Participation, Veto Actors, and Policy Responsiveness in the Evolution and *Reform* of Health Care in Developed Democracies

Robert J. Franzese, Jr.
franzese@umich.edu
Associate Professor, Department of Political Science,
Faculty Associate, Center for Political Studies, Institute for Social Research,
Faculty Affiliate and Advisory Board, Center for European Studies, International Institute,
The University of Michigan, Ann Arbor

16 November 2003

Prepared for the conferences and edited volume on:

Fukusi Saiken No Seijigaku (Reconstructing the Welfare State)
(Hideko Magara and Masanobu Ido, eds.)

International House of Japan
Tokyo, Japan: 4-6 July 2001

International Jacque Maritain Institute,
Study and Research Center at Breganziol,
Treviso, Italy: 16-17 September 2002

ABSTRACT: This paper offers a brief account of how interest and institutional structures interact to explain the divergent evolution of developed democracies' postwar commitments to social health-care provision. Institutions that fostered democratic participation also enhanced and balanced governmental responsiveness to inequality, economic hardship, and the population's age-demographic structure, inducing greater effective demand for public-health-spending growth in some democracies than others. Governments also responded to these differentially rising demands for public health-care to an extent and in ways that differed depending on multiple other interactions of political-economic conditions, institutions, and interest structures. Divided or *fractionalized* governments, in particular, retarded policy adjustment-rates and so greatly magnified the long-run impact of the common and differing demands for public-health provision. This varying growth in public health-care spending reduced (perceived) policy efficacy and maneuverability, shifting health-policy emphases toward reform of (perceived poor-performing) existing systems. Again, interest and institutional interactions conditioned the impact of this shift across democracies. Reforms have had only limited effect on spending growth, yet likely had and will continue to have sizable distributional effects that, once again, depend on key institutional interactions such as those described above. The paper thus shows, broadly, how complex structures of political-economic interests and institutions interact to induce different policies from democratic governments facing similar challenges and, specifically, how this unfolded in developed democracies over the postwar era as an evolution from commitments to quality public health-care provision toward more conservative and narrower goals of moderating health-care costs. And it shows that battles over these choices always were and remain still primarily political battles about (re)distribution and (in)equality, and only subsidiarily about efficiency, whatever partisan protagonists may claim.

Participation, Veto Actors, and Policy Responsiveness in the Evolution and *Reform* of Health Care in Developed Democracies

ABSTRACT: This paper offers a brief account of how interest and institutional structures interact to explain the divergent evolution of developed democracies' postwar commitments to social health-care provision. Institutions that fostered democratic participation also enhanced and balanced governmental responsiveness to inequality, economic hardship, and the population's age-demographic structure, inducing greater effective demand for public-health-spending growth in some democracies than others. Governments also responded to these differentially rising demands for public health-care to an extent and in ways that differed depending on multiple other interactions of political-economic conditions, institutions, and interest structures. Divided or fractionalized governments, in particular, retarded policy adjustment-rates and so greatly magnified the long-run impact of the common and differing demands for public-health provision. This varying growth in public health-care spending reduced (perceived) policy efficacy and maneuverability, shifting health-policy emphases toward reform of (perceived poor-performing) existing systems. Again, interest and institutional interactions conditioned the impact of this shift across democracies. Reforms have had only limited effect on spending growth, yet likely had and will continue to have sizable distributional effects that, once again, depend on key institutional interactions such as those described above. The paper thus shows, broadly, how complex structures of political-economic interests and institutions interact to induce different policies from democratic governments facing similar challenges and, specifically, how this unfolded in developed democracies over the postwar era as an evolution from commitments to quality public health-care provision toward more conservative and narrower goals of moderating health-care costs. And it shows that battles over these choices always were and remain still primarily political battles about (re)distribution and (in)equality, and only subsidiarily about efficiency, whatever partisan protagonists may claim.

I. Introduction

In *Macroeconomic Policies of Developed Democracies*, Franzese (2002) showed how government commitments to the Keynesian Welfare State (macroeconomic management plus social insurance) evolved differently across the developed democracies over the postwar era depending on multiple interactions among key aspects of their political-economic institutional-structural contexts. Despite the efficiency-oriented rhetoric that accompanied this evolution from broad social commitments through (perceived) fiscal over-burdening and constraints to anti-inflationary monetary rigor, these policy-regime shifts retained strong distributional implications and, likely, distributional motivations and explanations too. The rest of this section summarily reviews that broad argument; the paper then examines whether similar institutional-interactions shaped policy developments in the evolving public commitment to social health-care (as reflected in government and mandatory-private health spending).

Political scientists have long noted that, in the postwar era, governments in all developed democracies committed themselves, to varying degree, to three economic-policy agendas: (1) social insurance for disability, illness, old age, and unemployment, (2) *public* goods and services, and (3) public management of the macroeconomy and the macroeconomic cycle through fiscal, monetary, and wage/price regulation.[1] The terms

[1] See, e.g., Shonfield 1965; Cameron 1978; Esping-Andersen 1985, 1990; Katzenstein 1985; Hall 1986; Lindblom 1977; Offe 1984; Rose 1984; Wilensky 1975.

of this postwar commitment were perhaps most explicitly stated in the UK whose 1942 Beveridge Report to parliament advocated universal social security and fully publicly-funded health care (the National Health Service), was largely achieved under Aneurin Bevan's leadership (1946-8), and has not been seriously challenged since, until recently. The 1944 White Paper on Employment Policy, also largely unchallenged until recently, confirmed bipartisan acceptance of political responsibility for macroeconomic management:

> The Government accepts as one of their primary aims and responsibilities the maintenance of a high and stable level of employment after the war. (Quoted from Hall 1986.)

All developed democracies evidenced some such commitment, some more implicit but usually as unchallenged until recently, to social insurance, public services, and macroeconomic management.

As Offe (1984:198-9) notes, these commitments reflected developed democracies' broader goals to foster capitalist efficiency and growth and to alleviate their distributional consequences. Only success in the former could sustain the latter pursuit, yet the goals frequently proved inimical:[2]

> The strategic intention of Keynesian economic policy is to promote growth and full employment, the strategic intention of the welfare state to protect those affected by the risks and contingencies of industrial society and to create a measure of social equality. The latter strategy becomes feasible only to the extent that the first is successful, thereby providing the resources necessary for welfare policies and limiting the extent to which claims are made on these resources.
>
> 1. The Keynesian welfare state is a victim of its own success. By (partly) eliminating and smoothing crises [i.e., economic downturns], it has inhibited the positive function that crises used to perform in the capitalist process of 'creative destruction'.
>
> 2. The Keynesian welfare state involves the unintended but undeniable consequence of undermining both the incentives to invest and the incentives to work.
>
> 3. There is no equilibrating mechanism or 'stop-rule' that would facilitate adjustments of the extensions of social policy so as to eliminate its self-contradictory consequences; the logic of democratic party competition and the social democratic alliance with unions remains undisciplined by 'economic reason' (p. 199).

Furthermore, democracy and capitalism distribute political (votes) and economic (wealth) resources differently, creating popular pressures on policymakers that forced tradeoffs between these competing goals that typically expanded public-economic roles. Such concerns—that democracy relatively empowers those that free-market outcomes disadvantage and may thereby endanger capitalism—have a long (traceable to Aristotle), varied (including Mill and Marx in broad agreement), and distinguished (plus de Tocqueville, Hamilton, etc.) pedigree:

> "[T]he egalitarian threats of mass society and democratic mass politics...necessarily lead to tyranny and 'class legislation' by the propertyless, uneducated majority" (J.S. Mill, in Offe 1984:179).

[2] He attributes the last argument to "conservative economic policy ideologues" but notes that it is "equally, if reluctantly, acknowledged by practice and partly by theories of the left" (nor does he challenge them himself).

> "[Democracy is...] a political form that...exacerbate[s] social contradictions by withdrawing political guarantees from the socially dominant and giving political power to the subordinate" (Karl Marx, in Offe 1984:179).

More-recent scholars (e.g., Meltzer and Richard 1978, 1981) stress democratic dangers to efficient markets more than to capitalism *per se*. While democracy in principle distributes political influence uniformly, one person, one vote, the economic unit of influence is wealth, which capitalism tends to distribute with right skew (many poor and middle class, fewer but very rich); therefore, when democratic policymakers must compromise between goals of fostering capitalist development and ameliorating its distributional consequences, as they often must, they will tend to overemphasize redistribution relative to growth and efficiency. From such views, capitalist democracy creates a natural tendency for evolution of the democratic commitments to social insurance, public services, and macroeconomic regulation toward government *over-activity* and public-sector *crises*, i.e., toward increasing difficulties in rectifying the commitments' equality- and growth-fostering goals.

Indeed, the extreme sizes to which public sectors grew and the rising prevalence of public-sector *reform* as a political issue give *prima facie* evidence of such tendencies, and the policies and policymaking institutions that implement the commitments have indeed felt considerable strain in recent years. Popular and academic presses everywhere now teem with cries for governments to redress burgeoning social-insurance systems and public debt and for related public-policy, including health care, *reforms*. E.g., virtually every recent *European Journal of Political Research* annual report (1992-8) on key political issues in 28 democracies mentions one or more of these issues as a—often *the*—major issue in the country.[3] Not coincidentally, seemingly inexorable government growth, slower real growth, and higher unemployment accompanied the rising discontent. In the most dramatic cases, transfers exceeded 25% of GDP in Belgium, Finland, Netherlands, and Sweden, public debt surpassed 100% of GDP in Belgium, Italy, and Ireland, and public employment grew past 30% of total in Denmark, Norway, and Sweden. Meanwhile, double-digit unemployment became common, and sustained real *per-capita* growth over 3% seemed just a fond memory in most countries. In this context, recent lamentations (or celebrations) of *crises* in the Keynesian Welfare State are understandable (if not necessarily justified). However, as Franzese (2002) showed, not every developed democracy accumulated equally massive debt, or faces the same macroeconomic-

[3] Only issues surrounding the European Union, the new democracies in Eastern Europe, and various corruption scandals are near as prominent over this period.

management difficulties, or has equally burgeoning transfer systems. Yet, while no two countries confront the same set of difficulties, times and places where at least one of these elements does not seem critically over-extended are rare. That is, the universal pressures from conflicting goals and distributions of political and economic influence manifest as different *crises* in different times and places.

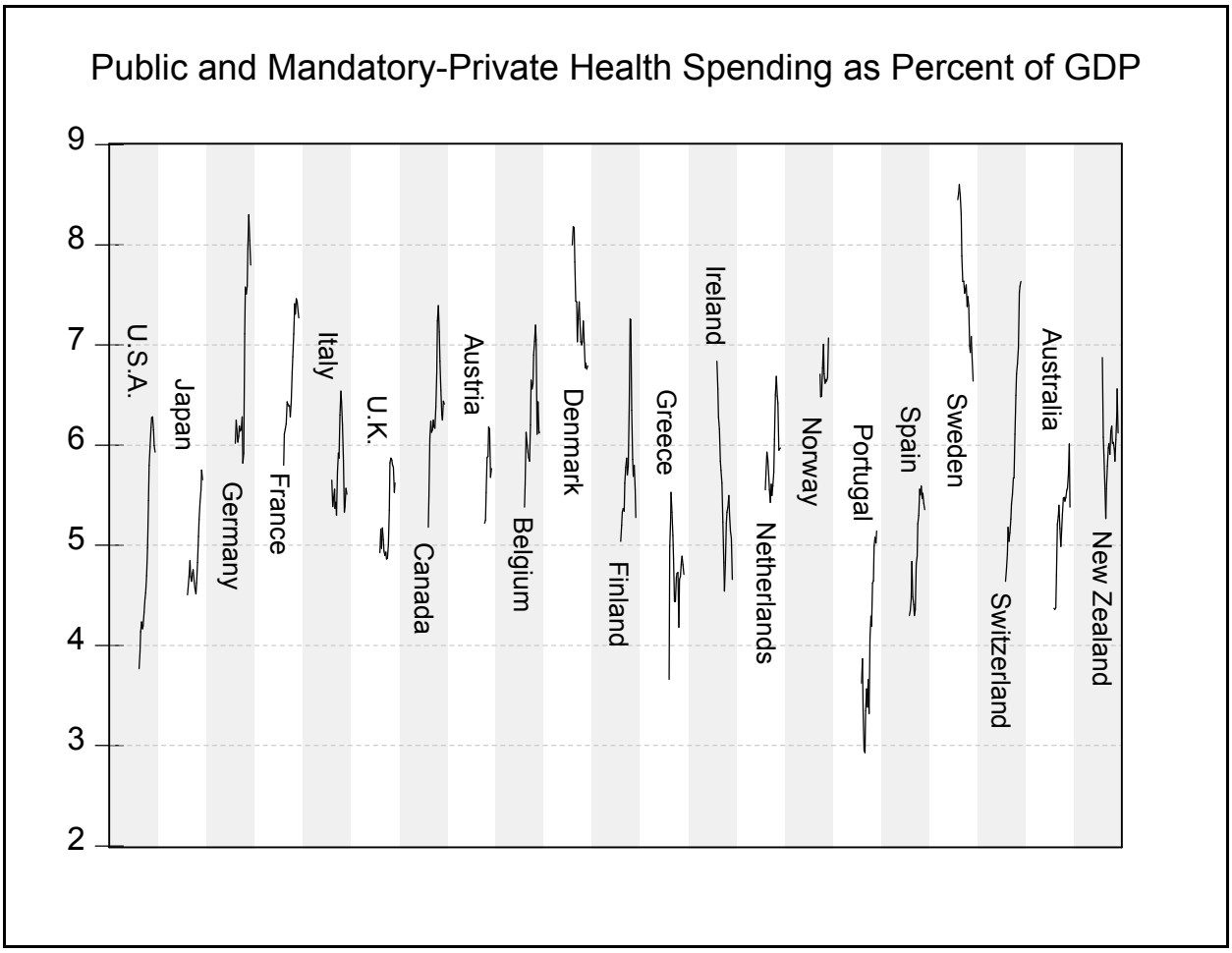

Figure 1: Public plus private-mandatory health-care spending as a percent of GDP in 21 developed democracies, 1980-1999

As **Figures 1-2** amply illustrate, the same broad features of persistent cross-national differences and a common trend, typically upward until some recent retrenchment, with considerable country-time specific variations around that temporal pattern and those cross-country differences, characterizes the developed democracies' postwar experiences with public-health spending as did their transfers spending and public debt (as documented in Franzese 2002:ch. 1). In public-health spending specifically, variation in the cross-national averages (left of **Figure 2**) comprises fully 70% of the total variation, while the shared cross-national trend (right of **Figure 2**) adds only 8% of the total, leaving 22% of total variation *country-time-unique*. Thus, far more so than

was true either for public transfers (cross-national: 43%, common-trend: 48%, unique: 9%) or debt (cross-national: 55%, common-trend: 19%, and unique: 26%), any explanation for the variation across developed democracies in the postwar evolution of their public-health systems must derive more predominantly from relatively persistent nation-specific differences than did that for transfers or debt (Franzese 2002: chs. 2 or 3, respectively), which suggests macro-institutional or cultural factors. As with public debt, the small role for a common trend and larger one for country-time-unique variation, suggests national-context conditioned responses to the health-care challenges that emerged over the postwar era.

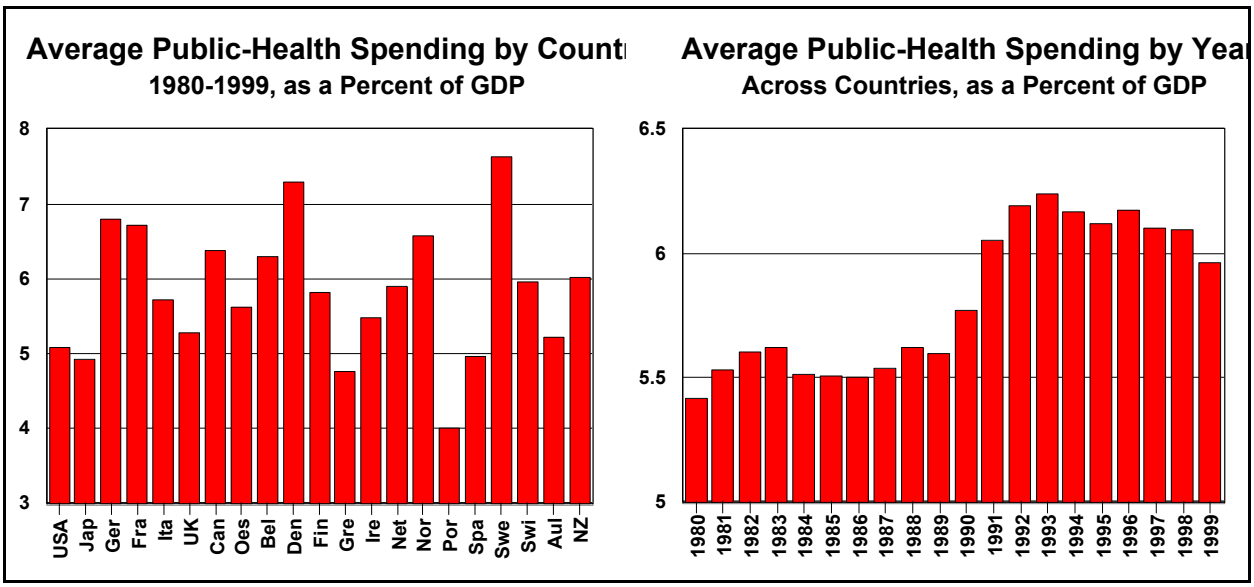

Figure 2: Average public-health spending over time (1980-1999) by country and across countries by year

In explaining how *potential* conflicts between the distributions of electoral and monetary influence manifested as differing crises for Keynesian Welfare States, Franzese (2002) stressed institutions that shaped participation and that determined policymaking veto-actors. Political-economic analysis, he argued, must extend beyond raw censuses of preferences to assess *effective* political weight, considering cognitive and other challenges in converting numbers into votes, availability and efficacy of other sources of political influence (e.g., wealth, organizational capacity), and how governmental institutions offer access points that may counteract or reinforce mere numbers.[4]

[4] If, e.g., control of investment capacity more than compensates for fewer numbers of wealthy, the effects would reverse those expected from numbers alone. Or, rationally-ignorant voters—who recognize as minuscule the probability of one vote altering election outcomes, and so, seeing tiny expected benefit of casting an informed vote, do not expend effort becoming informed—may find accurate cost-benefit evaluation of public activities difficult because budgets are complex (Buchanan and Wagner 1977) and because the value of such activities is inherently difficult to gauge (Downs 1960). If the latter consideration dominates, or if spending-side exceeds revenue-side budget-complexity, democratic governments will do too little. Moreover, interests may cross-cut class divisions. For example, when technological or terms-of-trade shifts threaten certain economic sectors, goals of fostering growth and reducing inequality can again

Broadly, differing distributions of economic and political resources fundamentally drives deviations of democratic governments' policies from those that would maximize unweighted sums of their citizens' interests. However, international and domestic structures of political-economic institutions and interests differ over time across countries, so public policymakers and private actors respond to these common pressures differently, producing *differing* deviations from textbook *optima* in response to similar political-economic conditions. Pro-participatory, proportional-parliamentary institutions, for example, enhanced governmental responsiveness to economic inequality and hardship, spurring especially post-seventies public-sector growth. They also tended to produce multiparty coalitions with little cross-government partisan variation, favoring policy stability but also retarding policy adjustments to economic challenges. Conversely, plurality parliamentary systems dampened participation and favored one-party governments of oscillating partisanship, speeding policy adjustment but muting democratic responsiveness and hindering over-time policy stability and consistency.[5] As these varying fiscal-policy difficulties evolved, democratic governments turned toward first monetary-policy then institutional-structural *reform*, aiming to rebuild broad coalitions behind democratic macroeconomic management (putatively for efficiency). Yet these new policy paradigms, whatever their efficiency effects, retained the strong distributional consequences of their predecessors, so *new* political struggles over institutional-structural *reforms* look remarkably similar to long-familiar employment-inflation, efficiency-equity tradeoffs. Not the nature but only the locus of familiar left-right battles have changed: from policies to the institutions and structures within which democratic policymakers conduct

conflict. Some limited subsidy mechanism might even be economically efficient as social insurance against uncertainty over returns to investment subject to such risks. Even so, a tradeoff would exist between the distributional goal and the need for insurance on the one hand and gains from trade and technological progress on the other hand. The different distribution of political and economic power and the different ways in which each translates into political influence would imply that democratic policymakers will not generally make such tradeoffs *efficiently*. Capital and labor in afflicted sectors will press policymakers for subsidies, protection, or otherwise to redress their losses. Accommodating such demands may accord with governments' distributional goals, but, by hindering reallocation of capital and labor to maximize gains from trade or technological advances, it would also retard growth. Again, political influence will not generally be distributed such that democratic policymakers make tradeoffs reflecting unweighted sums of citizens' interests. Following Olson (1965), for example, groups seeking compensation for trade losses are much smaller than those that would pay them (consumers and taxpayers) and so could likely bring more effective political force behind gaining subsidies than relative numbers alone would suggest. These arguments do not contradict. Although the first argues that democratic governments overemphasize distributional relative to efficiency goals because poor outnumber rich and the second claims a smaller group is more influential, the policy types and absolute and relative group sizes differ importantly. Broad redistribution distinguishes only rich from poor. Both groups are Olsonian large, so neither can organize much more effectively. The other policies distinguish one sector from the rest, and only sectors are Olsonian small. Plus, losses from freer trade are concentrated, individually large, certain, and current while gains are diffuse, uncertain, and future. Gains and losses from broad redistributive policies tend, contrarily, to be more certain and current, and of more-equal relative magnitude.

[5] More broadly, these differences arose because the incentives of political-economic actors that emerge from conflicting goals and distributions of interest and influence depend on multiple interactions among the domestic and international political-economic institutions, structures, and conditions within which they interact and to which they respond.

those policies. The remainder of this paper explores whether similar developments with similar motivations and explanations unfolded through the evolution of developed democracies' public-health spending.

II. Income and Age Distributions, Political Participation, Public Spending in Transfers and Health

The differing distribution of electoral (1 person, 1 vote) and economic (few very wealthy, many middle class and poor) resources in capitalist democracy yields poorer median than average citizens, fostering popular demand for public services. To see how, consider a reduced form of the classic median-voter model of democratic choice of a fully proportional tax-and-transfer system (Romer 1975; Meltzer and Richard 1981). The model stresses that, with differing vote and wealth distributions, the impetus for redistribution derives from and grows with the gap from economy median to average income (Meltzer and Richard 1978). With slight modification, that applies to public services more broadly.[6] To simplify, assume individual i's output (pre-tax income) declines in tax rates: $y_i = y_i(\tau)$, $y' < 0$,[7] and consider only tax systems that tax all income equally to fund public services. I.e., tax rate τ incurs on all income, y_i, and all revenues fund public services, $G = \tau \sum y_i \equiv \tau Y$. This reduces a multidimensional fiscal-system design-and-choice problem to one parameter: the tax rate, τ.[8] For analytic ease, let i have log utility in consumption (equal to disposable income, y-τy) plus some relative preference, α, for public services:

$$u_i \propto \ln\left[y_i(\tau) - \tau y_i(\tau) + \alpha\tau Y\right] \qquad \textbf{(1)}$$

Let subscript m denote the median-income person. A pure, full-participation, median-voter democracy will implement her optimal tax rate, found by maximizing **(1)** with respect to τ:[9]

$$\tau^* = a + b(\alpha Y - y_m) \quad where\ a \equiv -\frac{y'_m}{\alpha Y' - y'_m}\ ,\ b \equiv -\frac{1}{\alpha Y' - y'_m} \qquad \textbf{(2)}$$

The term in parentheses is the difference between preference-weighted total-income and the median income. This term increases with the income-distribution skew, i.e., as the gap from average to median income widens. The denominator in b and a is the difference between the responsiveness (elasticity) of preference-weighted total

[6] In stressing partisanship (e.g., Castles 1982, Hicks and Swank 1984, 1992, Hicks et al. 1989) or demography (e.g., Pampel and Williamson 1988), most previous empirical work ignored this hypothesis. Perhaps despairing of finding adequate income-distribution measures, even the public-choice literature, where these models originated, had not tested it directly until Husted and Kenney (1997) and Rodrigìuez (1999), neither of whom find much support in US state-level data.

[7] $y(\tau)$ could, e.g., be equilibrium output in a model where workers substitute leisure for labor as taxes increase. Key is that, at least beyond some point, higher taxes reduce aggregate efficiency. Theorists and practitioners, regardless of their ideological predispositions, generally accept that contention (see, e.g., Esping-Andersen 1982, quoted in Offe 1984).

[8] This obviously grossly simplifies any actual fiscal system, but the hypotheses derived remain substantively unchanged provided feasible systems have net taxes weakly increasing in income and the function is reasonably smooth.

[9] The first-order condition; second-order conditions will hold for well-behaved (see Franzese 2002: ch. 2) u(·) and y(τ).

and of median output to τ. If the wealthier respond more (greater output-elasticity) to taxes than do the poorer, which decreasing marginal utility of income assures, this term will be negative for any reasonable preference for public services, so b is positive (and a negative). Thus, m's optimal tax rate lies between zero and one (with a few simple, plausible further conditions; see Franzese 2002:ch.2) and typically[10] increases with income skew.[11]

The model assumes that all of society participates equally in the democratic process and thus that government policy responds to the *unweighted* distribution of societal interest. Yet not everyone votes, e.g., even in the most participatory democracies. Dye (1979), Pampel and Williamson 1988) suggest a link between more participatory democracy and *progressive* policy and, assuming public spending to be *progressive*, argue higher voter-turnout favors them. Even granting that assumption, however, the effect of voter participation logically must depend on who is added to the electoral pool and how well they like the expenditure at hand. Thus, although empirical correlations between turnout and, for example, *redistributive effort* seem strong (Hicks and Swank 1992, Pampel and Williamson 1988), why higher voter participation should necessarily raise the pro-transfers share of the politically active, i.e., electoral representation of the relatively poor, remained less explained. Most scholars—Meltzer and Richard (1978, 1981) and Aristotle, Tocqueville, Mill, and Marx alike before them—just assumed franchise expansion raises the political influence of the poorer. Historically, suffrage indeed expanded from wealthiest down, but whether higher participation *given universal suffrage* spurs greater governmental responsiveness (i.e., G increases) to inequality remained more assumed than established (*cf.* Husted and Kenney 1997). Meanwhile, empirical work firmly establishes that the relatively wealthy have higher propensity to vote (e.g., Verba et al. 1978, Wolfinger and Rosenstone 1980, Conway 1985, Harrop and Miller 1987, et al.); Nagel (1987) shows further that US voters, at least, are wealthier than non-voters;[12] participation varies dramatically across democracies and, less-so, over time (e.g., Jackman and Miller 1995). Franzese (2002:ch. 2) asked whether these observations linked more generally to imply that higher participation country-times had wealthier median

[10] Only *typically* because income skew increases could increase the denominator in b in absolute value even more.

[11] Several ancillary results surround the tax-elasticity of output (i.e., y' and $\partial y'/\partial y$). E.g., the more the wealthy substitute leisure for labor relative to the poor (more negative $\partial y'/\partial y$), the more average income falls as τ rises, so m will want less τ. Similarly, a *distribution-neutral* increase in Y leaves skew unaffected but increases the size of b's denominator, and so reduces m's desired τ. Intuitively: each case describes larger deadweight losses from taxes–because everyone is wealthier and so more willing to substitute leisure for labor or because the wealthy do so especially–so m seeks less G.

[12] Using the 1980 US Census, he estimated the median income as $18,267 and the median-voter's as $20,698.

voters relative to median persons so that the relations of *G* to participation hypothesized (Dye 1979) and found (Pampel and Williamson 1988, Hicks and Swank 1992) before could be derived from this model.[13]

Using a simple model of turnout in which citizens choose to vote or not by a cost-benefit analysis where (perhaps largely subjective) net benefits of voting vary by individual, country, and time; noting the strong positive empirical correlation between individuals' relative income and their propensity to vote implies net benefits must generally increase with individual income, he showed that, *on average*, that, indeed, country-times with higher voter participation will generally have a poorer (in relative terms) marginal voters—i.e., person for whom voting just has positive net benefits. Comparing across country-times, then, higher voter participation will correlate positively with increases *from right (rich) to left (poor)* in the proportion of the income distribution that votes. Thus, for any given median income in society, the effective median income represented by electoral input to the political process decreases in the voter-participation rate, so the raw income-skew and the voter-participation rate will interact in determining effective demand for public services. Specifically, the positive effect of the underlying income-distribution skew on *G* is itself increasing in the voter-participation rate, and, the logical converse, the positive effect of voter participation on *G* increases in raw income skew.[14]

Some similar participation-conditional expectations regarding government health-spending responsiveness should also hold. The relatively poor, e.g., likely prefer more than do the relatively wealthy to pay proportional taxes to fund public or socialized health-care services. However, the poor would favor more-direct redistribution even more strongly, so substitute relations between types of spending may reverse this participation-conditional relationship for health spending relative to that Franzese (2002:ch.2) found for transfers. I.e., while the poor will generally prefer greater health-care socialization than the wealthy, the analogous preference disparity is far greater regarding more-direct redistribution. Therefore, insofar as budget constraints force trades between health and transfers spending, we may expect the increasing weight on the poor that derives from higher voter participation to reduce health spending, certainly relative to transfers but perhaps absolutely also. Regarding age demographics,

[13] Nagel's finding that low turnout favors Republican presidential candidates is highly suggestive in this regard.

[14] Others have argued and found generally positive effects of voter participation before (Dye 1979, Pampel and Williamson 1988, Hicks and Swank 1992); this argument is more subtle: the impact of increased voter-participation depends on the interests of those joining the pool of voters. Specifically, the effect of the voter-participation rate on public-sector size increases in the income skew and *vice versa*.

too, governmental responsiveness in health-care policy should be participation-conditional, but not necessarily simply. The older are, of course, most likely to favor greater health spending, but the relationship between age and vote propensity is not monotonic, with propensities rising with age until late-life travails begin to reverse that. Therefore, as voter participation increases, we expect political over-weighting of middle-aged and moderately older citizens relative to the young and very old to decline, rather than the more monotonic voter-pool expansion from wealthy toward poor that we see along the income-distribution dimension. The empirical implication of this expectation depends on the age of the inflection point in the vote-propensity equation and on the precise relation between age and health-care expenditures. If, for instance, the inflection point in vote propensity is around 65-70 years old, and if health expenditures typically rise steeply in later life, beginning around that age also–plausible conjectures–then we would expect public health-expenditures to increase with the share of the population over 65 and increasingly so as voter participation rises. Theoretically, however, we can conclude only that voter participation, and (more exogenously) the electoral institutions that affect it, condition democratic governments' health-spending responsiveness to the income and age distributions; the precise manners of such conditioning remain theoretically ambiguous and, so, empirical matters (to be explored below).

This analysis stressed voting, but other modes of participation (lobbying, campaign contributions, directly contacting representatives, editorial letters, etc.) also yield political influence. Indeed, considering the minuscule probabilities that individual votes will alter election outcomes, most other forms of participation are likely more influential than mere voting. Far from undermining empirical relevance of the hypotheses above, however, this actually strengthens them because, as voting declines, the relative prevalence and influence of alternative modes of participation logically tend to increase and because economic status and age correlate even more strongly with other forms of participation than with voting (Verba et al. 1978, 1995; Rosenstone and Hansen 1993):

> "[Socioeconomic-structural] differences in mobilization typically aggravate rather than mitigate the effects of [socioeconomic-structural] differences in political resources," Rosenstone and Hansen (1993: 241).

Therefore, as voter participation declines, not only does electoral representation of the relatively poor and the young and very-old decline, but the political influence of extra-electoral participation rises and these age and income groups are even less-well represented there. Thus, voter participation legitimately summarizes political

participation more generally for these purposes; indeed, it was (is) intended as such in the analyses above (below).

Franzese (2002:ch. 2) empirically assessed the arguments regarding inequality, participation, and transfers using developed democracies' postwar public-transfers data.[15] Summarized, the results indicated that economic conditions and the differing distributions of political and economic influence broadly explained the common experiences across countries of rising transfers-shares of GDP (rapidly rising since 1970). As OECD economies grew swiftly through the 1960's, governments could meet rising demand for redistribution with only moderately growing transfers-shares of GDP. But, with 1970's stagflation persisting into 1980's stagnation, the costs of maintaining the democratic commitments to social insurance, and so transfers GDP-shares, skyrocketed.

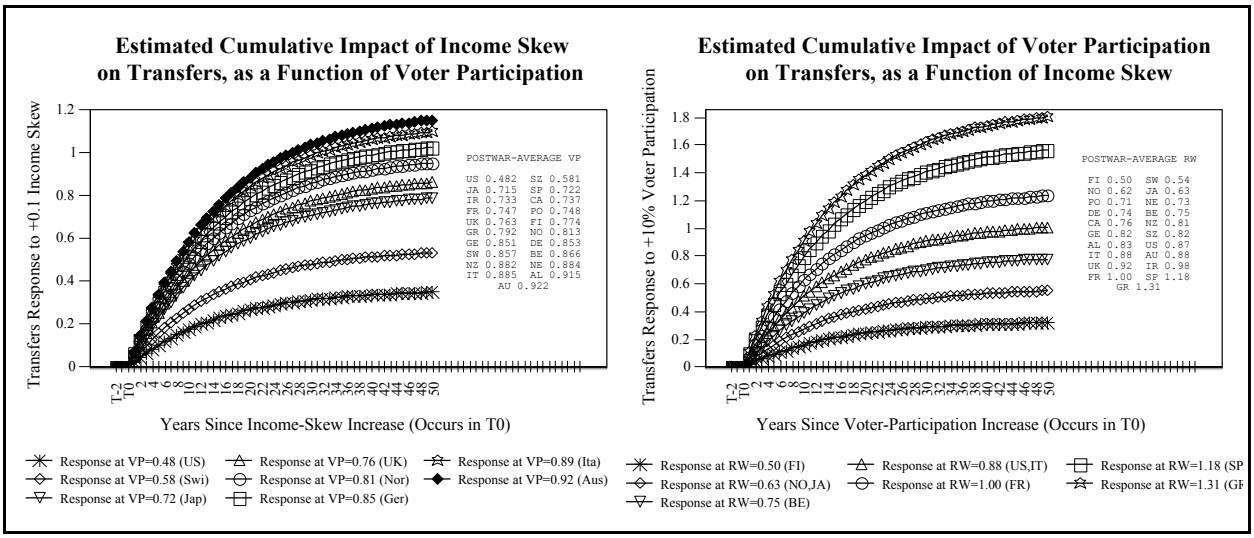

Figure 3: Estimated transfers responses to increased inequality depend on participation, and to participation depend on inequality

Political institutions and structures, meanwhile, broadly explained cross-national differences in the paces of transfers-growth, reflecting differing responses by policymakers to similar economic conditions and political pressures. Among key factors, growth and wealth figured prominently in many countries, but so too did union density, the voter-participation and income-skew combination, elections, and government partisanship. Stronger labor organization and left governments created more-effective political pressure for transfer expansion and more government responsiveness thereto. Also, systems with more frequent elections and slower policy-adjustment

[15] The usable sample was the US, Japan, Germany, France, Italy, UK, Canada, Austria, Belgium, Denmark, Finland, Greece, Ireland, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Australia 1956-91 (with some missing data). The regression included a set of time-series-cross-section controls determined appropriate: (a) lagged difference of the dependent variable, (b) set of country indicators, (c) non-democracy indicator, and (d) the average ***T&T*** in the other sample countries in that year; unemployment; population over 65; CPI inflation; growth and levels of real GDP-*per-capita*; trade exposure; three tax-structure-complexity measures (centralization, indirect-tax share, total-tax share) union density, pre-election indicators, government partisanship, government duration, income-distribution volatility across time, voter participation, income-distribution skew, and the product of the last two.

ratcheted opportunistic election-year manipulations into greater long-run transfers levels, although this effect was smaller. A left-partisan effect was also just visible in the results. Most importantly, and most interesting here, greater participation seemed to expand the income-distribution range represented in the electorate from right (wealthy) to left (poor) and so to increase the effective pro-transfer pressure on government that resulted from any given income skew. As **Figure 3** illustrates, transfers GDP-shares rose over six times as much in long-term response to inequality where participation was highest as where lowest, and rising participation spurred transfers almost nine times as much where inequality was highest as where it was lowest. One question explored below is whether similar participation-conditional inequality and age-demographic effects manifest in health spending.

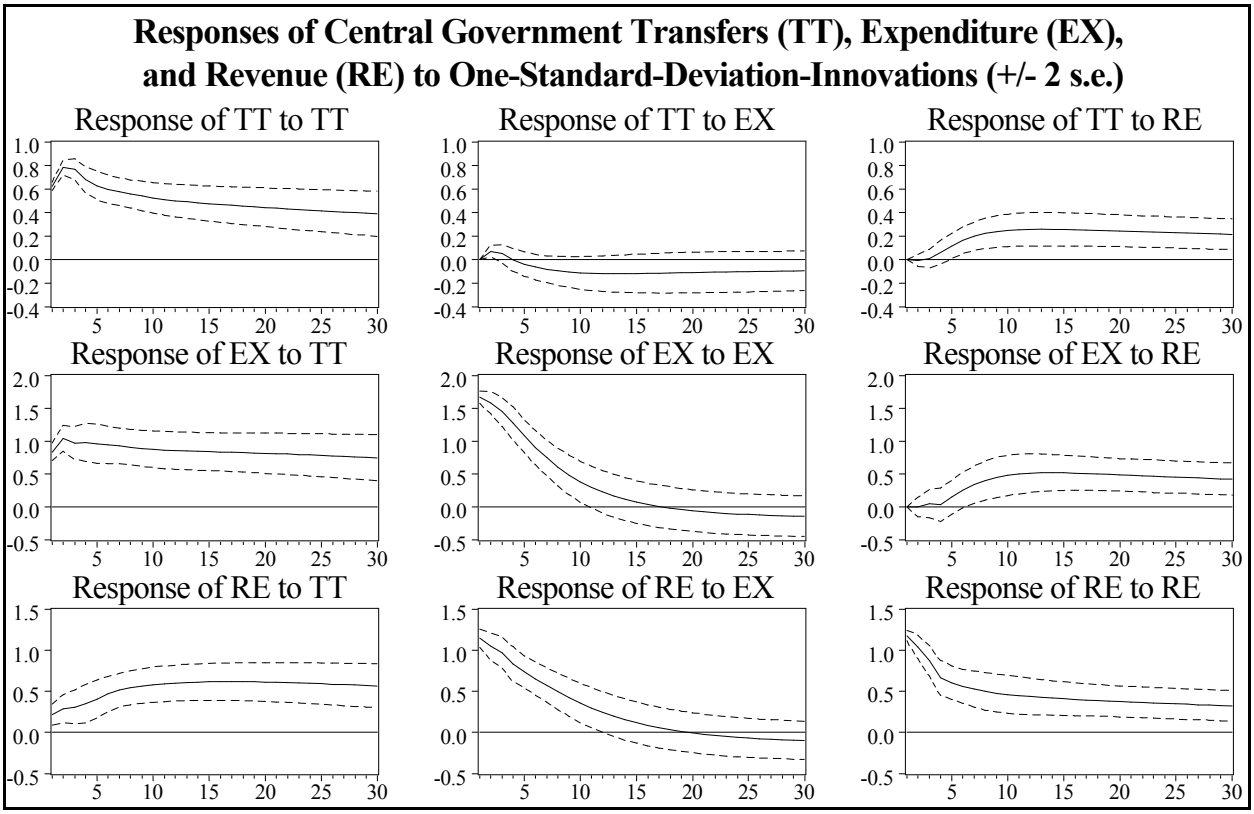

Figure 4: VAR estimates of transfers (TT), total public expenditures (EX), and total public revenues (RE) responses to each other

This varying transfers-growth also had clear economic effects and interesting political implications. First, rising transfers drove public-sector growth more generally, which, being partly deficit-financed, drove public debt in turn. To see this, consider responses of transfers, total public expenditure, and total public revenues to each other shown in **Figure 4** (a vector autoregression in the same 20-country, postwar-era sample). Compare, e.g., transfers response to its own exogenous shocks (1st row, 1st column) and expenditures response to those transfer

shocks (2nd row, 1st column), which show that almost all transfers increases recur in total spending and that this persists. I.e., governments do not usually reduce other spending to accommodate exogenous transfer shocks. Contrarily, revenue responds by only 50% to 75% as much as expenditure does to transfers shocks (3rd row, 1st column), implying that transfers growth was typically 50-75% tax- and 25-50% deficit-financed. Next, compare spending responses to its own shocks (2nd row, 2nd column) with revenue responses to those shocks (3rd row, 2nd column), which reveals a 25-50% deficit-financing norm for all spending. Comparing transfers responses to spending shocks (1st row, 2nd column) with those to revenue shocks (1st row, 3rd column) shows that governments generally do not reduce transfers to accommodate exogenous shocks to other spending but do at least partially use exogenous revenue shocks to expand transfers. Comparing, lastly, spending responses to revenue shocks (2nd row, 3rd column) with revenue responses to its own shocks (3rd row, 3rd column) shows that policymakers initially save exogenous revenue shocks but that, by 7± years on, they have adjusted budgets to spend remaining revenue.

Thus, stark asymmetries pervade democratic governments' responses to exogenous shocks in programmatic spending and other spending-categories relative to revenue responses to shocks. Studying the prime diagonal, transfers and tax-revenue shocks persist much longer than general expenditures, and, examining other impulse-responses, spending increases in one area are met by deficit and tax increases, not reductions in other spending. If health spending plays a role more similar to transfers than to total expenditures in an expansion of this analysis, this would provide further evidence that programmatic and discretionary spending behavior differs and place health spending firmly in the former camp. **Figure 5** shows vector autoregression estimates (with country and year indicators, and four lags) of the responses of health spending (H), transfers spending (T), total expenditures (E), and total revenue to one-standard-deviation innovations in the other variables.[16] We see first that, while not near-permanent like debt shocks, health (1st row, 1st col.) and transfers (2nd row, 2nd col.) spending shocks endure relatively long periods (20 and 30 years respectively). Next (1st row, 2nd col.), health spending responds negatively to positive shocks in transfers, suggesting something of a substitute relation given government budget constraints, which, as noted above, suggests that the participation-enhanced democratic demand for health spending may

[16] Note that the bottom-right nine graphs roughly replicate **Figure 4**, bolstering confidence in these analyses.

actually decline with inequality (as poor use their more effective representation in policymaking to spur transfers). In contrast, in response to health-spending shocks, transfers expand a roughly equal amount (2nd row, 1st col.), as do other spending categories, yielding a roughly threefold rise in total spending (3rd row, 1st col.). Conversely, total expenditure shocks do not affect health spending much (1st row, 3rd col.); nor do they affect transfers (2nd row, 3rd col.). I.e., far from other spending falling to accommodate health-spending hikes, health-spending shocks seem associated with roughly equivalent transfers and other-spending increases. In this respect, health-care spending behaves like transfers (programmatic) spending. However, health spending does not increase in response to revenue shocks either (1st row, 4th col.), although transfers do (2nd row, 4th col.). We also see rough replication of the 25-50% deficit-financing findings (3rd-4th rows).

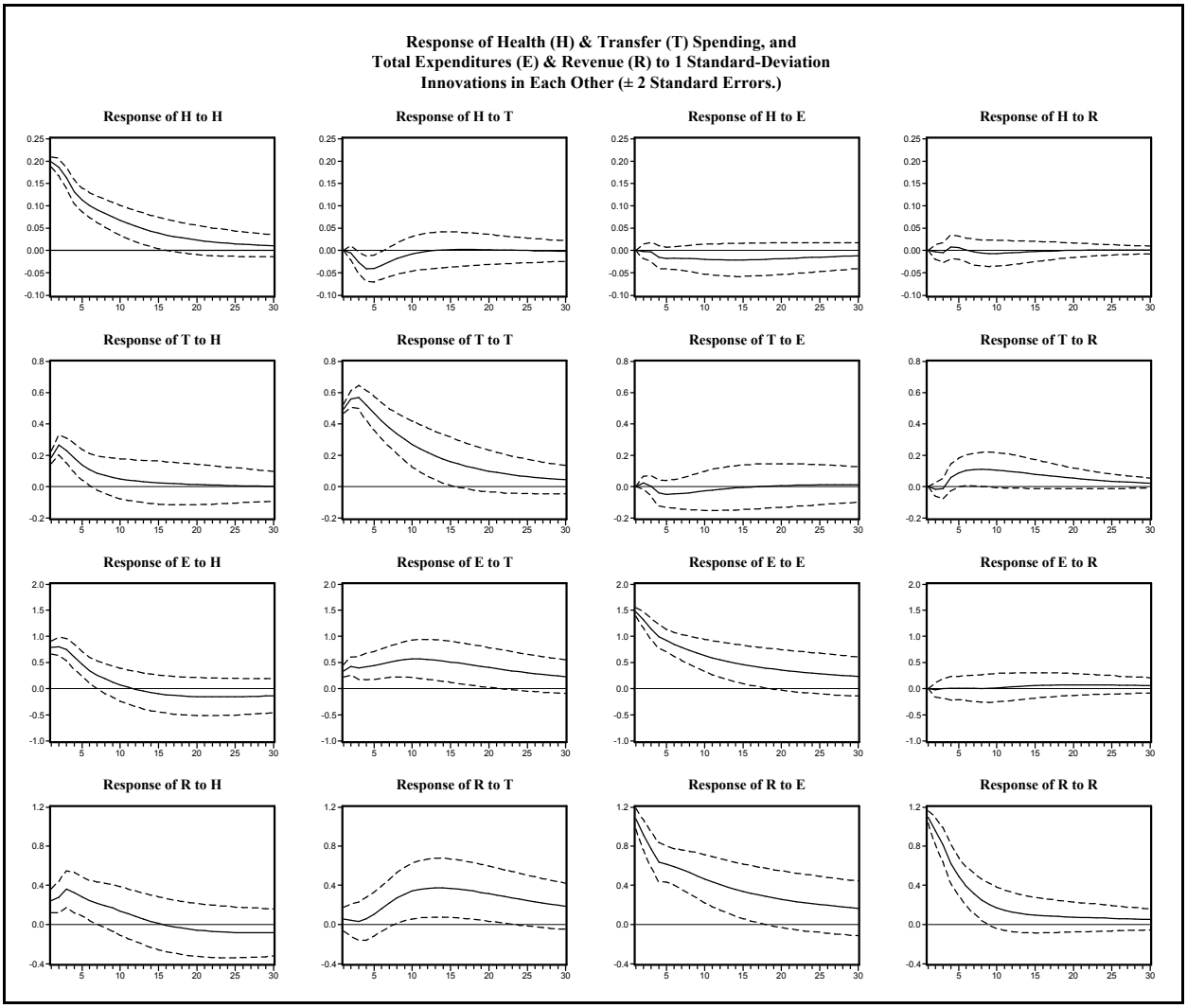

Figure 5: VAR estimates of health spending (H), transfers spending (T), total expenditures (E), and total revenues (R) to each other

Thus, as expected, the differential distribution of political and economic influence across the age and income

distributions tended to lead democratic policymakers to make tradeoffs that kept transfers and public-health spending growing by increasing taxation and borrowing and not by reducing other spending. In making necessary trades between their conflicting goals, democratic governments have often become *over-committed* (with deleterious consequences for economic performance). Of course, the converses are also true: transfers and revenue shortfalls will also persist longer, perhaps even when conditions merit increases. The rising transfers, furthermore, also reinforced labor-market rigidities, increasing unemployment and reducing fiscal-policy efficacy in controlling it (Franzese 2002:ch.2; see Layard et al. 1991, Meyer 1990, and Meyer 1995 for reviews). On the other hand, most scientific analyses of country-specific or comparative measures of poverty and government policies' impacts thereupon are equally unequivocal; unemployment or old-age poverty entails far less disastrous individual consequences in country-times with more-generous transfer systems (Hibbs 1987; Layard et al. 1991; Danziger and Weinberg 1994; Danziger and Gottschalk 1995; Atkinson et al. 1995; Primus 1996, 1998; Kamerman and Kahn 1997). Therefore, as suggested above, political conflicts over transfers-system *reform* replicate rather than replace familiar left-right conflicts. One suspects the same will prove true regarding health care.

III. Veto Actors and Policy Adjustment-Rates in Transfers and Public-Health Spending

Thus, public-services growth, born in the differing distributions of political and economic influence in capitalist democracy and magnified by institutions that foster democratic participation, spurred spending growth which, being typically partially deficit-financed, drove postwar accumulations of public debt. Strong economies through the 1960's kept transfers, health, and other spending, and so public debt, moderate or in retreat, but, with the poor economic performance since, transfers skyrocketed, public-sectors grew, and debt burgeoned. Once again, though, the extent of such *debt crises* differed across countries depending on their political-economic institutional and interest structures. Franzese (2002:ch.3) uses the postwar debt experiences of 21 developed democracies to evaluate empirically ten political-economy theories of public debt. In brief, he finds common exposure to similar economic conditions explains the typical path in these countries of falling debt through the 1970's and dramatic reversal thereafter. Universal pressures toward partial debt-finance of transfers- and health-driven growth in total spending were offset through the 1970's by strong GDP growth, allowing simultaneous

expansion of public services and reduction of debt-to-GDP ratios, but shared exposure to terms-of-trade shocks in the 1970's spawned high unemployment and stagnant growth that lingered through the 1980's, raising debt costs of continuing expansion. As governments turned to conservative monetary policy to redress the inflation half of stagflation, real-interest rates on the newly accumulating debt rose sharply, dramatically exacerbating the effects of slowed growth and higher unemployment and, indeed, of all other public-debt determinants (as below).

Again, interactions of differing political-economic institutions, structures, and conditions magnified these effects in some democracies and dampened them in others. Presidentialism, e.g., creates a single powerful policymaker with one national constituency, reducing motives for debt-financed distribution projects. Systems with autonomous, conservative central banks diminish governments' access to politically expedient inflationary debt-default, dissuading them from raising debt. More-complicated fiscal systems aggravate voters' difficulties in evaluating the full, true costs of deficit-financing (*fiscal illusion*), honing policymaker incentives to issue debt. Polities with more-frequent elections and slower policy-adjustment, ratchet opportunistic deficit manipulations into greater long-run debt levels. Most importantly, and most interestingly here, more-fractionalized/polarized governments retard policy adjustments, thereby geometrically multiplying the long-run debt-effects of the high real-interest that followed the terms-of-trade shocks and, indeed, the effects of all other political-economic conditions. Thus, the divided or *fractionalized* governments of some democracies retarded fiscal-policy adjustment-rates, and so greatly magnified the debt impact of, e.g., such countries' shared exposure to global economic shocks (OPEC and, after, rising real-interest rates). Democracies whose institutions induce more unified and decisive governments, by contrast, weathered these shocks with considerably less debt impact.

Figure 6 illustrates, plotting debt-responses to permanent increases in ***NoP***, the number of governing parties (i.e., *veto actors*; Tsebelis 1995, 2002), from 2 to 3 at six initially stable debt-levels: 3% (*sample minimum*), 11% (*low*), 35% (*mean*), 59% (*high*), 82% (*very high*), and 133% (*sample maximum*). As seen, such a ***NoP*** increase in a country with already *high debt* would have nearly explosive long-run equilibrium debt-effect. In 100 years, if nothing changes, *average debt* will have become *high*, *high* will have reached the prior sample *maximum*, and *very-high*

debt will have reached 200% of GDP and will be growing still at almost 1% per year![17] As the interior table clarifies, these dramatic effects operate *via* veto actors' impact on fiscal-adjustment rates, which alter the long-run multiplier. Thus, more-fractionalized governments greatly magnify the long-run debt-effects of <u>*all*</u> other public-determinants because the number of veto actors retards fiscal adjustment, which geometrically increases long-run multipliers on permanent changes in *any* public-debt determinant. For example, whereas single-party governments in the UK more-easily shifted adjustment costs to oppositions and so weathered stagflationary seventies and stagnant eighties without accumulating massive public debt, fractionalized Italian and Belgian governments were less-able to find fiscal-adjustment plans that distributed costs acceptably among coalition members and so debt skyrocketed under similar economic conditions as governing parties vetoed stabilization waiting for others to cave first. Clearly, then, fractionalization, specifically the number of partisan veto-actors in government, is a critical determinant of debt-adjustment paths and thereby plays a central large role in any explanation of postwar OECD debt experiences, especially for the extreme cases.

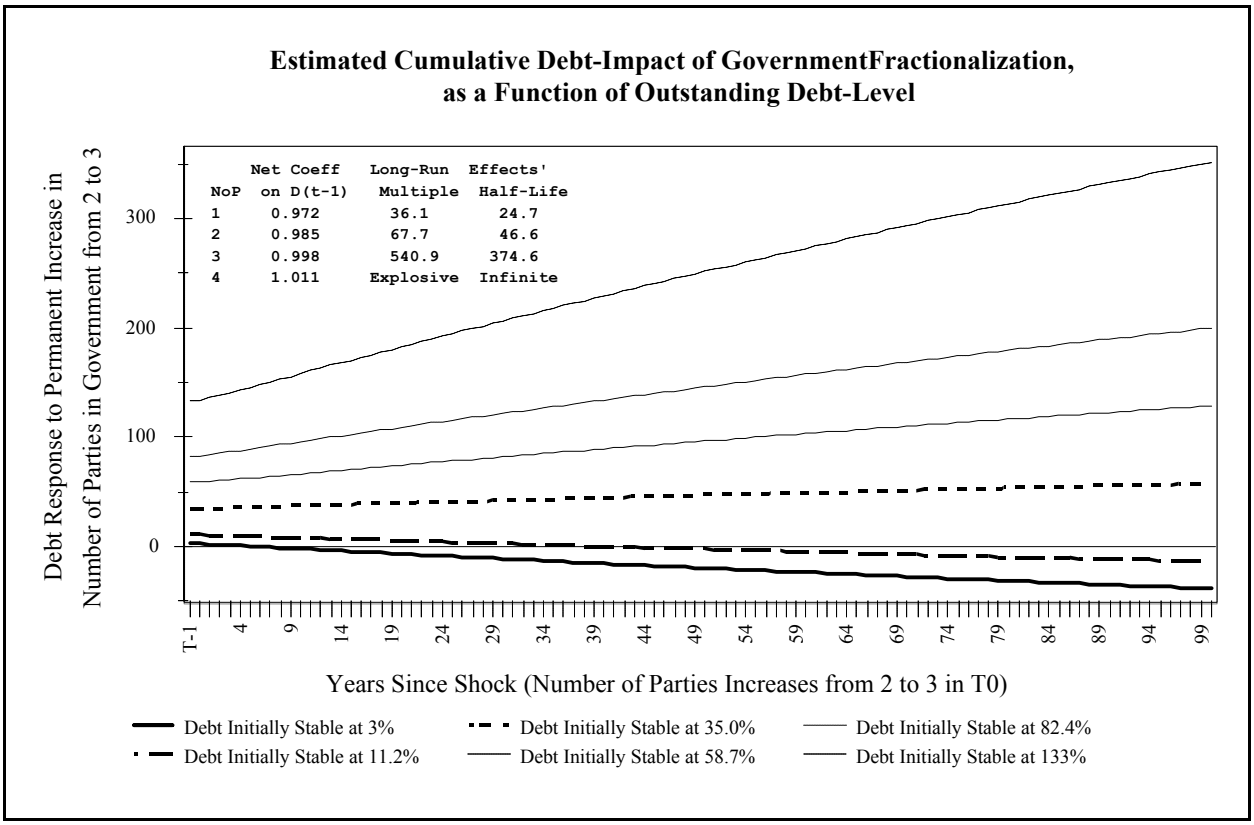

Figure 6: Estimated policy-adjustment rates, paths, and concomitant long-run multipliers depend on government fractionalization

[17] Indeed, permanent fractionalization in excess of three parties in government were estimated to produce explosive debt-paths in this sample (i.e., *ceteris paribus*, and ***r-ΔY*** and ***ADwiG*** at sample means).

Similar policy-adjustment retardation, with its concomitant, interactive long-run-multiplier effect, should arise in other policy-making arenas, including health care. For example, the participation-conditioned democratic responsiveness to income inequality and to age-demographics in health-care policy will also exhibit slower adjustment with more fractionalized/polarized than with more unified/homogenous governments. Regarding debt, Franzese (2002:ch.3) found Tsebelis' (1995,2002) *veto-actor conception* of fractionalization and polarization–the raw number of governing parties and their ideological range from farthest right to left–empirically dominated common *weighted-influence conception*–the effective number of governing parties and the standard deviations of their ideologies. Also, for debt, fractionalization measures explained better than did the polarization ones. Tsebelis argues that both numbers and ideological ranges of governing parties should hinder multidimensional-policy adjustment; debt, being the result of budgetary decisions about *vectors* of taxes and spending items is certainly multidimensional. Contrarily, public health-spending levels are more of a single spending-item decision and so reflect more unidimensional politics. Thus, we should expect polarization measures to perform better in this case.

IV. Conservative *Reforms* of Policy and Institutions

Meanwhile, the (variably) rising transfers reduced, or were perceived to reduce, scope for further fiscal activism, and, as noted above, high transfers actually tended to increase especially longer-term unemployment, which is more resilient to fiscal stimulus. Likewise, (variably) rising debts created at least the perception that fiscal maneuverability was waning, and, likely reduced the real efficacy of any further deficit stimuli as, at very high debt, crowding-out effects can dominate even in the short run (Perotti 1999).[18] The (perceived) declining fiscal efficacy and maneuverability naturally spurred shifts in macroeconomic policy-emphases toward monetary rigor aimed to restrain inflation as governments sought to retain or rebuild broad postwar popular support for *efficient* public-economic activity. Once again, the impact of this shift varied widely across developed democracies depending on interactions among their institutional and interest structural conditions.

First, it greatly exacerbated debt problems in states where the institutional mix and governmental division had produced larger public indebtedness. Real-debt-servicing costs are real interest minus growth rates, $\boldsymbol{r}$-$\Delta \boldsymbol{Y}$,

[18] In either debt or transfers case, diminishing marginal returns alone would likely suggest declining fiscal efficacy.

so the long-run debt-effects of governments' conservative monetary responses to the real slowdown since 1970 (Franzese 2002: ch.3) were huge, especially since net servicing costs speed or slow debt-adjustment rates and thereby help determine the geometric multiplier applying to *all* long-run, permanent changes. For example, for a single-party government, the long-run debt-effect of *any* other factor is 24 times its first-year deficit-impact at *low* net servicing costs (*mean-s.d.*), 41 times at *mean*, and 135 times at *high* (*mean*+*s.d.*)! The effect of a $\boldsymbol{r}$-$\Delta\boldsymbol{Y}$ shock thus depends on outstanding debt when it occurs, i.e. on *all* other economic and political determinants of debt.[19] The actual historical sequence of adverse terms-of-trade, growth, and unemployment shocks in the seventies and large and rising real-interest rates (monetary contraction) in the eighties was crushing. While the rising debt-service costs were tolerably weathered where debt was *low* to start the period, the long-run effect where debt was *average* or *high* were quite striking. Debt initially stable in 1952 at 35% of GDP (postwar OECD-average), e.g., would have risen to 47% by 1995 in response to the actual OECD-average $\boldsymbol{r}$-$\Delta\boldsymbol{Y}$ path alone, and that starting stable at 59% facing the same sequence would rise to 78% over the same period. Importantly, the real-interest-net-of-growth adversity begins with monetary authorities turning toward combating inflation around 1980, just as stagflation's real effects were reaching their worst depths.[20]

In sum, shared exposure to similar economic conditions and the universal tensions between the distributions of political and economic resources explain the general rise in health and transfers spending, especially since the 1970's, but the filtering of these common inputs through differing structures of political and economic institutions and interests, especially those affecting popular participation and the fractionalization and polarization of democratic policymakers, induced differing policy responses and policy-response adjustment-rates. This variably rising program spending drove public-sector growth more generally, which, being partially deficit-financed, spurred public indebtedness in turn. The common retiring through about 1970 and amassing thereafter of public debt, too, was driven primarily by shared exposure to similar economic conditions, but heavily modified

[19] At *low* debt (mean-s.d.: 11±% of GDP), a standard-deviation increase in $\boldsymbol{r}$-$\Delta\boldsymbol{Y}$ centered on its mean (i.e., -3.5% to +.85%) raises first-year deficits just +.23% of GDP but, if permanent, induce a sizable +36% long-run debt. At *average* debt (35%), the same $\boldsymbol{r}$-$\Delta\boldsymbol{Y}$ rise yields +0.7% first-year deficit and +111% long-run debt (to 146% of GDP!) if permanent. The same shock would be devastating at *high* debt (59%): an appreciable +1.2% first-year and +136% of GDP debt-increase (to almost 200% of GDP!!).

[20] These magnitudes were more than merely hypothetical. In high-debt countries like Belgium, the impact in the eighties through mid-nineties was truly astounding. Assuming the 70% of GDP 1953 Belgian debt was initially stable, Belgium's actual sequence of $\boldsymbol{r}$-$\Delta\boldsymbol{Y}$ shocks alone would have driven its debt to 114% of GDP by 1995, not far from its actual 132% peak in fact.

across country-times by multiple interactions among a similar set of political and economic institutions and interest-structures. The economic effects of this variably amassing public debt, on which Franzese (2002:ch.3) offers some simple vector-autoregression evidence (replicated in **Figure 7**), were also notable.[21]

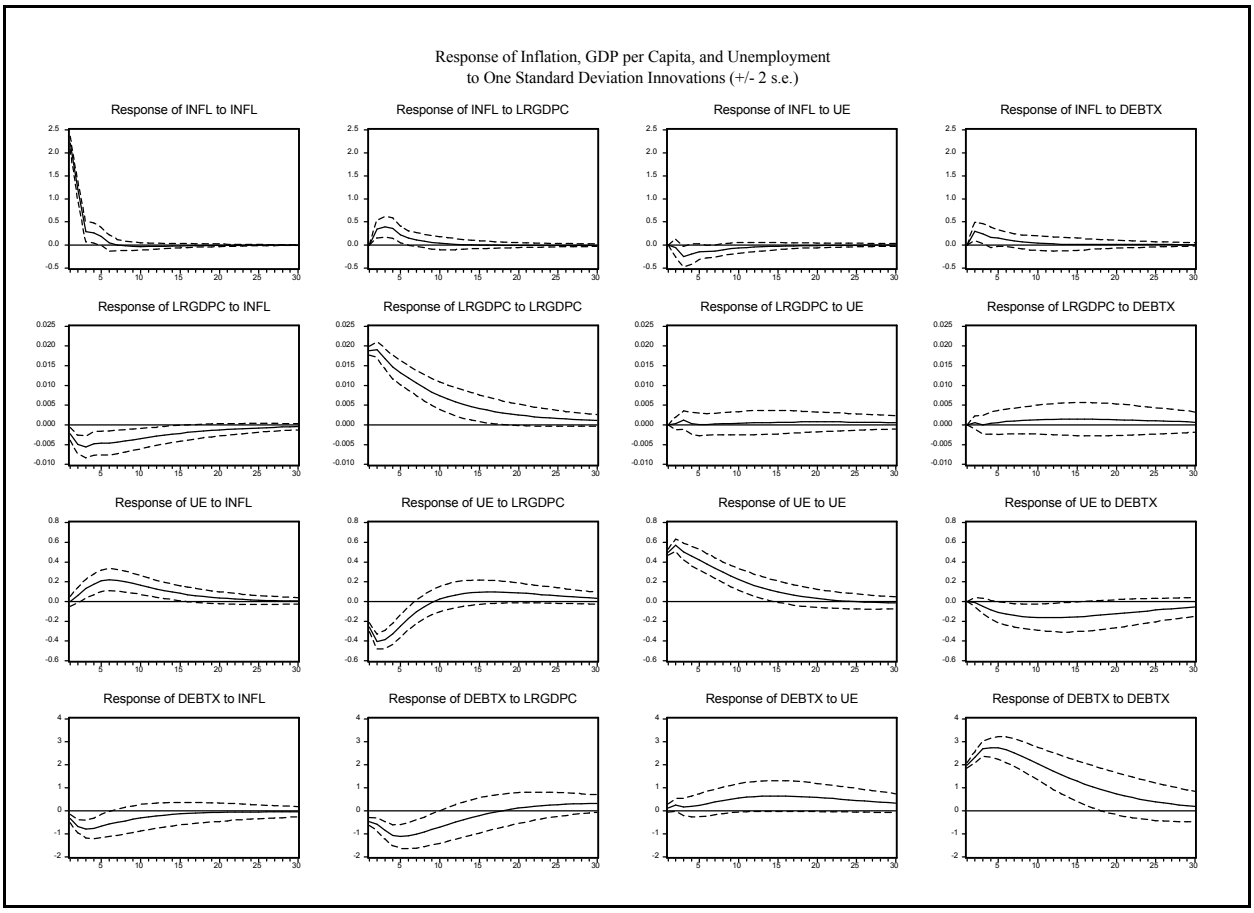

Figure 7: VAR estimates of inflation (*INFL*), unemployment (*UE*), log real GDP per capita (*LRGDPC*), and debt (*DEBTX*) to each other

First, real output (2nd row, 4th column) responses to debt actually suggest real-neutrality of public debt (Ricardian equivalence) cannot be rejected in the medium term, 10-15 years; public debt may even foster long-run growth slightly, perhaps by financing needed public investment. The large standard-errors on this estimate should give great caution on this conclusion, though, especially since VAR is prone to Type II errors, i.e., failure to reject when they should, (Freeman et al. 1996). VAR is reasonably immune to Type I errors (false rejections) though, so one can have greater confidence in the negative, short-run responses of unemployment to debt (3rd row, 4th column) and the significant, positive, short-run response of inflation to debt (1st row, 4th column).[22]

[21] Modern economic theory disputes the economic effects of public debt. Neoclassical arguments renew the Ricardian-equivalence theorem, implying public debt will not effect real outcomes (e.g., growth and employment). Neo-Keynesian theories, meanwhile, still imply important, short-run stimulative effects and perhaps more-negative long-run effects.

[22] When, e.g., the systematic impact of a variable on another is 10% of the other's stochastic (residual) variance, VAR will fail to reject when it should 20-60% of the time in samples with characteristics like this one. See Tables 1 and 2 of Freeman et al. (1996), which

Thus, economic debates about public-debt effects on output (efficiency) may have missed the political-economic (distribution) point. As Hibbs (1977, 1987) argued and demonstrated most thoroughly, people differ by class and partisanship in their relative emphases on unemployment and inflation. No one likes either, but the poorer have greater distaste for unemployment relative to inflation than the better-off.

Debt seems to have immediate and clear opposite impacts on inflation and unemployment, but small, less-immediate, and less-clear on output; thus, battles over public-debt *reform* are more over control of investment resources. When governments borrow, they remove private-sector investment-resources to allocate politically. This affects efficiency less than distribution; public investment favors employment more heavily than the private investment it displaces. Likewise in health care, debates over *efficient* or *cost-effective* revolve more centrally around the breadth of service (to many) versus the depth of service (to few) available. As Boix (1998) argues, modern left and right policy strategies center on these conflicting partisan views of the appropriate resource control and allocation. The left pursues growth by public investment in human capital, with an eye to equity; the right aims to reduce public economic activity to free private resources to pursue profits and thereby secure growth and efficiency by Smith's free hand, with only tangential equity concern. Plus, as **Figures 4-5** showed, governments usually debt-finance part of their economic activity, and, as Aghion and Bolton (1990) argued, public debt also creates new or exacerbates existing political cleavages beyond those over the uses for the borrowed funds. As governments borrowed to meet their commitments, they spurred public-debt holding in the polity. That raised fears of default and, for nominal-debt holders, inflation. Thus, as these democratic governments borrowed, they increasingly shifted their electorates' interests toward fiscal and monetary conservatism.[23] In short, the evidence

show Monte Carlo Wald-test sizes and powers in various samples with different stochastic assumptions (unit root, cointegration, near integration, stationarity). Sample size is nominally 720 here, but each country has only 35± observations, so the sample could also be viewed as a pool of 21 35-observation VARs. The tables imply that the actual power of a 5% test could be as low as 20%, viewing this sample as 700, or as low as 60%, viewing the sample as 35, advising great caution indeed in interpreting failure-to-reject as lack-of-causation. Simply, this *test* of Ricardian equivalence gave the theorem *the benefit of the null*, which is a huge benefit when standard errors are large. Moreover, even more Keynesian results emerge, with short-run positive and long-run negative growth effects of debt, in other specifications of the VAR. If some variables have or very nearly have unit roots, and if the VAR fails cointegration, Freeman et al. (1996) find VARs can over-reject by a factor of 3± in samples of 35. However, the estimated adjustment rates in this VAR (below .9) leave little to fear from this. Freeman et al. (1996) show VAR's even with only 35 observations have at worst 1.5 to 2 times actual test-size as nominal. If this sample is viewed as fully 700, actual and nominal sizes are equal unless variables contain unit roots, in which case the 2-to-1 ratio could still occur. However, Vector-Error-Correction models produce substantively similar results here, further testifying to the lack of unit-root concerns in this case. Substantively, each 2±% (exogenous) increase in public debt triggers a 0.4±% spurt in inflation over the next 4± years, which fades by 10-15 years on, and a more durable decrease in unemployment of 0.1±%.

[23] Indeed, evidence in Franzese (2002:ch.3) suggests that more-secure right governments, having stronger anti-inflation and -default reputations than their adversaries, may even have leveraged this strategically, amassing debt to increase thereby the electoral constituency

suggests that rising public indebtedness reinforced anti-inflation *versus* anti-unemployment cleavages in developed democracies. Not only do deficits induce the long-recognized short-run tradeoffs between unemployment and inflation, but accumulating debt widens the disparity of interests between the well-off, whose relative dislike of inflation *and* debt holdings are greater, and the less-well-off, whose relatively dislike of inflation *and* debt holdings are lower. Thus, battles over fiscal and monetary *reform*, however couched in language of aggregate efficiency, reflect and sharpen rather than replace partisan- and class-cleavages long-familiar to political economists.

Finally, rising programmatic obligations in health care and transfers, and the accompanying debt burdens, also increasingly constrained the ability of democratic governments to employ fiscal policy to meet their macroeconomic-management commitments. First, Missale and Blanchard (1992), building from Calvo and Guidotti (1989) and Calvo et al. (1991), argue and show[24] that as debt rises, nominal debt-holders fear inflationary default more, and so interest premia on nominal, domestic-currency public debt rise, which pushes policymakers to reduce or index or foreign-currency-denominate debt.[25] However, these schemes likely only partly evade premia, so large deficits raise debt *and* the interest-rate on it (Missale and Blanchard 1992). This vicious circle increasing limited democratic governments' fiscal maneuverability for macroeconomic management (Blais et al. 1993, 1996). Meanwhile, rising unemployment-insurance generosity was also rendering aggregate fiscal policy increasingly ineffective in that management. In sum, debt produced a kind of *policy crowding out*; as public economic activity grew over the postwar era to fulfill democratic commitments, fiscal-policy efficacy and maneuverability both shrunk. With fiscal-policy options closing, governments naturally turned toward monetary policy in attempting to fulfill commitments to macroeconomic management and toward other putative substitutes for fiscal policy, e.g., *supply-side* policies (see Boix 1998), including a fiercely anti-inflationary stance. That this pro-monetary, anti-inflationary policy-shift exacerbated public-debt crises in many democracies was shown above. The analysis in Franzese (2002) turned next to democratic governments' monetary-policy *reforms* for

with strong anti-inflation sentiments.

[24] They find positive correlations of debt-to-GDP ratios to shares of debt denominated in foreign-currency or indexed.

[25] If, however, the latter suffice to evade premia, and if, as Figure 28 found, debt does not harm output, then debt is no constraint on fiscal policy. As long as debt-holders remain confident democratic governments will not default outright, no fiscal belt-tightening is ever required. If this were so without limit, the *No-Ponzi-Game* limit-condition, which emerges as part of the solution to the Hamiltonian on which the Ricardian equivalence theorem is based, would not hold.

macroeconomic management. Other public-sector, institutional, and international developments, unfortunately, had simultaneously sapped the efficacy of and governments' access to that route also.

The anti-inflationary effects of monetary conservatism depended, first, on how inflationary the political economy would be absent such monetary conservatism. Where political and economic structures and institutions produced small/great inflationary pressures on governments, delegating monetary authority to a conservative domestic or, via exchange-rate pegs, foreign central bank added little/much further anti-inflationary bite. The real (e.g., unemployment) effects of monetary conservatism, meanwhile, depend on the credibility with which the monetary authority could threaten to quash inflationary pressures, as much economic theory emphasizes, but also on the incentives and capacity of wage-price bargainers to respond efficiently to those threats. More-coordinated bargaining-units encompass greater shares of the economic aggregates to which monetary authorities threaten responses and so have greater incentives and capacity to respond efficiently. Moreover, enaction of monetary threats raises interest rates, hindering private investment and appreciating exchange rates, so private-sector and especially traded-sector bargainers have greater incentives to respond more efficiently to monetary threats than public-sector bargainers. Thus, both the nominal benefits and real costs of the monetary-policy shifts toward conservatism were larger where political economies had less-coordinated and more public-relative-to-traded-sector dominated bargaining (Franzese 2002:ch.4).

Moreover, coordinated bargaining tended to equalize wage-growth across low-productivity-growth service and high-productivity-growth industrial sectors, tending to price private sectors out of service provision. Governments in such economies thus had either to increase public-sector service provision and employment or allow unemployment to rise. However, the increasing public-sector employment undermined the efficiency of coordinated bargaining in inducing wage-price restraint and appropriate responses to monetary conservatism. Therefore, as governments turned toward monetary conservatism to restrain inflation, the real costs of doing so were growing, even where they were once low, and tended to be larger wherever the nominal benefits of doing so were larger. The monetary conservatism converted the inflation effects of public-sector employment-growth into real effects and so undermined political support for coordinated bargaining. Thus, once again, modern

political struggles over institutional *reform*, here increasing labor-market *flexibility* and monetary-policy *credibility* (i.e., *conservatism*), merely paraphrase long-familiar macroeconomic-policy debates. Other contributions to this volume show similarly how health-care *reform*, too, is often just another word for *redistribution*.

V. Health-Care Spending and the Interactions of Veto Actors and Political Participation

Arguments above suggest the following specification for an empirical model of health-policy (spending):

$$H_t = \ldots + \left(r_0 + r_f F_t + r_p P_t\right) \cdot H_{i,t-1} + b_i I_t + b_a A_t + b_v V_t + b_{iv} I_t V_t + b_{av} A_t V_t \ldots \quad \textbf{(3)}$$

This model will have all of the features so far discussed. The first-period impacts on health-care-spending, $\boldsymbol{H_t}$, of the income and age distributions, $\boldsymbol{I_t}$ and $\boldsymbol{A_t}$, each depend on the degree of voter participation, $\boldsymbol{V_t}$, but do so potentially differently. The voter-participation effect likewise depends, differently, on $\boldsymbol{I_t}$ and $\boldsymbol{A_t}$:

$$\frac{\partial H}{\partial V}\Big|_{t_0} = b_v + b_{iv} I_t + b_{av} A_t \quad \textbf{(4)}$$

$$\frac{\partial H}{\partial A}\Big|_{t_0} = b_a + b_{av} V \quad \textbf{(5)}$$

$$\frac{\partial H}{\partial I}\Big|_{t_0} = b_i + b_{iv} V \quad \textbf{(6)}$$

The policy-adjustment rate, $\rho_0 + \rho_f F + \rho_p P$, meanwhile, depends on governmental fractionalization, ***F***, and polarization, ***P***, and this implies that the long-run multiplier, $\left(1 - \rho_0 - \rho_f F - \rho_p P\right)^{-1}$, does also, which, in turn, implies that the long-run health-care-spending effect of a permanent one-unit shift in any other variable, such as voter participation, depends on ***F*** and ***P***:

$$\frac{\partial H}{\partial V}\Big|_{t_\infty} = \left\{b_v + b_{iv} I_t + b_{av} A_t\right\} \cdot \left(1 - r_0 - r_f F - r_p P\right)^{-1} \quad \textbf{(7)}$$

Specifically, with health-spending, economic, and demographic data from *OECD Economic Outlook Volume 2002, Release 2*, and political data from Franzese (2002), I estimated the following model:

$$\begin{aligned} H_{jt} = a_j + b_1 \overline{H}_{(\sim j)t} + \left(r_0 + r_f F_{j(t-1)} + r_p P_{j(t-1)}\right) \cdot H_{j(t-1)} + b_f F_{j(t-1)} + b_p P_{j(t-1)} \\ + b_i I_{jt} + b_a A_{jt} + b_v V_{jt} + b_{iv} I_{jt} V_{jt} + b_{av} A_{jt} V_{jt} \\ + b_{gp} GP_{jt} + b_{e1} EY_{jt} + b_{e2} EY_{j(t-1)} + b_{ud} UD_{jt} + e_{jt} \end{aligned} \quad \textbf{(8)}$$

The α_j indicate the country (fixed-effects) intercepts/dummies. $\overline{H}_{(\sim j)t}$ is the average health spending in *other* (<u>*not*</u> *j*) sample countries that year: i.e., a simple spatial lag. *F* and *P* are the *veto-actor* or *weighted-influence* conceptions of fractionalization and polarization as noted above (see Franzese 2002:ch.3 for details). *I* is the skew of the

income distribution; A is the share of the population age 65 and over; and V is the share of the age-eligible population that votes (see Franzese 2002:ch.2 for details). GP, EY_t, EY_{t-1}, and UD are government (right) partisanship, pre- and post- election year indicators, and union density controls (see Franzese 2002 for details). All data and E-Views® program-file to generate these results available from *http://www-personal.umich.edu/~franzese*. The estimation results for each version of the full model **(8)** showed (a) that veto-actor measures of polarization and fractionalization (ranges and raw numbers) dominate weighted-influence measures (variances and effective numbers), as in Franzese (2002), (b) that polarization dominates fractionalization, opposite Franzese's (2002) results for debt but consistent with health-spending being a more unidimensional policy, and (c) that, unlike transfers and debt, health spending seems insensitive to labor organization and the electoral calendar.[26] Dropping the highly insignificant factors from the model (except those involved in complexes of interaction terms) leaves:

$$H_{jt} = a_j + b_1 \overline{H}_{(\sim j)t} + r_0 H_{j(t-1)} + r_p P_{j(t-1)} H_{j(t-1)} + b_p P_{j(t-1)} + b_i I_{jt} + b_a A_{jt} + b_v V_{jt} + b_{iv} I_{jt} V_{jt} + b_{av} A_{jt} V_{jt} + b_{gp} GP_{jt} + e_{jt} \quad \textbf{(9)}$$

<u>Table 1</u>: An Empirical Model of Polarization-Dampened Adjustment and Participation-Conditional Responsiveness in Public Health-Care Spending

	Coefficient Estimate	*Standard Error*	*t-Statistic*	*p-Level*
Health Spending Spatial Lag ($\overline{H}_{(\sim j)t}$)	.0852	.0304	2.804	.0052
Health Spending Temporal Lag (H_{t-1})	.8521	.0256	33.22	.0000
Govt. Polarization (Ideological Range)	-.0803	.0373	2.150	.0319
Govt. Polar. × Lag Health Spending	.0154	.0065	2.378	.0176
Population-Share Age 65&Older (0..1)	-5.984	4.527	-1.322	.1866
Income Skew (Ratio (Median-to-Mean)	1.206	.5891	2.047	.0410
Voter Participation Rate (0..1)	-.1238	.6919	.1789	.8581
Voter Participation × Population 65+	10.79	5.620	1.920	.0553
Voter Participation × Income Skew	-1.771	.7330	2.416	.0160
Government Right Partisanship (0..10)	-.0117	.0065	1.796	.0730

<u>Notes</u>: Estimation by weighted least-squares, weights generated by regression of logged squared-residuals on country indicators and spatial lag, plus White's heteroskedasticity-consistent standard errors. Country fixed-effect estimates suppressed to conserve space.

[26] Consistent with health policy being a less visible, more capital than current-consumption item, one sees if anything pre-electoral dips and post-electoral resurgence in health spending. And, as in Franzese (2002), the latter is, if anything, more sizable and significant.

With this, we now have answers to the empirical questions left open above about how political participation interacts with the age and income distributions to shape effective democratic demand for public health-spending.

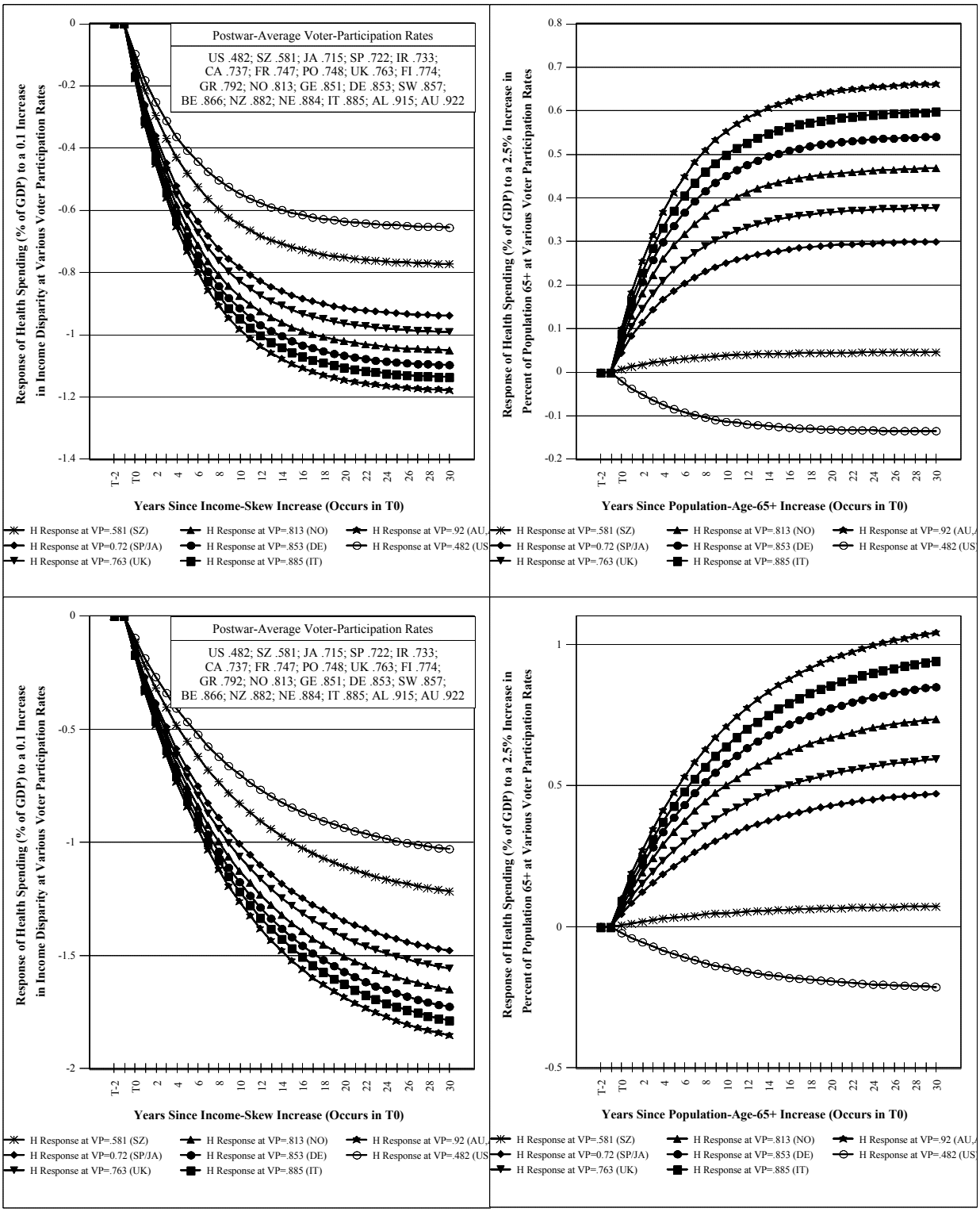

Figure 8: Estimated responses of public health-spending to income skew and to the share of the population over 65 as a function of voter participation, under unified government (top row) and polarized government (median+2 s.d.; bottom row).

The significant coefficients in Table 1 on the interactions of voter participation with the income skew and with

the percent of the population over 65 establish that the democratic policymaking responses to these demographic distributions depend on voter participation rates. As seen in **Figure 8**, the health-spending response to income skew declines as voter participation (and the effective influence of the poor) increases. The results in **Figure 5** and Franzese (2002) combined to suggest that may be because that extra influence goes to expand transfers and some substitute relations operate between those two spending categories. Increases in the population over 65 years had greater positive impact on health spending where higher voter participation enhanced the effective democratic representation of that age group. Further, where government polarization was higher–and, notably, in single dimensional health policymaking polarization empirically dominated the fractionalization that dominated multidimensional debt policymaking–both of these relations had larger long-run effect (notice the change in scale from the top row to the bottom row of graphs in **Figure 8**).

VI. Conclusion:

In broad summary, this paper showed how multiple political-economic interests and institutions interact complexly to induce different policies from democratic governments and, sometimes, different effects from the same policies. In brief, electoral institutions and the structure of interests, especially the age and income distributions, interact to determine the effective democratic demand for transfers and public-health services. Electoral and governmental institutions and interest-structures also produce more or less unified types of government, which affects policy adjustment-rates, which modify the long-run multipliers interacting with the effects of all other political-economic factors in policymaking. Finally, programmatic and fiscal developments from these two considerations shifted emphases toward monetary policy, in which monetary and wage/price-bargaining institutions interact to determine the real and nominal effects of anti-inflationary conservatism. It shows, more substantively, how all these interactions unfolded over the postwar era in developed democracies as macroeconomic policy evolution from commitment to full employment and quality public services, including health care, through fiscal activism toward monetary and fiscal conservatism aimed more narrowly to moderate inflation. And the battles over these choices, it seems, were and remain primarily political battles about income distribution and inequality, and only subsidiarily about efficiency, whatever partisan protagonists may claim.

Social transfers and health-care alleviated the worst individual pain of macroeconomic hardship, but may also have rendered unemployment more persistent and reduced macro-policy efficacy in addressing it. Public debt has *not* generally hindered real growth, but has spurred inflation while reducing unemployment. And monetary conservatism does reduce inflation, but it generally does so at (variably) high real, e.g., unemployment costs.

References

Aghion, P., P. Bolton. 1990. "Government Debt and the Risk of Default: a Political Economic Model of the Strategic Role of Debt," in R. Dornbusch, M. Draghi (eds.) *Public Debt Management: Theory and Practice*, Cambridge, UK: Cambridge UP.

Atkinson, A., L. Rainwater, and T. Smeeding. 1995. *Income Distribution in OECD Countries: The Evidence from the Luxembourg Income Study (LIS)*. Paris: OECD Social Policy Studies #18.

Blais, A., D. Blake, and S. Dion. 1993. "Do Parties Make a Difference? Parties and the Size of Government in Liberal Democracies." *American Journal of Political Science* 37(1): 40-62.

———. 1996. "Do Parties Make a Difference? A Reappraisal." *American Journal of Political Science* 40(2):514-20.

Boix, C. 1998. *Political Parties, Growth and Equality: Conservative and Social Democratic Economic Strategies in the World Economy.* Cambridge: Cambridge University Press.

Buchanan, J., R. Wagner. 1977. *Democracy in Deficit: The Political Legacy of Lard Keynes.* New York: Academic Press.

Calvo, G.A. and P.E. Guidotti. 1989. "Indexation and Maturity of Government Bonds: An Exploratory Model," in M. De Cecco and A. Giovannini, *A European Central Bank?*. Cambridge: Cambridge UP.

Calvo, G.A., P.E. Guidotti, and Leonardo Leiderman. 1991. "Optimal Maturity of Nominal Government Debt: The First Tests," *Economics Letters* 35: 415-21.

Cameron, D. 1978. "The Expansion of the Public Economy: A Comparative Analysis," *American Political Science Review*, 72: 1243-61.

Castles, F. (ed.) 1982. *The Impact of Parties.* London: Sage.

Conway, M. 1985. *Political Participation in the United States*. Washington, D.C.: Congressional Quarterly Press.

Danziger, S. and D. Weinberg. 1994. "The Historical Record : Trends in Family Income, Inequality, and Poverty," in S. Danziger, G. Sandefur, and D. Weinberg, eds., *Confronting Poverty: Prescriptions for Change*. Cambridge: Harvard UP.

Danziger, S. and P. Gottschalk. 1995. *America Unequal*. Cambridge: Harvard UP.

Downs, A. 1960. "Why the Government's Budget is Too Small in a Democracy," *World Politics* 12:541-63

Dye, T. 1979. "Politics Versus Economics: The Development of the Literature on Policy Determination," *Policy Studies Journal* 7: 652-62.

Esping-Andersen, G. 1982. "The Incompatibilities of the Welfare State," *Working Papers for a New Society*, January, as quoted in Offe 1984, 199.

———. 1985. *Politics Against Markets*. Princeton: Princeton UP.

———. 1990. *The Three Worlds of Welfare Capitalism.* Princeton: Princeton UP.

Franzese, R. 1999. "Partially Independent Central Banks, Politically Responsive Governments, and Inflation," *American Journal of Political Science* 43(3): 681-706.

———. 2002. *Macroeconomic Policies of Developed Democracies.* Cambridge UP.

Freeman, J., D. Houser, P. Kellstedt, and J.T. Williams. 1996. "Unit Roots and Causal Inference in Political Science," Paper Presented at the 1996 Meeting of the Political Methodology Section of the American Political Science Association in Ann Arbor, Michigan.

Hall, P. 1986. *Governing the Economy: The Politics of State Intervention in Britain and France*. New York, NY: Oxford UP.

Harrop, M. and W. Miller. 1987. *Elections and Voters: A Comparative Introduction*. London: MacMillan.

Hibbs, D. 1977. "Political Parties and Macroeconomic Policy," *American Political Science Review* 71(4):1467-87.

———. 1987. *The Americal Political Economy: Macroeconomics and Electoral Politics*. Cambridge: Harvard UP.

Hicks, A., and D. Swank. 1984. "On the Political Economy of Welfare Expansion," *Comparative Political Studies* 17(1): 81-119.

———. 1992. "Policies, Institutions, and Welfare Spending in Industrialized Democracies, 1960-1982," *American Political Science Review* 86(3): 658-74.

Hicks, A., D. Swank, and Ambuhl. 1989. "Welfare Expansion Revisited," *European Journal of Political Research*.

Husted, T.A. and L.W. Kenny. 1997. "The Effect of the Expansion of the Voting Franchise on the Size of

Government," *Journal of Political Economy* 105(1):54-82.
Jackman, R. and R. Miller. 1995. "Voter Turnout in the Industrial Democracies During the 1980s," *Comparative Political Studies* 27(4): 467-92.
Kamerman, S.B. and A.J. Kahn. 1997. "Investing in Children. Government Expenditure for Children and Their Families in Western Industrialized Countries." In: G.A. Cornia and S. Danziger, eds., *Child Poverty and Deprivation in the Industrialized Countries, 1945 – 1995*. Oxford: Clarendon Press.
Katzenstein, P. 1985. *Small States in World Markets.* Ithaca: Cornell UP.
Layard, R., S. Nickell, and R. Jackman. 1991. *Unemployment: Macroeconomic Performance and the Labour Market*, New York: Oxford UP.
Lindblom, C. 1977. *Politics and Markets.* New York: Basic Books.
Meltzer, A. and S. Richard. 1978. "Why Government Grows (and Grows) in a Democracy," *The Public Interest*, 52: 111-8.
———. 1981. "A Rational Theory of the Size of Government," *Journal of Political Economy* 89(5):914-27.
Meyer, B. 1990. "Unemployment Insurance and Unemployment Spells," *Econometrica* 58:757-82.
Meyer, B. 1995. "Lessons from the US Unemployment Insurance Experiments," *Journal of Economic Literature* 33:91-131.
Missale, A. and O.J. Blanchard. 1992. "The Debt Burden and Debt Maturity," Typescript, MIT.
Nagel, J.H. 1987. *Participation*. Englewood Cliffs: Prentice-Hall.
Offe, C. 1984. *Contradictions of the Welfare State*. London: Hutchinson.
Olson, M. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge: Harvard UP.
Pampel, F. and J. Williamson. 1988. "Welfare Spending in Advanced Industrial Democracies 1950-1980," *American Journal of Sociology*, 93(6): 1424-56.
Perotti, R. 1999. "Fiscal Policy in Good Times and Bad," *Quarterly Journal of Economics* 114(4):1399-1436.
Primus, W. 1996. "The Safety Net Delivers: The Effects of Government Benefit Programs in Reducing Poverty," Ctr. on Budget and Policy Priorities (http://www.cbpp.org/sndsum.htm).
———. 1998. "Strengths of the Safety Net: How the EITC, Social Security, and Other Government Programs Affect Poverty," CBPP (http://www.cbpp.org/snd98.htm).
Rodrigùez, F.C. 1999. "Does Distributional Skewness Lead to Redistribution? Evidence from the United States," *Economics and Politics*, 11(2): 171-99.
Romer, T. 1975. "Individual Welfare, Majority Voting, and the Properties of a Linear Income Tax," *Journal of Public Economics*, 14: 163-85.
Rose, R. 1984. *Understanding BIG Government.*
Rosenstone, S.J. and J.M. Hansen. 1993. *Mobilization, Participation, and Democracy in America*. New York: MacMillan.
Shonfield, A. 1965. *Modern Capitalism*. Oxford: Oxford UP.
Tsebelis, G. 1995. "Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism and Multipartism," *British Journal of Political Science* 25(3):289-326.
Tsebelis, G. 2002. *Veto Players: How Political Institutions Work*. Princeton: Princeton UP.
Verba, S., N.H. Nie, and J. Kim. 1978. *Participation and Political Equality: A Seven-Nation Comparison*. Chicago: The University of Chicago Press.
Verba, S., K.L. Schlozman, and H.E. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge: Harvard UP.
Wilensky, H. 1975. *The Welfare State and Equality*. Berkeley: The University of California Press.
Wolfinger, R.E and S.J. Rosenstone. 1980. *Who Votes?* New Haven : Yale UP.