

Welfare State Retrenchment, Redistribution Strategies, and Credible Commitments

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Abstract

It is common for political scientists to investigate the degree to which partisanship affects public policy. Less common is consideration of the effect of parties maximising policy preferences *through time*. In this paper, I propose a correction to the “new politics of the welfare state” thesis (Pierson, 1996) in which the mode of redistribution — cash transfers or welfare services — has implications for the degree to which this redistribution can be ‘rolled back’ by a future government. Left-wing parties are seen as acting strategically to maximise the present value of a stream of future policy pay-offs. Ultimately, they are influenced by the probability of a future government reversing their policies. Quantitative analysis of data from 20 OECD countries for the period 1990–2003 supports the claim that left-wing parties spend on cash transfers when they expect to be able to block future reforms, but welfare services otherwise.

It is common for political scientists to investigate the degree to which partisanship affects the welfare state. Less common is consideration of the effect of parties maximising their utility from such policies *through time*. In this paper, I propose a correction to the ‘new politics of the welfare state’ thesis Pierson (1996) in which the mode of redistribution has implications for the degree to which it can be ‘rolled back’ by a future government. Based on a politically important distinction between means-tested cash transfers and in-kind services in the welfare state, I build and test an argument in which left-wing parties are seen as acting strategically to maximise the present value of a stream of future policy pay-offs.

In brief, my claim is that means-tested cash transfers are a more effective form of redistribution than welfare services, but that they suffer from the drawback that they

are comparatively easy to cut for future governments. Faced with the decision of which form of welfare state expenditure to invest in, left-wing parties resolve the dilemma based on their perceptions of the likelihood that future governments will be able to roll back today's policy choices.

This view of the policy-making process can be seen in the idea of 'political uncertainty' proposed by Moe (1990). Horn and Shepsle (1989) offer a similar standpoint in which protection of policy gains is taken to be an inherent part of the political process. However, these earlier papers were largely concerned with US congressional politics. While Moe (1990, 238-248) provides some theoretical analysis for how the impact of 'political uncertainty' will vary from presidential to parliamentary systems, there is generally a dearth of empirically-grounded comparative work that applies the theoretical insight. Furthermore, these authors pay no attention to how their theories will interact with partisanship, and thus they fail to draw conclusions about why parties of similar ideological origin will pursue different policies across countries.

Beyond this 'policy uncertainty' research, I draw on two largely distinct strands of literature to make my argument. The first concerns how partisanship has influenced the development of welfare states in 'rich' countries while the second, stemming from earlier work in economics, analyses how institutions influence policy outcomes.

Building on the seminal work by Hibbs (1977), the broad political science literature is replete with quantitative empirical studies analysing the impact that partisanship has on policy outputs. Despite a voluminous literature regarding partisan effects on policy outputs, until relatively recently, there has been a tendency to ignore the context in which parties operate. Earlier researchers have implicitly assumed that left-wing parties seek the same policies in any political environment. This assumption is exhibited in the plethora of time-series cross-section (TSCS) studies, pooling across OECD countries, that model welfare expenditure (e.g. Pampel and Williamson, 1988; Hicks and Swank,

1992; Huber and Stephens, 2001; Iversen and Cusack, 2000; Franzese, 2002; Swank, 2002).

Furthermore, the work cited above has given little consideration to the idea that different types of welfare expenditure can have different redistributive effects — and therefore have different political dynamics associated with them (although see Rosenberry, 1982). Social policy scholars have been far less remiss in this respect, but this literature, in turn, suffers from its own drawbacks. Research in this tradition has tended towards ‘policy analysis’, whereby the effects of different types of social policy are evaluated with respect to criteria such as redistribution or poverty alleviation (e.g. Sainsbury and Morissens, 2002; Hölsch and Kraus, 2004, 2006), rather than explaining how the policies themselves arose. While a recent study by Nelson (2007) does come close to the kind of comparison of the development of different types of social expenditure set out here, the political dynamics remain under-theorised.

Despite ignoring the theoretical significance of distinctions between types of welfare expenditure, some political scientists have emphasised the importance of context in mediating political decisions. Garrett (1998, Chapter 4) investigates how and why left-wing and right-wing parties react differently to the onset of globalisation. His theoretical position, though, is one in which the prevailing politico-economic environment is only seen to temper or enhance partisan differences; not to influence chosen modes of redistribution. Rueda (2005, 2007) argues that the division between ‘insider’ and ‘outsider’ labour can have important consequences for the kinds of policies pursued by left-wing parties, which, in turn, can have important consequences for inequality. This ‘insider–outsider’ distinction can lead to differing political incentives depending on the nature of the labour market within which each group operates. So, with respect to labour market policies, he argues that left-wing parties have changed the policies that they favour as ‘insiders’ have come to feel less secure in their employment, and so to

share policy preferences with ‘outsiders’.

Largely separate from the partisanship literature, another branch of research focusing on the influence of institutions of a constitutional nature has developed. Most relevantly, there has been a focus on the political economy implications of credible commitment mechanisms for the nature and structure of public sectors. Acemoglu and Robinson (2001) provide a model showing that an absence of such mechanisms will lead governments to adopt policies that increase the likelihood of them winning future elections — with inefficiencies in public policy being the undesirable result.¹

Most recently, research has been conducted on the specific ways in which institutions mediate partisan actions. Iversen and Soskice (2006) and Ticchi and Vindigni (2005) propose that proportional electoral systems favour left-wing parties — with the logical conclusions regarding government expenditure. Bawn and Rosenbluth (2006) and Persson et al. (2007) provide theory and evidence as to the effects of intra-coalition bargaining on the size of government. Their conclusions being that more parties lead to higher levels of expenditure.

This paper follows the lead offered by those authors who emphasise the importance of political context on partisanship, but the emphasis here is more explicitly party-political. The very incentives of parties are seen to be conditioned by the political environment — the party system and its associated institutional structures — in which they operate. To make this theoretical case, I draw on the insights of the more recent political economy literature regarding institutions — especially in the area of commitment mechanisms.

1 The Argument

Before setting out my core theoretical claims, it is necessary to motivate the distinction between the two types of welfare expenditure that I emphasise. The distinction that I draw is similar to that suggested (almost 30 years ago) by Korpi (1980, 305) with respect to ‘universal’ as opposed to ‘marginal’ welfare policies. However, while Korpi’s dichotomy is useful, part of my claim is that it misses an important political difference between two components of welfare policy that are present, to different degrees, in both of his ideal types. Thus, I argue that we should draw a distinction between means-tested cash transfers and services in the welfare state. To support the importance of this distinction, I offer two arguments: one based on the relative abundance of labour in the latter, and the other based on how such labour tends to be highly unionised and, therefore, highly organised.

1.1 The ‘Stickiness’ of Welfare Spending

One of the central claims of the ‘new politics of the welfare state’ espoused by Pierson (1996) is that welfare state expenditure is extremely difficult to roll back. The ‘new politics’ claim is based on the idea that welfare policies are characterised by concentrated benefits and dispersed costs. This pattern makes it far more likely that those who benefit will organise to defend the *status quo* than that those who pay will organise to change it.

However, there are strong theoretical reasons to suggest that not all welfare expenditure is created equal. Pierson’s ‘new politics’ ignores the fact that the structure of welfare expenditure creates different sorts of winners and losers.² Expenditure that redistributes via investment in public *services* will tend to have two distinctive characteristics. First, the provision of services is nearly always very labour intensive. In

Baumol's words (Baumol, 1967, 416),

In some cases labor is primarily an instrument — an incidental requisite for the attainment of the final product, while in other fields of endeavor, for all practical purposes the labor is itself the end product.

Services in general, and certainly public welfare services, fall into this latter category. Health care, education, care for the elderly, pre-school, and any number of other welfare services that are provided by the state all embody large amounts of labour. This is true in a way that is not so for simple cash transfers. To be sure, a bureaucracy is required to process cash transfers, but an *equivalent* bureaucracy is needed to administer the provision of public services. Education and health ministries are hardly noted for their small size. The point is that public services require labour *over and above* that for pure administration. I claim, then, that public services will embody a far larger amount of labour than will cash transfer systems.

Recent data for the UK bears out this claim when comparing government expenditure on social security and education. In 2001, social security expenditure was £106.3 billion³ and expenditure by the Department for Education & Skills (DfES) was £40.9 billion (DfES, 2001, 9). By contrast, the Department of Social Security (DSS) employed a total of 80,000 staff (ONS, 2001, Table A) — including the Benefits, Child Support, and War Pensions agencies — while public sector education employment was estimated at 1.24 million (Hicks, 2005, Table 3). This latter figure includes non-school related employment. However, taking the figure for teachers alone, there were around 450,000 employed in the public sector (DfES, 2001, Table 2.5). The figure is more than five times the size of social security employment, which itself is constituted from expenditure at more than twice the level for education. Only including teachers in the comparison is also a large underestimate as there is a plethora of teaching-related and administrative employees that fall outside of the teaching profession but are directly

relevant to the argument advanced here. The evidence, then, supports the view that services embody far larger amounts of labour than do cash transfer systems.

Furthermore, using Baumol's terminology, the labour administering a cash transfer system is "an incidental requisite for the attainment of the final product", while that involved in the provision of services "is itself the end product". Not only does the logic underpinning Baumol's "cost disease" suggest that productivity improvements will tend to diminish the requirement for labour of the former kind, but the political support that such a group is likely to receive from the general public is minimal. Rightly or wrongly, people campaign for more nurses, not more bureaucrats.

The first point that services embody a far larger portion of labour than do cash transfers is strengthened by a second consideration. That is, that public sector workers are particularly likely to be unionised. Freeman (1986) passed an early commentary on how "unionism comes to the public sector". He noted the rise of public sector unionism in the USA over the post war era to the early 1980s. Also focusing on the USA, Farber (2005) presents data suggesting that since the mid 1970s, when both public and private sector union density stood at around 25%, the two sectors have diverged dramatically. By 2004, the private sector figure had shrunk to only around 8% while the public sector figure had swollen to around 35%. Draper (2000) presents evidence that this trend is far from particular to the USA. His data shows that across 12 OECD countries, while aggregate union density figures fell in most countries between the 1970s and the 1990s, the proportion of union membership being composed of public sector workers has risen — markedly so in several cases. Taking a snapshot of public and private union density figures for a similar selection of countries at the end of the 1990s, Blanchflower (2007, 6) shows that the difference between the two figures was of the order of 30 percentage points for most countries, and notably more for several. The evidence suggests, then, that while private sector unionism has been on the decline across most of the OECD

countries (Ebbinghaus and Visser, 1999; Visser, 2006), public sector unionism has, in both relative and absolute terms, been thriving.

The provision of public services, then, implies the presence of large bodies of highly organised labour — labour that will have a strong interest in maintaining or increasing funding for the services it provides. This is in contrast to those cases where there are large bureaucracies engaged in the distribution of means-tested cash transfers. In the transfer case, the bureaucracy has little to gain from forcing increases in welfare payments as its level of wages and employment requirements are unlikely to be directly related to this aspect of the policy. Processing payments of £100 will be essentially the same as processing payments of £120.

Based on the preceding discussion, redistribution of the welfare services sort should, therefore, be protected by the pattern of concentrated and dispersed interests underlying the ‘new politics’ thesis to an even *greater* extent than systems of means-tested cash transfers. To clarify, the claim is not that the ‘new politics’ thesis does not apply to means-tested cash transfers. They clearly fit the standard description of concentrated benefits and dispersed costs, with taxes collected from a large portion of a population and then (re)distributed to a subset of that population in the form of cash. The claim is that there is a *difference* in the ‘stickiness’ of this cash and service expenditure. It is this difference that my theoretical claims rely on below.

1.2 Redistributive Effectiveness

The arguments advanced above allow for the development of a testable hypothesis regarding the ways in which (left-wing) parties might act strategically in pursuing their redistributive goals. To derive this hypothesis, I make several assumptions, each of which is discussed below.

First, with good reason, I assume that parties care about the future. Investment

in long term projects such as missile defence, nuclear power and the like are certainly suggestive that the relevant time horizon for political parties may not be as short as might first be thought. Indeed, more relatedly, Jacobs (2008) provides a comparative analysis of pension reforms in the USA and the UK that strongly emphasises long-run interests. Furthermore, to the extent that the partisanship literature is premised on the notion that left-wing parties are seeking better outcomes for their constituencies, it is logical to expect that this interest extends beyond the instant at which policy is made.

One more factor should be relevant to the policy choice of a redistribution-seeking government: how big an effect will it achieve with each of cash or service redistribution? That is, which will give the bigger payoff in the current period? For three reasons, I argue that the payoff from cash redistribution will be larger than that for services (in the current period).

First, basic economic theory shows that the provision of benefits in-kind should be pareto-dominated by provision of cash benefits to the same value. The reason being that cash benefits could be used to purchase the same bundle of services that would have been offered or, *alternatively*, some other consumption bundle instead. In-kind provision is only of equal utility to a consumer if the provider is able to exactly determine the consumer's optimally desired level of service consumption. All other levels entail either an over- or an under-supply of the service. Obtaining sufficient information for a government to determine this optimal level of supply is likely to be extremely difficult. Further, while governments are likely to need to supply services of a fairly uniform level, consumers are likely to be heterogeneous in their preferences. Cash benefits would allow each consumer to optimise her consumption bundle, while in-kind benefits do not. One size does not fit all.

Second, the relative inefficiency of services as compared to cash can be justified

by thinking about how redistribution through services can be increased. In the first instance, starting a service from scratch will tend to require investment in physical capital — schools, hospitals, etc, must be built. This takes time. More pertinently, this takes longer than simply increasing the value of the cash transfer. However, the argument can be applied even to the incremental build-up of existing services. As labour forms the core of the provision, the quality of labour inevitably has a large bearing on the quality of the service. Improvement of labour quality should, then, be a logical avenue for making the services more redistributive. While increasing wages is the obvious way to achieve this goal in the long run (c.f. Nickell and Quintini, 2002), the effect is likely to be muted in the short run. There are limits to the number of more highly qualified individuals that can be attracted into, say, the teaching profession in any given year following a wage increase — not least because there will be (implicitly, less qualified) existing teachers in place.

Third, empirically, it appears that public services tend to be used to a large extent by the middle classes (Le Grand, 1982; Goodin and Le Grand, 1987). For these reasons — consumption bundle rigidity, the difficulty in improving services, and the tendency for services to be ‘consumed’ by the ‘non-poor’ — I assume that cash transfers offer a greater immediate payoff to a redistributively-minded government.

1.3 Strategic Policy-Seeking

What do these dual distinctions relating to welfare stickiness and redistributive power yield in terms of testable hypotheses? I argue that it is a left-wing party’s expectations about its future capacity to block welfare reforms that leads it to choose redistribution via cash or services.

Veto player analysis of the sort put forward by Tsebelis (2002) highlights the important influence of institutional structure on the possibilities for reform, and Tsebelis

and Chang (2004) apply the veto player model to welfare expenditure. Similarly, in analysing welfare expenditure across countries, Swank (2002) emphasises the ways in which institutions preclude some reforms by providing more or less actors with veto powers. However, literature of this sort tends to concentrate only on the constraints that institutional context place on the actions of government. The policy preferences of actors are either assumed or estimated, but institutions are not seen as *determinants* of those policy preferences.

By contrast, my claim is that a more nuanced understanding of the impact of veto points is necessary. I focus on how the presence of veto points may come to (partially) determine the *policy* preferences of actors. In this way, I share the sentiment expressed by Ganghof (2003, 10), who notes that, “exogenous shocks may also *change* [... veto players’] policy preferences by changing their beliefs about the mapping of policies onto outcomes”. Given some (quasi) exogenous shock — such as rising unemployment, greater trade openness, or any other such phenomenon — the presence of more veto players may actually *increase* the likelihood of achieving an optimal policy response. The reason being that more veto players make it more likely that the agreed upon policy will not be subject to subsequent reform in directions unwanted by parties to the original agreement.

It is now possible to analyse the decision-making of an incoming left-wing government. Given their (assumed) concern for the future, what is their optimum policy choice and what will influence this choice? In an environment in which the Left expects not to be able to block reforms in the future with high probability, I claim that they will use their current incumbency to lock in as much redistribution as possible. Despite the lower immediate payoff, that means investing in services as these will be relatively immune from the predations of anticipated future right-wing governments. By contrast, where the Left expects to be able to block unwanted reforms in the future

with high probability, they have less to fear from right-wing policy reversals. Consequently, they choose to redistribute more through means-tested cash transfers as the payoff is larger — both in the current period (which is known) and in the future (which is expected).

Another way to think of this is that the decision over whether to spend on cash or services is effectively a decision over which mechanism of checks one wishes to rely upon. Choosing cash expenditure implies a relatively greater reliance on the checks institutionalised by the legislative process. Choosing service expenditure implies the creation of *new* checks in the form of organised public sector labour. Where a left-wing party is satisfied that the future level of legislative checks will be high enough to allow them to protect their preferred welfare policies, cash expenditure becomes more attractive due to its higher payoff. Where legislative checks are expected to be insufficient in the face of future right-wing governments, then recourse to union checks via service expenditure becomes more attractive.

2 Empirical Analysis

In this section, I test the theoretical prediction that the effect of partisanship on the two types of welfare expenditure will be conditional on the prevailing level of checks within political systems.

2.1 The Dependent Variables

The decision about how to approach the testing of the theory set out above is not a simple one. On the face of it, the theoretical position taken in this paper is one that makes claims about the *relative* amount of cash and in-kind welfare expenditure. No explicit predictions about the magnitude of either expenditure are made, only about

the way in which they will covary with the political process. As such, the relevant dependent variable to test the theoretical claim would appear to be the ratio of cash to in-kind expenditure.

However, such a measure is actually rather problematic and an example is the easiest way to show why. Consider a case where a left-wing party has been out of power for a long period. If this period has coincided with a low prevalence of checks/veto-players, then my model suggests that cash transfers, which are more easily rolled-back, would be at a relatively low level. In this situation, we might expect the incoming left-wing party to, at least initially, invest in cash transfers in order to get them up to a reasonable level.⁴ However, as set out above, my theoretical claim is that an incoming left-wing party, seeking to secure future redistribution, will choose to invest in services rather than cash transfers. Thus, the logic underlying my theory generates ambiguous predictions when the dependent variable is taken as a ratio of spending.

The same issue is present even when modelling the two expenditure types separately, but there is reason to think it will be more muted. This is because modelling them separately makes it possible to estimate the strategic expenditure shift in one measure — services in the example above — without it being swamped by an expenditure shift in the other. Thus, while the *estimated* strategic partisan expenditure effect will be biased downwards for one category (cash), it will be correctly estimated for the other (services). The direction of the bias is less clear where a ratio is employed — especially where one of the components of the ratio is expected to exhibit higher variance than the other component. Finally, it should be noted that this issue induces bias *against* the theory I seek to test, making any support found from the estimates all the more credible.

Thus, I estimate separate models for each of my proxies for cash and service expenditure: employing the two dependent variables, $ExpCash_{i,t}$ and $ExpServ_{i,t}$. The two

dependent variables are sourced separately. The data used to construct a measure of cash spending effort is taken from Nelson (2007), which provides data on means-tested benefits for different types of individual earning an ‘average production worker’s wage’.⁵ It covers old-age pensions, unemployment insurance, and sickness insurance. Data is available for representative lone parents, families, and singles, but for reasons of space, I focus on that for families.⁶ This data covers 22 countries⁷ for the period 1990–2005, although there is some missing data for Portugal. The actual variable employed is the level of means-tested benefits available to the ‘family’ category of recipient(s) as a percentage of average national income ($ExpCash^{Fa}$).⁸ In this way, the relative generosity of each means-tested benefit system can easily be compared across countries. Low ratios indicate instances where means-tested benefits fail to raise the income of recipients to somewhere close to the mean level of income in the country. Such a situation is taken to indicate that those benefits are doing less to counter inequality than if the ratio were higher.

Data for $ExpServ$ is taken from the OECD Detailed General Government Accounts. Specifically, I add together three variables capturing the level of expenditure on welfare wages in different sectors: ‘social protection’, ‘housing’, and ‘health’.⁹ This sum is then divided by GDP, thus giving ‘social wages’ as a percentage of GDP as my proxy for service expenditure, $ExpServ$. This variable is used because, by focusing specifically on wages, it stays closer to the underlying theoretical stance advanced here regarding the importance of large bodies of public sector labour to the strategic decisions of parties.

At this point, it should be noted that the two proxies for cash and service expenditure are, at one level, not commensurate. The proxy for $ExpCash$ effectively captures welfare effort *for a given need*, while the proxy for $ExpServ$ captures welfare effort on a more aggregated, less restricted, measure. Despite these differences, each does provide

a reasonable proxy for the underlying theoretical concepts at issue. The means-tested benefits data provides exceptionally detailed and precise measures of a variable that maps very closely onto the logic expressed above regarding cash expenditure. The appropriateness of the measure stems from the fact that it reflects *individual level* income — where the individual is a prime example of the type of person that left-wing parties are assumed to want to redistribute to. That there is no equivalent measure for service expenditure actually accords with the theoretical position set forth here. I claim that service expenditure, by its nature, tends to benefit very large sections of society so it is unsurprising that data on the value of individual-level consumption of these services is not available.

Table 1 provides a summary of the dependent variables. In particular, *Table 1* shows that there are differing trends and differing levels in both of the variables across countries. Commensurate with the data being for the retrenchment period, cash transfers show signs of decline in several countries — most notably in Canada, Finland, Ireland, and Sweden. The very difference in these cash-retrenching countries suggests that the explanation for such changes must go beyond the ‘liberalisation’ of ‘social democratic welfare states’. Meanwhile, other countries hold cash payments broadly steady. The data for *ExpServ* make plain that the Nordic countries operate notably higher levels of welfare services than do the other countries in the sample. Several countries exhibit increases in *ExpServ* across the period (e.g. Denmark, Greece, and Portugal), while others maintain a fairly consistent level (e.g. France, Germany, and the Netherlands). The data for Austria suggest that service retrenchment there was the deepest in the sample. Notably, this did not appear to coincide with such deep cuts in cash transfers.

[Table 1 about here.]

2.2 Core Explanatory Variables

As a partisanship variable, I use the proportion of cabinet seats held by a left-wing party for a given country-year, $Left_{i,t}$. This is interacted with a proxy for expectations regarding the future level of veto power in the political system. I denote this variable $ExpectedChecks_{i,t}$ — where the t subscript denotes the expectation about the future held at time t . If the theoretical claim in this paper is correct, we should expect to see this interaction effect work (statistically significant and) opposite directions for the two different dependent variables. In the cash transfer models, the expectation is that the interaction effect is positive, indicating that a higher level of $ExpectedChecks_{i,t}$ leads left-wing governments to invest more in cash transfers. By contrast, the expectation is of a negative interaction effect in the welfare service models, thus providing evidence that the presence of more checks in a system leads left-wing governments to feel less need to embed their redistributive welfare policies within a structure of organised labour.

Clearly, this setup makes it necessary to derive a proxy for that estimation of future checks ($ExpectedChecks_{i,t}$). I construct this variable from the $Checks$ variable provided by Keefer and Stasavage (2003). This is a composite index capturing the number of checks on government in a political system, and varies by country-year. The variable takes into account institutional factors, such as bicameralism and presidentialism, as well as partisan factors, such as the distance of governing coalition members from each other (and non-coalition members) in left-right policy terms.

As a test of reliability, I also construct an alternative to $ExpectedChecks$ using the veto player data set provided by Tsebelis. This yields a variable I denote $ExpectedVPs$. However, shorter time series and missing data for some countries reduce the sample size when using this variable by about half, which leads me to place far more weight on the results obtained with the $ExpectedChecks$ variable.

With the underlying variables established, the next step is to use them to generate a proxy for *ExpectedChecks*.¹⁰ To do so, I use an ‘adaptive expectations’ approach.

2.2.1 Adaptive Expectations

The adaptive expectations approach is taken from the work of Cagan (1956) and Friedman (1957, 143). The idea is simply that current expectations are a weighted average of expectations in the previous period and the current observed value of the variable in question. Thus, adaptive expectations for the level of checks within a political system ($Checks_{i,t}$) are formed in the following way:

$$ExpectedChecks_{i,t}^{Adapt,\gamma} = \gamma \cdot Checks_{i,t} + (1 - \gamma) \cdot ExpectedChecks_{i,t-1}^{Adapt,\gamma} . \quad (1)$$

I use adaptive expectations because they provide for actors to update their beliefs in a fairly simple way based on new information that they receive in each period. The parameter, γ , provides a way of varying the relative weight given to the new information.

In standard economic adaptive expectations models, it is often possible to estimate γ directly within empirical models. Unfortunately, in models with a lagged dependent variable (as all of mine have), it is not possible to distinguish between the ‘partial adjustment’ process captured by the lagged dependent variable and the adaptive expectations mechanism (Waud, 1966). For this reason, I adopt the less elegant empirical strategy of generating adaptive expectation series of the level of *Checks* in a country — denoted as $ExpectedChecks_{i,t}^{Adapt,\gamma}$.¹¹

Of course, the issue then is what is the appropriate value of γ to use. As my theoretical position is that politicians are making strategic decisions with an eye several periods into the future, I contend that relatively low values are most appropriate for testing the theory. That is, expectations about future levels of checks adjust fairly

slowly to new observations and are not overly sensitive to relatively short periods of fluctuation, perhaps as a result of cabinet or coalition instability around elections. For that reason, the results presented below are for models estimated with $\gamma = 0.1$. Unreported results from estimating alternative specifications with $\gamma = 0.2$ and $\gamma = 0.05$ confirm that the findings are robust to plausible alternative levels of γ .

Table 2 presents a summary of the $ExpectedChecks^{Adapt,0.1}$ variable for each country at three points in time. It shows that, while the variable is fairly stable in several countries (e.g. Australia, Canada, and Greece), it exhibits a fair degree of variation in others. Austria, Denmark, France, Ireland, Italy, Japan, and Portugal all have high values around 10% above their low values. To be sure, this variation is not dramatically large, but the presence of country fixed effects in the models estimated below biases *against* the finding of substantive effects from such a variable — implying that we do not suffer from the problem of being over-confident when drawing inferences from the results.

[Table 2 about here.]

2.3 ‘Control’ Variables

In addition to those explanatory variables used to test the theory proposed here, a number of control variables are employed across both cash and services models.

Unemployment ($Unemp_{i,t}$) is an obvious control variable as it has a direct bearing on cash transfers through unemployment benefits. It has also been suggested that governments respond to unemployment by increasing public sector employment, making it directly relevant to the services models, as well.

Following the standard Wagner hypothesis regarding greater public expenditure becoming more desirable at higher levels of GDP, I include (the natural log of) GDP per capita ($LogGDP_{i,t}$).

Public debt, measured as a percentage of GDP, is included as it represents a possible measure of budgetary constraint ($PublicDebt_{i,t}$). Higher levels of debt are likely to be met with more austere spending patterns. For the same reason, I also include a measure of the prevailing government budget deficit ($PublicDeficit_{i,t}$).

The ‘openness’ of the economy, defined as the sum of the value of imports and exports, divided by GDP, is also included ($Openness_{i,t}$). This is in light of the theory and evidence from the likes of Rodrik (1998), and Garrett (1998) regarding the use of the welfare state as a ‘compensation’ mechanism for the higher risks stemming from globalization.

Following Iversen and Cusack (2000), ‘deindustrialization’ is controlled for ($Deind_{i,t}$). It is measured as the ratio of agricultural and industrial employment to the total labour force. The logic for its inclusion is that the process of deindustrialization witnessed by most ‘developed democracies’ is a source of risk for those who have been required to find alternative employment in new sectors of the economy. As they experience higher employment risk, we should expect their demand for social insurance to rise.

Union density is controlled for as it offers a measure of the strength of the union movement ($UnionDensity_{i,t}$). A stronger union movement is likely to be able to lobby for increases in its preferred welfare provisions.

For the cash models, I include a control variable for ‘unexpected GDP growth’ (Roubini and Sachs, 1989), defined as the difference between growth in a year and average growth over its three previous years ($UnexpGrowth_{i,t}$). The logic being that any unexpected growth will lead cash transfers to fail to grow at the same rate as GDP (per capita), thus reducing $ExpCash_{i,t}$.

For the services models, I include the so-called ‘dependency ratio’, measured as the ratio of under 16s and over 65s to the working age population ($DepRatio_{i,t}$). The expectation is that both of the former groups are likely to require higher levels of public

services via health and social care.

Based on data availability, the samples that result from these specifications are 273 observations (for 20 countries) for the cash models and 221 (for 20 countries) for the services models. As noted above, the use of Tsebelis' veto player data severely constrains the sample size. When using *ExpectedVPs*, the sample drops to 139 (for 16 countries) for cash models and 121 (for 16 countries) for services. As such, the results for the *VPs* models are intended only as indicative robustness tests, rather than fully competing models.

2.4 Modeling Strategies

In modeling the two (types of) dependent variable, I employ error correction models (ECMs). I do so as it allows for greater flexibility in the modeling of short- and long-run effects of the explanatory variables.

An important issue is whether to treat the two dependent variables as endogenous to each other — as mutually determining in some way. At root, such a model is implied by the theory set out above in that the two types of expenditure are held, partially at least, to be substitutes for each other: a given expenditure is decided upon and then a choice of how to allocate it between the two categories is made. For this reason, it makes theoretical sense to model the two types of expenditure with a system of simultaneous equations.

However, for practical reasons, this is rather difficult. First, estimating a system of equations requires that observations on the two dependent variables coincide: missing values from one variable for a given country-year precludes the use of the other dependent variable for the same case. Unfortunately, the two dependent variable samples do not coincide as much as would be desirable. Estimating the models simultaneously cuts the cash sample by around 100 observations and the service sample by around

30, which is rather a high price to pay given the limited initial sample size. A second practical argument against the simultaneous equation model approach is that it precludes use of ‘panel-corrected standard errors’ which Beck and Katz (1995) show to be an important corrective to traditional estimates. For these reasons, I estimate the two types of models independently of each other.

2.4.1 Lag Structures

Following Tsebelis and Chang (2004, 457), I make the assumption that the effects of any agents on the level of $ExpCash_{i,t}$ will be felt without a lag. That is, when a political party is in power in a given year, they are able to determine the level of means-tested cash benefits *in that same year*. Any difficulties with this assumption are ameliorated by the fact that the $Left_{i,t}$ variable that I employ from Armingeon et al. (2007) is weighted by the proportion of the year each party is in office.¹²

While I assume agency effects to be contemporaneous, I employ an extra lag for most of the control variables used in the model. The aim here is to escape the biases induced by endogeneity. Specifically, it would be reasonable to claim that increases in the level of means-tested cash benefits could have a positive and causal effect on any or all of unemployment levels, the public budget deficit, deindustrialization, and even the openness of the economy as benefits become relatively more attractive to potential recipients. In that way, higher benefits may reduce employment and/or work effort. To avoid this reverse causality, I therefore lag those variable by one period.

For the services models, I make the assumption that political agency effects are manifested with a one period lag. Spending on wages is a function of two factors: the number of employees and the level of pay for those employees. Certainly, it seems plausible to assert that decisions as to changes in employment levels are likely to take some time to work through for reasons of employment law and notice periods. As

to the level of wages for employees, this tends to be bargained between unions and governments in advance, and so again warrants a lagged effect.¹³

That there are reasons to believe that cash and service expenditure levels should be modeled with differing lag structures is of no surprise given the premises of this paper. Tsebelis and Chang (2004) do not account for this as they do not identify different expenditure types. In that light, the finding by Plümper et al. (2005) of varying lag structures across countries may be partially explained by the differing structure of welfare states (in terms of cash and services) across countries.

2.5 Estimation Issues

In estimating empirical models below, I employ country fixed effects (FE) so as to account for time-invariant differences across countries. This is a standard approach in the comparative political economy literature, but it does introduce a potential problem when combined with the use of a lagged dependent variable (LDV). The so-called ‘Nickell bias’ stems from correlation between the LDV and the error term in the presence of fixed effects. Nickell (1981) showed that the bias associated with this problem is of the order $1/T$ and thus of diminishing significance as the number of time periods increases. The data I employ has a maximum T of 14, with many panels dropping to far smaller numbers of periods. The bias, then, is potentially a significant problem.

Following Wawro (2002), I estimate a series of models utilising the Generalised Method of Moments (GMM) procedure set out by Arellano and Bond (1991). The combination of first-differencing and instrumenting entailed in this method yields unbiased parameter estimates. However, in Monte Carlo work, Beck and Katz (2004) provide some evidence that the benefits from this more complicated estimation technique may be out-weighed by their efficiency costs. Thus, following Bawn and Rosenbluth (2006), I present the results of estimating both GMM and the more usual ordinary least

squares (OLS) models with fixed effects and LDV and the panel corrected standard errors (PCSEs) advocated by Beck and Katz (1995).

2.6 Results

The results of estimating the models described above are presented below. A series of OLS/PCSE and GMM models are shown, together with estimates that substitute Tsebelis' veto player variable for DPI's *Checks* as the main explanatory variable of interest. Unreported results of Lagrange Multiplier tests for residual autocorrelation indicate that the estimated models do not suffer from this problem once the lagged dependent variables are included.¹⁴

2.6.1 Cash Models

Table 3 presents the results from estimating a series models for family cash benefits. *Models 1* and *2* are estimated by OLS/PCSE and GMM, respectively. *Model (3)* re-estimates by OLS/PCSE, but with *ExpectedVPs* substituted in for *ExpectedChecks*.

[Table 3 about here.]

I do not dwell on the control variable results as they are not the primary interest, here. In brief, unemployment appears to lead to lower cash transfers in the long run and there is some evidence that the state of public finances and the level of GDP also provide a drag on the level of cash transfers. By contrast, trade openness, deindustrialisation, and union density all appear to be poor predictors of the dependent variable.

On the core findings relating to the hypothesised partisanship effect, conditional on the level of *ExpectedChecks*, the results are very encouraging. The two models that employ this (preferred) explanatory variable appear to show a statistically significant positive long-run interaction effect. Re-estimating the model with Tsebelis'

VPs variable substituted in for the *Checks* variable generates results that are broadly commensurate with those using *ExpectedChecks*. The positive partisanship interaction with *VPs* largely remains, although the results are now stronger for the short-run than the long-run effect. Still, given that this model is estimated with a sample almost half the size, wider confidence intervals around parameter estimates for the long-run interaction are unsurprising.

2.6.2 Services Models

Table 4 presents the results from estimating a series of models with *ExpServ* as the dependent variable. *Models 4* and *5* are OLS/PCSE and GMM estimations, respectively.¹⁵ *Model 6* re-estimates by OLS/PCSE, but with *ExpectedVPs* substituted in for *ExpectedChecks*.

[Table 4 about here.]

Again, I do not dwell on analysis of control variables. The results suggest that higher unemployment and public debt are negatively related to *ExpServ*, while deindustrialisation appears to have the opposite effect. The latter indicates that as jobs are lost in the industrial (and agricultural) sectors, they are replaced with public sector service jobs. Meanwhile, GDP, the dependency ratio, and union density fail to find any statistical significance as predictors of social wages.

With respect to the primary explanatory variables of interest here, the partisanship interaction shows a negative effect. Left-wing parties appear to give greater priority to social wages, but this effect diminishes as the level of expected checks in the system gets larger — as the theoretical account provided above would suggest. There is a suggestion that these results are slightly weaker than those for the cash models, although the true conditional effect cannot be inferred directly from the coefficients and their individual

statistical significance. Likewise, it appears that the GMM results are weaker than those from the OLS/PCSE estimation. Again, re-estimation with *ExpectedVPs* provides reassurance that the predicted effect exists and is not contingent on a particular operationalisation of the explanatory variable.

2.7 Discussion

While the statistical significance on the partisan interaction terms for the various cash and service models are very encouraging in terms of support of the theoretical position advanced here, it is necessary to determine the true statistical significance of partisanship conditional on the level of *ExpectedChecks*. *Figure 1* depict this conditional effect as estimated by OLS/PCSE in Model (1). Similarly, *Figure 2* plots the conditional effect estimated by the same technique for the *ExpServ* in Model (4). The plots are provided with 95% confidence intervals.

[Figure 1 about here.]

[Figure 2 about here.]

The figures are useful to highlight the very different effect that the level of expected checks has in a political system. As expected checks increase, left-wing parties are seen to have an increasing preference for cash transfers and a decreasing preference for redistributive public services.

With the level of $ExpectedChecks^{Adapt,0.1}$ varying between 2.5 (Portugal, 1997) and 8 (France, 1994) within the sample, the confidence bounds indicate that the partisanship effect at each extreme of $ExpectedChecks^{Adapt,0.1}$ are different from each other at the 95% confidence level. Thus, the figure provides further support for the theory set out above. Higher levels of expected checks in a political system lead to an increase in

cash-based redistribution. This is in sharp contradiction to the predictions from the standard Tsebelis veto player model.

Substantively, the estimated partisanship effects are rather large. The presence of a 100% left-wing government in an environment with a low level of expected checks, for example Sweden with a value of around 3.5, leads to a reduction in the level of cash benefits to families of about 13 percentage points.¹⁶ The same left-wing government coming to power with expected checks at a relatively high level, for example Ireland with a value of around 7, would increase cash benefits to families by about 14 percentage points.¹⁷ These differential effects are remarkably large and caution must be exercised in interpreting them as there remains uncertainty in the estimated effects.

The findings for the service models are somewhat more muted. Nonetheless, they are policy-relevant. A 100% left-wing government with approximately Swedish levels of expected checks would raise the proportion of government expenditure on social wages by around 0.7 percentage points. The same government with Irish levels would lower social wages by about 1 percentage points.

One feature that emerges from the figures plotting conditional partisanship effects is that low (high) levels of expected checks actually leads to a negative partisanship effect on cash transfers (services). On the face of it, this may appear surprising. However, it is actually broadly in accordance with the theoretical argument advanced here. Taking the estimated conditional partisanship effects for both cash and services together, it becomes clear that the negative effects for one dependent variable correspond with positive effects for the other. Effectively, then, the conditional effects plots support the contention that the two types of expenditure are (at least partially) substitutes and that governments face a budget constraint when choosing what to spend on. Higher service expenditure will often come at the cost of lower cash transfers, and vice versa.

Other aspects of the results are also of interest. The findings for the cash models vary somewhat across the three different welfare groups for which we have data. There is some evidence that partisanship effects — conditional or averaged — are smaller for singles than they are for lone parents and families. Coefficients from both the OLS/PCSE and the GMM models suggest that the substantive size of the effect and the accuracy with which it is estimated is smaller for singles. This fits with a view of welfare whereby single adults are deemed to be less in need of state support as they should have fewer impediments to gainful employment and fewer ‘innocent’ victims — in the form of dependent children — of any perceived reticence to work.

3 Conclusions

The theory presented here has suggested that it is necessary to split welfare effort into two distinct components: cash transfers and in-kind services. The two have differing redistributive effects and differing political consequences. Furthermore, it has been argued that left-wing parties are rational actors and choose an optimal bundle of cash and service redistribution so as to maximise their expected utility into future periods. Expectations of being able to veto changes in policy in the future make it less likely that right-wing parties will be able to (further) retrench cash-based redistribution. Consequently, left-wing parties will prefer this more efficient form of redistribution where there is a high number of checks in the system. By contrast, a low likelihood of future left-wing blocking power will lead to a preference for service-based redistribution which is inherently more difficult to roll back. Left-wing parties effectively opt for insurance at the cost of reduced efficiency.

The empirical evidence presented above provide support for this theory. Results are robust across different estimation techniques and alternative measures of expected

checks in a political system. Further, the estimated effects are found to be substantively large.

The findings here challenge the prevailing ‘new politics’ view in which the welfare state is perceived as largely homogeneous. A look at the raw data presented in *Table 1* indicates that this view is overly simplistic. The patterns revealed there are largely of divergent trends across the two spending types. The results should also lead us to be sceptical of the recent theoretical work in the historical institutionalism school which argues that ‘history’ and ‘time’ are of great importance in explaining policy change, but that there is an inherent randomness to this process that means explanation by political scientists can only, at best, be post hoc (c.f. Pierson, 2004). In the alternative view presented here, time is again taken to be of crucial importance, but it is shown that we can posit rational, strategic, actors as operating within the sorts of processes outlined by the historical institutionalists. Those rational actors are political parties in the argument advanced here. In recent work by Jacobs (2008), they are interest groups. It would appear likely that there are other such actors that we could usefully apply rational foresight to, as well as other policy areas.

Country	<i>ExpCash^{Fa}</i>			<i>ExpServ</i>		
	1990	1995	2000	1990	1995	2000
Australia	61.1	61.7	54.5			2.65
Austria	50.9	50.8	47.0		2.91	2.13
Belgium	57.1	52.3	45.5	0.80	0.86	0.88
Canada	81.4	77.2	51.7			
Denmark	87.9	85.6	82.3	7.96	7.99	8.23
Finland	88.2	94.3	71.9	6.22	6.68	5.66
France	47.6	46.9	45.2		3.33	3.30
Germany	76.7	78.2	73.5		1.50	1.39
Greece				2.20	3.71	4.09
Ireland	109.8	92.1	58.7		2.87	2.72
Italy	66.0	62.8	67.3	2.85	2.60	2.67
Japan	66.2	66.4	68.0	0.61	0.66	0.70
Netherlands	62.3	59.8	50.3		1.73	1.62
New Zealand	81.3	77.6	74.4			
Norway	60.5	63.8	68.2	5.26	6.09	5.66
Portugal			42.1	2.55	3.18	3.60
Spain	52.6	39.2	31.4			3.05
Sweden	85.3	90.6	67.1		7.66	7.30
Switzerland	70.5	80.8	72.0			
UK	65.3	67.4	65.7	3.67	4.01	3.79
USA	43.3	39.1	32.2	1.38	1.36	1.16

Table 1: Summary of dependent variables for cash transfer ($ExpCash^{Fa}$) and welfare services ($ExpServ$) for each country in 1990, 1995, and 2000.

Country	<i>ExpectedChecks</i> ^{Adapt,0.1}		
	1990	1995	2000
Australia	4.20	4.12	4.26
Austria	4.34	4.61	4.67
Belgium	5.27	5.44	5.10
Canada	4.04	4.03	4.01
Denmark	6.34	6.17	6.51
Finland	4.56	4.74	4.23
France	7.56	7.47	6.46
Germany	4.92	4.64	4.60
Greece	3.01	3.09	3.05
Ireland	5.54	5.86	6.33
Italy	4.61	4.49	4.22
Japan	3.49	4.21	4.19
Netherlands	4.14	4.28	4.79
New Zealand	3.02	2.84	3.01
Norway	4.08	4.08	4.18
Portugal	2.74	2.44	2.57
Spain	3.59	3.95	4.04
Sweden	3.32	3.92	3.73
Switzerland	3.03	3.02	3.32
UK	4.05	4.03	3.75
USA	4.80	4.71	4.83

Table 2: Summary of the key ‘expected checks’ (*ExpectedChecks*^{Adapt,0.1}) for each country in 1990, 1995, and 2000.

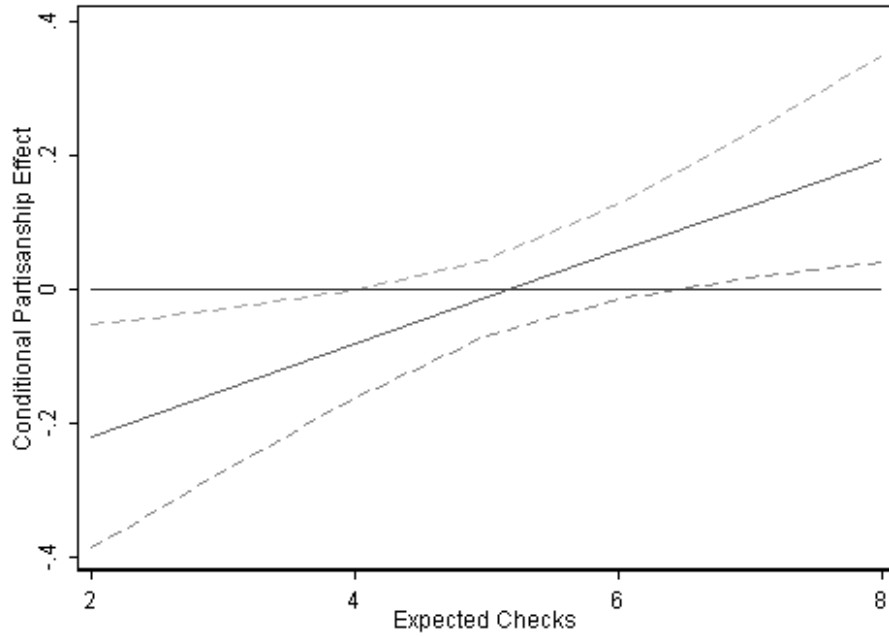


Figure 1: Partisanship effect on $ExpCash^{Fa}$, conditional on $ExpectedChecks^{Adapt,0.1}$, estimated from Model (1). 95% confidence intervals shown.

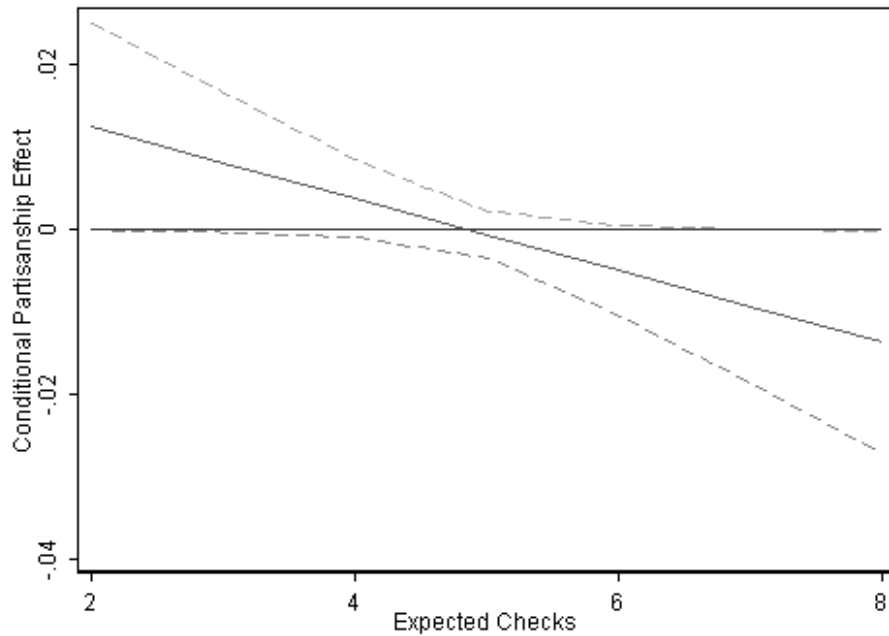


Figure 2: Partisanship effect on $ExpServ$, conditional on $ExpectedChecks^{Adapt,0.1}$, estimated from Model (4). 95% confidence intervals shown.

Table 3: Determinants of means-tested income support (as a percentage of GDP per capita).

	(1)		(2)		(3)	
	b	z	b	z	b	z
$ExpCash_{i,t-1}^{Fa}$	-0.166***	-2.88	-0.413***	-8.29	-0.230**	-2.50
$\Delta Unemp_{i,t-1}$	-0.368	-1.52	-0.497	-1.16	-0.444	-1.31
$Unemp_{i,t-2}$	-0.541***	-3.30	-0.994***	-2.85	-0.644***	-3.23
$\Delta PublicDeficit_{i,t-1}$	-0.231	-1.50	-0.265**	-2.39	-0.142	-0.83
$PublicDeficit_{i,t-2}$	-0.0325	-0.28	-0.130	-1.57	-0.0588	-0.50
$UnexpGrowth_{i,t}$	-19.36	-1.22	-9.337	-0.54	-5.079	-0.40
$\Delta LogGDPPC_{i,t}$	-14.06	-0.78	-27.78***	-3.47	-4.705	-0.37
$LogGDPPC_{i,t-1}$	-11.65*	-1.83	-38.45***	-5.47	-2.418	-0.33
$\Delta Openness_{i,t-1}$	-0.0250	-0.61	0.0370	0.65	-0.209**	-2.46
$Openness_{i,t-2}$	-0.0423	-1.41	0.0268	0.72	-0.286***	-3.94
$\Delta Deind_{i,t-1}$	-3.862	-0.16	10.16	0.35	-20.06	-0.45
$Deind_{i,t-2}$	3.996	0.33	30.88	1.01	-3.321	-0.10
$\Delta UnionDensity_{i,t-1}$	-0.000140	-0.00	0.125	0.44	0.458**	2.12
$UnionDensity_{i,t-2}$	-0.0272	-0.45	0.0493	0.32	-0.0127	-0.12
$\Delta Left_{i,t}$	-0.0179	-0.67	-0.0270	-0.64	-0.0666***	-3.47
$Left_{i,t-1}$	-0.0596***	-4.73	-0.0909***	-2.75	-0.0234**	-2.20
$\Delta ExpectedChecks_{i,t-1}^{Adapt,.1}$	-4.067**	-2.17	-1.448	-1.05		
$ExpectedChecks_{i,t-1}^{Adapt,.1}$	-0.480	-0.82	1.007	0.74		
$\Delta (Left \cdot ExpectedChecks_{i,t-1}^{Adapt,.1})_{i,t}$	0.00312	0.69	0.00536	0.75		
$(Left \cdot ExpectedChecks_{i,t-1}^{Adapt,.1})_{i,t-1}$	0.0115***	4.98	0.0163***	2.63		
$\Delta ExpectedVPS_{i,t-1}^{Adapt,0.1}$					-0.935	-0.38
$ExpectedVPS_{i,t-1}^{Adapt,0.1}$					-1.772	-1.36
$\Delta (Left \cdot ExpectedVPS_{i,t-1}^{Adapt,0.1})_{i,t}$					0.0341***	3.56
$(Left \cdot ExpectedVPS_{i,t-1}^{Adapt,0.1})_{i,t-1}$					0.00971	1.42
Estimation	FE/OLS/PCSE		GMM		FE/OLS/PCSE	
R^2	0.488				0.695	
N	262		223		139	
Countries	20		20		16	

Notes: Z-statistics in parallel columns. *, **, and *** denote p-values of 0.1, 0.05, and 0.01, respectively.

Table 4: Determinants of expenditure on wages for the provision of social welfare (as a percentage of government expenditure).

	(4)		(5)		(6)	
	b	z	b	z	b	z
$ExpServ_{i,t-1}$	-0.382***	-2.72	-0.563***	-3.96	-0.642***	-3.24
$\Delta Unemp_{i,t-1}$	-0.0658*	-1.79	-0.0785**	-2.16	-0.139***	-3.58
$Unemp_{i,t-2}$	-0.0507*	-1.74	-0.0282	-0.59	-0.0605	-1.39
$\Delta PublicDebt_{i,t-1}$	-0.0181***	-2.72	-0.0236*	-1.74	-0.0226***	-4.19
$PublicDebt_{i,t-2}$	-0.00480**	-2.18	-0.00588	-1.59	-0.00596	-1.08
$\Delta PublicDeficit_{i,t-1}$	-0.00267	-0.16	-0.00288	-0.26	-0.00428	-0.16
$PublicDeficit_{i,t-2}$	-0.00146	-0.14	-0.0114	-0.39	-0.0684***	-2.97
$\Delta LogGDPPC_{i,t-1}$	-1.620	-1.55	-4.380*	-1.82	-0.228	-0.19
$LogGDPPC_{i,t-2}$	-1.171*	-1.71	-1.949	-1.28	0.503	0.56
$\Delta Openness_{i,t-1}$	-0.00440	-0.86	0.00111	0.21	-0.00181	-0.36
$Openness_{i,t-2}$	-0.00645	-1.40	0.00315	0.45	-0.0124**	-2.28
$\Delta DepRatio_{i,t-1}$	25.38**	2.11	10.16	0.45	18.08	1.18
$DepRatio_{i,t-2}$	2.967	0.75	-0.236	-0.03	16.87**	2.06
$\Delta Deind_{i,t-1}$	3.624	1.06	5.131	1.54	2.924	0.56
$Deind_{i,t-2}$	4.226	1.19	5.151	1.04	-5.327	-0.91
$\Delta UnionDensity_{i,t-1}$	0.00791	0.28	0.0282	1.03	0.0283	0.85
$UnionDensity_{i,t-2}$	-0.0185	-1.07	-0.0329	-1.33	-0.0339	-1.33
$\Delta Left_{i,t-1}$	0.00985**	2.18	0.00850	1.07	0.00127	0.19
$Left_{i,t-2}$	0.00807*	1.94	0.00923*	1.76	0.00788*	1.65
$\Delta ExpectedChecks_{i,t-1}^{Adapt,.1}$	0.211	1.52	0.347	1.26		
$ExpectedChecks_{i,t-2}^{Adapt,.1}$	0.176**	2.21	0.288*	1.65		
$\Delta (Left \cdot ExpectedChecks_{i,t-1}^{Adapt,.1})_{i,t-1}$	-0.00194**	-2.16	-0.00173	-1.11		
$(Left \cdot ExpectedChecks_{i,t-2}^{Adapt,.1})_{i,t-2}$	-0.00166**	-2.02	-0.00179*	-1.65		
$\Delta ExpectedVPS_{i,t-1}^{Adapt,0.1}$					-0.368	-0.76
$ExpectedVPS_{i,t-2}^{Adapt,0.1}$					-0.0436	-0.29
$\Delta (Left \cdot ExpectedVPS_{i,t-1}^{Adapt,0.1})_{i,t-1}$					0.000466	0.16
$(Left \cdot ExpectedVPS_{i,t-2}^{Adapt,0.1})_{i,t-2}$					-0.00391**	-2.30
Estimation	FE/OLS/PCSE		GMM		FE/OLS/PCSE	
R^2	0.385				0.585	
N	189		155		105	
Countries	18		17		14	

Notes: Z-statistics in parallel columns. *, **, and *** denote p-values of 0.1, 0.05, and 0.01, respectively.

Notes

¹The insight is rather similar to that expressed by Moe (1990) and Horn and Shepsle (1989), although this appears to have been unnoticed.

²Clayton and Pontusson (1998, 70) discern a similar omission, noting that, “By and large, the retrenchment literature tends to ignore the question of changes in the delivery of social services or, in other words, the question of how the public sector is organized.”

³Source: Office for National Statistics, ‘Social security benefit expenditure: by recipient group, 2001/02: Social Trends 33’. N.B. This figure is actually for Great Britain (i.e. excluding Northern Ireland), but this makes little difference to the comparisons here.

⁴There is an implicit assumption here that cash transfers and services are not *perfect* substitutes.

⁵Specifically, these types are a single person, a lone parent, and a two-parent two-child family.

⁶Results for the other measures are broadly in line with those presented below, and are available from the author upon request.

⁷Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, the United States, Spain, Portugal, Greece, and the Czech Republic. I exclude the Czech Republic due to other data constraints and a desire to stay with the more standard sample associated with research into ‘developed democracies’.

⁸The average income data is gross national income per capita, taken from the *World Development Indicators* (WDI) produced by *The World Bank*. I use the purchasing power parity (PPP) measures from Nelson (2007) and the WDI.

⁹To be precise, “Total compensation of employees paid by the government: Social protection”, “Total compensation of employees paid by the government: Housing”, and “Total compensation of employees paid by the government: Health”.

¹⁰The *ExpectedVPs* variable is constructed in an exactly analogous way to that for and *ExpectedChecks*.

¹¹As can be seen from (1), a starting value is needed to begin the series. I use the sample mean value of checks for each country (\overline{Checks}_i). Of course, this may not be a valid starting point for the value of $ExpectedChecks_{i,t}^{Adapt,\gamma}$. However, my data for $Checks_{i,t}$ starts in the mid-1970s, while that for my dependent variables start after 1990, so there are 15-20 years for the series to settle down.

¹²Unreported results confirm that the conditional partisan effects presented below survive in a model with partisanship lagged by one period, albeit with lower statistical significance.

¹³Again, unreported results confirm that the conditional partisan effects presented below survive in a model with partisanship entering the models contemporaneously (as with the cash models), but again, the findings have lower statistical significance.

¹⁴The tests were carried out as described by Podestà (2006, Endnote 4) and the results are available from the author.

¹⁵The use of GMM is at the expense of Spain, for which data is not available for a long enough time period.

¹⁶See *Figure 1*: $100 \times (-0.13) = -13$.

¹⁷See *Figure 1*: $100 \times 0.14 = 14$.

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