Policy Feedbacks in Retirement?
Public Pension Income and Pension Policy Preferences in Europe

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*** EARLY DRAFT!!: COMMENTS MOST WELCOME ***

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Introduction

Ten years after the publication of Paul Pierson’s “Dismantling the Welfare State?” (1994) it has become commonplace to assert that welfare state institutions generate powerful policy feedback effects. Most obviously, social transfer programs generate beneficiary groups who are dependent on benefits and may be motivated to act to defend these programs from attempted retrenchment. That social programs have the potential to generate their own political support is intuitively plausible, and it resonates with what we know, or think we know, about constituency politics both in the US and elsewhere. Public pensions, in particular, are the “third rail” of politics, because threatened cuts are thought to mobilize beneficiaries to punish the politicians who propose retrenchment.

Yet, perhaps because the theorized constituency feedback effect seems so utterly unassailable, political scientists have shown remarkably little inclination to test it.¹ This paper submits the constituency feedback effect theory to a systematic, cross-national, empirical evaluation. The data are drawn from two cross-national European surveys: Wave 1 (1994) of the European Community Household Panel (a household income survey) and a 1992 Eurobarometer survey with a battery of attitudinal questions on social programs. Cross-dataset imputation is used to combine individual-level information about income from social programs and political attitudes towards these programs in a single dataset. This allows for an empirical test of the received wisdom that the people who benefit most from public pensions are in fact more likely to support these policies in the face of proposed retrenchment.

¹ Andrea Campbell’s (2003) work on the United States stands alone in demonstrating empirically that seniors act in response to threats against Social Security, and that politicians respond by protecting the social program in question.
To anticipate, I find that the received wisdom does not in fact hold true in any European country. Elderly Europeans who derive a large share of their household income from public pensions and related social programs are, in general and other things being equal, no more likely to oppose retrenchment of public pensions than their age-mates who are less dependent on welfare state programs. Further, the elderly Europeans who say they benefit most from pensions are in fact the least likely to oppose cuts to the level of public pensions.

**Policy Feedbacks and Public Pensions**

The constituency feedback model rests on a baseline assumption that beneficiaries of social programs are self-interested voters\(^2\). Those who receive benefits will fight to protect these benefits. They will fight harder the more important these benefits are to them; and they will defend “their” programs even if in so doing they threaten to crowd out other socially desirable spending. At the same time, politicians are “blame-avoiders” (Weaver 1987, Pierson 1993 and 1994) whose own office-seeking behavior requires them to avoid rousing the ire of the politically mobilized beneficiaries of social programs. The combination of self-interested beneficiaries and blame-avoiding politicians leads to a powerful inertial force in social policy: social transfer programs over time create constituencies that will come to the defense of these programs if they are threatened.

Many layers of complexity could be added to this story. The self-interested voting of program beneficiaries, motivated by their receipt of cash benefits, is only one pathway by which social programs generate political constituencies. Most scholars who

\(^2\) Or directly related to voters – non-elderly adults may act as proxies for either their children or their elderly parents.
have proposed policy feedback models go well beyond this baseline, pointing to other aspects of social policy that can have important effects on whether and how beneficiary groups mobilize. The degree of stigma associated with benefits, whether programs are fragmented or universal, and whether benefits are administered in a particularistic or bureaucratic-rational manner can all contribute to policy feedback effects as well. These additional considerations also point to more complex microfoundational assumptions: voters are motivated by ideational concerns as well as material self-interest; the mobilization of beneficiaries is contingent not only on the level of benefits, but also on group dynamics and identities; politicians’ “investment” in social programs may go well beyond what their constituencies demand.

Yet despite the complexity of the actual process by which policies generate constituency feedback effects, some self-interested voting on the basis of welfare benefits would seem to be a minimum condition for a constituency feedback effect to occur. The policy feedback literature thus depends, in the final instance, on a relationship between beneficiaries’ receipt of income from social programs, and their political behavior in defense of these programs. Such a relationship would likely emerge most clearly in the arena of public pensions, where benefit levels should be particularly politically salient for recipients because pensions constitute a relatively large part of many seniors’ household income.

Pierson (1994) posits just such a logic underlying the political dynamics of pension system reform in the US and the UK. Pierson envisions a process considerably more complex than a political exchange between self-interested beneficiary-voters and blame-avoiding politicians. Nevertheless his theory assumes as a baseline that pension
beneficiaries will act to protect “their” programs, unless obstacles to political
mobilization are thrown in their way by politicians who fear punishment for imposing
cuts. Yet Pierson provides little empirical support for the microfoundational assumptions
of his policy feedback theory.

Campbell’s (2003) work on the constituency feedback effects of Social Security
programs in the United States, like Pierson’s, envisions a variety of policy feedback
mechanisms. Still, Campbell’s work confirms that self-interest is an important part of the
more complex story explaining the political mobilization of elderly voters in defense of
Social Security. Social Security has prospered, Campbell argues, primarily because
seniors who depend for their livelihood on Social Security benefits participate
disproportionately in defense of the program, and convey a strong message to legislators
about their opposition to cutbacks. Unlike Pierson’s work, however, Campbell’s is able
to offer empirical confirmation of a causal chain running from receipt of pension benefits
to beneficiaries’ political behavior in defense of those benefits to politicians’ actions to
defend public pension programs.

Campbell’s work appears to be unique, though. In January 2003 I asked members
of the Pension Reform Interest Group email list\(^3\) – some 245 academic and public policy
researchers active in this field internationally – for references to research that considered
the link between income from benefits, on the one hand, and political attitudes or political
behavior in defense of those benefits, on the other. While a number of subscribers to the
list provided references to work that assumed such a link, this query did not unearth a
single source that demonstrated it.

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Numerous single-country and comparative studies of contemporary European
politics do make reference to the influence of organized elderly lobbies and politically mobilized elderly voters on both party positions vis-à-vis welfare reform, and election outcomes when such reforms are at issue. Still other research elucidates the causes for variation across individuals in support for different welfare state programs. But we know remarkably little about the microfoundations linking reliance on public social benefits like pensions to the politics surrounding these programs in countries outside of the United States.

Are the political foundations of pension reform politics in the United States similar to those in other countries? Are citizens in other countries as likely to be motivated in their pension reform preferences by self-interest, or do partisan, union, or family attachments play a larger role in contexts outside of the United States? Do different types of pension systems – more or less fragmented, more or less generous, citizenship-based versus occupationalist, means-tested versus universal – have different underlying logics of constituency support? Even if we assume that political behavior has a universal basis in self-interest, what beneficiaries get out of public pension systems varies across nations, and thus different kinds of pension systems might generate constituency-based pressures for reform that differ in their intensity and distribution across the electorate. A cross-national comparison of the influence of pension benefits on beneficiaries’ political behavior surrounding pensions is thus a crucial foundation stone for an empirically verified theory of policy feedback.

**Measuring Policy Feedbacks with Political Beliefs?**

Having raised expectations, I must now dash them. The data necessary to
construct a relationship between use of pension benefits and political behavior on behalf of these benefits – data equivalent to the Roper surveys utilized by Campbell -- are not available for European countries. For a variety of reasons, surveys of Europeans do not tend to ask detailed questions about political behavior. The range of measurable political behaviors is truncated in comparison with the United States because most election campaigns in Europe are publicly financed and the highly professionalized mass parties that characterize European polities require few volunteers. These features make donating time and money to political campaigns atypical behaviors in the European context, even for high-SES individuals. In addition, the programmatic nature of political competition in many of the countries of Northwestern Europe means that direct contacting of elected officials is unusual, even for "constituency service"-type requests. In the more particularistic polities of Southern Europe, of course, direct contacting is met with considerable opprobrium and thus tends to be underreported even when surveys do ask (Sani 1989).

The most common behavior items on European surveys regard voting, vote choice, and participation in mass protests. These items don't tell us why pension beneficiaries cast the votes they report having cast, and if they demonstrate, we don't know whether they demonstrate around the issue of pension reform or some other issue. Although less precise than we might want, this kind of information would be helpful, if we had it. Unfortunately, even these behavior items are not available in either of the cross-national data sources I use here. With the data we have, it is possible only to examine the relationships between reliance on public pensions and attitudes towards pension systems.
Attitudes towards pension system reform are clearly weak proxies for eventual political behavior surrounding this issue. It is relatively easy to express support for a program, or a political movement that acts in defense of the program, and more costly to take direct action in a program's defense. Still, at a very minimum, we would expect to see some relationship between expressed attitudes towards the pension system and behavior in the voting booth or in the streets. But even this “second-best” test of the political impact of reliance on public pensions is more difficult to conduct than one might imagine. This is because cross-national public opinion surveys contain scant information about household income – information that is crucial to estimating the extent of a respondent’s reliance on welfare state benefits. At the same time, household income surveys that provide detailed information about the types of social benefits utilized by individuals rarely contain any information about social or political attitudes. In order to test the policy feedback model directly at the individual level, and to evaluate the size and direction of such an effect in different national contexts, it is necessary to somehow bring together information on the source of household income and on support for welfare state programs. Before exploring the imputation and estimation techniques, though, it is necessary to specify more precisely the hypotheses to be tested.

Hypotheses

Accumulated wisdom from the comparative study of welfare states suggests that generous, comprehensive social programs enjoy broader political support than targeted programs and those that offer more limited financial assistance. The mechanisms that might produce these differences in public support are many, including the stigmatizing
effects of means-tested benefits. And other aspects of pension system organization may contribute, to be sure, to the strength of political support among beneficiaries. The most obvious explanation, however, for why generous pension systems receive more support has to do with the heightened salience of generous benefits. When public benefits are an important source of income, rather than a marginal one, people are more likely to act to defend these benefits.

_Benefit from pensions._ The micro-level implication of this macro-level theory is that, _ceteris paribus_, the more a household benefits from public pensions, the more likely it is that a respondent from that household will defend the pension system status quo against attempted retrenchment. My analysis seeks to evaluate whether this blanket claim is a realistic one, or whether we need to pay more attention to other conditions that might influence whether a person supports or opposes cuts to social programs. The main alternatives to the basic hypothesis of self-interested behavior in defense of pensions revolve around alternative influences on an individual’s level of support for public pensions.

_Generalized support for the welfare state._ The level of support for the welfare state more generally may trump any personal stake that pension recipients feel in pension programs as a result of their entitlements. In practice the causal arrows in the relationships among income from public pensions, support for public pensions, and support for the welfare state more generally could be difficult to disentangle. A more supportive attitude towards the welfare state in general might make the income received from pensions a less important predictor of attitudes towards public pensions, as I just suggested. But receiving generous pension benefits could also make beneficiaries more
supportive of both the pension system and the welfare state more generally. In either case, generalized attitudes towards the welfare state as a whole are an important control, even if we have trouble interpreting precisely the relationship between use of old-age benefits, attitudes towards the welfare state in general, and attitudes towards the pension system in particular.

**Other financial resources.** While we expect that the percentage of income supplied by pensions might affect the degree of protectiveness people feel towards the pension system, it might also be the case that individuals’ sense of dependence on the pension system is affected by their (actual or perceived) level of resources more generally. People who are, or who feel, poor may be inclined to strongly support preserving the level of public pensions, regardless of how much of their income comes from pensions, because they perceive first-hand the importance of a social safety net. Alternatively, people who gain little from the pension system and who are also poor may be more likely to believe that the system is not working well, and should be modified. We need to ask whether income derived from pensions has an effect on attitudes towards pension system retrenchment net of a household’s broader economic status.

**Political engagement.** Individuals who benefit from social programs and who are more educated, more politically aware, and more mobilized into politics may be more likely to express support for the welfare state programs they benefit from, and opposition to threatened cuts. Alternatively, highly educated and politicized individuals may be more likely to support cuts in pension programs when there is a case to be made that over-generous pension programs are unsustainable or crowd out the provision of other important social benefits. The causal pathways may again be difficult to interpret; but it
is important to include these kinds of variables as controls in order to determine whether income from pension benefits has any independent effect on attitudes towards these programs.

**Partisanship and Ideology.** Partisan and ideological identifications may also be important influences on attitudes towards social programs. Aggregate-level analyses have shown that the (cumulative) vote shares, seat shares, and/or cabinet shares of Christian democratic and social democratic parties have distinctive effects on pension spending (eg. Williamson and Pampel 1993), the structure of public pension systems (eg. Esping-Andersen 1990), and pension system retrenchment (eg. Huber and Stephens 2001). Individual-level partisan or ideological preferences may also be related to support for the pension system status quo. The self-interest-based policy feedback hypothesis would be strongly supported, on the other hand, if it were demonstrated that income derived from pensions had an effect on attitudes towards these programs net of partisanship or ideological self-placement.  

**National context: norms, institutions, and politics.** Any of the relationships discussed above might also vary cross-nationally due to the different institutional configurations and political traditions that surround the welfare states in different countries. The null-hypothesis version of this claim is that the relationship between support for pension policies and income from pensions is the same regardless of the national context. It is worth investigating alternative claims.

Attitudes towards pension reform among similarly-situated pensioners may depend on institutional features such as means-testing of benefits, flat-rate versus

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4 Increased willingness to support pensioners' parties among those highly dependent on public pensions would be even stronger confirmation, since supporting a pensioners' party would involve breaking away from often quite longstanding attachments to other parties.
earnings-related benefits, payroll financing versus financing from general revenues, or
the degree of fragmentation versus universalism. Attitudes towards pensions may also
depend on societal norms about intergenerational resource transfers and the degree of
support that pensioners can reasonably expect from, for example, adult children.

Features of the policy reform environment in a given country – widespread public
consensus that pension spending is too high or that benefits are not generous enough, or
longstanding partisan commitments to particular welfare state programs – could also
affect the relationship between income from pensions and attitudes towards pensions.
For all of these reasons, we should pay close attention to the possibility of cross-national
variation in the relationship between receipt of benefits and attitudes towards those
benefits.

Measures and Model specification

I test for the presence of constituency feedback effects at the individual level in a
sample of approximately 3,200 European citizens, all aged 50 and above and either
retired from paid work or self-defined housewives. Using ordered logit analysis, I seek
to answer one very simple question: does "benefiting" from public pensions have a
statistically significant effect on the likelihood that an individual will oppose pension
system retrenchment? Measures of the key dependent and independent variables, as well
as the controls outlined in the section above, are drawn from two datasets.

Eurobarometer 37.1, conducted in 1992, polled citizens on attitudes towards social

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5 The statutory retirement age in some European countries is as low as 50, and in many others incentives
for early retirement mean that large numbers of pensioners are well below the age at which we classify
people as "senior citizens" in the United States.

6 Unfortunately it is not possible in this dataset to distinguish housewives who are married to retirees from
those married to workers over the age of 50.
benefits and the treatment of the elderly in the then twelve member countries of the European Union. Wave 1 of the European Community Household Panel, conducted in 1994, contains detailed information on household income both from the market and from a variety of social programs.

The dependent variables: Indicators of opposition to retrenchment. Our dependent variable, opposition to pension system retrenchment, is approximated by two separate items drawn from the 1992 Eurobarometer survey. These items tap directly respondents' preference for maintaining pensions as they are currently structured in the face of mounting fiscal problems associated with pay-as-you-go pensions:

LEV [level of pensions]:
Opinions differ about the level of the pension. Which of these comes closest to your opinion?
1. Pensions are too high and should be reduced.
2. Pensions are about right.
3. Pensions are too low but they will have to stay at that level because contributions or taxes should not be raised.
4. Pensions are too low and should be increased even if this means raising contributions or taxes.

Higher values of PENSLEV can be interpreted as implying greater opposition to retrenchment of pension benefit levels than lower values.

PYG [pay-as-you-go financing]:
Those who are now working have a duty to ensure, through the contributions or taxes they pay, that elderly people have a decent standard of living.
1. Disagree strongly
2. Disagree slightly
3. Agree slightly
4. Agree strongly

Higher levels of PAYFOREL indicate greater opposition to proposals, floated frequently in the 1990s, to transform pay-as-you-go public pension systems into fully funded

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7 A Eurobarometer survey with a much wider array of pension-related questions was conducted in 2001, but the pension-related variables have still not been made available for public use.
systems with a tighter link between individual contributions and individual benefits. Separate ordered logit models are estimated for these two different measures of "opposition to retrenchment."

Key independent variables: "benefit" from public pensions. What explains the degree of support for the public pension system? In the basic constituency feedback model I seek to test, the main independent variable of interest is the percent of household income derived from social benefits, a variable that is imputed for Eurobarometer respondents using data drawn from the European Community Household Panel (see discussion below). I consider benefits from all social programs, rather than from public pensions alone, because in many countries access to and the level of other benefits like family allowances or housing subsidies are linked to the type of pension a person receives. Counting only income from pensions would substantially underestimate the value of social benefits entitlements explicitly linked to old age, especially for low-income individuals, in many national contexts. Unemployment benefits, work-related disability pensions, and other benefits accruing only to individuals active in the labor market are of course excluded.  

Respondents were also asked about the adequacy of the pensions they currently receive (very inadequate, somewhat inadequate, just about adequate, or completely adequate). As an indicator of a respondent's use of public pensions, and thus her "susceptibility" to a policy feedback effect, this item leaves much to be desired. Note that this question takes into account earnings from both public and private pensions, and so where the latter are large relative to the former (eg. Britain, Ireland, the Netherlands),

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8 To be certain that the results are not affected by including income from other social programs in addition to pensions, I must replicate the analysis using income from pensions alone. Unfortunately, I cannot do that until I can again gain access to the ECHP data.
responses do not reflect respondents' reliance on public pensions per se. Furthermore, the perceived adequacy of pensions received is not the same as the amount of benefit actually gained. Despite the shortcomings of this indicator, the constituency feedback theory would still predict a positive relationship between perceived pension adequacy and opposition to pension system retrenchment: more intensive "use" of pensions should lead to more opposition to retrenchment. (Note, however, how the predictions of the policy feedback model become less intuitive as we operationalize the concepts of interest. It seems clear that individuals who, net of other factors, perceive their pensions to be more adequate may actually be more willing to see cuts to their benefits.)

The ordered logit models estimated here include both measures of "benefit" from public pensions: predicted income from social benefits, and perceived adequacy of one's own pension income. Thus, the effects of perceived adequacy should be interpreted net of the effects of the actual level of public pension benefits received.

The remainder of the independent variables in the model tap into factors other than reliance on pension benefits that might affect attitudes towards the pension system:

*Support for the welfare state as a whole* is measured using responses to two Eurobarometer questions about the welfare state. The question wording reflects the European use of “social security” to represent a broad range of social benefits including unemployment insurance, social assistance, day care, family allowances, health care, occupational injury insurance, etc., in addition to public pensions:

**ACHIEVE:**
Social security is a major achievement of modern society. The government should make sure that nobody is left deprived when unemployed, poor, ill, disabled, etc. [4-point disagree-agree scale.]
BROAD:
The government must continue to provide everyone with a broad range of social security benefits even if this means increasing taxes or other contributions. [4-point disagree-agree scale.]

The other financial resources available to households beyond social benefits are captured by two variables: the quartile in the national income distribution where the household income falls; and respondents’ self-rated standard of living (very poor, poor, just getting along, average, comfortable, very comfortable, rich).

The level of political engagement is approximated by four measures: age at the completion of education, the frequency of political discussions, the frequency of media use, and whether or not there is a union member in the respondent’s household. Unions have been in the forefront of discussions about pension system reform in Europe, and I expect households with union members to be more closely attuned to these debates than non-union households.

Political partisanship. Partisan loyalties are difficult to reconstruct from this Eurobarometer, which did not ask any questions about vote choice or party identification. However, questions on left-right self-placement and subjective social class provide some insight into respondents’ likely partisan commitments. The degree of religious faith can also be used as a proxy for party identification in Germany and the Netherlands.9

Politics and Institutions. To capture the impact of country-specific features of the pension system’s organization and the political environment surrounding pension reform, I estimate the ordered logit models separately for each country. Similarly, separate models are run for four different "families" (Castles and Mitchell 1993) of welfare states

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9 Frequency of church attendance, which is not available, would be a better measure of religiosity for Italy, the third of the strongly Christian Democratic countries.
to capture the effects of different kinds of pension systems. Typologies of welfare states can take into account a wide variety of characteristics (see Titmuss 1974, Esping-Andersen 1990, Castles and Mitchell 1993, Ferrera 1993). This analysis borrows from Esping-Andersen’s and Ferrera’s (1996) typologies to group countries according to key attributes of the pension system. Liberal welfare states (in our sample Great Britain and Ireland) have limited public pension systems with relatively uniformly low benefit levels, and eligibility for these benefits may be subject to a means-test. Southern European welfare states (Italy, Spain, Portugal, Greece) are distinguished by segmented occupationalist pension systems that reward the highest earners in the core labor force handsomely, but offer only meager benefits to those whose attachments to the formal labor market were weaker during their working lives. Pension systems in Conservative-corporatist welfare states (France, Belgium, Luxembourg, West Germany) are similar to those in the Southern European family, but tend to be more generous for low- and middle-income earners. Social Democratic welfare states (Denmark, East Germany\textsuperscript{10}), like the Liberal countries, offer flat-rate public pensions to all elderly citizens regardless of their former attachment to the workforce. But compared to the Liberal family, benefits are much more generous, and truly universal (i.e. not means-tested). These systems may also provide public occupationally-linked benefits to supplement the basic pension. To summarize, both average generosity and the size of the populations covered by public pension schemes increase as one moves from the Liberal to the Southern European to the Conservative-Corporatist to the Social Democratic welfare state family.

\textsuperscript{10} In 1992, only three years after re-unification, the East German pension system was closer to the Social Democratic model than to the Conservative-Corporatist pension system in the West. The results of estimation by welfare state type remain unchanged, however, when East Germany is coded as Conservative-Corporatist.
Finally, the models include controls for age (with a top category of 85-and-over),
sex, and health status (a dummy variable coded 1 for individuals with a long-term illness
or disability).

**Getting the data together: imputing the key independent variable**

The two-stage auxiliary instrumental variable approach described in Franklin
(1989) makes it possible to estimate statistical models on a dataset composed of real
observations on the dependent (opinion) variables and most control variables, and
imputed values for the key causal variable, percentage of household income derived from
social benefits. The European Community Household Panel (ECHP) contains
information on household income from social benefits; the Eurobarometer does not. But
both datasets contain a large number of variables (age, sex, education, income,
occupational status, health status, household size, possession of a variety of consumer
goods, etc.) that can be used as instruments for household income from social benefits.

In the first stage of the 2SAIV procedure, I use ECHP data to estimate a model in
which social income as a percent of household income is predicted by the shared
variables:

\[ \text{SOCIN} = z_2^\gamma + \epsilon \]

where SOCIN is income from social benefits as a percentage of household income, \( z_2 \) is a
vector of the shared variables, with \( \gamma \) the vector of coefficients on these shared variables.
SOCIN and \( z_2 \) are both observed; \( \gamma \) is estimated. The shared variables in \( z_2 \) are age, sex,
a disability dummy, marital status, household size, number of children in household,
labor market status, housing tenure, and possession of a television, VCR, and/or second
home. The model is estimated for each individual country in the survey. Separate regressions for each country in the sample yield r-squared statistics ranging from .41 (the Netherlands) to .69 (Denmark, Italy, and Great Britain); eight of the twelve are above .6. The statistical significance of individual coefficients varies in the single-country regressions, but most variables except age and sex are highly significant in most countries.

After estimating coefficients on the shared variables, I import the coefficients into the Eurobarometer dataset. I then apply these coefficients to the Eurobarometer versions of the shared variables in order to generate a “predicted” value for the social income variable for each country:

\[ \text{PRSOCIN} = z_1 \gamma \]

In this equation, \( \gamma \) is the vector of coefficients estimated from the ECHP dataset, \( z_1 \) is a vector of the shared variables (the same variables as in \( z_2 \) above), and PRSOCIN is the predicted value of income from social benefits as a percentage of household income, derived from applying the coefficients to the shared variables in the Eurobarometer dataset. In this step, \( z_1 \) and \( \gamma \) are observed; PRSOCIN is estimated.

PRSOCIN can then be used as an independent variable in further analysis using Eurobarometer data – the second stage of 2SAIV -- making appropriate adjustments to the standard errors as described in Franklin (1989). The critical assumption underlying the 2SAIV approach is that the two datasets are samples drawn from the same population, which implies that the coefficients (\( \gamma \)s) and the variances of the error terms are the same across the two datasets. In our case, Wave 1 of the ECHP, conducted in 1994, and Eurobarometer 37.1, conducted in April-May 1992, draw from substantially the same
population of households living in countries of the European Union, and thus are appropriate for 2SAIV estimation.

First results overturn accepted wisdom

Results of the ordered logit analysis, using values of predicted social income as a percentage of household income (PRSOCIN) imputed with 2SAIV, are summarized in Table 1. Net of other factors, PRSOCIN significantly affects the predicted probability of opposition to retrenchment of the level of public pensions in only two of the twelve EU countries in our study, Ireland and Spain. In both of these countries, the predictive power of PRSOCIN is weak, and in the wrong direction: those who depend most on the public pension system are the least likely to oppose retrenchments in the level of the pension. The self-assessed adequacy of a respondent's own pension, net of the household's actual reliance on those pensions, is a better predictor of opposition to cutting benefit levels. Again, however, the direction of the relationship is opposite that predicted by the constituency feedback model. Individuals who benefit more from pensions – those with more "adequate" pensions – are significantly less likely to oppose cuts in benefit levels, not more. The ordered logit analysis did not pick up any effect at all of PRSOCIN on the likelihood that an individual would oppose altering the PAYGO nature of public pensions. And only in the Netherlands does perceived adequacy of one's own pensions seem to produce the predicted increase in support for the pension system status quo.

[Table 1 about here]
These results overturn the common assumption that people who benefit from social programs are particularly protective of those programs. Unsurprisingly, the degree of support for the welfare state more generally is a significant predictor of attitudes towards the pension system in many countries. Respondents’ evaluation of their standard of living also affects their support for the pension system, with subjectively well-off respondents less likely to express a high degree of opposition to retrenchment of public pensions. But after controlling for demographic variables, household resources, political orientations (including the propensity to support the welfare state in general), and the degree of political engagement, there is only the weakest evidence for a significant and systematic relationship between the benefit individual Europeans receive from the pension system and their propensity to oppose retrenchment of public pension programs.

These results run counter to so much received wisdom that it is necessary to think carefully about potential flaws in the analysis. One possibility is that the expected relationship between beneficiary status and political behavior in defense of benefits does exist, but that the attitudinal indicators are simply too weak a proxy for political behavior to pick up any effects of beneficiary status. If this were true, it would mean that self-interest around social programs is not reflected in expressed opinions, but rather appears only when we look directly at political behavior. This proposition is testable, but with a caveat. As discussed above, the range of measurable political behaviors that is common in Europe is notably more limited than in the US. Whereas Campbell (2003), for example, makes use of measures of campaign giving and forms of citizen contacting such as letter writing, these behaviors are not typical in Europe, and are rarely measured in surveys. Future research should look into the relationships not only between income
from social programs and attitudes towards these programs, as in this paper, but also investigate the strength of the relationship between attitudes and the more limited number of political behaviors (vote choice, participation in demonstrations or protests) that are relevant in a European context.

Faulty measures of income might also make it difficult to detect a relationship between materially benefiting from social programs and attitudes towards those programs. In this paper, income from public social benefits as a percentage of household income is the primary measure of reliance on pensions. For reasons discussed above, I believe this is the best measure for our purposes. However, the structure of the ECHP survey does make it possible to measure income from public pensions alone, without add-on benefits for dependents, low income, or housing allowances. This should clearly be done in the next iteration of this research, but must await a second round of access to the tightly controlled ECHP microdata file. The predicted social income measure asks to what degree a respondent's household depends on social benefits for income. But it could be argued that an absolute measure of social benefits income – something like the percentile of the pension income distribution in which a respondent's household falls -- better captures the concept of "benefiting" from social programs that the policy feedback literature relies upon. Again, constructing this alternative measure must await access to the ECHP microdata.

A final potential explanation for the lack of a statistically significant effect of income from benefits on attitudes towards these benefits is if the statistical procedures used in the analysis are biased or inefficient in their use of information. I focus here on efficiency concerns. The 2SAIV procedure could introduce inefficiency in two ways. If
the matching variables used in the first-stage equations are, taken together, only weak
predictors of social income, then standard errors on any coefficient estimated on the
imputed variable will be inflated. In this case, there does not seem to be much cause for
concern. Selecting the 2SAIV matching variables for a low degree of missingness
minimizes this second possible source of inefficiency.

Problems with the Eurobarometer do cause a substantial loss of data on other key
variables, though, quite apart from the imputed PRSOCIN. Eurobarometer data on both
the public opinion items and some key control variables (income chief among them) are
spotty at best. “Don’t know” (DK) responses to the opinion items and non-response to
the income question in particular contribute to a loss of up to 30 per cent of the
observations in some countries, and a corresponding decline in the efficiency of the
estimates produced using these datasets. Very small effective sample sizes once the
sample is subdivided into countries and once observations are deleted for missing data
should make us cautious about concluding too much from the results presented in Table
1.

Deletion of observations with missing data comes at a real price. Respondents
who answer DK to even one of the several attitudinal items on the Eurobarometer that I
considered using in this analysis are more likely than those with a full slate of responses
to be poor, female, low-educated, and highly dependent for their income on social
benefits. The selection bias associated with throwing out observations based on DK
answers is severe. So too is the bias that came from discarding the roughly 25 per cent of
observations that are deleted for non-response to the household income question. It
seems possible that selection bias could be responsible for the highly counter-intuitive
results from the first estimation.

Since I have already used one form of imputation to import my key independent variable, PRSOCIN, into the Eurobarometer dataset, there seems nothing to lose and everything to gain from using yet more imputation to reduce both the inefficiency and the potential for bias caused by missing data. The multiple imputation (MI) procedure described in King et al. (2001) and implemented in the Amelia software program (Honaker et al. 2001) allows me to estimate missing values for key variables and perform logit analysis that is more efficient and more unbiased.

**Multiple imputation of key dependent variables**

In a process quite similar in underlying logic to the 2SAIV procedure, Amelia generates values for the missing data based on the observed values on other variables that can be used to predict the missing variable. The MI procedure generates $m$ predicted values for each missing piece of data, creating $m$ new data sets that are completely “filled in.” The range of values across the $m$ datasets for a given piece of missing data reflects the degree of certainty with which it can be predicted, given the other information available: where there is greater uncertainty, the $m$ values are more dispersed. Statistical analysis is then performed on the $m$ different datasets separately. The resulting coefficients and standard errors are combined to yield a single estimate that reflects the results of the analyses performed on the $m$ datasets. (Details of the multiple imputation algorithm and the method for combining results across the $m$ datasets are laid out in King et al. 2001 and Honaker et al. 2001.) For my purposes, $m=5$ (the default setting in Amelia) seems adequate, since the degree of missingness in my dataset was not extreme.
The critical assumption of any imputation procedure is that the values that are being imputed are in fact knowable, even if not observed. In the Eurobarometer survey used in this analysis, for example, the non-response rate among respondents over age 50 for the household income question was 22 per cent, but each of these households has an income that could, in theory, be measured and reported. Imputation of the missing values for household income and other similar items is unproblematic. Note, for example, that the ECHP and most other household income surveys routinely impute missing income data.

Imputation of values to replace “don’t know” responses to opinion questions is riskier. After all, in at least some of these cases a DK response will reflect an actual lack of knowledge or lack of opinion. We would expect this to be true especially for questions that require technical or factual knowledge. But for questions in which a respondent is asked to provide a personal evaluation of or attitude towards something that is part of every-day experience – an attitude towards marriage as an institution, for example, or an evaluation of the state of the economy --, a “don’t know” response may be better interpreted as an unwillingness or inability to express an opinion, rather than a lack of opinion. We can presume that the vast majority of respondents, even those who are not personally married or economists, have a theoretically observable attitude, be it positive, negative, or neutral, towards things like marriage as an institution or the state of the economy. In this case, imputation to replace DK responses would be appropriate.

The key opinion variables for this study fall somewhere between the two possibilities presented above. Respondents who lack factual knowledge about the level of current pension benefits, for example, may be unable to form an opinion about whether
pension benefits should be higher or lower in the future. But most people in the age
group selected for this study, 50 and above, would have at least enough every-day
experience or second-hand knowledge to form an opinion about the adequacy or
inadequacy of provisions for the elderly -- even if the use of don't know "filter" wording
may encourage a DK response. Furthermore, we would expect that respondents who are
able to provide an answer for four of five closely-related attitudinal questions related to
the pension system would also have an opinion, even if not expressed, on the fifth item.
The distribution of DK responses seems to support this presumption. DK answers across
five pension-related items, and across three items related to the welfare state more
generally, are not highly correlated.

About five percent of respondents were unable to provide an opinion for not only
the opinion variable used in this analysis, but also one of the other related items included
in the Eurobarometer survey. How should we treat these respondents? Omitting them
from the analysis risks introducing bias associated with differential non-response rates
that are systematically related to preferences on social welfare spending (Berinsky 2002).
The concentration of multiple DK responses among older women and low SES-
individuals may reflect a lack of the political or economic knowledge necessary to form
an opinion, in which case these DKs should be treated as true non-opinions. But it seems
equally likely that this kind of DK is a result not of the lack of an opinion, but of "the
lack of political thought structured enough to form a summary evaluation in response to a
survey question." (Berinsky 2002, p. 277). If non-responses are not a reflection of a true
lack of opinion, it may be safer to impute responses rather than drop cases, which would
result in both loss of efficiency and potential bias. In this analysis, non-responses were
The 2SAIV technique for generating predicted values of the percentage of household income from social benefits can, like any other statistical operation, be performed on datasets produced by MI. The value of PRSOCIN is calculated by the application of the observed coefficients from the ECHP household income survey to a series of matching variables in the Eurobarometer dataset. The key differences are two. First, some values of these matched variables will have been generated using MI, rather than directly observed. Second, the 2SAIV procedure is applied five times, to the \( m=5 \) datasets produced during multiple imputation. The standard errors for the predicted social income variable for each dataset can still be bootstrapped, as per Franklin's suggestion (personal communication) and combined across datasets as per King et al.’s MI procedure.

Applying this method of combined MI and 2SAIV to the same original data and estimating the same model as before confirms the main findings of the analysis performed without MI. The inefficiency and possible bias produced by the high degree of missingness in the data prior to imputation with MI do not, then, appear to explain the lack of support in the initial results for the constituency feedback model. Let us turn now to a closer examination of the results using both 2SAIV and MI, presented in Table 2.

**Results with multiple imputation further question constituency feedback model**

The headline of the new analysis is the same as the headline of the old analysis: the key measure of income from public pensions has no statistically significant effect on the likelihood that a respondent will oppose retrenchment of either the level or the pay-
as-you-go structure of public pensions in any of the countries in our study.\textsuperscript{11} And perceived adequacy of pensions, holding the actual importance of pensions in the household economy constant, is strongly but \textit{negatively} associated with opposition to cutting pensions in all countries. That is, the better one perceives one's pension to be, the less likely one is to oppose cuts. Both of these findings contradict the constituency feedback model, which holds that individuals who depend on public pensions for their income and those who believe that they benefit from the pension system should both strongly oppose retrenchment.

[Table 2 about here]

This analysis brings into question the basic premise upon which much theorizing about the politics of welfare state reform is based: that is, that receiving social benefits, at least social benefits of a non-stigmatized nature like pensions, will lead individuals to political attitudes (and eventually behavior) in defense of "their" programs. The expected relationship between beneficiary status and political attitudes does not show up in this analysis. But responses to the pension reform questions indicate that large numbers of Europeans do in fact want to preserve their pension systems as they are. If constituency feedback effects are not the source of such attitudes, what is? Individual-level factors? Features of the political environment in a given country? Aspects of the pension system?

The most consistently significant predictor of attitudes towards pension system reform, apart from the perceived adequacy of an individual's own pension, is one's

\textsuperscript{11} In the East German sample the coefficient on PRSOCIN was just shy of the significance at the .05 level. In no other country sample did it even approach statistical significance.
attitude towards the welfare state in general. Across most countries in our sample, the belief that the welfare state should continue to play an important role in society, even if it means paying more in taxes, is strongly associated with opposition to retrenchment of pension benefits. Similarly, the belief that the welfare state is a major achievement of society and should continue to provide a broad range of benefits is strongly associated with support for the pay-as-you-go pension model in most of the country subsamples.\footnote{Why the welfare state items and pension items should pair off as they have done is something of a mystery to me. One possibility is that the two items containing references to increased taxes are likely to be supported by similar individuals.} This association between support for the welfare state in general and support for pensions in particular is unsurprising, although, as I noted above, the direction of any causal relationship is difficult to determine.

Aside from these generalized attitudes towards the welfare state, other features of the political environment also seem to matter for how individuals translate their personal experiences with social programs into political attitudes. Support for the pay-as-you-go status quo, in particular, seems to be related to characteristics that are strongly related to partisanship or political engagement in a number of countries (left-right self-placement in Great Britain, subjective social class and media exposure in Spain, religiosity and education in Germany, subjective social class in the Netherlands). Keep in mind, of course, that the increased efficiency of estimation that MI provides (since cases are not lost to listwise deletion) means that estimates of even modest effects are more likely to be statistically significant. This is true despite the fact that the MI procedure takes into account the added uncertainty that working with imputed data implies. Hence, interpretation of the results requires going beyond signs and significance to examine the predicted probabilities of attitudinal categories under conditions that are of interest.
Given the large number of countries and variables involved, it is impossible to undertake here a systematic exposition of all results, but they are available from the author upon request.

A major alternative to the individual-focused explanation, and indeed to the hypothesis of constituency feedback effects, is that the structure of welfare state institutions profoundly conditions individuals' responses to proposed reforms. We can subdivide our sample by welfare state "family" in order to evaluate whether the relationships between beneficiary status and attitudes towards pensions and towards the welfare state in general seem to vary across different kinds of welfare states. Results are summarized in Table 3. Let us begin with the similarities. Self-assessed adequacy of one's own pension predicts an increased tolerance for cuts to benefit levels in all four welfare state types. Recognition of the welfare state as a major achievement of society is associated with support for pay-as-you-go pensions in all four welfare state types. And a willingness to increase taxes in order to maintain a broad array of welfare state benefits is associated with support for the pension system status quo in all four welfare state types.

[Table 3 about here]

Beyond these similarities, very little of note emerges. Only one significant divergence from the norm of equivalence across welfare state types is visible. In the Social Democratic welfare states, subjective social class and education level emerge as significant predictors of pension attitudes. Whether this is because of the association of class and education with labor market and hence pension status, or with political
awareness/mobilization is unclear. Income from social programs is a statistically significant predictor of support for maintaining benefit levels only in the Conservative-Corporatist welfare states, and even here the effect is minimal. Figure 1 shows predicted probabilities for LEV=1 (the level of the pensions is too high and should be cut) and LEV=4 (pension benefits are too low and should be increased even if that means raising taxes or contributions) over the 10th through 90th percentiles of the distribution of PRSOCIN, with all other variables held at their means. Keeping in mind the 95 percent confidence intervals for the predicted probabilities, values for even the extreme categories of the dependent variable are indistinguishable between respondents in the 10th and 90th percentile of the distribution of PRSOCIN.

[Figure 1 about here]

If the lack of correspondence between use of benefits and attitudes towards benefits calls into question the constituency feedback approach, the lack of correspondence between welfare state regime type and sources of support for the welfare state is equally surprising from the standpoint of the comparative political economy literature. What we are left with is the evidently strong, but largely unexplored, relationship between how individuals perceive the welfare state as a whole, how they perceive the adequacy of their own benefits, and their visions of the appropriate future for costly public pension systems.
Conclusion

2SAIV estimation without multiple imputation reveals, among retired Europeans and housewives aged 50 and older, no significant effect of income from social security benefits on attitudes towards the public pension system. When combined with multiple imputation to increase efficiency and correct for potential non-response bias, the estimation still yields no statistically significant effects. And older people who feel their pensions to be the most adequate are less supportive of the pension system than people who stand to lose less from retrenchment. Neither the 2SAIV nor the MI analyses support the theorized constituency feedback effect in which self-interest drives beneficiaries of social programs to become political supporters of those programs.

These results are surprising. They overturn something that has in the last ten years become an oft-repeated, if under-unexamined, assumption about the political dynamics of welfare state reform. And yet a careful reader of the literature devoted to policy feedback would likely not be too terribly surprised by these findings. Pierson, Skocpol, Weaver, and Campbell would all agree that self-interest is only one strand of a more complex process that shapes the political mobilization of welfare state beneficiaries. The results presented here, far from undermining the insights of the policy feedback approach writ large, confirm this vision of complexity. But they also serve as a reminder that the self-interest of welfare state beneficiaries is not an accurate shorthand transcription of the insights of the policy feedback approach.

Assertions about the “dangers” of ageing populations for fiscal restraint and intergenerational equity rely on the notion that beneficiaries of the most generous welfare benefits – pensions – will demand an ever-larger share of the pie. The findings presented
here suggest that elderly voters who receive a large share of their income from generous public pensions may not be much more inclined to oppose pension retrenchment than any one else would be. Attitudes towards the welfare state in general and perceptions of individual economic well-being both appear to be more important determinants of support for public pensions than actual income from these programs. And the influence of larger-scale structures and processes – the organization of welfare state programs, and to an even greater extent national-level politics surrounding debates about welfare reform – is revealed in cross-national differences in the micro-logic of support for the welfare state.

This paper constitutes a trial application of 2SAIV and MI techniques to ECHP and Eurobarometer data. Further work is still necessary on several fronts before conclusive tests of the constituency feedback hypothesis can be performed. As indicated, the most immediate next steps should be to test for the robustness of multiple specifications of the income measure, and, as soon as the data become publicly available, replicate the analysis using data from Eurobarometer 56.1’s impressive battery of pension-related questions. 2SAIV and MI techniques should also be applied substituting political behavior items for attitudinal variables if an appropriate cross-nationally comparable survey of behaviors can be found. Finally, a more thorough analysis taking advantage of the cross-national nature of these data should be undertaken. Only then can we begin to assess systematically how differences in welfare state institutions and political contexts may shape the articulation of constituency feedback effects.
References


Table 1: Significance and signs of ordered logit coefficients

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++ or - - : significant at .01 level
+ or - : significant at .05 level

*models did not converge
Table 2: Significance and signs of ordered logit coefficients with multiple imputation

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% of HH income from social bens.

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Perceived pension adequacy - - - - - -
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Subj. social class +
Education
Media use +
Freq. of political discussions
Union member in HH
Left-Right self-placement -
Religiosity
Disabled dummy
Broad WS even if raise taxes ++ ++ ++ ++ +
WS major achievement ++ ++ ++ ++

++ or - - : significant at .01 level
+ or - : significant at .05 level

*model did not converge
Table 3: Significance and signs of ordered logit coefficients with multiple imputation

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(Country dummies also included)

++ or --: significant at .01 level
+ or -: significant at .05 level
Figure 1: Predicted probabilities of opposition to benefit retrenchment (LEV=1 and LEV=4) in Conservative-Corporatist welfare States, by level of PRSOCIN.

All other variables in model set at means.
Levels and confidence intervals estimated with Monte Carlo simulations using Clarify 2.1 (Tomz et al. 2003).