

Nest Eggs and Negative Equity: The Political Economy of Ownership

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ABSTRACT

The major economic story of the last decade has been the surge and collapse of house prices worldwide, building on substantial housing volatility that began to emerge in the 1980s. Yet political economists have had very little to say about this critical phenomenon, trapped with an analytical language that speaks to the labor market but is deaf to the effects of wealth and ownership. This article presents an important first step in filling the analytical and empirical gap. I argue that homeowners, particularly those experiencing rapid house price appreciation, will become less supportive of social insurance policies since their houses act as a form of private insurance against job and income loss. Political parties that represent homeowners will, following these preferences, cut social insurance spending substantially during housing booms. I test these propositions using both micro-data on social preferences drawn from surveys in the USA, UK, and Germany, and on macro-data of social spending at the national level for 18 countries between 1975 and 2001.

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1. Introduction

The past decade has seen a remarkable transition in the political economies of the advanced industrial world. Whereas in the postwar era, the Keynesian duel of rapid price inflation and full employment held sway, since the 1980s inflation in the price of goods and services, and concomitantly in wages, has been held at bay. During the same time period, however, a new source of volatility, dormant since the Great Depression, has re-emerged – that of the price of assets, both equities and housing. Since the mid 1980s OECD states have experienced three stock market booms and crashes and two housing boom and busts, the last unprecedented in scale or scope. Such volatility is not a phenomenon somehow limited to participants in high finance. Surges and collapses in the price of assets threaten the livelihood of most citizens and underpin, or threaten, their retirement savings or recourse to public aid. Politicians have responded everywhere to the increased importance of assets in determining citizens' welfare. In boom times there emerge declarations of an “ownership society”, in bad times, politicians fret about collapsing asset prices.

Political economists face these developments armed with analytical weapons from an earlier war. Both in terms of our understanding of the micro-preferences of citizens over government policies and in our analysis of partisanship, policy-making and political institutions at the national level, the focus of political economy has been on the labor market to the exclusion of the asset market. Early work on both individual preferences over social spending and on partisan policymaking emphasized the role of social class as defined by labor market income (Goldthorpe, 1968; Korpi, 1983). More recently, a consensus has emerged on the importance of individual skills determining social policy

preferences. Iversen and Soskice (2001) argue that the relative specificity of an individual's skills will determine the risk they face in the labor market and shape their preferences over government policies that insure them against income loss. This line of argument has advanced our understanding of preference formation by moving from viewing individuals purely through annual income to examining their labor market assets. Indeed, Iversen (2005) argues that an investment in human capital produces the most important asset people ever own. For some people this is likely true. However, for many others the most important investment they ever make, their most valuable asset, is not their education but their home. Wealth, in other words, may be just as important as labor market income in shaping an individual's economic circumstances and, by implication, what they demand from government. Yet political economists lack both the theoretical language and the empirical background to fully understand the effects of this form of asset ownership. In a world of volatile asset booms and busts and widespread homeownership this neglect is problematic.

In this paper I provide a theoretical framework and empirical analyses at both the individual and national level of the impact of housing on social insurance policies. In doing so, I expand the range of current political economy analysis from a focus on the stream of income to the stock of wealth in society, arguing that insight about the latter is particularly important given contemporary developments in the global economy. I begin in Section Two by empirically outlining the nature of this change in the political economies of the advanced industrial world, showing how, whereas price stability has been achieved, asset volatility has grown dramatically in the past two decades. I argue that political economists have, as yet, not provided a clear analytical or empirical picture

of how these developments shape policy preferences or policymaking. Section Three turns to the implications of this shift for theorizing about the preferences of individuals over particular social policies. I argue that when asset prices are rising, the policy preferences of asset-owners diverge quite substantially from those predicted by standard political economy theories that are based on labor market status. Rising house prices, for example, make homeowners less supportive of publicly provided social insurance and pensions since they rely on their homes as nest eggs. Collapsing house prices and negative equity, in contrast, produce demands for government support. I argue that political parties will respond to these changes in voter preferences and that this effect will be pronounced for right-wing parties, which disproportionately represent homeowners.

The following two sections develop the empirics of asset ownership and social policy. Section Four begins with a series of micro-analyses that focus on individual preferences over social policy through a series of social surveys in the USA, England, and Germany. I examine how the preferences of homeowners over social policy change over time according to the prevailing level of house prices and in the case of the USA I examine how the estimated rate of appreciation individuals have experienced since they purchased the house affects their policy preferences. Throughout these examples I find powerful and robust effects of ownership and house prices on policy preferences. But do these preferences matter in any substantive sense? I turn in Section Five to examining the effects of changes in aggregate house prices on national social insurance policies. Here I examine the joint effect of political partisanship and house price changes on general social spending and transfers, pensions spending, and unemployment benefits. I find powerful conditional effects of right-wing government and house price increases in terms

of reducing government spending quite dramatically, even controlling for a broad variety of macroeconomic conditions. The pattern is particularly pronounced in countries with higher homeownership rates. This effect, hitherto undiscovered in the literature on the determinants of public spending, demonstrates the very real significance of a deeper understanding of the role of ownership in political economy.

2. Income, Assets, and the Political Economy Consensus

Political economists know a great deal about the political causes and consequences of business cycles in the postwar era. Drawing first on Keynesian economics and the Philips curve, and later on various versions of rational expectations business cycle theories, successive scholars were able to draw broad conclusions both about the effects of partisanship and labor market institutions on price inflation and unemployment (Hibbs, 1977; Calmfors and Driffell, 1988; Iversen, 1999), and symmetrically about the impact of these macroeconomic forces on political outcomes from public spending to voting (Franzese, 2002; Duch and Stevenson, 2007). The postwar world was one of ‘Employment Dominance’, where macroeconomic policies had larger effects on the product market –in terms of prices, wages and employment – than they did on the value of assets like equities and housing. Price inflation in this era was both high and volatile. Between 1956 and 1985 the average level of price inflation in the OECD was 6.9% with a within-country standard deviation of 4.9%. Citizens relied on wages for their income, and on employer- or government-provided unemployment benefits or pensions for periods where they are out of the labor force, either through involuntary unemployment or voluntary retirement.

Ironically, just as a broad consensus on the relationship between politics and macroeconomics in the Keynesian era had emerged, contemporary trends in the business cycle and particularly in price inflation, suggested that the macroeconomic volatility that characterized the mid-twentieth century had been tamed. Between 1985 and 2006, the average level of price inflation more than halved to 3.3%, as did the standard deviation - to 2.4%. However, while price inflation of goods and services was dormant, another form of volatility was waking. From the mid-1980s, housing markets became substantially more volatile. The period between 1985 and 2006 had three times the average level of real house price inflation as that between 1970 and 1985 and, even before 2006 and the downturn in housing prices, a higher level of volatility. This final boom and bust period was unprecedented in modern times.

Furthermore there has been ever-greater 'leakage' from the housing sector into the health of overall economy. The IMF (2008) estimate that in a number of countries, above all the USA, shocks to house prices and their feedback into consumption and residential investment account for over twenty percent of variation in national economic output. This world might best be characterized as one of 'Asset Dominance', in which changes in macroeconomic policies have a larger effect on the value of assets than on product prices, wages, or employment.¹ Moreover, citizens depend increasingly on the value of their assets both for day-to-day income (using the value of their asset as collateral) and for unemployment or retirement (a 'nest egg' effect).

¹ The ideal types of 'Employment Dominance' and 'Asset Dominance' are just that. Although the evidence above is suggestive of moderation in price inflation and an accompanying growing volatility in asset prices, clearly in reality both effects exist contemporaneously. However, the past few decades have seen a greater proximity to a world of 'Asset Dominance' than the postwar era.

Political economists know much about the world of ‘Employment Dominance’. Power resources theory provided powerful insights into the immediate postwar world of widespread economic growth driven by manufacturing and trade. This work argued that social class, as defined by an individual’s job, determined citizens’ demands for greater or lesser government spending and regulation of the market economy. By and large, such theories suggested that subjective social class or wage earnings defined individual policy preferences (Goldthorpe, 1968). As the economic structure of developed countries has shifted towards the service sector and away from the manufacturing sector, recent work has moved away from the simple working-class / managerial divide to focus on the particular skills individuals bring to the labor market. Here work has examined both how skills affect policy preferences (Iversen and Soskice, 2001) and how governments of various partisan stripes and differing national institutions provide these skills (Boix, 1998; Estevez-Abe, Iversen, and Soskice, 2001).

Nonetheless, all these theories hold in common the basic assumption that citizens’ policy preferences derive from their place in the labor market. Skills matter not only because they increase wages but also because they shape the risk individuals face in terms of employment. Thus, despite the move from class to skills, most political economists still view policy preferences and policymaking as at root defined by how labor market status shapes the demand for social insurance. The role of assets from outside the labor market, like housing, is almost entirely absent. Scheve and Slaughter (2001) do examine the role of home ownership in determining trade-policy preferences but there is no existing analysis of home ownership and social policy preferences, particularly as mediated by house prices.

3. A Theory of Asset Ownership, Asset Prices, and Social Spending

As I argued above, the contemporary literature examining the preferences of citizens regarding social policy - and by extension the behavior of political parties - is built around the *demand for insurance by individuals*. Missing from such an analysis is its theoretical and empirical counterpart: the *supply of insurance by individuals*. Because most political economists presume insurance to be socially provided they neglect the possibility that individuals may be able to ‘insure’ themselves against income loss by accumulating tradable assets like housing. When political economists have looked at assets they have typically viewed them as types of endowments producing a stream of income in the labor market – for example, thinking of specific skills as an asset that produces different labor market income depending on the use to which they are put. When an individual loses their employment in this model, they also lose the value of the asset. But other types of assets are not tied to the labor market – they exist as a separate stock of wealth. The greater is an individual’s wealth, the less they are at risk of a collapse in living standards if they lose their stream of income. Thus homeownership acts as a form of *private insurance* against the welfare losses associated with job loss. In that sense, the supply of private insurance might reduce the demand for social insurance: private and social insurance are inherently intertwined.

Wealth produced by homeownership comes in two forms. First, there is the decision whether to own a house or to rent private or public housing. Second, there is the relative value of the house, which may change across time in comparison to the cost of other tradable goods and services. The final level of individual wealth is a product of both of these factors – thus solely examining the effects of being a homeowner without regard

to housing prices may be misleading. For example, if house prices are declining homeowners may actually be more supportive of social insurance than are non-homeowners, particularly if they end up with negative equity. Moreover, differential rates of house price growth will affect the policy preferences of homeowners differently. Homeowners in a boom that rapidly increases their wealth are more likely to feel that they have a large ‘nest egg’ to fall back on than are homeowners in a country with stagnant home price growth.

I argue then, that the rate of house price growth will be an important determinant of social policy preferences. When asset prices – like housing - are rising, asset-owning citizens will respond by desiring less publicly provided social insurance for two reasons. First, rising asset prices, if taxable, will subject asset-owners to higher taxes, which in part pay for social insurance. Second, and most critically, asset owners have privately insured against income loss in unemployment or old age by being able to use their assets – especially housing – as a nest egg. Hence they have less demand for public insurance as a hedge against such risks.² These responses to rising asset prices should be mirrored in the case of decreasing asset prices – producing a reversal of preferences. Arguably house price crashes should lead to increased demand for social insurance against the vagaries of the market. This resembles the claims of Karl Polanyi (1944), who suggests that demand for government intervention is a natural reaction to free market volatility. Or perhaps we could simply state that people rationally prefer to privatize gains but to socialize losses. In summary, I expect homeowners with appreciating property values to demand less

² There is a broad range of other policy preferences that might also be affected by home ownership. In particular, we might expect homeowners to desire lower interest rates if asset prices are threatened by high interest rates, especially because the interest rate elasticity of house prices has greatly increased in recent decades. I explore this possibility elsewhere (Ansell, 2007), noting that this argument flips in its head the classic argument made by Hibbs (1977) that wealthier citizens prefer higher interest rates.

social insurance than other citizens, for example renters. Such social insurance includes both insurance against the loss of current income – unemployment benefits or redistributive transfers – and against future income – public pensions.

A wrinkle emerges when we examine these claims empirically in that, except for citizens actually selling their house, individuals do not typically see the realized value of their asset. For many individuals their value of their house is a subjective approximation based on information gleaned about the local or national housing market.³ Hence citizens are forming *sociotropic* impressions of the value of their house and these valuations then determine social policy preferences. This caveat is not especially crucial. First, most studies find that sociotropic voting and opinion formation is more common than pure pocket-book behavior (for example Lewis-Beck, 1988). Second, many theories of the demand for social insurance also rely on individuals making judgments about uncertain quantities – for example, specific skills arguments presume individuals are making judgments about the likelihood of finding another job that rewards their skills at the same level as their current occupation. Thus, even though citizens typically do not know the precise value of their house, national, and - even better – local housing conditions will likely shape their estimate.

Having established how changes house prices affect the social policy preferences of homeowners, how might these views aggregate upwards into actual policy outcomes? I argue that, broadly speaking, right-wing parties disproportionately represent asset owners. This pattern fits the established findings that higher income and older citizens tend to vote for, though not exclusively, right-wing parties. Indeed, I show empirically in

³ Sometimes, of course, this evaluation may be off-base or irrationally formed (Shiller, 2006). In this case citizens may hold policy beliefs that reflect their false impressions of the value of their house as opposed to its fundamental long-run value.

Section Four that the hypothesized effect of house price appreciation on individual policy preferences is strongest for right-wing voters. As such, we should expect to see the preferences of homeowners channeled by right-wing parties during periods of home price change. Put explicitly, *during house price booms I expect right-wing governments to cut spending on social insurance policies*. In Section Five we will indeed see this pattern in cross-national time-series data. This effect, I hypothesize will be strongest where more voters are homeowners and hence form a larger constituency of votes – that is, in countries where homeownership is high, right-wing parties should be particularly likely to reduce spending on social insurance.

This argument differs not only from the standard analysis in political economy that focuses either on social class or on skills profiles in determining policy preferences and policy outcomes but also on the relatively few political economy analyses existing that do discuss housing. Both Castles (1998) and Conley and Gifford (2006) have noted the potential tradeoff between homeownership and the welfare state. However, these analyses focus purely on aggregate homeownership rates and, in the case of Conley and Gifford, focus on explaining homeownership with reference to social welfare provision rather than *vice versa*. These arguments paint with rather too broad an analytical brush. For example, political parties are nowhere to be seen in the analysis, rather there is simply a cross-sectional trade-off between homeownership rates and the size of government without analysis into why particular actors within countries want specific policies. Moreover, the relative price of housing is completely absent from the analysis yet - as I argued above – the value of housing in supplying private insurance is conditional not only on simply owning property but on that property's value. Just as

Iversen and Soskice (2001) identify the relative *value* of skills in particular uses – rather than just the presence of education itself - as key to explaining preferences, we have to examine the value of the asset of housing itself.

Recent work that does take into account fluctuations in the housing market, especially that by Schwartz (2008), remedies this omission but it too does not delve into individual preferences or the behavior of parties, mostly focusing on national-level cross-sectional variation. The closest comparable work to my own is that by Scheve and Slaughter (2001) who argue that homeowners in US counties with internationally uncompetitive industries will be less supportive of free trade. I extend the analysis of preferences to those over social insurance and focus not on housing demand imputed from industry composition but rather on historical local real house price data across several countries.

4. The Microfoundations of Asset Ownership and Social Policy Preferences

I argued above that asset ownership and asset prices should powerfully shape citizens' preferences about the role of government in providing social insurance. In this section, I test this conjecture using individual survey data drawn from three countries that have had quite different experiences with housing prices – the USA, the United Kingdom, and Germany. In each case, I examine how various measures of home ownership and house price appreciation are related to individual preferences over social insurance and redistribution. I find strong and robust evidence for the substitutive effect of home ownership for social insurance under conditions of rising house prices. Put simply, when homeowners experience rising wealth in the form of property price

increases they become less supportive of social insurance and redistribution generally. This effect appears to be amplified for right-wing voters, suggesting, as see in Section Five, that right-wing parties will be most responsive to increasing house prices in terms of altering social policies. Thus, this section shows the microfoundations of how changes in asset prices affect citizens' preferences, with the following section showing how the aggregation of such preferences shapes social policy outcomes.

I begin by examining preferences over the funding of the Social Security retirement program in the United States. The USA has a number of data advantages that I draw on in this analysis. In particular, detailed data on house prices, dating back to the 1970s, exist at the local level, allowing a more geographically fine-grained analysis of house prices than is possible with most other national surveys. Furthermore, the American National Election Survey includes questions both on home ownership and on the length of ownership, together permitting the estimation of the house price appreciation experienced by a given individual. However, there are no questions on preferences over unemployment spending nor on redistribution between rich and poor, hence I focus here solely on Social Security spending, following up the other questions in the analysis of the UK and Germany.

I use the ANES 2004 pre-election dataset for three reasons – firstly it directly asks questions about Social Security funding and about home ownership; secondly, 2004 marks, if not the very peak of the US housing boom, a high point on a fairly uninterrupted increase in housing prices; and thirdly, the year coincides with a shift in the rhetoric of the Republican party towards what George W. Bush termed ‘an ownership

society’, which would after the election lead to an attempt by the president to introduce private retirement accounts in lieu of social contributions.

The dependent variable is a three point scale asking whether individuals would like to see federal spending on Social Security decrease, remain the same, or increase. As the main independent variable of focus I examine a variety of indicators of house price appreciation, with the expectation that homeowners who have experienced rising prices will be less supportive of Social Security. I draw on data at the Metropolitan Statistical Area (MSA) and US state level provided by the Federal Housing Administration (FHA). Of the 1,039 individuals for whom I have data on the dependent and other control variables, around eighty-five percent live in one of these broadly defined MSAs. For the remaining fifteen percent I have only state level data from the FHA. The state and MSA house price data is adjusted for consumer price inflation and in many cases dates back more than twenty-five years.

Using this data I construct two types of indicator for the house price appreciation experienced by respondents. Firstly, I create a variable ‘House Price Increase’, which combines data on (a) whether an individual is a homeowner, (b) how long they have owned their property, and (c) the percentage change in property values in their MSA or state during the period of ownership. Thus if an individual is a homeowner who has owned a property for five years and the average house price appreciation in their MSA was sixty percent over the period, then they score 0.6 on this index. If an individual is a renter, they score zero. For each individual I create three versions of this index: (a) where applicable, their MSA level score, with non-MSA individuals coded as missing (b) their state level score, and (c) their MSA level score where applicable and, where not, their

state level score. The latter variable provides the best estimate across all individuals of their house price appreciation – it does however assume that the state and MSA level estimates are perfectly comparable. Its mean level in the sample is 0.22, with a standard deviation of 0.33 and a minimum of -0.18 and a maximum of 2.36. Excluding renters (around 30% of the sample) the mean level is 0.32 with a standard deviation of 0.36. Clearly, this variable does not provide us with the *actual* level of appreciation of an individual's particular house; such data would, in any case, be unavailable for privacy reasons. However, it provides arguably as close an estimate of that appreciation as is possible at the individual level.

The second measure of house price appreciation I use is simply the five year (1999-2004) percentage increase in house prices in an individual's MSA (or where applicable, their state), provided they are a homeowner – renters again are coded as zero. While this measure does not distinguish among homeowners living in the same MSA it does have the advantage of making less restrictive assumptions about individual appreciation than does the first measure. It also has the advantage of being comparable to the more aggregate indices I use in the case of the British and German surveys. This measure can be considered a more 'sociotropic' measure of house price appreciation – individual homeowners are expected to adopt viewpoints that reflect the contemporary state of their local housing market. Again I employ three different versions of this variable: MSA; state; and MSA / state depending on data availability.

I include a number of control variables that seem theoretically relevant. Along with a dummy for gender and an age variable, I include a dummy for whether the citizen is retired (and likely on Social Security), a measure of their household income, a measure

of their highest level of education, and a measure of their party identification. The latter is clearly a very strong indicator of political preferences in general, including over most forms of social spending. Party identification is a seven-point scale from strong Democrat to strong Republican. Other measures of partisanship, such as a dummy for being a Republican and the George W. Bush ‘feeling thermometer’ produce near-identical results. Finally, I also use a measure of skill specificity, which Iversen and Soskice (2001) find is a powerful predictor of social policy preferences, particularly with regard to social insurance. I use the NES questions on occupational data and translate this into estimates of individual skill specificity, following the rubric in Cusack, Iversen, and Rehm (2008). Since occupational data is missing for some fifteen percent of the cases, I use multiple imputation to estimate skill specificity for those missing cases. Results without the skill specificity variable or the imputation are very similar, partly because the correlation between house price appreciation and skill specificity is very low (-0.027).

In terms of my estimation approach I conduct a series of ordered logit tests on the data, adjusting the standard errors for clustering by either MSA or state, and using sample population weights provided by the NES. Table One presents a series of models using, in turn, the various measures of house price appreciation. Model One is limited to those individuals with MSA data and shows a robust negative effect of house price appreciation on attitudes towards Social Security. The substantive effect is quite large. Moving from being a renter to owning a house that has doubled in value in real terms is estimated to make an individual around nine percent points less supportive of increasing Social Security spending. This effect is comparable to magnitude to that obtained for gender and much larger than those for income or being retired. Model Two uses the five-year MSA

house price percentage increase variable. Here we again see a robust and fairly sizable negative relationship - moving from the 5th to 95th percentile is associated with a ten percent point drop in supporting expanding Social Security spending. Models Three and Four expand the sample somewhat since they use only state-level house price data. We see a very similar pattern using this data. Models Five through Eight use the MSA or State variable, which should provide the most accurate estimates of house price appreciation. Models Five and Six show very similar results to beforehand both in terms of robustness and in substantive magnitude. In Models Seven and Eight I introduce dummy variables for, respectively, MSA and state. These models are rather more challenging since by introducing them we are now only comparing individuals within MSAs or states – hence we examine only the individual-level estimate of house price appreciation. While the results become slightly less robust, they are other similar in magnitude to before and are broadly supportive of the finding that homeowners with higher appreciation are less supportive of social insurance even in areas that have particularly high or low rates of appreciation.

Table Two turns to a slightly different issue. I argued above that right-wing parties are especially likely to seize upon the change in preferences of homeowners over social insurance. Empirically this suggests that the effects of property prices on social insurance preferences should be stronger for right-wing voters. If they turned out to be stronger for left-wing voters that would be anomalous for the theory. In Table Two, I re-examine Models Five and Six of Table One, breaking voters into those who are Republicans and those who are either independents or Democrats. I find strong and robust evidence that it is right-wing voters who are driving the results in Table One.

Although the coefficients on house price appreciation for Democrats and independents are negative they are not robust at conventional levels. Conversely those for Republicans are highly robust and twice the size of those reported for the full sample in Table One. In that sense, Bush's 'ownership society' rhetoric was aimed at his base – right-wing voters are most responsive to the idea of replacing social insurance with a private nest egg.

To check on the generalizability of this finding about policy preferences in the American context, I now turn to survey evidence from two European countries: the United Kingdom and Germany. These countries form a revealing pairing. The UK, like the USA, has had fairly sizable volatility in house prices since 1970 and experienced an even greater housing boom in the early 2000s. Germany by contrast actually saw declining property values during the same period but it too had periods of rising and declining prices over the previous three decades. Germany is also well-known for having particularly low homeownership rates in comparative context. The two European countries contrast with the USA in their data availability. Neither the British Social Attitudes Survey (BSAS) nor the German Social Survey (ALLBUS) contain information on the length of homeownership. Nor is geographically fine-grained house price data available – for the UK there is data by region but there is no available long-run data on house prices by German Bundesland, hence for Germany I rely only on cross-time national house price data. Although these differences reduce direct comparability with the USA, there are some benefits to using these surveys. Unlike the USA both ask questions about unemployment benefits / income support and about income redistribution. Thus what we lack here in fine-grained homeownership data we gain in the range of dependent variables under analysis.

I begin with the United Kingdom, with the British Social Attitudes Surveys of 2001 and 2006. I examine three questions that relate to social insurance. The first two – on pensions and unemployment benefits – follow the same rubric. Respondents are asked whether the government should spend more or less on each of these policy items.⁴ In terms of redistribution, the question in both surveys is simply whether the government should redistribute income from rich to poor. Iversen and Soskice (2001) argue such redistribution is tantamount to social insurance, at least from a ‘veil of ignorance’ perspective. Since I lack data on how long respondents have owned their property, I estimate individual house price appreciation by examining the five year percentage increase in house prices in the region a given homeowner lives in. Thus, I am essentially recreating the ‘sociotropic’ measure from the NES analysis, albeit with only eleven regions. Given this limit in the number of regions, examining two surveys is helpful since many, though not all, British regions did not experience sharp rises in house prices until well after 2001, whereas others like London had booms dating back to the mid 1990s.

I employ a very similar set of control variables to Table One: gender, age, income, education, retired status, partisanship, and skill specificity. Education is measured using university degree since British education has a complicated structure at the secondary level that does not correspond well to the US case. Partisanship is taken as the composite of ideological views on redistribution, government intervention, societal fairness, and big business.⁵ Since redistribution views are included in this measure, I

⁴ In the BSAS 2001, for each type of program, some respondents were asked if taxes should go up one penny in the pound to pay for these programs, whereas some were asked if taxes should go up three pennies in the pound. I combine these groups into one indicator for pensions and one for unemployment, though similar patterns hold within each group. In the BSAS 2006 the questions are simply whether the government should increase spending on pensions or unemployment respectively.

⁵ Using dummies for political parties produces very similar results, though the existence of a viable third party makes results for partisanship less clear than the US case.

exclude from the analysis of the redistribution question. Finally, skill specificity is coded from the ISCO occupational codes provided in the BSAS 2001 following the specifications of Cusack, Iversen, and Rehm (2008). The BSAS 2006 lacks this information, consequently I included broad (non-ISCO) occupational dummies in these analyses as proxy controls for skill specificity.⁶ Finally, for each specification I alternate between excluding and including dummies for the region. When dummies are included, the housing variable measures differences in regions between homeowners and renters, amplified by the size of the regional five-year change in prices. When dummies are excluded, we obtain this effect and that *between* homeowners across regions with different price growth.

Table Three (a) presents results for ordered probit analyses of the pensions, unemployment, and redistribution questions. Across almost all the models we find robust negative relationships between the house price appreciation variable and social insurance preferences. As an example, the effect of moving from being a renter to a homeowner in Outer London is to reduce support for increased spending on pensions by between seven and ten percent points, depending on the model, an effect comparable in magnitude to that found in the American case. A substantively similar effect is found with regard to unemployment insurance – moving from being a renter to a homeowner with high levels of house price appreciation is associated with a ten percent point increase in the probability of desiring cuts to unemployment benefits. Finally, the same move on the house price appreciation variable is associated with a ten percent point decrease in supporting greater redistribution. Generally these effects are marginally larger in the

⁶ For the BSAS 2006, I used the Goldthorpe occupational dummies that unlike ISCO codes are included in the dataset. These are not perfect substitutes, see Iversen (2008).

BSAS 2006 than the BSAS 2001 but the broad similarity in robustness and magnitude suggests the effect of house price appreciation on social policy preferences is quite stable.

Table Three (b) returns to the question of which kinds of individuals are most responsive to house price changes. Once more, I divide the sample by the partisanship of individuals, this time examining solely Conservative and Labour supporters in the two samples.⁷ As in the American case, I find that the negative effects of house price appreciation on social policy preferences are much stronger and more robust in the case of Conservatives than Labour supporters. Again the negative direction of the effect is consistent across both parties but is only robust and is much larger for right-wing voters. This provides further support for the conjecture that it is right-wing parties that are most likely to cut social spending during housing booms.

I conclude the analysis of housing and social policy preferences by turning to the case of Germany. Germany, unfortunately, does not have historical data on housing prices at the Bundesland level, hence here I use national house price data and examine changes in social policy preferences over the period 1988 to 2004. I alter the specification of the model somewhat given the absence of regional data and use a dummy variable for home ownership and a five-year national real house price change variable. In Germany, this variable is sometimes positive and sometimes negative, given that unlike the USA and the UK in the early 2000s, Germany had both housing declines and rises between 1988 and 2004. In fact the five year house price change variable has a mean of -2.6% over the five-year period.

⁷ These two parties mark the clearest left-wing dimension in British politics, with the Liberal Democrats and regional parties having less well-defined preferences over social insurance, though they typically lean to the left.

I use three questions on social policy preferences as dependent variables. Unfortunately, they do not match precisely those used in the previous two samples but there is some overlap. The first question asks whether “social benefits” should be cut or extended, referring to general social insurance policies. The second question asks whether the government should “secure the income” of all citizens in times of hardship. This question is related to social insurance motivations, albeit more to unemployment insurance than to pensions. Finally, the third question asks whether social differences are just. There is some correspondence here to the redistribution question in the BSAS, though here respondents are not asked whether the government should reduce the gap between rich and poor, simply whether that gap is fair. The three questions are available for different years in the ALLBUS survey: the social benefits question for 1994, 2000, and 2004; the income security question for 1991, 1994, 2000, and 2004; and the social differences question for 1988, 1991, 1994, 1998, 2000, and 2004. Thus, the latter questions reflect greater variation in house price changes than does the former. For each question I use two specifications, one with dummies for Bundesland and a skill specificity variable, and one without. All models contain dummies for the year of the survey and robust standard errors clustered by Bundesland. The skill specificity variable is calculated from ISCO codes, however these are only available for a subset of respondents (around one third). The models are presented in Table Four.

Across all the models homeownership itself has a powerful negative effect on support for social insurance policies and a positive effect on finding just the gap between rich and poor. Furthermore, in five of the six models, the effect of house increases accentuates the homeownership effect – it is always in the same direction as the

coefficient on homeownership. This is somewhat surprising since many of the years under analysis house prices are declining, which would mean that house price coefficient is negative – in such cases the effect of homeownership on opposing social insurance is thus weakened. This indicates that declining prices also affect the behavior of homeowners in terms of their social policy preferences – a finding with interesting implications for voters during the current housing downturn.

In sum, the analysis of the effects of homeownership and house prices on individual social policy preferences shows a powerful negative relationship that previous studies of preferences have not uncovered. The effect is one that runs often orthogonally to traditional factors of interest like income, education, and skill specificity. The analysis shows that measures of individual wealth may, then, be as important as individual labor market status in shaping opinions about the role of government and the welfare state. However, we are still left with the question as to whether these preferences matter in any substantive sense – do political parties respond to the shifting views of voters?

5. Housing Prices and Policy Outcomes at the Macro Level

In this section I move from examining how house prices affect micro-preferences over social policies to analyzing whether house price fluctuations actually alter policy outcomes. In particular, I investigate whether the same pattern of right-wing voters being most strongly affected by house prices manifests itself at the national level through the actions of right-wing parties. The findings in this section strongly support these conjectures. Even controlling for changes in standard macroeconomic factors including national income, price inflation, unemployment, and interest rates we see powerful

effects of house prices on patterns of government spending. In short, under right-wing government, the housing effect on spending is stronger. When house prices are rising, right-wing governments appear to cut spending further and faster. This finding jibes closely with the expectations I laid out in the previous section. Homeowners experience a rise in the price of their most important asset during housing booms. This leads to a lower demand for publicly provided social insurance, as houses become seen as nest eggs. Parties that disproportionately represent homeowners – those of the right – respond to their constituents’ preferences by paring back social security spending. I explore this political effect of the housing cycle using cross-sectional time-series data for eighteen countries dating from 1975 to 2001.

The key independent variable is the five-year percentage change in real house prices (i.e. inflation-adjusted), taken from the Bank of International Settlements' house price data for eighteen countries from 1970 to 2001. This housing data provides a country-specific level of house prices relative to 1970 - note this implies that house price *levels* cannot be usefully compared cross-sectionally, though *changes* can, hence my use of the five-year percentage change.⁸ The mean of this variable is 12.8% (i.e. a compounded annual rate of around 2.5%), its standard deviation is 25.6% and its minimum and maximum values are, respectively, -45.8% and 118.3%.

I include as controls, a set of macroeconomic variables that come from the Penn World Tables (PWT), the World Development Indicators (WDI), and the OECD. These include Gross Domestic Product (measured in \$100bn), the annual growth rate of GDP, both from the PWT, the log of population, the real interest rate and consumer price

⁸ Using different lengths of time produces similar results, including one year changes. However, a five year period is both shorter than most housing booms but avoids the volatility of a one year indicator and is less likely to cause endogeneity problems.

inflation from the WDI, and the unemployment rate from the OECD.⁹ I also add two further important determinants of social spending: trade openness (Garrett, 1998; Rodrik, 2000) and the proportion of citizens over sixty-five years of age (both from the WDI). For government partisanship I use Cusack and Engelhardt's cabinet 'center of gravity' index, which produces a measure of cabinet ideology that is a weighted average of the ideology of parties in the governing coalition (Cusack and Engelhardt, 2002). I use their 'composite ideology' index, which is based on 23 expert ratings and is also used in Iversen and Soskice (2006). This variable ranges (theoretically) between -100 and 100, with right-wing parties having higher scores, and has a mean of 3.65, and a standard deviation of 24.15. I also employ an interactive variable that is the product of cabinet ideology and the five year percentage change in house prices.¹⁰ It is this variable I expect to be most critical – social insurance spending should be reduced by the *combination* of right-wing government and house price increases.

For the dependent variables, I examine social spending policies from the OECD Social Spending dataset from 1980 to 2001, as well as OECD data on social transfers as compiled by Armingeon et al (2010). The variables taken from the OECD Social Spending dataset are total social spending as a percentage of GDP, spending on old age pensions as a percentage of GDP, and spending on unemployment benefits as a percentage of GDP. The total social spending measure includes not only pensions and unemployment but also survivors' benefits, incapacity benefits, health spending, family spending, active labor market programs, and public housing. The social transfers measure

⁹ This configuration of sources provides the greatest time and country coverage. Other measures of unemployment and GDP provide very similar results on a truncated dataset.

¹⁰ These variables along with the dependent variables were drawn from the Quality of Governance Social Policy dataset compiled by Samanni et al (2008).

from Armingeon et al (2010) is defined as “social assistance grants and welfare benefits paid by general government” and has greater availability, dating back to the 1960s and is correlated at 0.81 with the OECD total social spending variable.

Tables Five (a) through Five (d) through test the propositions developed above using a variety of statistical techniques on a dataset of eighteen states from 1975 to 2001, with between 280 and 396 observations across the various models. Table Five (a) examines total social spending, Table Five (b) looks at old age pensions spending, Table Five (c) examines spending on unemployment benefits, and Table Five (d) examines social security transfers. Each table contains a comparable series of statistical estimations. Model 1 is a country fixed effects analysis with a stripped down array of macroeconomic controls. Model 2 adds a further series of controls reducing the dataset somewhat in size: inflation, real interest rate, trade openness, and proportion of population over 65. Model 3 and Model 4 repeat that specification but with, respectively, an AR1 error term and a lagged dependent variable. All the fixed effects models use country-clustered standard errors. Finally Models 5 and 6 remove the country fixed effects and are pooled analyses with AR1 error terms, lagged dependent variables, and, respectively, heteroskedasticity adjusted and panel corrected standard errors. All Models except Model 6, which uses a time trend, contain year dummies.

The main finding jumping out of these tables is that the interactive variable of cabinet partisanship and house prices is negative and robust across almost all of the models. Except for unemployment spending, where the results are more mixed, the effects of house prices conditional on right-wing partisanship are to robustly decrease social spending, particularly pensions. For total spending this effect is robust at the one

percent level in all but one model, for pensions in all but two models, and for social transfers at the five percent level in all but one model. For unemployment spending, the situation is mixed, only the latter three models are significant at conventional levels. Broadly, the implication is that the impact of house prices, controlling for other aspects of the business cycle and other determinants of government spending, is filtered through partisan control of government. When right-wing governments capture office and house prices have been appreciating we see a strong negative impact on social spending and transfers and in terms of old age pensions (with some mixed evidence on unemployment spending). Conversely, when left-wing parties are in power during periods of house price appreciation there is no distinguishable effect on social spending. Splitting the sample into left and right wing parties we do indeed find that the negative effect of house price appreciation on social spending only occurs under the latter.¹¹

This pattern can be seen in Figures One (a) and One (b), which show estimates drawn from Model A of each Tables Five (a) and Five (b) of the marginal effect of real house prices increasing by fifty percent (as they did in many European countries including the UK, Belgium, and Denmark during 2001-2006) on, respectively, social spending and pensions spending.¹² The figures can be interpreted as showing the estimated effect - with ninety-five percent confidence intervals - of this increase in house prices for a given level of partisanship, where negative fifty implies a fifty-point swing to the left and positive fifty implies a fifty-point swing to the right.¹³ Three patterns are clearest. Firstly, when partisanship moves to the left (towards minus fifty on the x-axis)

¹¹ Results not shown, available from author.

¹² Using different models alters the slope and intercept of these predicted curves though broadly the substantive interpretation is the same.

¹³ That the x-axis reflects swings of partisanship within countries rather than levels across countries is due to the use of country dummies.

there is little evidence of house price increases affecting either social spending (Figure One (a), except at the extreme left) or pensions spending (Figure One (b), throughout the whole range of leftward shifts in government). Secondly, when cabinet partisanship moves to the right there is a robust negative effect of house price increases on both pensions and social spending more broadly. That is, house price booms lead to decreases in social spending when right-wing parties are in power. At the extreme, a fifty point swing to the right in partisanship combined with a fifty-percent increase in house prices is associated with a reduction of social spending of just over one percent point of GDP and half a percent point of GDP in the amount of spending on pensions. These figures amount to half a within-country standard deviation in both total and pensions spending – sizable effects with substantial political implications. The final point worth noting is that even with a ‘moderate’ government (one with the country’s mean level of partisanship), house price increases are associated with declines in both social and pensions spending.

I conclude this section by examining whether the aggregate level of homeownership has any impact on the findings above. Here I rely on data collected by Atterhog (2005) on home ownership rates from 1960 to 2003 across fifteen of the countries in the dataset.¹⁴ I examine whether the effects on social spending of house price increases conditional on partisanship, as found in the previous tables, are stronger in those countries with higher rates of homeownership.¹⁵ This expectation fits with Conley and Gifford (2006), who find homeownership is negatively correlated with aggregate

¹⁴ Atterhog’s data is collected at different time intervals across countries: sometimes every year, sometimes every five years. In order to have uniform data I linearly interpolate home ownership rates for missing years – since homeownership rates are fairly slow-moving this should introduce limited bias.

¹⁵ Introducing the homeownership rate as an extra control variable into Tables Five (a) through (d) has minimal effects on the coefficients of interest but reduces the number of cases substantially. Results available from author.

social spending at the cross-sectional level. Table Six splits countries into two groups: those with average levels of homeownership across the time period lower than the overall median and those at the median or above. I examine each of the four spending variables from Table Five and use the same specification as Model 4. Across total spending, pensions spending, and unemployment spending the coefficient on the interactive variable is larger in magnitude and statistically far more robust for the groups of countries with higher homeownership rates than for those with lower rates.¹⁶ For social transfers the coefficient is actually slightly smaller for the high homeownership group but is robust at the ten percent level, whereas that for the low homeownership group is not robust. Homeownership itself is almost always negatively signed but is rarely a robust predictor of changes in social spending. This analysis then marks an advance on that of Conley and Gifford (2006) in showing that it is not homeownership *per se* that matters for public spending but rather the *differential benefits* homeowners obtain in terms of their wealth when house prices are rising. These effects will be more pronounced where homeownership is more widespread, as a supermajority of voters, especially right-wing voters, are homeowners who stand to benefit from changes in prices.

Thus across the last few decades, OECD countries do appear to have experienced important effects of housing on the behavior of governments. This pattern has striking political implications given the increased volatility of housing prices and the general threats to government spending in an era of potential retrenchment (Clayton and Pontusson, 1997). The effect of housing appears refracted through the political system.

¹⁶ This finding mirrors that found in the analysis of German survey data where homeownership at the individual level was a robust predictor of social policy preferences but changes in house prices were less robust, as compared to the UK and American cases. Germany has much lower rates of home ownership than these two countries.

Right-wing parties have responded to the opportunity produced by an ‘ownership society’ to cut back spending quite dramatically. Fluctuations in asset markets have sharp consequences for the welfare state.

6. In Conclusion

The major economic story of the last decade has been the surge and collapse of house prices worldwide, building on substantial housing volatility that began to emerge in the 1980s (Shiller, 2007). Yet political economists have had very little to say about this critical phenomenon, trapped with an analytical language that speaks to the labor market but is deaf to the effects of wealth and ownership. This article presents an important first step in filling the analytical and empirical gap. Ownership matters for both the preferences of citizens about what they want from government and for the actual policymaking behavior of governments themselves. Building on a theory of assets acting as private insurance, I argued that homeowners, especially those who have experienced high levels of house price appreciation, will desire reduced (or at least stable) levels of spending on social insurance of various stripes, from pensions, to unemployment, to redistribution in general. Furthermore, parties representing these citizens – for the most part, right-wing parties – will likely respond by cutting social insurance programs during housing booms. I tested these propositions in two empirical settings. First, I examined social survey data from the USA, Britain, and Germany. Using a variety of measures of home ownership and house price appreciation I found strong evidence for the claim that homeowners with appreciating property will demand less social insurance and that this pattern is amplified among right-wing voters. Second, I found that right-wing parties do

appear to have cut social spending rather more vigorously during housing booms at the national level. Put together, these findings suggest a powerful new approach to thinking about the interaction of the economy and the welfare state. As economies have transitioned towards increasingly volatile asset markets, and given longstanding claims about retrenchment in the welfare state (Clayton and Pontusson, 1997), this theory helps us to understand how these forces affect the demand for, and supply of, social insurance.

This article has not been a simple reframing of existing arguments: home ownership and house price changes have an effect independent of the standard labor market forces of income, skill specificity, and employment. The analysis in this article allows us to join the broad literature on the political economy of income and employment to a new literature on ownership and wealth. In this latter world, many of the forces that political economists think drive policy preferences and policymaking still matter but in quite distinct ways. For example, political economists see globalization, through trade or foreign direct investment, as altering the risk individuals face in the labor market and hence their policy preferences (Rodrik and Mayda, 2005; Scheve and Slaughter, 2004). However while globalization may increase the demand for insurance it can also increase the supply of private insurance. As Herman Schwartz (2008) has noted, global credit markets underpinned a political economy of cheap credit and housing booms in Anglo-American countries in the 1990s and 2000s. While the value of homes may in the long run have been ephemeral, during the housing boom years many citizens took advantage of globalization to feather their nest eggs. Global credit then made possible the supply of private insurance and potentially reduced support for social insurance, precisely the opposite of the story commonly told about globalization and social spending.

Bibliography

- Ansell, Ben, 2007, 'Bubbling Under: Political Preferences During Asset Bubbles', Working Paper
- Armingeon, K. and Leimgruber, P. and Beyeler, M. and Menegale, S. 2010 Comparative Political Dataset I. Universitat Bern.
- Atterhog, Mikael, 2005, 'Importance of Government Policies for Home Ownership Rates', Working Paper, Swedish Royal Institute of Technology.
- Beck, Nathaniel and Jonathan Katz, 1995, 'What to do (and not to do) with time-series cross-section data', *American Political Science Review*, 89(3):634-647.
- Bernanke, Ben, 2004, 'The Great Moderation', remarks at the meetings of the Eastern Economic Association, Washington, February 20.
- Boix, Carles. 1998. *Political Parties, Growth and Equality*. Cambridge University Press.
- Calmfors Lars and John Driffill, 1988, 'Bargaining Structure, Corporatism, and Macroeconomic Performance' *Economic Policy*.
- Castles, Francis, 1998, 'The really big trade-off: Home onweship and the welfare state in the new world and the old', *Acta Politica* 33:5-19.
- Clayton, Richard and Jonas Pontusson, 1997, 'Welfare-state retrenchment revisited: entitlement cuts, public sector restructuring, and inegalitarian trends in advanced capitalist societies', *World Politics*, 51(1):67-98.
- Conley, Dalton and Brian Gifford, 2006, 'Home Ownership, Social Insurance, and the Welfare State', *Sociological Forum*, 21(1).
- Cusack, Thomas and Lutz Engelhardt, 2002, The PGL file collection: File structures and procedure. Wissenschaftszentrum Berlin für Sozialforschung
- Cusack, Thomas, Torben Iversen, and Philipp Rehm, 2006, 'Risks at work: the demand and supply sides of government redistribution', *Oxford Review of Economic Policy*, 22(3).
- Duch, Raymond and Randolph Stevenson, 2007, *The Economic Vote*, Cambridge University Press, New York, NY.

- Estevez-Abe, Margarita, Torben Iversen, and David Soskice. 2001. "Social Protection and the Formation of Skills: A Reinterpretation of the Welfare State." In Peter Hall and David Soskice (eds.), *Varieties of Capitalism*. New York: Oxford University Press.
- Franzese, Robert, 2002, *Macroeconomic Policies of Developed Democracies*, Cambridge University Press, New York, NY.
- Garrett, Geoffrey, 1998. *Partisan Politics in the Global Economy* Cambridge University Press, New York, NY.
- Goldthorpe, John, 1968, *The Affluent Worker: Industrial Attitudes and Behavior*. Cambridge University Press.
- Hibbs, Douglas, 1977, 'Political Parties and Macroeconomic Policy', *American Political Science Review*.
- IMF, 2008, *The Changing Housing Cycle and the Implications for Monetary Policy in Economic Outlook 2008*.
- Iversen, Torben, 1999, *Contested Economic Institutions*, Cambridge University Press
- Iversen, Torben, 2005. *Capitalism, Welfare, and Democracy*. Cambridge University Press.
- Iversen, Torben and David Soskice. 2006. Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More Than Others. *American Political Science Review* 100 (02):165-181.
- Korpi, Walter. 1983. *The Democratic Class Struggle*. London: Routledge.
- Polanyi, Karl 1948, *The Great Transformation*, Beacon Press, Boston, MA.
- Rodrik, Dani, 2000. Why Do More Open Economies Have Larger Governments? *Journal of Political Economy* 106 (5):997–1032.
- Rodrik, Dani, and Anne-Marie Mayda, 2005, 'Why are some people (and countries) more protectionist than others?' *European Economic Review*. 49(6):1393-1430.
- Samanni, Marcus, Jan Teorell, Staffan Kumlin & Bo Rothstein. 2008. The QoG Social Policy Dataset, version 24Oct08. University of Gothenburg: The Quality of Government Institute, <http://www.qog.pol.gu.se>.
- Scheve, Kenneth and Matthew Slaughter, 2001, 'What Determines Individual Trade Policy Preferences?', *Journal of International Economics*, 54(2):267-292.

- Scheve, Kenneth and Matthew Slaughter, 2004, 'Economic Insecurity and the Globalization of Production', *American Journal of Political Science*. 48(4):662-674.
- Schwartz, Herman, 2009, *Subprime Nation*, Cornell University Press, Ithaca, NY.
- Schwartz, Herman and Leonard Seabrooke, 2008, 'Varieties of Residential Capitalism in the International Political Economy: Old Welfare States and the New Politics of Housing', *Comparative European Politics*. 6(3).
- Shiller, Robert, 2007, *Irrational Exuberance*, Second Edition, Doubleday Press, New York, NY.

Table One: Preferences over Social Security Funding NES 2004

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
MSA House Increase	-0.333** (0.166)							
Own *5 Yr % change in MSA		-0.687** (0.351)						
State House Increase			-0.433** (0.183)					
Own*5 Yr % change in State				-0.576** (0.286)				
State or MSA House Increase					-0.398** (0.166)		-0.417* (0.246)	-0.329* (0.188)
Own*5 Yr % change						-0.730** (0.320)		
Party ID	-0.161*** (0.030)	-0.173*** (0.030)	-0.154*** (0.036)	-0.155*** (0.028)	-0.156*** (0.029)	-0.157*** (0.028)	-0.172*** (0.032)	-0.176*** (0.038)
Gender	0.382*** (0.145)	0.353** (0.151)	0.352*** (0.136)	0.343*** (0.124)	0.346*** (0.123)	0.348*** (0.122)	0.331*** (0.126)	0.339** (0.136)
Age	-0.004 (0.006)	-0.003 (0.006)	-0.002 (0.006)	-0.003 (0.005)	-0.003 (0.005)	-0.003 (0.005)	-0.005 (0.005)	-0.006 (0.005)
Retired	-0.312 (0.271)	-0.332 (0.277)	-0.310 (0.209)	-0.309 (0.223)	-0.308 (0.222)	-0.314 (0.223)	-0.370* (0.219)	-0.304 (0.205)
Education	-0.267*** (0.064)	-0.261*** (0.067)	-0.239*** (0.059)	-0.236*** (0.059)	-0.238*** (0.059)	-0.238*** (0.058)	-0.222*** (0.059)	-0.212*** (0.057)
Household Income	-0.012 (0.017)	-0.015 (0.018)	-0.020 (0.013)	-0.018 (0.014)	-0.020 (0.015)	-0.017 (0.014)	-0.028 (0.017)	-0.030** (0.012)
Skill Specificity	-0.020 (0.077)	-0.033 (0.078)	-0.071 (0.058)	-0.071 (0.064)	-0.075 (0.063)	-0.074 (0.063)	-0.072 (0.064)	-0.066 (0.055)
Dummies	NO	NO	NO	NO	NO	NO	MSA	STATE
Clustered std errors	MSA	MSA	STATE	STATE	MSA	MSA	MSA	MSA
Observations	900	851	1039	1039	1039	1039	1039	1039

Table Two: Social Security Preferences and House Prices by Partisanship

	(1) NON-REPS	(2) REPS	(3) NON-REPS	(4) REPS
State or MSA House Increase	-0.294 (0.207)	-0.772** (0.368)		
Own*5 Yr % change			-0.419 (0.405)	-1.590*** (0.532)
Gender	0.350** (0.141)	0.323 (0.253)	0.350** (0.141)	0.324 (0.252)
Age	-0.006 (0.006)	0.003 (0.010)	-0.006 (0.006)	0.005 (0.009)
Retired	-0.030 (0.255)	-0.776** (0.321)	-0.043 (0.258)	-0.788** (0.314)
Education	-0.220*** (0.047)	-0.251** (0.126)	-0.220*** (0.047)	-0.253** (0.123)
Household Income	-0.006 (0.015)	-0.068** (0.030)	-0.005 (0.015)	-0.062** (0.029)
Skill Specificity	-0.033 (0.071)	-0.305* (0.161)	-0.032 (0.071)	-0.309* (0.166)
Observations	741	302	741	302

Table Three (a): British Social Attitudes Survey 2001 and 2006

BSAS 2001	(1) PENSIONS	(2) PENSIONS	(3) UNEMP	(4) UNEMP	(5) REDIST	(6) REDIST
HomeOwn* % 5yr	-0.244*** (0.089)	-0.188* (0.103)	-0.329** (0.167)	-0.428** (0.206)	-0.147 (0.156)	-0.304* (0.167)
Gender	0.099*** (0.034)	0.100*** (0.035)	0.103* (0.055)	0.105* (0.056)	-0.091 (0.057)	-0.084 (0.056)
Age	0.010*** (0.002)	0.010*** (0.002)	-0.000 (0.002)	-0.000 (0.002)	0.003* (0.002)	0.004* (0.002)
Income	-0.044* (0.024)	-0.046* (0.025)	-0.064** (0.025)	-0.060** (0.025)	-0.159*** (0.023)	-0.153*** (0.024)
Degree	-0.137** (0.066)	-0.136** (0.067)	0.253*** (0.039)	0.241*** (0.035)	0.448*** (0.069)	0.440*** (0.066)
Retired	0.046 (0.088)	0.046 (0.089)	0.066 (0.047)	0.066 (0.047)	-0.066 (0.086)	-0.072 (0.088)
Skill Specificity	0.058*** (0.017)	0.054*** (0.018)	-0.000 (0.037)	0.003 (0.037)	0.134*** (0.043)	0.133*** (0.042)
Left-Right	-0.148*** (0.018)	-0.144*** (0.018)	-0.161*** (0.039)	-0.154*** (0.041)		
Region Dummies	N	Y	N	Y	N	Y
Observations	2340	2340	2334	2334	2338	2338

Region clustered standard errors in parentheses*** p<0.01, ** p<0.05, * p<0.1

BSAS 2006	(1) PENSIONS	(2) PENSIONS	(3) UNEMP	(4) UNEMP	(5) REDIST	(6) REDIST
HomeOwn* % 5yr	-0.180 (0.144)	-0.307*** (0.094)	-0.391*** (0.124)	-0.419*** (0.122)	-0.179*** (0.049)	-0.229*** (0.053)
Gender	-0.020 (0.080)	-0.016 (0.079)	-0.102** (0.044)	-0.105** (0.047)	-0.115*** (0.037)	-0.115*** (0.037)
Age	0.016*** (0.004)	0.016*** (0.003)	0.012*** (0.003)	0.012*** (0.003)	0.007*** (0.001)	0.007*** (0.001)
Income	-0.007 (0.016)	-0.005 (0.017)	-0.062*** (0.015)	-0.061*** (0.014)	-0.044*** (0.006)	-0.042*** (0.005)
Degree	-0.273* (0.140)	-0.242 (0.151)	0.230* (0.118)	0.211 (0.130)	0.338*** (0.097)	0.329*** (0.097)
Retired	-0.208* (0.115)	-0.210* (0.124)	-0.274** (0.118)	-0.255** (0.112)	-0.283*** (0.039)	-0.275*** (0.038)
Left-Right	-0.248*** (0.069)	-0.242*** (0.065)	-0.178** (0.079)	-0.188** (0.080)		
Region Dummies	N	Y	N	Y	N	Y
Observations	712	712	686	686	3013	3013

All models include dummies for occupation.

Region clustered standard errors in parentheses*** p<0.01, ** p<0.05, * p<0.1

Table Three (b): BSAS Partisan Differences with Pensions

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	2001	2001	2001	2001	2006	2006	2006	2006
	CONS	LAB	CONS	LAB	CONS	LAB	CONS	LAB
HomeOwn* % 5yr	-0.419*** (0.117)	-0.222 (0.193)	-0.446** (0.182)	-0.193 (0.217)	-0.824** (0.380)	-0.055 (0.233)	-0.946** (0.434)	-0.136 (0.272)
Gender	0.054 (0.083)	0.065 (0.063)	0.058 (0.085)	0.070 (0.061)	0.273** (0.107)	0.043 (0.171)	0.253* (0.130)	0.022 (0.181)
Age	0.013*** (0.004)	0.012*** (0.003)	0.014*** (0.004)	0.012*** (0.003)	0.021*** (0.008)	0.014* (0.008)	0.022** (0.009)	0.015* (0.008)
Income	-0.146*** (0.056)	0.001 (0.043)	-0.150*** (0.056)	0.004 (0.041)	-0.037* (0.020)	-0.005 (0.027)	-0.034* (0.021)	-0.007 (0.029)
Degree	-0.150 (0.100)	-0.117 (0.124)	-0.140 (0.116)	-0.127 (0.130)	-0.130 (0.267)	-0.303 (0.239)	-0.157 (0.289)	-0.359 (0.268)
Retired	-0.224 (0.138)	0.040 (0.129)	-0.262* (0.134)	0.052 (0.132)	-0.533 (0.325)	-0.064 (0.249)	-0.684** (0.333)	0.003 (0.267)
Left-Right	-0.018 (0.062)	-0.154*** (0.057)	-0.008 (0.062)	-0.142*** (0.055)	-0.103 (0.116)	-0.468*** (0.104)	-0.123 (0.111)	-0.410*** (0.113)
Skill Specificity	0.066 (0.090)	0.042 (0.046)	0.071 (0.090)	0.043 (0.044)				
Region Dummies	N	N	Y	Y	N	N	Y	Y
Observations	529	1080	529	1080	193	236	193	236

Models 5 to 8 use occupation dummies. Regional clustered standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table Four: German ALLBUS Data

	(1)	(2)	(3)	(4)	(5)	(6)
	BENEFITS	BENEFITS	INC SUPP	INC SUPP	GAP JUST	GAP JUST
Own House	-0.280*** (0.086)	-0.274*** (0.094)	-0.155*** (0.048)	-0.225*** (0.056)	0.187*** (0.070)	0.135* (0.078)
Own House*%5 Yr	-0.922* (0.562)	-0.338 (0.723)	-1.048** (0.419)	-1.472** (0.629)	1.984*** (0.424)	1.180* (0.723)
Age	-0.016*** (0.002)	-0.025*** (0.004)	-0.006*** (0.002)	-0.001 (0.004)	0.009*** (0.002)	0.012*** (0.003)
Gender	0.343*** (0.048)	0.120 (0.103)	0.141*** (0.049)	0.125* (0.068)	-0.143*** (0.032)	-0.083 (0.068)
Income	-0.093*** (0.010)	-0.063*** (0.015)	-0.079*** (0.005)	-0.047*** (0.009)	0.068*** (0.008)	0.030*** (0.009)
Left-Right	-0.214*** (0.022)	-0.124*** (0.027)	-0.089*** (0.014)	-0.026 (0.027)	0.196*** (0.013)	0.107*** (0.022)
Retired	0.178*** (0.057)	-0.044 (0.108)	0.257*** (0.056)	-0.049 (0.100)	-0.069 (0.088)	0.132 (0.102)
Education	-0.205*** (0.017)	-0.212*** (0.060)	-0.183*** (0.020)	-0.116*** (0.041)	0.030* (0.018)	0.120*** (0.025)
Skill Specificity		0.057 (0.057)		0.064 (0.045)		-0.137*** (0.033)
Bundesland Dummies	N	Y	N	Y	N	Y
Observations	6137	2454	9908	3063	13777	3946

Bundesland clustered standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table Five (a): Total Social Spending 1980 to 2001

	(1)	(2)	(3)	(4)	(5)	(6)
	FIXED FX	FIXED FX	FIXED AR1	FIXED LDV	POOLED	PCSE
Lagged DV				0.826*** (0.040)	0.961*** (0.015)	0.950*** (0.018)
House Price Change	-0.536 (0.500)	-0.608 (0.519)	-0.417 (0.455)	-0.352 (0.218)	0.067 (0.202)	-0.028 (0.214)
Cabinet Partisanship	0.001 (0.005)	0.002 (0.004)	-0.004 (0.002)	-0.001 (0.002)	-0.003* (0.002)	-0.003** (0.002)
Partisan*House Price	-0.039*** (0.010)	-0.042*** (0.009)	-0.026*** (0.008)	-0.018** (0.007)	-0.015*** (0.004)	-0.016*** (0.004)
GDP per capita	-0.052 (0.182)	-0.045 (0.254)	-0.620*** (0.189)	0.084 (0.092)	-0.060*** (0.021)	-0.063** (0.027)
GDP growth	-0.278*** (0.056)	-0.218*** (0.044)	-0.051* (0.027)	-0.225*** (0.032)	-0.216*** (0.024)	-0.244*** (0.025)
Population (ln)	6.837 (6.927)	10.252 (9.129)	0.548 (1.998)	2.560 (3.524)	0.031 (0.054)	0.027 (0.068)
Unemployment	0.450*** (0.099)	0.462*** (0.109)	0.190*** (0.065)	0.020 (0.044)	-0.042*** (0.015)	-0.039** (0.015)
Real Interest rate		0.081 (0.069)	0.059** (0.026)	0.071*** (0.021)	0.051*** (0.018)	0.058*** (0.021)
Inflation		0.028 (0.082)	-0.049 (0.032)	-0.004 (0.029)	-0.002 (0.020)	-0.024 (0.023)
Trade		-0.053 (0.031)	-0.032** (0.016)	-0.022* (0.011)	-0.002 (0.002)	-0.002 (0.002)
Population>65		-0.087 (0.231)	-0.239 (0.290)	-0.010 (0.061)	0.052 (0.033)	0.066* (0.035)
Constant	-95.038 (116.811)	-148.366 (152.261)	-4.059*** (0.628)	-40.063 (58.631)	1.479 (1.023)	22.539 (38.094)
Observations	333	298	280	281	281	281
R-squared	0.712	0.736	0.589	0.914	0.992	0.993
Number of ccode	18	18	18	18	18	18

All models contain year dummies. Country clustered robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table Five (b): Total Pensions Spending 1980 to 2001

	(1)	(2)	(3)	(4)	(5)	(6)
	FIXED FX	FIXED FX	FIXED AR1	FIXED LDV	POOLED	PCSE
Lagged DV				0.858*** (0.050)	0.981*** (0.012)	0.982*** (0.011)
House Price Change	-0.324 (0.283)	-0.293 (0.250)	-0.302 (0.186)	-0.064 (0.107)	0.102 (0.085)	0.056 (0.071)
Cabinet Partisanship	0.001 (0.002)	0.001 (0.002)	-0.001 (0.001)	0.001 (0.001)	-0.000 (0.001)	-0.000 (0.001)
Partisan*House Price	-0.013*** (0.003)	-0.013*** (0.003)	-0.008** (0.003)	-0.005* (0.003)	-0.006*** (0.002)	-0.006*** (0.002)
GDP per capita	0.049 (0.116)	-0.018 (0.107)	-0.180** (0.077)	-0.004 (0.039)	-0.019** (0.008)	-0.017* (0.009)
GDP growth	-0.115*** (0.034)	-0.087*** (0.019)	-0.017 (0.011)	-0.059*** (0.012)	-0.059*** (0.008)	-0.063*** (0.007)
Population (ln)	-7.337 (4.336)	-5.198 (4.317)	0.132 (0.829)	-1.167 (1.168)	0.053*** (0.020)	0.053** (0.023)
Unemployment	0.115*** (0.034)	0.104** (0.036)	0.013 (0.027)	-0.013 (0.013)	-0.012* (0.007)	-0.009 (0.007)
Real Interest rate		0.004 (0.030)	0.024** (0.011)	0.020* (0.010)	0.007 (0.006)	0.008 (0.006)
Inflation		0.020 (0.026)	-0.013 (0.013)	0.012 (0.011)	0.011 (0.008)	0.009 (0.007)
Trade		-0.012 (0.022)	-0.009 (0.006)	-0.003 (0.004)	-0.001 (0.001)	-0.001 (0.001)
Population>65		0.222 (0.130)	0.129 (0.119)	0.040 (0.028)	0.029** (0.013)	0.026** (0.013)
Constant	128.416* (70.603)	91.415 (70.018)	-1.635*** (0.255)	20.307 (19.145)	-0.601 (0.398)	-13.049 (9.155)
Observations	333	298	280	281	281	281
R-squared	0.565	0.619	0.400	0.878	0.993	0.993
Number of ccode	18	18	18	18	18	18

All models, except Model 6, contain year dummies. Country clustered robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table Five (c): Total Unemployment Spending 1980 to 2001

	(1)	(2)	(3)	(4)	(5)	(6)
	FIXED FX	FIXED FX	FIXED AR1	FIXED LDV	POOLED	PCSE
Lagged DV				0.708*** (0.063)	0.890*** (0.026)	0.863*** (0.036)
House Price Change	0.107 (0.145)	0.130 (0.153)	0.006 (0.148)	0.047 (0.107)	0.026 (0.081)	0.032 (0.079)
Cabinet Partisanship	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)	0.000 (0.000)	-0.001 (0.001)	-0.001 (0.001)
Partisan*House Price	-0.006 (0.004)	-0.007 (0.004)	-0.002 (0.003)	-0.006* (0.003)	-0.004** (0.002)	-0.004* (0.002)
GDP per capita	-0.016 (0.055)	-0.026 (0.056)	-0.100* (0.057)	0.033 (0.019)	-0.002 (0.008)	0.005 (0.010)
GDP growth	-0.026** (0.011)	-0.009 (0.013)	-0.000 (0.009)	-0.056*** (0.009)	-0.067*** (0.007)	-0.076*** (0.007)
Population (ln)	2.501 (1.899)	1.731 (1.841)	0.300 (0.487)	0.548 (0.810)	-0.029 (0.023)	-0.045* (0.027)
Unemployment	0.219*** (0.034)	0.232*** (0.033)	0.149*** (0.021)	0.075*** (0.021)	0.015 (0.009)	0.024** (0.012)
Real Interest rate		0.021 (0.014)	0.017** (0.008)	0.025*** (0.008)	0.019*** (0.006)	0.019*** (0.006)
Inflation		0.031 (0.027)	-0.007 (0.011)	0.010 (0.013)	-0.011 (0.008)	-0.012 (0.008)
Trade		-0.014** (0.005)	-0.003 (0.005)	-0.004 (0.005)	0.000 (0.001)	0.000 (0.001)
Population>65		-0.117 (0.075)	-0.188** (0.081)	-0.070** (0.029)	0.003 (0.008)	0.005 (0.010)
Constant	-42.091 (31.741)	-26.540 (30.968)	-1.080*** (0.220)	-9.050 (13.496)	0.740** (0.360)	32.568*** (10.941)
Observations	330	295	277	279	279	279
R-squared	0.709	0.722	0.551	0.871	0.949	0.941
Number of ccode	18	18	18	18	18	18

All models, except Model 6, contain year dummies. Country clustered robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table Five (d): Total Social Transfers 1975 to 2000

	(1)	(2)	(3)	(4)	(5)	(6)
	FIXED FX	FIXED FX	FIXED AR1	FIXED LDV	POOLED	PCSE
Lagged DV				0.930*** (0.026)	0.924*** (0.025)	0.923*** (0.028)
House Price Change	-0.205 (0.814)	-0.652 (0.858)	-0.546 (0.485)	-0.097 (0.206)	0.032 (0.260)	0.165 (0.276)
Cabinet Partisanship	0.007* (0.004)	0.006 (0.004)	-0.002 (0.003)	-0.000 (0.001)	-0.002 (0.001)	-0.001 (0.001)
Partisan*House Price	-0.023* (0.013)	-0.027** (0.011)	-0.024*** (0.009)	-0.013*** (0.004)	-0.012** (0.006)	-0.012** (0.006)
GDP per capita	-0.253 (0.475)	-0.138 (0.558)	-0.955*** (0.220)	0.013 (0.133)	-0.087*** (0.025)	-0.077*** (0.024)
GDP growth	-0.118* (0.061)	-0.218** (0.087)	-0.012 (0.031)	-0.248*** (0.018)	-0.213*** (0.020)	-0.233*** (0.021)
Population (ln)	2.618 (9.343)	3.178 (9.358)	3.936 (8.031)	1.903 (1.628)	-0.004 (0.064)	-0.058 (0.058)
Unemployment	0.337 (0.214)	0.243 (0.181)	0.041 (0.074)	-0.052 (0.035)	-0.029 (0.019)	-0.016 (0.016)
Real Interest rate		0.078 (0.102)	0.034 (0.026)	0.086** (0.031)	0.079*** (0.017)	0.076*** (0.017)
Inflation		-0.124 (0.126)	-0.041 (0.035)	-0.053 (0.032)	-0.033* (0.018)	-0.040** (0.017)
Trade		0.004 (0.062)	-0.004 (0.018)	-0.001 (0.013)	-0.003 (0.003)	-0.004 (0.003)
Population>65		-0.192 (0.329)	-0.459 (0.358)	-0.050 (0.056)	0.073** (0.033)	0.070** (0.032)
Constant	-24.649 (160.094)	-33.784 (159.118)	5.077 (3.119)	-30.323 (26.679)	2.911** (1.235)	96.278** (40.231)
Observations	396	346	328	346	346	346
R-squared	0.381	0.424	0.420	0.878	0.983	0.986
Number of ccode	18	18	18	18	18	18

All models, except Model 6, contain year dummies. Country clustered robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table Six: Effects of Partisanship and House Prices by Homeownership Rate

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	SOC SP	SOC SP	PENS	PENS	UNEMP	UNEMP	TRANS	TRANS
	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
Lagged DV	0.734*** (0.091)	0.827*** (0.066)	0.681*** (0.091)	0.813*** (0.063)	0.522*** (0.080)	0.708*** (0.083)	0.843*** (0.070)	0.946*** (0.048)
House Price Ch.	-0.582 (0.470)	-0.417 (0.559)	-0.060 (0.181)	-0.231 (0.202)	0.062 (0.129)	-0.153 (0.184)	-0.513 (0.719)	0.671* (0.357)
Partisanship	-0.004 (0.004)	-0.002 (0.004)	0.000 (0.001)	-0.001 (0.002)	-0.001 (0.001)	0.001 (0.001)	-0.009* (0.005)	0.002 (0.002)
Partisan*House Pr	-0.014 (0.010)	-0.027** (0.012)	-0.001 (0.004)	-0.009** (0.004)	-0.003 (0.002)	-0.012*** (0.004)	-0.023 (0.014)	-0.015* (0.008)
GDP per capita	-0.279 (0.208)	0.286* (0.145)	-0.051 (0.082)	0.091* (0.055)	-0.107** (0.051)	0.064 (0.049)	-0.248 (0.241)	0.056 (0.114)
GDP growth	-0.103* (0.059)	-0.282*** (0.039)	-0.045* (0.023)	-0.072*** (0.014)	-0.002 (0.016)	-0.078*** (0.014)	-0.233*** (0.081)	-0.231*** (0.028)
Population (ln)	-13.198 (11.327)	-0.113 (3.933)	-6.939 (4.325)	-0.089 (1.444)	-1.326 (2.652)	-3.147** (1.497)	-13.792 (10.448)	2.516 (2.664)
Unemployment	0.017 (0.083)	0.016 (0.074)	0.030 (0.030)	0.003 (0.026)	0.119*** (0.024)	0.045 (0.028)	-0.022 (0.092)	0.011 (0.043)
Real Interest rate	0.155** (0.061)	0.083** (0.038)	0.043* (0.022)	0.009 (0.014)	0.019 (0.013)	0.028** (0.011)	0.217*** (0.075)	0.039* (0.023)
Inflation	0.014 (0.081)	-0.012 (0.049)	-0.010 (0.031)	0.001 (0.018)	0.037* (0.019)	-0.007 (0.018)	-0.090 (0.076)	0.033 (0.031)
Trade	-0.048* (0.026)	-0.013 (0.017)	-0.016 (0.010)	-0.003 (0.006)	-0.021*** (0.006)	0.001 (0.006)	-0.036 (0.035)	0.002 (0.014)
Population>65	0.010 (0.198)	0.281 (0.269)	0.031 (0.074)	0.321** (0.124)	0.005 (0.046)	-0.050 (0.096)	0.027 (0.308)	-0.345*** (0.122)
Homeownership	-0.093* (0.049)	-0.105 (0.071)	0.003 (0.019)	-0.015 (0.026)	-0.013 (0.011)	-0.019 (0.023)	-0.084 (0.063)	-0.047 (0.037)
Constant	237.965 (190.090)	5.423 (67.180)	118.937 (72.369)	-1.230 (24.768)	25.902 (44.308)	52.745** (25.551)	245.658 (176.056)	-34.245 (45.415)
Observations	107	124	107	124	107	122	131	156
R-squared	0.910	0.943	0.888	0.913	0.948	0.920	0.872	0.955
Countries	7	8	7	8	7	8	7	8

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Figure One (a): Estimated Effects of House Price Changes on Total Social Spending

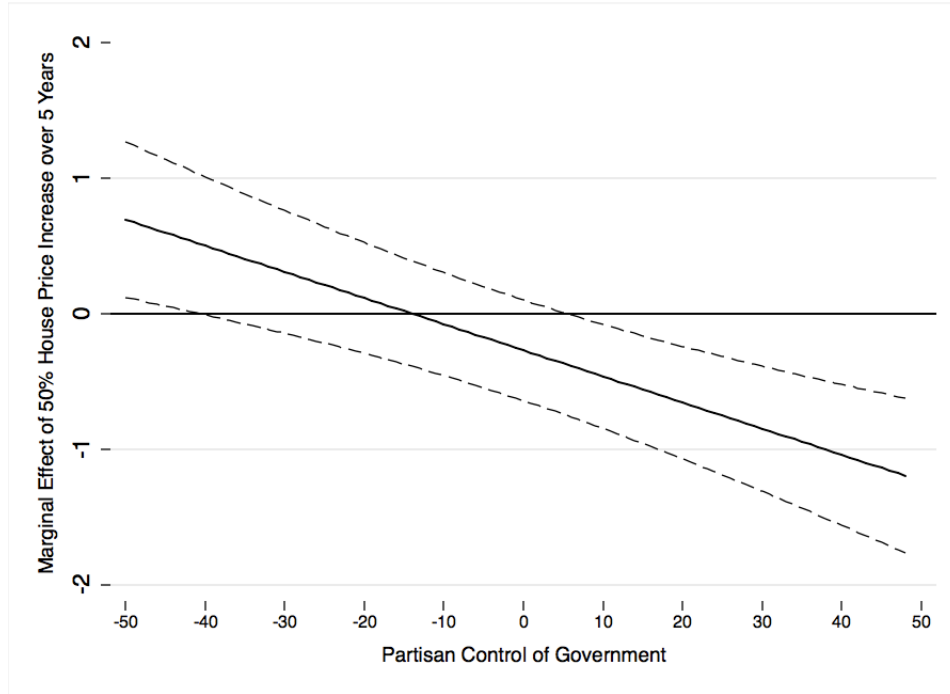


Figure One (b): Estimated Effects of House Price Changes on Pensions Spending

