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Compensating Whom For What?

Reconsidering the Composition of Public Spending

Niamh Hardiman

UCD School of Politics and International Relations. Niamh.Hardiman@ucd.ie

Patrick Murphy

UCD School of Mathematical Sciences. Patrick.Murphy@ucd.ie

Orlaith Burke

PhD candidate, UCD School of Mathematical Sciences. Orlaith.Burke@ucd.ie

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Abstract

This paper reports the preliminary work under way to analyse the composition of public spending in response to increased economic openness in the advanced industrial societies over recent decades. The compensation hypothesis predicts that public spending will rise in response to greater openness, especially trade competition. The globalization hypothesis predicts that public spending will be constrained by increased capital market openness. Our research design distinguishes between four aspects of public spending. First it considers spending targeted at producer as opposed to labour market interests. It further distinguishes between short-term transfer spending and longer-term investment spending, all of which have aspects of compensation spending to them. The principal focus of the research project is to analyse to what degree left-right partisanship makes a difference to spending effort, and to what degree the patterns vary between different varieties of capitalism. Drawing mainly on OECD data for the period since 1980, the modelling and analysis, using pooled time-series cross-sectional data with an error correction model, is as yet at a relatively early stage. Preliminary results suggest that neither trade nor capital market openness is associated with increase spending efforts in the manner anticipated by the compensation hypothesis. A number of lines of further inquiry are identified.

Introduction

Budget-making, both revenue-raising and expenditure, is at the core of democratic politics, and the allocation of public spending has far-reaching consequences for the livelihoods and well-being of any country's citizens. It is not merely a matter of redistributive politics, of who gets what, where and when, but of the state's engagement with the politics of production, and how the impact of international economic forces is modulated by domestic decision-making. Even though the era of wide-ranging state control may have passed since the 1980s, the state continues to be the 'gateway' to any country's relationship with the international economy (Levy 2006; Weiss 1998; 2003). Indeed, the state's role is likely to become more not less relevant, as the credibility of neo-liberal orthodoxies wane and as states are obliged to extend into activities that would have been difficult to contemplate until very recently, such as taking on ownership of major banks and committing large sums to economic stimulus measures.

This paper takes up the debate about the consequences of increased economic openness for patterns of public spending. Economic openness has several dimensions, and while trade openness is the measure that garners most attention, we are mindful that capital market liberalization and intensified flows of foreign direct investment may also have important effects. We are most interested in exploring the composition of public spending, and to tease out the manner in which domestic institutions and interests may modify the overall relationship between openness and public spending. The first section outlines reasons for expecting that there will be a relationship between openness and public spending at all. The second section considers determinants of the composition of spending, and sets out the research design we are working on. The third section reports our preliminary findings and outlines the next steps in the investigation.

1. Trade openness and public spending

There is by now a considerable literature on the effects of economic openness on the size and composition of the public sector. The topic, if anything, has gained in theoretical interest, because it provides a lens on two related areas of interest in comparative political economy.

The first concerns the determinants of the distributive efforts of states in democratic societies. The state in market societies is required to support and assist the development of productive

capacities and growth potential. The state is also expected to underpin at least a minimum of material welfare for its citizens, not only because this increases the productive potential of the economy, but because this is a normative expectation on which governments' electoral fortunes may turn and on which the legitimation of the political institutions themselves may depend. The fiscal bargain underpins political legitimacy (Levi 1988). Within this, the combination of efficiency-enhancing and legitimacy-procuring policies is central to modern democratic politics (Scharpf 2000).

But states vary significantly in the way they combine their policy commitments. The tools of comparative political economy that have been found to gain purchase on explaining systematic variations include a range of institutional and actor-centred variables, stimulated by Peter Hall's classic formulation (Hall 1986). Among these are the constitutional features of the state itself (centralized or decentralized, majoritarian or representative electoral system); the degree to which parties of the left or right prevail in shaping policy choices, since electoral considerations as well as ideological orientation may lead governments to policies that favour one sector over another; the structure of organized economic interests, and the availability of consensus-seeking policy choices; and the structure of the economy itself, or 'varieties of capitalism', since the main features of the productive capacities of the economy may bias feasible decision-sets systematically in one direction over another (Hall and Soskice 2001a; Swank 2002).

The second reason why the effects of economic openness on the size and composition of the public sector continue to attract scholarly attention is that this topic raises the question about how, to what extent, and in what ways the insertion of national economies into the international political economy makes a difference to the scope of policy choice of national governments. Domestic institutions mediate how 'external' challenges are experienced: external influences are of course experienced as real effects within the domestic economy. Whether economies are highly open and trade-dependent, or relatively closed and more reliant on domestic markets (especially if the market is large), will have a bearing on the challenges national governments have to face (Frieden and Rogowski 1996; Kahler and Lake 2003). Trade exposure is one form of domestic openness. Increasingly since the 1990s though, other forms of intensified economic interdependence have emerged, particularly with the liberalization of capital markets, but also with the greater international mobility of investment capital and the growth in the scale of foreign direct investment (FDI) in rich and

poor economies alike. The impact of globalization in all these senses is deeply contested, though the most dramatic projections of a race to the bottom in terms of government spending and social provision now seem greatly overstated. The scope for national variation in policy mix is more extensive than previously thought, and domestic institutions and political partisanship continue to play an important role in shaping policy outcomes (Starke et al. 2008). Nevertheless, it seems clear that the constraints of working within fluid international money markets impose a narrower palette of political choice on national economies, particularly in market-sensitive areas such as tax policy, also in deficit management (Ganghof 2007; Mosley 2003). The swift international ramifications of the current crisis have brought financial interdependences clearly into focus (Palma 2009). New sources of policy constraint also emanate from networks of international trade agreements, including the EU with its multilevel negotiations for market-making and regulation; from the European Monetary Union, within which monetary and exchange-rate policies are centrally determined, while tax and spending competences are located at national level; and from trade and rules set by bodies such as the World Trade Organization (Gilpin 2001; Hallerberg and Bridwell 2008; Scharpf 1999).

Markets and the compensation hypothesis

Interest in the politics of domestic politics of ‘compensation’ through state expenditure goes back at least to the work of Karl Polanyi, who argued that nineteenth-century economic liberalism, backed and enforced by the exercise of state power in the era prior to mass suffrage, produced social dislocations that stimulated the development of the labour movement and the organization of the political left (Polanyi 1944/2002). The rise of interwar European fascism, he argued, cannot be understood without recognizing the delegitimation of constitutional systems arising from the pervasive ‘great transformation’ of the social order that had been wrought by market liberalism. The reconstruction of political order in the wake of World War Two was therefore grounded in ‘embedded liberalism’, the combination of international trade liberalization with the widespread acceptance of at least some of the principles of the Keynesian welfare state, among the advanced industrial societies (Ruggie 1982). Since the 1980s, though, the postwar settlement has been unravelling in various ways. The new politics of neo-liberalism gained uneven purchase (Prasad 2006). But everywhere the scope for an older model of nationally distinctive political economies was narrowed.

Inevitably perhaps, it was the most distinctive kinds of political economy that first attracted

analytical attention. David Cameron's seminal contribution to the explaining the size of the public sector, specified in terms of total government spending, with reference to state size and economic openness, was strongly modelled on the Swedish pathway from trade exposure to organizational centralization, strong political left, and large welfare state (Cameron 1978). Peter Katzenstein's still-influential work on small European states deliberately selected cases for study because they were all small, open and wealthy trading economies, and because all had evolved complementary domestic adjustment strategies grounded in 'corporatism', that is, a close articulation between organized economic interests and the state, on industrial policy, wage determination, and welfare spending (Katzenstein 1985). Public spending was channelled to both employers and employees to underpin bargained agreements. While strategies of 'political exchange' were by then widespread in linking wage bargaining into the domestic politics of inflation control and welfare expansion (Pizzorno 1978), Katzenstein's contribution was to link the politics of industrial relations to the broader agenda of domestic responses to the international political economy in a broader context of developmental strategy.

These distinctive models of political economy experienced new challenges from the 1980s on. But in addition, their generalizability might raise some questions. Katzenstein distinguished between a liberal and a social democratic variant within his corporatist strategies, typified by Switzerland with its relatively stronger employer interests on the one hand, and Sweden with its strong links between trade unions and Social Democratic party on the other. But all the states he studied were what might now be termed coordinated market economies, a category that encompasses most continental European countries plus Japan (Amable 2003; Hall and Soskice 2001b; Soskice 1999). The productive capacities of these economies all tend to be structured in similar ways. They involve stronger inter-firm strategic coordination than would be the case in either the more market-responsive liberal market economies (broadly the English-speaking world), or in countries with a stronger role for the state in industrial policy (such as France and the Mediterranean southern European countries) (Hall and Soskice 2001a). Institutions might not all complement one another and many points of friction arise when conflict over reform initiatives in one policy area create new tensions in another (Amable 2009; Crouch 2005; Streeck and Thelen 2005). But both product markets and labour markets tend to vary systematically across these clusters; and patterns of welfare state provision are differently structured too (Esping-Andersen 1990; 1999).

Later studies analysing a much wider range of countries have found that ‘the results confirm the existing literature on the public sector as a compensatory mechanism in open economies’; ‘higher levels of trade systematically lead to a larger public sector’ (Adserà and Boix 2002, pp.244, 253), at least when government consumption as measured with reference to the volume of state revenues. The main determinants of the larger public sector seem to arise from the state’s role in directly supporting declining economic sectors to alleviate the disruptive effects of intensified competition on domestic markets, and in increasing welfare spending in response to the dislocating effects on employees. Rodrik found similar effects, also across a wide range of countries (Rodrik 1998).

Why it is that welfare effort might be greater in small states, as Cameron and Katzenstein argued, has been subject to investigation. Alesina and Wacziarg argue that small size makes a significant difference (Alesina and Wacziarg 1998). But Down argues that the link is not between openness and increased spending, but volatility and spending, where small economies are also more open. Openness per se does not cause volatility, or spending. Small population size, hence a limited domestic market (and not small geographical area as is modelled in Adserà and Boix) means more volatility. Trade exposure implies structural adjustment, with a corresponding demand for compensation (Down 2007, p.16). But paradoxically, it may be that integration into wider market opportunities decreases volatility, especially for small states, since the risk of asymmetric shock is spread (Down 2007, p.4). This argument is still contested, and Kim, for example, argues that the evidence still points to externally driven risk, and domestic perception of such risk, as a driver of demand for increased welfare compensation (Kim 2007).

Iversen and Cusack, who are globalization sceptics on this matter, find ‘no link between either trade openness or capital market openness and volatility of the real domestic economy’ (Iversen and Cusack 2000, p.319). They hold that deindustrialization rather than trade-driven adjustment creates the dislocation effects: public spending soared in western countries even as the industrial working itself contracted dramatically. Dreher and his colleagues also argue that globalization as such has little or no effect on the composition of spending, and that this is most strongly shaped by domestic political factors (Dreher et al. 2008). However, Burgoon reports conflicting findings (Burgoon 2001); these issues are contested too. And it may be that Iversen and Cusack underestimate the degree to which domestic deindustrialization is itself indirectly affected by transnational shifts in the composition and location of production,

causing intensified domestic need to engage in trade-related structural adjustment.

Globalization and the efficiency hypothesis

Compensation spending might work in facilitating adjustment to greater trade openness, but it may be that the effects of globalization constrain how, to what extent, and across what time-span the compensation hypothesis might hold empirically. The argument about globalization, in this context, is that intensified competitiveness pressures limit the degree to which states might be able to increase or even hold steady any particular volume of public spending: efficiency constraints depress welfare and other public spending efforts. ‘Stateness’ itself might even come into question (Evans 1997). However, it seems that such far-reaching conclusions would be premature. It seems that efficiency effects have not displaced compensation effects, and it is difficult to envisage how they could in any simple fashion. The manner of adjustment to globalization pressures, according to Garrett’s extensive work, continues to be mediated through domestic institutions. Where appropriate institutional combinations exist, particularly where left-oriented parties can rely on the coordinating capabilities of allied trade unions, even large-scale welfare states can continue to thrive (Garrett 1998; 2000; Garrett and Mitchell 2001). Other authors similarly stress the design of institutions – especially the role of corporatism, consensus democracy, and the centralization of state constitutional structure – for shaping strong compensation policies (Schulze and Ursprung 1999, p.345; Swank 2001; 2004). Rodrik, with a global span of country observations, argues strongly against the existence of uniform effects of globalization on domestic politics, and like Stiglitz, criticizes attempts to generalize supposed best-practice policy approaches along the lines of the ‘one size fits all’ approach favoured by the ‘Washington consensus’ during the 1980s and 1990s (Rodrik 2007; Stiglitz 2003).

But quite how the compensation and efficiency effects might interact, in the context of globalization understood in terms of capital market liberalization, continues to present analytical challenges. More recent analyses have found a weakening or even non-existent association between change in openness and the size of the compensation effect. There is some question over whether the time-scale of observations might make a significant difference to results. Data that extend to the mid-1990s, as in much of Garrett’s work, would not yet have captured the strongest effects of globalization, the scale of which became particularly apparent with the East Asian financial crisis of 1998 and has again come sharply into focus with the current international crisis. It may be that compensation effects are

genuinely present at an earlier stage of adjustment to increased trade interdependence, but that over time, the efficiency effect of both more intensified competition and of market disciplines constrain public spending and push back welfare effort. Busemeyer, for example, presents a nuanced argument that goes beyond either-or possibilities, to characterize the subtle ways in which real decision-makers make decisions under shifting constraints (Busemeyer 2009). Typically, quantitative modelling flattens out trends over time, so that the possibility of a shift in the curve within a time-series would need to be explicitly tested.

2. The composition of public spending and the politics of distribution

Indicators of compensation effort are quite varied, with dependent variables that may include the volume of revenue, total government consumption, total public spending, and total social spending. But in addition to the size of the public ‘effort’, however conceptualized, the issue of how this is apportioned is far from obvious.

As Schulze and Ursprung note, in a wide-ranging review of current research, the classic argument is that ‘governments accommodate to rising demand for better social insurance provision in the context of increasing international economic integration’ (Schulze and Ursprung 1999, p.335). There is some attitudinal data supporting the claim that these expectations work through electoral channels (Balcells Ventura 2004). A further refinement distinguishes between government commitments to broad spending measures, or to narrowly targeted measures. Explaining variations in countries’ provisions requires looking not only at the kind of assets employees have and the preferences that result, to which governments respond in order to secure electoral support, but also at the type of institutional arrangements that channel these links. Rickard found that, other things being equal, representative electoral systems respond more strongly to increased electoral demand for narrow or targeted benefits, even without the direct mobilization of these interests through interest organization or recourse to collective action (Rickard 2009).

But employees at risk of displacement are not the only ones who will seek assurances from governments; firms are if anything more directly at risk, so industry interests may also place demands for assurances of government backing. An important first dimension of distribution is therefore the allocation of spending as between labour market interests and industry or firm

interests. In the case of firms, what we would expect would be direct subsidies. Increasingly since the 1990s, targeted subsidies have been ruled inadmissible both by EU competition rules, with the advent of the Single European Market in 1992, and by new World Trade Organization rules since 1995. But the rules are made up of complex and patchwork provisions, and many wealthy countries, including EU member states, continue to avail of them, even in areas where their admissibility is more clearly questionable (Blauberger 2009; European Commission 1997).

An alternative perspective on these issues suggests that employees themselves might have differentiated interests. Those who lose their jobs will expect ex post compensation guarantees in the form of welfare supports. But those who are still at work might have a vested interest in the ongoing security of their jobs, and might therefore prefer government spending ex ante on adaptation measures directed toward vulnerable sectors. Rickard, for example, seeks to analyse governments' propensity to spend on social welfare as opposed to sectoral measures for a large number of developing countries across the postwar era, by analysing the relative proportion of total spending accorded to each, regardless of how large the total volume of spending is relative to GDP. She finds a marked shift from welfare to sectoral spending (Rickard 2008). Similarly, Burgoon undertook a sophisticated analysis of types of state spending, identifying clusters of alternative potential coalitions between employees and employers in their preference structures (Burgoon 2001, pp. 520-25).

However, if what we are interested in is the disposition of political decision-makers to respond to different sectors of the electorate as part of an overall strategy of economic development, balancing productive and distributive imperatives, that is, if we are most interested in the steering capacity of states, we consider that it is worth distinguishing between spending that is primarily firm-oriented and that which is primarily employee-oriented. A research design analysing cross-class coalitions of interest, and the different preferences of employees for job security over unemployment compensation, offers a different perspective; but it does not displace the continuing relevance of the question of broad class-oriented spending preferences.

A second dimension of interest concerns the longer-term as opposed to short-term approach to compensation spending. As Schulze and Ursprung argue, among advanced industrial societies, 'governments competing for foreign investment will... restructure their expenditure

towards more privately productive public inputs at the expense of transfers and non-productive government consumption' (Schulze and Ursprung 1999, p.298). Short-term compensation spending alleviates immediate hardships through transfer spending. But adjustment to increased trade openness, especially where openness also means seeking to attract more mobile capital investments, means a shift in orientation over time away from direct transfer compensation and toward indirect productivity-enhancing investment spending. Openness would be expected to create incentives to governments to increase their commitment to supply-side spending. Less-developed countries tend to commit rather less to employee-related insurance categories (Shelton 2007, pp. 2231-3). Developed countries start, on the whole, with already well developed social transfer mechanisms. But we would expect the advanced societies to display a rising propensity toward investment spending in the context of increased openness, broadly conceived.

This presses us to consider a third dimension, which is spending that would be primarily firm-oriented as opposed to spending that is primarily labour-market oriented, in the context of supply-side or investment or long-term spending commitments. The former category includes investments in fixed infrastructure, transport, communications technologies. We could also consider public investment in research and development in this category. There are many ways in which states can support industrial development apart from recourse to selective industrial or firm-oriented subsidies, which may including tariffs, cultivation of national champions in strategic industries, and so on. These were extensively used by the richest countries in their pathways to prosperity, also by the wealthiest tier of Asian countries. In recent years, WTO rules have severely limited the scope for developing countries to use them (Chang 2002; 2008; Kohli 2004). But many kinds of supports that include non-fiscal provisions such as grants, licensing arrangements, regulatory provision, as well as fiscal incentives such as preferential corporation tax rates, are still core features of state industrial policy in wealthy countries (Block 2008; Ganghof 2000; Ó Riain 2004). We cannot capture all of this in our analysis of public spending commitments. But we think there should be interesting variation in the degree to which states commit to spending on productivity-enhancing capital investments.

Longer-term investment spending that primarily benefits employees principally means human capital formation, or spending on education and skills development. In a world of increased capital mobility, fragmentation of production systems, and intensified competition for

investment capital, employees in richer countries have no cost-based competitive advantages and must rely on increased labour productivity to support continued job creation in most sectors. Every country wants to ‘move up the value chain’, and securing high-technology processes on the one hand, and high-end traded services on the other, are the pathways toward sustaining high living standards. There is a potential trade-off between investment in high-end quality-enhancing manufacturing and services-heavy employment, as the German and Austrian cases indicate (see Table 6 below). Moreover, the issue of foreign direct investment in services, and deregulation of service activities, is often far more conflicted than in the case of manufacturing, since so many areas of key national economic activities are potentially affected (utilities and infrastructure, aviation, banking, etc.), and restrictive or anti-FDI policies are quite common in these areas (Stephen 2009).

Therefore we might consider not only that states may need to balance short-term transfer spending against long-term investment spending, but also that within investment spending, different combinations of firm-oriented and labour-market-oriented investments may develop.

Compensating whom for what?

Our research questions build on the reflections set out in the preceding section and may be summarized in Figure 1 below.

Figure 1. Government targeting options in response to increased openness

Targeting	PRODUCERS	EMPLOYEES
SHORT-TERM: TRANSFERS, DEMAND-SIDE	<p>1. Direct assistance to existing enterprises:</p> <p>Subsidies</p>	<p>2. Direct labour market supports:</p> <p>Transfer payments (UB)</p> <p>In-work job subsidies</p> <p>Active labour market reintegration measures</p>
LONG-TERM: INVESTMENTS, SUPPLY-SIDE	<p>3. Productivity and competition enhancing investments:</p> <p>Public fixed capital formation</p>	<p>4. Human capital upgrading:</p> <p>Upper second-level education and skills training</p> <p>Third-level education and skills training</p>

What we are most interested in explaining is the composition of governments’ spending commitments in the context of increasing economic openness, not only in response to electoral incentives, but also consistently with the steering mechanisms available to them. States function in embedded ways in political economies that are not all the same. We consider that while electoral and constitutional institutions may well be important in shaping the profile of states’ spending commitments, along with the partisanship profile of government, the scope for government intervention is also strongly shaped by the kind of market economy that is under consideration (Hall 2007).

1. Short-term producer-oriented transfer spending

The first distinction we made was between firm-oriented and labour-market-oriented compensation payments. What we have in mind here is narrow or targeted benefits, the mechanisms whereby governments can directly alleviate the pain of intensified competition

that may lead to loss of livelihood. Subsidies to sectors or firms include all subsidies, including EU subsidies that provide direct supports. We factor in EU agricultural subsidies here too, because these have provided an essential friction-reducing resource to manage declining employment in agriculture across Europe.

2. Short-term employee-oriented transfer spending

Considering employee interests, we leave to one side, for now, issues about broader targeting such as the extent of coverage of social insurance schemes, and non-fiscal labour market protection, that are part of providing security of employment in work and which are common in coordinated and ‘mixed’ market economies. Direct social welfare compensation in Anglo-Saxon liberal market economies is means-tested and time-limited. Scandinavian labour markets typically provide generous protection for workers, not jobs; security in the labour market rather than job security. Continental and Southern European countries tend to provide generous welfare assurances alongside strong job protection (Ebbinghaus 2006; Vail 2008). We focus only on measures directly targeted at those who are most vulnerable within the labour market.

There are conceptual and empirical issues involved in capturing what is at issue here. Spending on unemployment benefit is the first measure we use. This may vary mainly with growth in GDP, as rate increases may simply reflect rising living standards. It mostly varies directly with the level of unemployment in an economy, and this may be the result of domestic or international business cycle fluctuations, or national fiscal mismanagement issues, rather than being directly attributable to the effects of changes in trade openness as such. Our measure takes unemployed benefit spending normalized against GDP. We expect that most fluctuations in economic performance will be captured within the model itself, and have not (yet) tried to control for variations in domestic consumption or international business cycles. We do not think it appropriate to control for the level of unemployment as such.

We also consider that public spending on keeping people in work through provision of (generally short-term) job subsidies in selected sectors constitutes a direct trade-related expenditure measure. Active labour market schemes to reintegrate displaced workers falls into the same category. Unfortunately data limitations at this stage have not permitted us to

include these variables in our model as yet.

We anticipate that cross-national pattern of the composition of government spending is likely to vary systematically between these two categories. We would expect that stronger left government composition will be associated with higher levels of labour-market-centred effort. We anticipate that (non-agricultural) sectoral or producer-oriented subsidies will be more apparent in coordinated market economies, where the creation and destruction of firms may have more damaging consequences for long-term growth prospects and can therefore be less readily accommodated than in liberal market economies.

3. Longer-term producer-oriented investment spending

In the longer term, most governments actively support measures to improve competitiveness and enhance trade performance on domestic and export markets. But the pathways through which they do this may vary, and country experiences are likely to have developed somewhat differently over recent decades. Until the 1970s, virtually the only way in which the large-scale public infrastructure investments necessary for economic growth could be undertaken was through the public sector. Since then, different combinations of privatization, for-profit management of major infrastructures, and public-private partnerships, have become more common. EU tendering rules also enforce transnational competition in tendering rules, competition in provision of utilities, and other market-making provisions that reduce the scope of discretionary state interventions. Nevertheless, we anticipate to find differences in the profile of countries' spending efforts that depend on the relative weight of the political left and right. Both Boix and Mulas-Granados have argued that Social Democratic parties display a preference for public-sector-led supply-side investments, and that they seek to maintain high spending levels through reliance on broad-based revenue sources. They also argue that Social Democratic governments are reluctant to cut the size of public investments and will maintain these even at the expense of the generosity of transfer payments (Boix 1998; Mulas-Granados 2006). In contrast, governments of the right tend to prefer strategies of reducing total tax liabilities and relying more strongly on market mechanisms for capital side development. They prefer to promote private sector investments through fiscal incentives based on tax levels and rates, tax expenditures, management of tax liability rules governing depreciation rates, and so on.

Although spending on research and development is vital for technological innovation and

growth-enhancing prospects, we have decided to exclude public spending in this area from consideration in our analysis (at this stage anyway). The extent to which countries rely on state-financed as opposed to in-firm R&D spending do not seem to display systematic patterns. And it is quite likely that much of the public effort put into supporting R&D investments is based on tax incentives and indirect public spending in areas such as technology parks and university-industry collaborations, which is hard to capture in this particular kind of analysis of variations in spending patterns.

4. Longer-term labour market-oriented investment spending

Those who lose their jobs through trade-related competition, or because they are in declining industries that cannot survive growing economic interdependence, may be capable of being reintegrated into the workforce in the short term. But in the medium to long term, new investments in the labour force are required to facilitate structural economic adaptation, and to equip new generations of employees to work in higher-skilled activities and in emergent sectors of economic activity. Investment in new skills and acquisition of new education-based competences are likely to prove vital.

Countries vary systematically in the volume of public spending put into education at each level, though this is not directly related to performance in standardized attainment tests in, for example, maths, science, and literacy (OECD 2008). But we consider that it is important to decompose different aspects of public investment in human capital, as we anticipate systematic differences in the manner in which this is undertaken across varieties of capitalism. The distinction normally made is between general and specific skills acquisition (Estevez-Abe et al. 2001). In liberal market economies, inter-firm competition reduces the incentives for employer investment in high-level skill development. Employers tend to rely on state-supported education that is not immediately productivity-enhancing. Certification and grade-attainment in general education provides a signalling mechanism for employers for hiring purposes. In coordinated market economies, it is more common for employer coordination to provide on-the-job skills acquisition of a kind that is specific to the firm or industry in question, financed through some combination of employer funds and state inputs. The distinctions between the way education provision tracks into labour market opportunities are apparent in the structure of second-level education, and this is where most of the research comparing education and skills training tends to be concentrated (Allmendinger 1989; Crouch et al. 1999; Hassel 2007; Iversen and Stephens 2008). But there is also a case to be

made for considering the different state inputs to vocational-technical and general-academic education standards at third level. There is a trend toward higher levels of educational attainment in general in the wealthy societies. Comparing profiles of spending at third level captures more of the real variation in labour force competences and how this affects economic growth capabilities (Culpepper 2007; UNESCO 2006). We would expect, in line with this literature, that liberal market economies would show a bias toward general rather than specific skill development, captured through profiles in educational attainment; that coordinated market economies would lean toward high-level as well as lower-level technical skills; and that Scandinavian economies would show a mix of these (Hardiman 2009).

Openness and spending trends

Economic openness can mean different things. The most common definition is probably the sum of the value of imports and exports expressed as a proportion of GDP. Trade openness in this sense shows considerable variation, and as many scholars have noted, tends to be more pronounced in small economies (represented by population size, that is, where domestic markets are quickly saturated) than in larger economies. Growing volumes of trade need not result in any increase in overall openness, and indeed it can be consistent with a decline in the openness measure. Table 1 below shows that even in 1980, countries had widely dispersed degrees of openness, with Belgium at the top with 117% and Japan ranking last with 28%. But our research questions focus on what happens when economies become more open, then what we need to capture is the degree of change between two points. We take countries' profiles at the starting-point for granted; we wish to analyse the change wrought in the internal politics of compensation spending in response to the change in the degree of openness that has occurred across the time-period under observation.

Neither the economies that were most openness-prone nor those that were most relatively closed in 1980 were necessarily the ones that experienced the greatest change over the following two decades. Ireland experienced the most dramatic increase in openness, of about 80 percentage points, between 1980 and 2000. Increases of between 10 and 30 points were more common. Norway (in EFTA but not the EU) and Japan (experiencing a long slump and with ongoing issues about import resistance to US goods) both display a decline in openness on this measure.

Table 1. Trade Openness, % GDP

	1980	1985	1990	1995	2000	Points change 1980-2000
Ireland	102.9	109.5	107.2	139.8	184.1	81.2
Belgium	117.0	140.0	137.5	131.3	166.4	49.4
Canada	54.9	54.7	52.0	72.2	86.5	29.7
Spain	31.5	40.9	35.5	44.8	61.2	29.7
Netherlands	107.6	123.4	108.5	112.2	133.4	25.9
Sweden	60.6	68.9	59.6	71.9	86.0	25.4
Germany	44.0	51.2	49.2	47.4	66.4	22.5
Austria	71.0	73.0	74.3	70.3	89.6	18.6
Denmark	68.8	76.1	69.7	71.2	87.2	18.3
Portugal	59.2	68.6	72.4	66.7	74.3	15.1
Switzerland	70.8	72.9	70.1	65.7	85.7	14.8
Australia	31.7	33.2	32.6	38.7	44.8	13.1
Finland	64.1	56.6	47.0	65.0	76.4	12.4
France	44.1	47.4	44.0	44.4	56.2	12.2
Greece	51.4	46.4	45.9	42.6	61.6	10.2
Italy	46.1	45.4	39.4	50.0	55.6	9.5
New Zealand	60.3	61.6	53.4	57.3	69.3	9.0
UK	51.9	56.5	50.6	57.2	58.1	6.2
USA	20.8	17.2	20.5	23.4	26.3	5.6
Norway	80.0	78.4	74.3	69.7	76.1	-4.0
Japan	28.2	25.1	19.9	16.8	20.2	-8.0

Source: OECD

An alternative indicator of economic openness is the flow of foreign direct investment (outward as well as inward), as summarized in Table 2 below. Ireland's performance topped the list in 1980, and again in 2000. But already having a strong profile on FDI does not necessarily make a country perform most strongly over time in increasing this. It seems the main work in setting a development trajectory had already been laid down in Ireland by 1980, and FDI flows increased by only some three points. In contrast, Sweden, Spain and Finland increased their FDI flow exposure by some eleven points, with six other countries coming in with increases of between six and nine points. Once again, the change between the two dates seems to capture something different from the rank order.

Table 2. FDI Flows, % GDP

	1980	1985	1990	1995	2000	Points change 1980-2000
Sweden	6.3	9.7	12.9	15.2	17.2	11.0
Spain	4.5	6.6	9.4	11.0	15.0	10.6
Finland	6.5	8.6	11.2	12.7	16.9	10.4
New Zealand	7.5	11.5	14.0	14.9	16.3	8.8
Italy	4.8	6.7	8.6	10.7	12.7	8.0
Germany	5.3	7.0	8.2	8.7	13.3	7.9
Austria	8.5	9.8	11.8	11.5	16.1	7.6
Portugal	8.6	11.4	10.8	10.8	15.9	7.3
Denmark	9.3	10.8	13.2	15.5	16.3	7.0
France	6.2	8.1	9.7	9.3	12.4	6.1
Norway	10.4	11.5	12.8	13.4	15.8	5.4
Switzerland	13.1	15.3	15.6	15.5	18.0	4.9
Australia	8.9	10.1	12.3	13.2	13.6	4.7
USA	5.6	5.4	6.8	7.6	9.5	3.9
Netherlands	15.3	16.2	17.3	17.3	18.9	3.6
Belgium	16.0	17.0	18.6	18.6	19.4	3.5
Ireland	16.5	17.0	16.9	17.8	19.6	3.1
Canada	13.6	12.8	13.1	14.9	16.5	2.9
UK	11.8	12.4	12.9	13.3	14.4	2.7
Greece	8.9	9.7	8.2	8.3	11.0	2.2
Japan	2.8	3.6	6.4	4.7	4.3	1.5

Source: OECD

Our research interest is in specific components of social and non-social spending. But it may be of interest to consider what the trends are in total social spending in OECD countries over time. This is given in Table 3 below. A cursory inspection reveals that the profile of change in countries' openness does not result in any commensurate change in levels of total social spending. In line with classic analyses of domestic political partisanship, countries with the strongest profiles of either Social Democratic or Christian Democratic government composition by 1980 were the ones with the largest welfare spending commitments, though this was channelled and targeted differently within each cluster of countries (Esping-Andersen 1990; van Kersbergen 1995). In Table 3 below, we note a drop in the proportion of social spending relative to GDP after 1995 in many countries. But Frank Castles and his collaborators have argued that this should not be interpreted as welfare. Rather, as a

composition of total budgets, social spending has held its own, and when spending cutbacks have been undertaken, non-social elements of budgets, including education and training, as well as general economic affairs, defence and policing, and debt financing, have been the areas that have been cut most obviously (Castles 2007). We must bear in mind that the trajectory of the total size of the public purse, and of total tax revenues, flattened out across most countries from about 1995 on.

Total social spending grew most rapidly in Greece and Portugal, both of which started out in 1980 with small welfare states and high public expectations of welfare improvements as democratization bedded down under recurrent left-of-centre administrations. The largest welfare states in 1980 still topped the league table in 2000, though there was much less disparity by this date in total social spending; the biggest spenders held a fairly steady-state relative to their GDP. Ireland and the Netherlands show a drop in the volume of total social spending relative to GDP. But this can be misleading: we should also note that in Ireland, during its 'Celtic Tiger' years 1994-2000, real growth in social spending simply did not match very rapid increases in GDP. (It is common in Ireland to use a parallel measure of GNP, because GDP rose more rapidly than GNP because of the significance of FDI. The volume of repatriated profits and the somewhat opaque character of transfer pricing within foreign-owned forms made GNP seem a more reliable indicator. GNP figures bring Ireland closer to international average levels of taxation and spending. But they do not fundamentally alter the trajectory of the statistics).

Table 3. Total Social Spending, % GDP

	1980	1985	1990	1995	2000	Points change 1980-2000
Greece	11.5	17.9	18.6	19.3	21.3	9.8
Portugal	10.8	11.0	13.7	18.1	20.2	9.4
Australia	11.0	13.0	14.1	17.1	17.9	6.9
France	20.8	25.8	25.3	28.4	27.6	6.7
Japan	10.3	11.2	11.3	13.9	16.1	5.8
Norway	16.9	17.9	22.6	23.5	22.2	5.4
Italy	18.0	20.8	19.9	19.8	23.2	5.2
Spain	15.6	17.8	20.0	21.5	20.4	4.8
Switzerland	13.9	14.8	13.5	17.5	18.0	4.1
Germany	23.0	23.6	22.5	26.6	26.3	3.3
Finland	18.4	22.8	24.5	27.4	21.3	3.0
Austria	22.6	23.9	23.7	26.6	25.3	2.8
Canada	14.1	17.3	18.4	19.2	16.7	2.6
UK	16.6	19.6	17.2	20.4	19.1	2.6
New Zealand	17.1	18.0	21.8	19.0	19.1	2.0
Belgium	23.5	26.1	25.0	26.4	25.3	1.8
USA	13.3	12.9	13.4	15.4	14.6	1.3
Denmark	25.2	24.2	25.5	28.9	25.8	0.6
Sweden	28.6	29.7	30.5	32.5	28.8	0.2
Ireland	16.8	21.8	15.5	16.3	13.6	-3.1
Netherlands	24.2	24.2	24.4	22.8	19.3	-4.8

Source: OECD

Noting the comment above about using GDP as a denominator in these data, and in line with arguments that the volume of public spending governments can commit is constrained by the resources available to them, it may be interesting to inspect cross-national trends in GDP over time, and changes in GDP. This is set out in Table 4 below.

Table 4. Gross domestic product, volume, at 2005 PPP, USD

	1980	1985	1990	1995	2000	2005	change 1980-2005	% change 1980-2005
Ireland	43,273	49,077	61,763	77,464	122,498	160,618	117,345	271%
Australia	299,820	348,342	409,653	468,784	575,312	673,165	373,345	125%
USA	5,834,449	6,842,798	8,039,574	9,078,554	11,096,494	12,421,875	6,587,426	113%
Spain	574,964	616,179	767,785	827,383	1,011,765	1,188,102	613,139	107%
Norway	106,254	125,186	136,226	163,578	195,997	218,707	112,454	106%
New Zealand	49,738	59,991	63,120	72,526	84,409	101,342	51,604	104%
Canada	567,370	649,669	748,721	815,396	998,378	1,132,000	564,630	100%
Portugal	113,974	119,119	156,952	170,789	208,628	217,912	103,938	91%
UK	1,039,480	1,154,231	1,359,071	1,474,189	1,745,427	1,968,812	929,331	89%
Finland	86,540	99,007	117,020	112,412	141,750	160,632	74,092	86%
Netherlands	315,593	333,869	392,864	440,029	536,543	572,901	257,308	82%
Japan	2,178,171	2,536,902	3,206,150	3,457,387	3,630,107	3,872,844	1,694,673	78%
Austria	156,580	168,111	194,752	216,873	252,405	275,502	118,922	76%
Sweden	170,252	186,520	211,562	218,768	257,751	291,652	121,399	71%
Denmark	106,638	121,929	130,796	146,819	169,012	179,888	73,250	69%
France	1,115,358	1,206,663	1,415,986	1,499,907	1,722,847	1,867,206	751,848	67%
Greece	166,934	168,073	178,749	190,173	225,311	276,799	109,865	66%
Belgium	205,629	215,523	250,907	271,538	310,077	336,393	130,764	64%
Italy	1,062,829	1,156,187	1,348,695	1,437,611	1,579,275	1,649,898	587,069	55%
Switzerland	180,045	194,028	224,277	225,395	249,367	265,751	85,706	48%
Germany	-	-	-	2,274,366	2,511,592	2,583,174	NA	NA

Source: OECD *Economic Outlook No 85*, 2009. (There is a break in the German series due to reunification)

The scale of Ireland's super-normal growth during the 1990s becomes clearer here. Countries that grew by 100% or over between 1980 and 2000 include Australia, the USA, Spain, Norway, New Zealand, and Canada. The slowest-growing OECD countries include Switzerland, Italy, Belgium, Greece, France, Denmark, Sweden.

OECD countries vary considerably in size. We need to be mindful of the argument that population size, as a proxy for speed of market saturation, has a bearing on the propensity toward openness. We also need to consider that increases in spending on all the elements of variables we are interested in may be driven as much by rising per capita demands as by any change in political priorities. The rate of expansion of populations itself shows a lot of variation, as Table 5 below shows.

Table 5. Population Size ('000) and Change in Population (%)

	1980	1985	1990	1995	2000	% change 1980-2000
Germany	61,566	61,024	63,254	81,661	82,160	33%
Australia	14,695	15,788	17,065	18,072	19,153	30%
Canada	24,516	25,843	27,698	29,302	30,689	25%
USA	227,225	237,924	249,623	266,278	282,194	24%
New Zealand	3,144	3,272	3,363	3,673	3,858	23%
Switzerland	6,319	6,470	6,712	7,041	7,184	14%
Greece	9,642	9,934	10,089	10,634	10,917	13%
Netherlands	14,150	14,491	14,951	15,459	15,926	13%
Ireland	3,401	3,540	3,503	3,601	3,790	11%
Norway	4,086	4,153	4,241	4,359	4,491	10%
France	53,880	55,284	56,709	57,844	59,049	10%
Japan	117,060	121,049	123,611	125,570	126,926	8%
Finland	4,779	4,902	4,986	5,108	5,176	8%
Austria	7,549	7,558	7,718	8,047	8,110	7%
Spain	37,527	38,420	38,851	39,388	40,264	7%
Sweden	8,311	8,350	8,559	8,827	8,872	7%
UK	56,330	56,554	57,237	58,025	58,886	5%
Denmark	5,123	5,114	5,141	5,233	5,340	4%
Portugal	9,819	10,014	9,873	9,847	10,229	4%
Belgium	9,859	9,858	9,967	10,137	10,251	4%
Italy	55,657	56,498	56,737	56,745	57,189	3%

Source: OECD Labour Force statistics

The expansion of the German population by one-third between 1980 and 2000 is of course the result of reunification in 1990 (the break in the statistics is not noted here). The populations of Australia, Canada, the USA, and New Zealand owed much of their expansion by one-quarter and more to immigration. Countries with the lowest rates of population growth, in low single figures, include Italy, Belgium, Portugal, Denmark, and the UK.

Table 6 shows that the outflow from agriculture across OECD countries had already largely been completed by the 1990s, compared with 1960 when many countries still had 20% or 25% of their populations working on the land. Although only showing data for 1996 and 2006, we can also see some variation in the degree of reliance on services. The USA, Britain, Sweden, and the Netherlands have the largest proportions engaged in service activities. Portugal has the lowest, with Italy, Spain, and Greece next, then Ireland, along with Germany and Austria. But the reasons are somewhat different, and would need to be explored taking

account of the composition of industry.

Table 6. Composition of the workforce, 1996-2006

	Total labour force ¹				Civilian employment ¹								
	Thousands, 2006	% change, 2006/96	Female participation rate ²		Total, thousands	% change 2006/96	Composition						
			2006	1996			Agriculture, forestry and fishing		Industry		Services		
							2006	1996	2006	1996	2006	1996	
Australia	10 765	17.3	69.4	64.9	10 190	22.2	3.5	5.0	21.4	22.4	75.1	72.6	
Austria	4 124	6.6	67.3	61.5	3 918	6.5	5.5	7.3	28.2	32.7	66.2	60.0	
Belgium	4 647	7.4	59.9	56.9	4 264	14.1	2.0	2.4	24.7	25.9	73.4	71.8	
Canada	17 654	18.3	73.2	67.5	16 484	22.8	2.6	4.0	22.0	21.8	75.4	74.2	
Denmark	2 904	2.9	77.0	74.1	2 759	6.4	3.0	4.0	23.6	27.0	73.4	69.0	
Finland	2 670	5.9	73.8	70.3	2 434	14.9	4.7	7.5	25.8	27.3	69.6	65.2	
France	27 575	7.7	64.2	61.0	24 717	12.2	3.4	4.5	22.9	25.9	73.8	69.7	
Germany	41 521	5.0	69.1	61.9	36 978	3.8	2.3	3.0	29.8	35.4	67.9	61.6	
Greece	4 880	13.1	53.8	46.5	4 453	15.1	12.0	20.3	22.0	22.9	65.9	56.8	
Ireland	2 114	40.2	62.1	49.7	2 015	52.8	5.6	10.7	27.6	27.8	66.8	61.4	
Italy	24 662	7.4	51.2	43.5	22 738	14.0	4.3	6.4	30.5	33.5	65.2	60.0	
Japan ³	66 570	- 0.8	66.2	62.6	63 820	- 1.6	4.3	5.5	28.0	33.3	67.7	61.2	
Netherlands	8 597	14.4	71.0	60.1	8 261	18.3	3.0	3.9	19.2	22.4	77.8	73.8	
New Zealand	2 209	17.8	71.6	68.1	2 117	20.8	7.1	9.5	22.3	24.7	70.5	65.8	
Norway	2 446	9.2	76.1	73.9	2 345	11.5	3.3	5.1	20.9	23.2	75.8	71.7	
Portugal	5 587	16.7	72.3	62.1	5 130	16.4	11.8	12.4	30.7	31.4	57.5	56.2	
Spain	21 585	29.5	60.4	47.1	19 660	53.4	4.8	8.4	29.7	29.8	65.5	61.8	
Sweden	4 671	6.1	76.1	75.8	4 341	9.5	2.0	2.9	22.0	26.1	76.0	71.0	
Switzerland	4 477	9.1	79.8	73.8	4 304	9.0	3.8	4.7	23.8	27.4	72.5	67.9	
United Kingdom	29 942	6.4	69.0	66.6	28 203	9.6	1.3	2.0	22.0	27.3	76.7	70.8	
United States	152 672	12.9	69.9	69.9	144 427	14.0	1.5	2.8	19.8	23.8	78.7	73.3	
EU15	185 808	9.8	64.3	57.8	170 189	14.2	3.6	5.0	26.3	29.9	70.1	65.1	
OECD total	564 339	10.1	62.1	59.3	526 968	11.8	5.5	8.3	24.8	27.8	69.7	63.9	

StatLink: <http://dx.doi.org/10.1787/467508228555>

1. For some countries, data for the latest years are estimated. For further details, see the source.
2. Defined as female labour force of all ages divided by female population aged 15-64.

Sources:

Labour Force Statistics: 1986-2006, OECD, Paris, 2007;
International Migration Outlook: SOPEMI, 2008 Edition, OECD, Paris, 2008

Source: OECD Statistical Variables Index

<http://www.oecd.org/dataoecd/26/40/38785295.htm>

3. The model and preliminary analysis

The approach to modelling we have undertaken to date has been hindered by data limitations. OECD data series are unevenly available for extended time series. More specific indicators are available only for the period since 1990.

The modelling approach that we used here is an OLS (ordinary least squares) with PCSEs (panel-corrected standard errors). The data are made up of several (four in most cases here, for now) variables over several years for a number of countries. The idea of this modelling approach is to fit the underlying model to the data while taking the country effects and the effects of having time series data into account.

The country effects (fixed effects or constants associated with each country) are used to take the country differences into account. The time series aspect of the data is taken care of by means of the iterative Prais-Winsten procedure, which allows us to estimate the regression while taking the nature of the time series into account.

There are several factors which dictate the form of the model that we can apply to the data using this method. For example, if the time series are non-stationary (as they are in our case), it is not sensible to use variables that have not been differenced (the results obtained in such a case will be spurious). In some cases it may be possible to remove the non-stationarity by including a trend term, but this is not possible here. It should be noted that using categorical variables in the iterative Prais-Winsten procedure does not produce sensible results.

We worked with a differenced model as follows:

$$\Delta Y_t = a + Y_{t-1} + \gamma \Delta X_t + v_t$$

where $v_t = \rho_i v_{t-1} + \varepsilon_t$ in all cases.

That is to say, the change in the response variable in the current year is the sum of a country fixed effect (a), plus the change in the response variable in the preceding year (the lagged variable noted here), plus the change in the independent explanatory variables, plus the error term.

All the indicators outlined in Figure 1 above have turned out to present data problems of various sorts. Our data series are limited, and the indicators we think will really capture the variables we are interested in are not all available for the range of years we want. The

variables we have been able to get, so far, are not all quite appropriate to the task. What we have are approximate measures of the variables of greatest interest. To date, the variables we have worked with are the following:

Totsoexp = Total Public Social Expenditure (%GDP)

Sub = Subsidies (%GDP)

Educ = Training + Secondary + Third level Education(%GDP)

Unempb = Unemployment Benefits (%GDP)

GFCF = Gross Fixed Capital Formation (%GDP)

Flow = FDI flows (%GDP)

Topen = Trade Openness (%GDP)

Popn = Population ('000s)

Data sources and their limitations are summarized in Appendix 1.

Furthermore, explanatory variables we are keen to test have proven difficult to include satisfactorily in the model, particularly those related to partisanship. Available left government incumbency measures include problems of both categorical variables and zero estimates, which make their inclusion in this model difficult. Similarly, we would like to estimate the effects of government duration and electoral system effects on the propensity to engage in long-term as opposed to short-term spending commitments. None of this has been possible as yet.

The results are summarized in Table 7 below.

Table 7. Summary of preliminary modelling

Total Public Social Expenditure		
Change in totsoexp (last year)	0.282133	0.001
Change in Trade openness	-0.04542	0.001
Change in Flows	-0.20215	0.01
Change in popn	0.000151	
Education		
Change in education (last year)	-0.16981	0.1
Change in Trade openness	-0.00966	
Change in Flows	-0.06848	
Subsidies		
Change in subsidies (last year)	0.000233	
Change in Trade openness	-0.00225	
Change in Flows	-0.01696	
Change in population	1.53E-06	
Unemployment benefit		
Change in UB (last year)	0.479453	0.001
Change in Trade openness	-0.01397	0.01
Change in Flows	-0.01078	
Gross fixed capital formation		
Change in GFCF (last year)	-0.1	
Change in Trade openness	0.00732	0.1
Change in Flows	-0.01538	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

These findings suggest that neither trade openness nor FDI flows shows a positive association with the change in the extent of expenditure under each heading relative to the underlying model. Capital market openness did not prove at all significant and has been excluded from the summary data reported here. There is one exception, where there is a small positive association in the case of trade openness (though not FDI flows) and gross fixed capital formation; this is the only case in which a positive correlation of any sort is observed. The strongest determinants of change in the dependent variable, relative to the underlying rate of change common to all countries in the model, is the lagged effect of the previous year's spending commitments. We had anticipated the negative finding in the case of total social spending. We had anticipated positive associations in the other cases.

Full country effects are shown in Table 8 below. A more complex set of findings is apparent here, with some positive and some negative outcomes in evidence. At this point, it is difficult to interpret the findings in any consistent manner; we must await better data first and

foremost.

Table 8. Country effects

	Total Public Social Expenditure		Unemployment benefit	Gross fixed capital formation	Education
		Subsidies			
Australia	0.2405479	0.00544	0.0093627	-0.02303	-0.242775
Canada	-0.0092851	-0.03179	0.014096	0.03642	na
Denmark	0.105876	0.07084	-0.0048631	-0.008904	0.257879
Finland	0.1329192	-0.0621	0.0204288	0.0159	-0.053527
France	0.2478041	-0.01901	-0.0007372	0.02193	0.019884
Ireland	0.090601	-0.09275	-0.009166	-0.14	0.058539
Italy	0.2158381	-0.1131	0.007922	0.02841	0.068201
Japan	0.0726582	-0.02887	0.0270235	0.00001399	0.021427
Netherlands	-0.1327784	-0.01037	-0.0415551	-0.04964	-0.027536
New Zealand	0.0272131	-0.03384	-0.0031408	-0.03205	-0.067607
Portugal	0.5421729	-0.1043	0.0400102	0.003847	-0.008001
Spain	0.2058302	0.01592	0.0337437	0.03506	-0.159628
Sweden	0.1491438	-0.03142	0.0154072	0.05975	0.001698
UK	0.0530681	-0.05838	0.0207364	-0.03685	-0.045166
USA	-0.1549356	0.001309	0.0020628	-0.0339	0.205746

However, the negative trend in association between openness and all variables except total fixed capital investment do invite at least some speculative discussion. It may be that, as Busemeyer suggests, the effects of openness are not consistent across a stretch of time, but that the trend is in fact curvilinear and that the attempt to model it as a steady relationship over time is misplaced (Busemeyer 2009). A closer probing of underlying trends will be needed before modelling associations to see if a pooled time-series analysis may be masking more than it reveals.

Further, it may be that the way these relationships work within European countries is not the same as in non-EU member states. As Adserà and Boix suggest, European unification may not mean the same thing as increased trade openness in the classic sense. Reducing trade barriers in order to create a single large market which itself is tariff-protected may be equivalent to risk-reduction through market expansion. It could be seen as ‘an alternative (and more cost-effective) response to globalization than expanding the welfare state of each European nation one step further’ (Adserà and Boix 2002, p.256). This might require us to

rethink entirely the nature of social risk associated with increased openness.

Conclusion

Data limitations constrain what we can say with confidence about our research to date, and better quality data over longer time series are a prerequisite to making progress. We have argued that public spending in response to increased openness can be targeted toward producer or labour market interests, and that it can be directed toward short-term transfer payments or longer-term investment expenditure. We are confident that the overall research design yields hypotheses that are worth investigating further. We think there is likely to be left-right differentiation in the way state spending effort is channelled. We think spending profiles are also likely to be conditioned by the state's embeddedness in different varieties of capitalism. We think there are likely to be different short-term and long-term profiles to spending effort that are also shaped by partisan and variety-of-capitalism effects. We would also like to explore patterns of long-term investment spending further in relation to shifts in the composition of economic activity (from low-skill to high-tech manufacturing; from industrial to services employment).

We have as yet been unable to test for the impact of many variables that are still subsumed under our country fixed effects. In particular, we plan to find appropriate measures for government partisanship, also of the duration of government, which will work within our model (given the problems we have encountered with categorical variables and observations with values of zero).

To date, our preliminary model finds relatively little impact of increased economic openness on changes in the profile of spending relative to the underlying model. We are therefore particularly interested in exploring further whether and to what degree a single underlying model might really capture consistent relationships over time. This paper reflects the first stage of our investigation, and has been based on using pooled time-series regression with an error correction model. But this might obscure more than it reveals about changes in the dynamics of what is going on. Competing theories about the expanding effects of compensation pressures on public spending, as opposed to the constraining effects of globalization, might not be zero-sum alternatives. There may be a more complex interplay at work between governments' imperative to respond to developmental needs of the economy

and distributive issues in the society, on the one hand, and the realities of the market constraints within which states make these decisions on the other. We have conceptualized this differentiated relationship with reference to varieties of capitalism. But a more curvilinear relationship may also be at work over time for all states.

Finally, we also wish to explore further the possibility that economic openness within the EU has a distinctive meaning for the politics of domestic political adaptation, compared with non-EU OECD member states.

Appendix 1. A note on data sources and limitations

Data have in many cases been taken directly from databases at the OECD website, www.SourceOECD.org, from Economic Outlook; Labour Force Statistics; National Accounts; OECD Social Expenditure database SOCX

Also KOF Globalization Index <http://globalization.kof.ethz.ch/> (Teorell et al. 2009)

We are also indebted to two online databases where a wide range of variables can be accessed:

(Armingeon et al. 2005), *Comparative Political Dataset 1*, at

http://www.ipw.unibe.ch/content/team/klaus_armingeon/comparative_political_data_sets/index_ger.html

and (Teorell et al. 2009), *The Quality of Government Dataset*, at <http://www.qog.pol.gu.se/>

Aggregate data are available for 1980-2003, with some missing country variables.

Data on public capital formation, active labour market spending, in-work job subsidies (private sector), public sector ALM job creation schemes, education, skills training, are only available in detail from 1990.

Data on 'left partisanship', 'government duration', and 'changes in government' are readily available; but as noted in the text, they contain categorical measures and zero values that present modelling problems.

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