread concerns may build up about the sustainability of the historical policy trajectory. Most importantly, these concerns may induce citizens to believe that they have self-interest in recalibrations that invert the historical policy trajectory. Second, bounded rationality underlies the non-recognition that targeted welfare improvements usually trigger unintended grievances in other groups. As justifications for new benefits allow multiple interpretations, non-improved groups and their dependents have selective incentives to re-interpret those justifications and voice their demand for extensions of welfare improvements.4

Consequently, we argue that specific pension policies induce negative feedback because they undermine support for self-reinforcing policy trajectories. Endorsement of pension benefit cuts, increases in social security contributions, and extension of the working career may depend, respectively, on the level of elderly poverty, social security contributions, and the statutory retirement age.

First, the principles of the negative feedback approach suggest that support for pension cutbacks should be related to the level of elderly poverty. Although the historical expansion of pension provision has largely improved living conditions for the elderly (OECD, 1988),⁵ large pockets of elderly poverty still constitute a major welfare problem in many European countries (OECD, 2008).6 In this sense, high levels of elderly poverty can undermine the average support for pension cutbacks by transforming the preferences of pensioners and non-pensioners alike. Income deprivation among pensioners increases their material dependence on public pensions, reinforcing their interest against pension cuts. Previous research also shows that under conditions of high elderly poverty, bi-generational financial transfers occur predominantly upwards from the working-age generation to older generations (Saraceno, 2010). This suggests that in a context of high elderly poverty non-pensioner or working-age children absorb the demands for protection of their deprived, elderly parents, and thus fostering their own interests against

pension cuts. We, therefore, hypothesize a negative relationship between elderly poverty and support for pension cuts.

H1b: Countries with higher levels of elderly poverty are less supportive of cutbacks in pension benefits.

As with elderly poverty, which is a direct outcome of public policies, high social security contribution rates are perceived as a previously unforeseen cost of welfare provision in many countries. This owes to increasing concerns over the past two decades that further increases in countries with already high social security contributions may be especially counterproductive to expanding the labour force (Scharpf, 2000; Bonoli and Palier, 2007). High social security contributions increase labour costs, which could affect the international competitiveness of national products and services. Hence, to prevent increases in unemployment, countries such as France, Germany, and Sweden have excluded substantial changes in these rates in major pension reforms (Hinrichs, 2005; Anderson and Immergut, 2007; Conceição-Heldt, 2007). This means that public opinion in countries with higher social security contributions should be less inclined to strengthen the finances of public pension programs through additional increases.

H2b: Countries with higher levels of social security contributions are less supportive of increases in these rates.

Finally, there are reasons to believe that a high statutory retirement age can also produce negative feedback. Analysts tend to agree that lengthening the working career improves the financial health of pension systems (OECD, 2006). However, concerning pension policy, lengthening the working career undermines intra-generational fairness (OECD, 1988; Myles, 2003; Esping-Andersen, 2010) and poses a finances/justice trade-off. This is because low-income workers in European countries have shorter life expectancies than high-income workers (Mackenbach et al., 1997). While the percentage difference in life expectancies at retirement declines across income groups as the statutory retirement age decreases (and the two absolute values are higher), this percentage difference increases along with the statutory retirement age. In other words, due to life expectancy inequalities, increases in the pensionable age produce a regressiveness feedback, especially in countries with already higher pensionable ages. We can expect, therefore, to find less approval for the postponement of retirement precisely in countries with higher statutory retirement age.

H3b: Countries with higher statutory retirement ages are less likely to support increases in the retirement age.

Data and Analytical Strategy

Data

Previously, most comparative research on pension policy attitudes has relied on the modules 'Role of Government' of the International Social Survey Programme, which includes data about attitudes towards 'providing a decent standard of living for the elderly' and changes in pension spending (Blekesaune and Quadagno, 2003; Kohli, 2008; Busemeyer, Goerres and Weschle, 2009). These options, however, hardly reflect the current pension policymaking scenario in affluent democracies (Goerres and Prinzen, 2011). In coming decades, in most European countries, public pension spending is not expected to fall (Salomäki, 2006); whereas increases in pension spending could be driven by either the mechanical impact of population aging or conscious decisions to increase generosity levels. As noted earlier, faced with population aging and dwindling economic growth rates, the three main alternatives faced by European governments in relation to public pension programs involve tax increases, lengthening of the average career, and reductions in public pension benefits.⁷

The Special Eurobarometer 66.3 'European Social Reality' (European Commission, 2007), with fieldwork from 2006, includes a question that reflects these three, realistic, pension policy alternatives. The question reads: 'If you had to choose from the following possibilities aimed at guaranteeing the financing of the pension system in (our country), which one would be most acceptable to you?' The questionnaire offered four answers: (i) 'work and contribute for longer', (ii) 'maintain the retirement age and increase your social security contributions', (iii) 'maintain the current retirement age and accept that you will receive less', and (iv) 'none of the above'. Because these are realistic alternatives, this Eurobarometer has been chosen for the following analysis.

Regarding the independent variables, we include four, key, theoretical variables at the country level. The average statutory retirement age for men and women in 2005 (Eurostat, 2008) is used to examine the effect of the retirement age on support for the option 'work and contribute for longer'. We test the impact of social security contribution levels on attitudes towards increases in 'your social security contributions' using employee social security contributions as a percentage

of the GDP in 2005 (Eurostat, 2007). Additionally, we test the effect of the elderly poverty rate in 2005 (Eurostat, 2009) and the average replacement rate as a measure of pension generosity. The latter is computed as the old-age pension expenditure as a proportion of GDP in 2005 (Eurostat, 2010) divided by the share of population 65 or older in 2005 (Eurostat, 2010). We also include the share of population 65 or older in 2005 as a control variable.

Because the focus of this study is about the contextual effects on popular attitudes towards pension policy reform, individual-level variables are mainly included to minimize the risk of country-level variables absorbing compositional effects. Specifically, the multilevel models control for 10 variables that have proven significant in previous research on pension policy attitudes (Boeri et al., 2001; Gelissen, 2001). Female, aged 65 or older captures the influence of gender and age. Professional, manager, housewife, unemployed, retired, supervisor, and employee address the role of occupational status. Finally, years of education captures the effect of education, measuring the respondent's age when full-time education ceased. We do not include ideology as an explanatory factor at the individual level because of potential endogeneity with the dependent variables. Descriptive statistics of these variables are presented in Table 1.

Analytical Strategy

Because individuals are nested within countries and the dependent variable includes four mutually exclusive responses, we estimate multinomial multilevel logistic regression models. The four alternatives are as follows: (i) work longer, (ii) increase contributions, (iii) lower pensions, and the reference category, and (iv) no change. We assume that the effect for each individual-level variable is fixed across countries, but there is a random effect accounting for the variance of responses. We, therefore, use a random intercept model with national covariates.

Estimation of multilevel models with categorical outcomes involves significant computational problems due to the complexities of the likelihood function. We adopt the quasi-likelihood approach (Goldstein, 2010) because it performs better than numerical methods of integration when the number of level one units is high (Callens and Croux, 2005), as it is the case, and it is computationally less demanding. As suggested by Goldstein and Rabash (1996), we use the penalized quasi-likelihood of the second order (PQL2) after running a marginal quasi-likelihood model (MQL1) to generate starting values in MLwiN.⁹

Results

It is useful to begin the analysis by reviewing the average national support for each type of pension reform, as reported in Figure 1. A majority of the European population thinks that the public pension system must be reformed in one way or another. An increase in contributions is the most popular measure, with percentages ranging from one-third to more than one-half the population (for a similar interpretation of this descriptive evidence, see Frommert et al., 2009). Working longer—and especially having lower pensions—is less supported, although an important share of the population in several countries would agree to these alternatives. In addition, there are substantial and statistically significant, cross-national differences concerning the popularity of each alternative (see random part in Table 2). This suggests that acceptance of reforms depends on the characteristics of each country. The key question is whether these cross-national differences follow a consistent pattern, as we have hypothesized. To answer this question, we now discuss the results of our multivariate analysis.

Table 2 shows the results of the multilevel multinomial logistic regression. The dependent variable is the support for three, pension policy, reform options: lower pensions, increase contributions, work longer, and the reference category no change. In all, the results in Table 2 support the hypotheses derived from the negative policy feedbacks approach in the case of lowering pensions and increasing social security contributions. However, they also provide support for the positive policy effect in the case of working longer.

To test each hypothesis, we structure the discussion around the type of measure. Regarding support for lower pensions, elderly poverty has a significant and negative effect, while the average replacement rate has an insignificant effect. This is consistent with the negative feedback approach (H1b) and inconsistent with the positive feedback approach (H1a). The degree of public pension generosity measured by the replacement rate is unrelated to support for pension cutbacks. But as the elderly poverty ratio increases, the pension system fails to achieve one of its central goals: the redistribution implied by the inter-generational contract that supports social security. This has an impact on the way public opinion evaluates different policy alternatives by reducing people's willingness to accept cuts in pension benefits.

Regarding support for increases in contributions, social security contributions of employees has a negative and significant effect. This is also consistent with the negative feedback approach (H2b)—and contrary to the

 Table 1
 Descriptive statistics

Variable	Mean	SD	Minimum	Maximum
Average replacement rate	45.249	10.097	24.848	63.804
Population aged 65 or older	15.653	1.967	11.2	19.5
Statutory age of retirement	62.882	1.912	59.5	66.0
Social security contributions	3.517	1.886	0.3	7.8
Elderly poverty	17.660	8.720	5.3	50.3
Female	0.553		0	1
Aged 65 or older	0.199		0	1
Professional	0.047		0	1
Manager	0.087		0	1
Housewife	0.092		0	1
Unemployed	0.061		0	1
Retired	0.292		0	1
Supervisor	0.149		0	1
Employer	0.209		0	1
Years of education	18.674	4.710	5	50

 Table 2
 Acceptance of pension policy reforms. Coefficients of multilevel multinomial logistic regression

	Lower pensions	Increase contributions	Work longer	
Fixed part				
Country-level variables				
Average replacement rate	0.005 (0.015)	0.018 (0.014)	0.030 (0.018)	
Population aged 65 or older	-0.055 (0.071)	-0.159** (0.064)	-0.122 (0.085)	
Elderly poverty	$-0.047^{***} (0.017)$	-0.007 (0.015)	-0.022 (0.020)	
Social security contributions	-0.060 (0.089)	-0.182^{**} (0.081)	-0.215** (0.108)	
Statutory retirement age	0.114 (0.077)	0.135* (0.070)	0.162* (0.093)	
Individual-level variables				
Reference category: Male				
Female	-0.047 (0.046)	0.028 (0.031)	-0.160***(0.035)	
Ref. cat.: Aged 65 or younger				
Aged 65 or older	-0.131* (0.075)	-0.071 (0.050)	0.173*** (0.055)	
Ref. cat.: self-employed				
Professional	0.117 (0.133)	0.404^{***} (0.094)	0.031 (0.100)	
Manager	-0.093 (0.114)	0.365*** (0.080)	-0.174** (0.086)	
Housewife	0.136 (0.115)	0.397*** (0.082)	0.083 (0.088)	
Unemployed	0.265** (0.120)	0.491*** (0.087)	0.237** (0.092)	
Retired	0.104 (0.103)	0.459*** (0.074)	0.041 (0.078)	
Supervisor	0.018 (0.101)	0.294*** (0.073)	-0.306***(0.079)	
Employer	-0.014 (0.097)	0.348*** (0.070)	-0.157** (0.075)	
Years of education	0.007 (0.006)	0.005 (0.004)	0.029***(0.004)	
Constant	-6.116 (4.905)	-5.754 (4.431)	-8.767 (5.882)	
Random part				
Var (constant)	0.514 (0.146)	0.427 (0.118)	0.753 (0.209)	
No. obs. level 1	18,665			
No. obs. level 2		27		

^{*}P<0.1; **P<0.05; ***P<0.01. Values in parentheses are standard errors.

positive policy feedback approach (*H2a*). Increasing concerns about the potential, negative, macroeconomic consequences of high social security contributions offset the effect of strengthened collective norms about social reciprocity produced by higher tax rates. This implies that although increasing contributions is the most popular alternative in almost every country, public opinion reacts negatively to it as effective contributions get larger.

Regarding support for working longer, the effect of the statutory age of retirement is positive and significant. In contrast to the other two considered measures, this is consistent with the positive policy feedback approach (H3a) and inconsistent with that of the negative feedback approach (H3b). This result means that in countries with low statutory pensionable ages there is strong resistance to increasing this age, while populations that must work longer are likely to accept retirement age increases.

In relation to the control variables, population aged 65 or older does have a negative and significant impact on the willingness to accept increased social security contributions. 10 One possible explanation for the negative relationship between population aging and support for contribution increases stresses the role of additional fiscal pressures on already low income groups. Because the elderly tend to suffer more income deprivation and, in a few countries, also pay social security contributions (OECD, 2005)—more aged societies may be particularly reluctant to accept contribution increases that would put additional economic strain on the elderly population. Furthermore, social security contributions has a negative and significant effect on the willingness to work longer, suggesting that individuals are less willing to work longer if they must pay a large share of contributions during their working life. This is consistent with a rational approach in which individuals are maximizing their total income across the life-cycle (Haider and Solon, 2006).

In addition, we estimate a multinomial model in which we include interaction terms between the relevant aggregate variables and an age dummy to test whether the impact of country variables varies between the elderly and the working-age population. In this case, the variable aged 60 or older also has a random slope. However, none of the interactions turn out to be significant. Hence, we can conclude that the effect of country variables do not vary across age groups. These results are available upon request.

To gain a more detailed understanding about the dynamics of public support for pension reform, we used the estimates from the multilevel models in Table 2 to simulate the probabilities of supporting each policy alternative at different levels of the variables of interest. The simulated probabilities depicted in Figure 2 are computed for a male, aged 59 or younger, and a professional while holding all the continuous variables at their means. For an average individual, the probability of supporting cutbacks in pension benefits ranges from 0.04, when elderly poverty is more than 50 per cent, to 0.19, when elderly poverty is 5.40 per cent. Regarding the predicted probabilities of accepting an increase in contributions, for the same hypothetical individual, the probability is 0.47, when the contribution ratio is 0.3 per cent, but falls to 0.33, when the ratio reaches 8.0 per cent. Finally, the probability of supporting a postponement in the retirement age ranges from 0.21 when the retirement age is 59 to 0.29 when the retirement age is 66. Figure 2 indicates that elderly poverty, the level of social security contributions, and the statutory retirement age have a substantial impact on the support for pension cuts, contribution increases, and statutory retirement age increases, respectively.

Discussion

Pension reforms are at the top of the political agenda in many European countries, although public preferences for different policy alternatives are not yet well understood. While the data presented earlier indicate that the European public is willing to accept some form of pension reform, they also indicate substantial, cross-national variations in support for specific measures. This raises the questions of whether tolerance for reform follows a coherent pattern across countries, or whether national differences are linked to idiosyncratic historical factors. To reconnect welfare attitudes analysis to critical choices in the contemporary political economy of European countries and identify the relationship between the domestic context and support for realistic policy alternatives, this article conducts a multilevel analysis of the determinants of three, pragmatic, pension policy options.

To analyze this question we examine the explanatory power of the positive and negative policy feedback approaches. The positive policy feedback approach argues that existing policies foster personal interests in available benefits and commitment to their moral foundations. Policies, therefore, generate preferences that reinforce past policymaking trends. This approach predicts that under conditions of less generous pension systems, higher social security contributions and higher statutory pensionable ages, public opinion should be more tolerant towards pension cutbacks, increases in contributions and increases in the statutory retirement age, respectively. The negative policy feedback approach

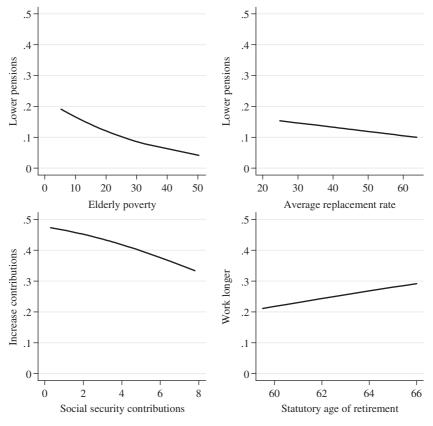


Figure 2 Plots with the simulated probabilities of supporting reductions of public pension benefits, increases in social security contributions, and the postponement of retirement

argues that existing policies produce unforeseen consequences. In many contexts, unexpected and unacceptable socioeconomic costs transform perceptions of individual interests, generating preferences that support a policy reversal. This approach predicts that high elderly poverty (linked to meagre pensions), high social security contributions, and high pensionable ages should reduce the tolerance towards pension cutbacks, increases in contributions, and increases in the statutory retirement age, respectively.

Although our analysis provides partial support to the positive feedback approach, most of the evidence is consistent with the negative feedback approach. Three main findings emerge from the empirical examination. First, in countries with a higher statutory retirement age, citizens are more likely to endorse a postponement of the retirement age. As predicted by the positive feedback approach, the average-aged worker has more opportunities to adapt his or her retirement income strategy to changes in the pensionable age precisely in countries

with higher pensionable ages, which affects individual policy preferences.

Second, in line with the negative feedback approach, in countries with higher social security contributions, citizens are less likely to support further increases in these rates. This reflects disquiet with the unintended consequences of previous increases. In countries with already high social security rates, there have been increasing concerns about the potential, negative macroeconomic impact of very high social security contributions on employment growth. As a result, in countries with higher social security contributions, the public is less supportive of further increases that could create additional difficulties in the fight against unemployment.

Third, also in line with the negative feedback approach, in countries with higher elderly poverty, citizens are less likely to support cuts in pension benefits. Higher levels of elderly poverty generate unforeseen grievances among pensioners and their relatives, who are inadequately covered by the public

pension system and demand benefit levels of those adequately covered. Therefore, on average, citizens in countries with high elderly poverty are more supportive of pension increases and less likely to demand pension cutbacks that would exacerbate the pension inadequacy problem. In all, the results are mainly consistent with the negative feedback approach. They indicate that two of the three policy conditions (insufficient poverty-prevention benefits and high social security rates) considered in this study induce consequences that reduce preferences in favor of persevering in the policy trajectory.

The findings of this study—that institutional conditions and institutional outcomes shape attitudes towards pragmatic pension policy measures—suggest the potential for further comparative research on public attitudes towards critical dilemmas in the political economy of European welfare states. In this sense, future comparative research could shed light on attitudes towards prioritizing efforts against child poverty vis-à-vis other forms of poverty (Esping-Andersen, 2002), or the appropriate balance between active or passive unemployment programs (Bonoli, 2009).

Moreover, the conclusions of this study open the question of why contemporary European pension policies generate stronger negative than positive attitudinal feedback effects. In this regard, Weaver (2010) argues that objective conditions (e.g. the maturity of the pension system) tend to determine the relative political influence of each type of feedback. However, to be influential, objective conditions must be defined and mobilized by collective actors. Public perceptions and collective framing projects provide a key linkage between policies themselves and the predominance of negative or positive feedback. This suggests that negative feedback prevails in European pension policy attitudes because determinate actors succeed in generalizing frames that underlie the unforeseen and negative consequences of existing policies. Future research could contribute to our understanding of the political effects of policies through analyses of interpretative debates of socioeconomic indicators and the role played by social actors in these interpretations.

Notes

1. Although Myles and Pierson (2001) and Weaver (2010) mainly use the notions of positive and negative policy feedbacks, respectively, to explain structural pension reforms, they can be applied also to incremental reforms.

- 2. In relation to specific programs, scholars have found more consistent results with the positive policy feedbacks approach. Support for national health care provision is larger in countries with hierarchically integrated systems (Jordan, 2010) and when doctors spend more time with patients (Wendt et al., 2009).
- 3 See note 1.
- 4 See note 2.
- 5. In this regard, negative policy outcomes may induce changes in policy preferences linearly, or, as noticed by Pierson (2004) in relation to positive feedback effects, they may accumulate until a certain tipping point when they trigger a sudden and substantial change in policy preferences.
- **6.** Moreover, Europeans tend to be well informed about the poverty levels in their area. At the country level, the objective poverty level (Eurostat, 2009) is strongly correlated with the percentage of citizens who consider that there is poverty in their area (European Commission, 2007) (Pearson correlation = 0.504; *P* < 0.05).
- 7. Beyond the Eurobarometer 66.3 and the ISSP modules, none of the four waves of the European Social Survey (Norwegian Social Science Data Services, 2008) include questions on potential pension policy measures.
- The dataset includes a fourth spontaneous option ('a combination of all three'), which was not included in the initial questionnaire. Note, however, that the presence or absence of the fourth choice has no effect on the estimates of the multinomial logit, because the assumption of IIA (independence of irrelevant alternatives) holds, implying that the relative probability of choosing one alternative does not depend on other alternatives (Álvarez 1998: Nagler, 60-61; Skrondal Rabe-Hesketh, 2003). In our case, the Hausman-McFadden test takes a negative value in the multinomial logit, which is indicative that IIA holds (Hausman and McFadden, 1984) and the results are consistent whether we include the fifth option. In addition, the computational burden of such a multilevel model is reduced dramatically when we take into account four categories instead of
- **9.** In addition, we use a MCMC (Markov Chain Monte Carlo) algorithm, as proposed by Browne and Draper (2006), to check the robustness of the

10. As an additional robustness check, we estimate the model using the baseline model and the projected share of population aged 65 or older in 2025 (Eurostat, 2006). However, the impact and significance of the relevant country variables remain unchanged. In addition, population aged 65 or older in 2025 is an insignificant predictor of the three response alternatives. These results are available upon request.

Acknowledgements

The authors thank David Brady, Inés Calzada, Richard Frederick, Achim Goerres, Jane Gringrich, Jan Heisig, James Patterson, and attentive audiences at the SASE (Society for the Advancement of Socio-Economics) 2011 Annual Conference and at the ECPR (European Consortium for Political Research) 2011 General Conference for thoughtful comments on earlier drafts. All remaining errors are the authors' sole responsibility.

Funding

This project was partially funded by the A.SK Program at the Wissenschaftszentrum Berlin für Sozialforschung (WZB) and by the Spanish Ministry of Science and Innovation (CSO2011-29346).

References

- Álvarez, R. M. and Nagler, J. (1998). When politics and models collide: estimating models of multiparty competition. American Journal of Political Science, 42, 55–96.
- Anderson, K. and Immergut, E. M. (2007). Sweden: after social democratic hegemony. In Immergut, E. M., Anderson, K. M. and Schulze, I. (Eds.), *Handbook of West European Pension Politics*. Oxford: Oxford University Press, pp. 349–396.
- Béland, D. (2010). Reconsidering policy feedback: how policies affect politics. *Administration & Society*, **42**, 568–590.
- Blekesaune, M. and Quadagno, J. (2003). Public attitudes toward welfare state policies: a comparative analysis of 24 nation. *European Sociological Review*, **19**, 415–427.
- Boeri, T. *et al.* (2001). Would you like to shrink the welfare state? A survey of European citizens. *Economic Policy*, **16**, 7+9–50.

- Bonoli, G. (2009). Adapting employment policies to postindustrial labour market risks. In Guigni, M. (Ed.), *The Politics of Unemployment in Europe: Policy Perspectives and Collection Action*. Surrey: Ashgate.
- Bonoli, G. and Palier, B. (2007). When past reforms open new opportunities: comparing old-age insurance reforms in Bismarckian welfare systems. In Palier, B. and Martin, C. (Eds.), *Reforming the Bismarckian Welfare State*. Malden: Blackwell Publishing.
- Browne, W. and Draper, D. (2006). A comparison of Bayesian and likelihood-based methods for fitting multilevel models. *Bayesian Analysis*, 1, 473–514.
- Busemeyer, M. R., Goerres, A. and Weschle, S. (2009). Attitudes towards redistributive spending in an era of demographic aging: the rival pressures from age and income in 14 OECD countries. *Journal of European Social Policy*, **19**, 195–212.
- Callens, M. and Croux, C. (2005). Performance of likelihood based estimation methods for multilevel binary regression models. *Journal of Statistical Com*putation and Simulation, 75, 1003–1017.
- Campbell, A. L. (2003). How Policies Make Citizens: Senior Political Activism and the American Welfare State. Princeton: Princeton University Press.
- Casey, B. H. (2009). Learning across borders: labour market and social policies. *International Social* Security Review, 62, 3–21.
- Conceição-Heldt, E. da. (2007). France: the importance of the electoral cycle. In Immergut, E. M., Anderson, K. M. and Schulze, I. (Eds.), *Handbook of West European Pension Politics*. Oxford: Oxford University Press.
- Esping-Andersen, G. (1990). The Three Worlds of Welfare Capitalism. Princeton: Princeton University Press.
- Esping-Andersen, G. (1996). Welfare States without work: the impasse of labour shedding and familialism in continental European social policy. In Esping-Andersen, G. (Ed.), Welfare States in Transition: National Adaptations in Global Economies. London: Sage, pp. 66–88.
- Esping-Andersen, G. (2002). A child-centered social investment strategy. In Esping-Andersen, G., Gallie, D., Hemerijck, A. and Myles, J. (Eds.), *Why We Need a New Welfare State*. Oxford: Oxford University Press, pp. 68–96.
- Esping-Andersen, G. (2010). Prologue: what does it mean to break with Bismarck?. In Palier, B. (Ed.), A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe Chicago, IL: Chicago University Press, pp. 11–19.

- European Commission. (2007). Special Eurobarometer 273/Wave 66.3: European Social Reality. Brussels: European Commission.
- Eurostat. (2007). Taxation Trends in the European Union. Brussels: Eurostat.
- Eurostat. (2008). The Life of Women and Men in Europe: A Statistical Portrait. Brussels: Eurostat.
- Eurostat (2009). At-risk-of-poverty rate of elderly people, by gender. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_pnp1&lang=en? [accessed 15 June 2012].
- Eurostat (2010). Social Protection (ESPROSS), available from http://epp.eurostat.ec.europa.eu/portal/page/portal/social_protection/data/database [accessed 14 June 2012].
- Frommert, D. et al. (2009). Pension systems and the challenge of population ageing: what does the public think?. In Edmondson, R. and Kondratowitz, H.-J. (Eds.), Valuing Older People: A Humanist Approach to Ageing Bristol: Policy Press.
- Gelissen, J. (2001). Old-age pensions: individual or collective responsibility? An investigation of public opinion across European Welfare States. *European Societies*, 3, 495–523.
- Goerres, A. and Prinzen, K. (2011). Can we improve the measurement of attitudes towards the welfare state? A constructive critique of survey instruments with evidence from focus groups. *Social Indicators Research*, **10**, 1–19.
- Goldstein, H. (2010). Multilevel Statistical Models. Hoboken, NJ: Wiley.
- Goldstein, H. and Rasbash, J. (1996). Improved approximations for multilevel models with binary responses. *Journal of the Royal Statistical Society*, **A 159**, 505–513.
- Hausman, J. A. and McFadden, D. L. (1984). Specification tests for the multinomial logit model. *Econometrica*, 52, 1219–1240.
- Haider, S. and Solon, G. (2006). Life-cycle variation in the association between current and lifetime earnings. http://www.nber.org/papers/w11943 [accessed 15 June 2012].
- Hinrichs, K. (2005). New century—new paradigm: pension reforms in Germany. In Bonoli, G. and Shinkawa, T. (Eds.), Ageing and Pension Reform Around the World. Evidence from Eleven Countries. Cheltenham: Edward Elgar.
- Heclo, H. (1974). Modern Social Politics in Britain and Sweden. New Haven: Yale University Press.
- Jordan, J. (2010). Institutional feedback and support for the welfare state: the case of national health care. Comparative Political Studies, 43, 862–885.
- Kohli, M. (2008). Generational equity. Concepts and attitudes. In Arza, C. and Kohli, M. (Eds.), *Pension*

- Reform in Europe: Politics, Policies and Outcomes. London: Routledge, pp. 197–214.
- Kumlin, S. (2007). The Welfare State: values, policy preferences, and performance evaluations. In Dalton, R. J. and Klingemann, H.-D. (Eds.), *The* Oxford Handbooks of Political Behavior. Oxford: Oxford University Press, pp. 362–383.
- Larsen, C. A. (2008). The institutional logic of welfare attitudes. How welfare regimes influence public support? Comparative Political Studies, 41, 145–168.
- Lowi, T. (1964). American business, public policy, casestudies, and political theory. World Politics, 16, 677–715.
- Lynch, J. and Myrskylä, M. (2009). Always the third rail? Pension income and policy preferences in European democracies. *Comparative Political Studies*, **42**, 1–30.
- Mackenbach, J. P. *et al.* (1997). Socioeconomic inequalities in morbidity and mortality in western Europe. *The Lancet*, **349**, 1655–1659.
- Mau, S. (2003). The Moral Economy of Welfare States: Britain and Germany Compared. New York: Routledge.
- Merton, R. K. (1936). The unanticipated consequences of purposive social action. *American Sociological Review*, 1, 894–904.
- Mettler, S. and Soss, J. (2004). The consequences of public policy for democratic citizenship: bridging policy studies and mass politics. *Perspectives on Politics*, 2, 55–73.
- Myles, J. (2003). What justice requires: pension reform in ageing societies. *Journal of European Social Policy*, **13**, 264–269.
- Myles, J. and Pierson, P. (2001). The comparative political economy of pension reform. In Pierson, P. (Ed.), *The New Politics of the Welfare State*. Oxford: Oxford University Press.
- Myles, J. and Quadagno, J. (1997). Recent trends in public pension reform: a comparative view. In Banting, K. and Boadway, R. (Eds.), Reform of Retirement Income Policy. International and Canadian Perspectives. Kingston: Queen's University Press.
- North, D. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Norwegian Social Science Data Services (2008). ESS Round 4: European Social Survey Round 4 Data.
- OECD. (1988). Reforming Public Pensions. Paris: OECD.
- OECD. (2005). Pensions at a Glance. Paris: OECD.

595-628.

- OECD. (2006). Live Longer, Work Longer. Paris: OECD. OECD (2008). Growing Unequal? Income Distribution
- and Poverty in OECD Countries. Paris: OECD.
 Pierson, P. (1993). When effects become cause. Policy feedback and political change. World Politics, 45,

- Pierson, P. (1994). Dismantling the welfare state? Reagan, Thatcher, and the politics of retrenchment. Cambridge: Cambridge University Press.
- Pierson, P. (2000). Increasing returns, path dependence, and the study of politics. American Political Science Review, 94, 251–267.
- Pierson, P. (2004). Politics in Time: History, Institutions and Social Analysis. Princeton: Princeton University Press.
- Queisser, M. (2000). Pension reform and international organizations: from conflict to convergence. *International Social Security Review*, **53**, 31–45.
- Salomäki, A. (2006). Public pension expenditure in the EPC and the European Commission Projections: an analysis of the projection results. European Economy -Economic Papers. No. 268.
- Saraceno, C. (2010). Social inequalities in facing old-age dependency: a bi-generational perspective. *Journal of European Social Policy*, **20**, 32–44.
- Scharpf, F. W. (2000). Economic changes, vulnerabilities, and institutional capabilities. In Scharpf, F. W. and Schmidt, V. A. (Eds.), Welfare and Work in the Open Economy. Volume I, From Vulnerability to Competitiveness. Oxford: Oxford University Press.
- Skocpol, T. (1992). Protecting Soldiers and Mothers. Cambridge, MA: Harvard University.
- Skrondal, A. and Rabe-Hesketh, S. (2003). Multilevel logistic regression for polytomous data and rankings. *Psychometrika*, **68**, 267–287.
- Streeck, W. and Thelen, K. (2005). Introduction: institutional change in advanced political economies. In

- Thelen, K. and Streeck, W. (Eds.), *Beyond Continuity: Institutional Change in Advanced Political Economies*. Oxford: Oxford University Press.
- Svallfors, S. (2007). Conclusions: the past and future of political sociology. In Svallfors, S. (Ed.), *The Political Sociology of the Welfare State: Institutions, Social Cleavages, and Orientations.* Stanford: Stanford University Press.
- Svallfors, S. (2011). Public attitudes. In Svallfors, S. (Ed.), Oxford Handbook of Comparative Social Policy. Oxford: Oxford University Press.
- Thelen, K. (2004). How Institutions Evolve: The Political Economy of Skills in Germany, Britain, the United States, and Japan. Cambridge: Cambridge University Press.
- Weakliem, D. L. (2005). Public opinion, political attitudes, and ideology. In Janoski, T., Alford, R. R, Hicks, A. and Schwartz, M. (Eds.), The Handbook of Political Sociology: States, Civil Societies, and Globalization. Cambridge: Cambridge University Press.
- Weaver, K. (2010). Path and forks or chutes and ladders?: negative feedbacks and policy regime change. *Journal of Public Policy*, **30**, 137–162.
- Wendt, C. et al. (2009). How do Europeans perceive their healthcare system? Patterns of satisfaction and preference for state involvement in the field of healthcare. European Sociological Review, 26, 177–192.
- Whiteford, P. and Whitehouse, E. (2006). Pension challenges and pension reforms in OECD countries. *Oxford Review of Economic Policy*, **22**, 78–93.