

**The Dynamics of Welfare State Expansion:  
Trade Openness, Deindustrialization  
and Partisan Politics**

Torben Iversen  
Department of Government  
Harvard University

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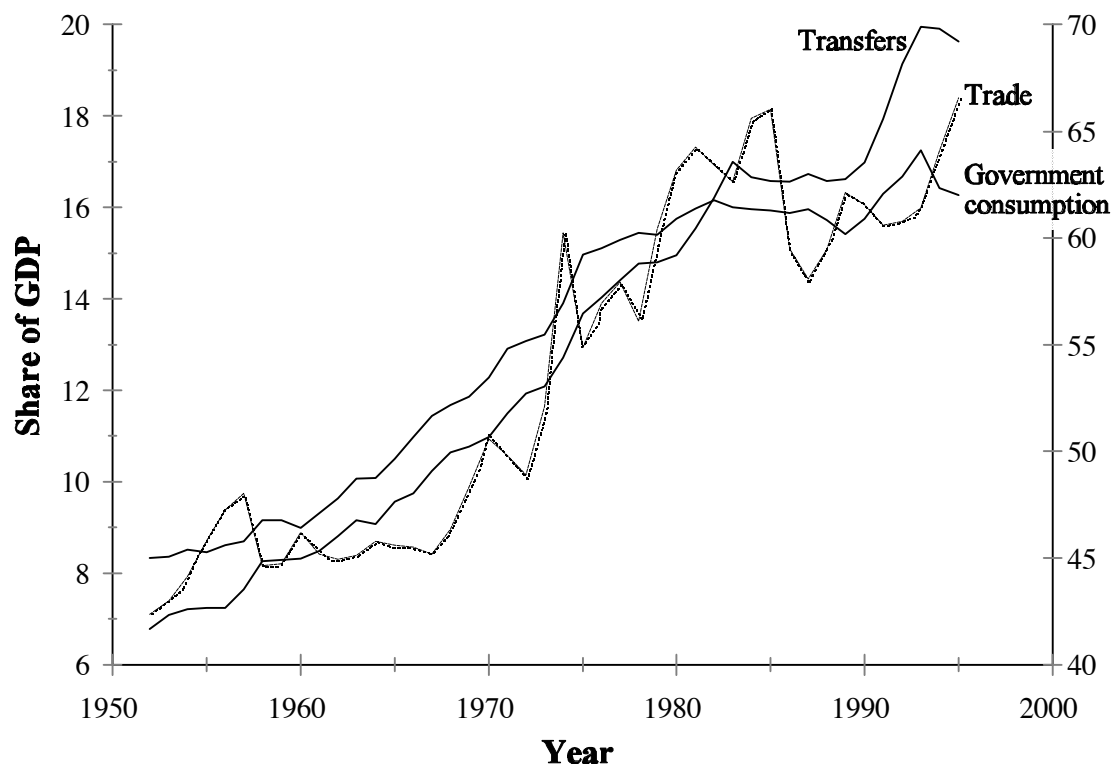
## **Introduction**

Recently, the debate about the future of the welfare state has focused on the effects of globalization. Two opposing views have emerged: a “pessimistic” one that sees globalization as a serious threat to the continuation of the Keynesian welfare state; and an “optimistic” one which predicts globalization to be compatible with, and even strengthening, the welfare state. The pessimistic view, prominent in the popular literature and in the press, holds that a large welfare state is simply incompatible with participation in a fiercely competitive world economy. Optimists, on the other hand, underscore the potential for governments to shape welfare provisions in ways that are compatible with economic efficiency, and they argue that globalization is likely to expose people to greater labor market risks that will raise political demands for public compensation.

For evidence the pessimists can point to the breakdown of the relatively consensus-driven process of welfare expansion during the 1960s and 1970s, and the emergence in the 1980s and 1990s of fierce political battles over welfare state reforms -- battles that are at least rhetorically linked to the need for international competitiveness (Rhodes 1996). Yet, overall spending data clearly support the optimists. As illustrated in figure 1, both government consumption of services and social transfers as shares of GDP have risen sharply, and almost uninterrupted, since the early 1950s. True, the very rapid expansion beginning in the mid-1960s slowed down somewhat in the 1980s, and the fiscal retrenchment associated with the reining in of public deficits in the late 1980s seems to have caused a temporary reduction in public consumption. But there are no signs of any broad-scale retrenchment of the welfare state.

In fact, the growth in government spending closely tracks the expansion in trade. This tantalizing association, one that also holds for international capital market liberalization, has been argued to reflect a causal relationship. Cameron (1978) and Katzenstein (1985) are important precursors for this line of argument, which has become a major tenet of the contemporary welfare state literature. The argument starts from the premise that integration into the international economy promises large potential welfare gains for especially small countries, but that such integration exposes economies to the ups and downs of global markets while undermining the capacity of governments to counteract these business cycles. The way governments solve this

**Figure 1. Average public spending and trade across 17 OECD countries, 1952-1995 (percent).**



*Notes:* Government consumption is all spending on public services less military spending; transfers are all government transfers less interest payments and subsidies; trade is exports plus imports divided by the GDP.

*Sources:* OECD, *National Accounts*, Part II: Detailed Tables (various years).

dilemma, so the argument goes, is by accepting high trade exposure, while simultaneously adopting comprehensive social programs to compensate people for increased levels of labor market risk (see also Ruggie 1983).

The original evidence for this thesis was highly suggestive, but inconclusive. Cameron relied on simple cross-sectional correlations across a sample of OECD countries, and Katzenstein focused exclusively on open economies which shared certain basic public policy patterns. Recently, however, more comprehensive evidence has been provided by Garrett (1995; 1998) and

by Rodrik (1997; 1998). Both authors make effective use of sophisticated large-N statistical techniques to control for a number of potentially confounding variables. Rodrik accomplishes this by expanding the sample of cases to include developing countries, while Garrett (more in the spirit of Cameron's original article) does so by expanding the number of observations in time. Based on this new evidence, both are confident that trade openness *strengthen* the welfare state. As Rodrik notes, given the inclusion of so many control variables, the association between trade openness and government spending "is not a spurious relationship generated by omitted variables" (1998, 1011).

This paper presents a different explanation. Not only are there no compelling theoretical reasons to expect trade openness and welfare spending to be linked, the relationship disappears once we control for a variable that I call deindustrialization -- which both Rodrik and Garrett fail to do. By deindustrialization I have in mind the secular and simultaneous reduction of employment in agriculture and industry beginning in the early 1960s in most countries. This variable turns out to be a very strong predictor of welfare state expansion, and for good reasons. The labor market dislocations associated with deindustrialization are staggering and compare in magnitude to the movement of workers from the country-side to the city during the industrial revolution. In 1960, for example, about 59 percent of the labor force in the OECD area was employed in the primary sectors; 35 years later this figure is down to about 30 percent. This massive sectoral shift is the outgrowth of deep forces of technological change that have coincided with progressive market saturation -- structural-technological conditions that also transformed agriculture.

More specifically I argue that the division between agriculture and industry, on the one hand, and services on the other, presents a major skill boundary in the economy in the sense that skills travel poorly from the former to the latter. This being the case, the threat of having to move across this boundary is a major risk factor for individual workers because their skills, and hence labor market power, will be downgraded. Employer-provided social benefits do not offer protection against these risks because they are not, as a general rule, transferable. For insurance against these risks people therefore turn to the state.

The argument is quite compatible with previous work the early development of the welfare state by Esping-Andersen (1985, 1990), Korpi (1978, 1983), Stephens (1979), and others which

underscore the importance of the rise of industry and thus the industrial working class. Indeed it defies credulity -- and, as we shall see, also the empirical record -- if the decline of agriculture and rise of industry is of major importance for the welfare state while the massive transformation implied by deindustrialization is irrelevant. Yet, some scholars have taken the link between working class strength and welfare state development to imply that deindustrialization, and the associated decline of the blue-color working class, undermine the political support for the welfare state (e.g., Piven 1991). This paper essentially argues the exact opposite: welfare state expansion since the early 1960s has in large measure been *driven* by deindustrialization and the decline of the blue-color working class.

But deindustrialization is not the whole story. The speed, and especially the distributional composition, of welfare state expansion vary according to the structure of labor market institutions, and especially the character of electoral and party politics. Where people in the most risky labor market positions are more prone to vote in elections, and where left parties dominate government power, welfare state expansion has entailed a heavy dose of low-priced public services, as well as more egalitarian social transfer programs and wage policies. Egalitarianism and public sector expansion are causally related to one other, as well as to deindustrialization, because earnings compression undermines the growth of low-productivity, price-sensitive, private service sector jobs (Esping-Andersen 1993, 1994; Iversen and Wren 1998; Glyn 1997). So while deindustrialization has everywhere propelled growth of the welfare state, the distributive aspects of the rising service economy, and the private-public sector mix of employment, vary according to political parameters.

Perhaps the most pressing political question that the deindustrialization thesis highlights is what will happen when the employment structure stabilizes. If the insecurities associated with past deindustrialization spread demands for compensation and for socialization of risks well into the middle classes, once the dust settles, will the process be reversed? Pierson (1994, 1996) has forcefully argued that political “lock-in effects” may prevent this from happening, and the results in this paper supports that argument. The slowdown of the deindustrialization process, however, is likely to undermine support for further expansion and to exacerbate conflicts over the distributive aspects of the welfare state. This is precisely as predicted by the pessimists, but the

underlying cause is not globalization.

### **Discounting Trade Openness**

Figure 2 shows the positive cross-national relationship between trade openness and public spending. The figure basically reproduces a similar figure in Rodrik (1998, p. 1000), and -- along with the temporal relationship illustrated in Figure 1 -- conveys the empirical regularity that has given rise to the openness-breeds-spending argument.<sup>1</sup>

Rodrik explains the relationship between trade and spending by inserting economic risk as an intermediate mechanism:

More open economies have greater exposure to the risks emanating from turbulence in world markets. One can view larger government spending in such economies as performing an insulation function, insofar as the government sector is the “safe” sector (in terms of employment and purchases from the rest of the economy) relative to other activities, and especially compared to tradables (1998, p. 1011).

Garrett fundamentally agrees, and elaborates the argument:

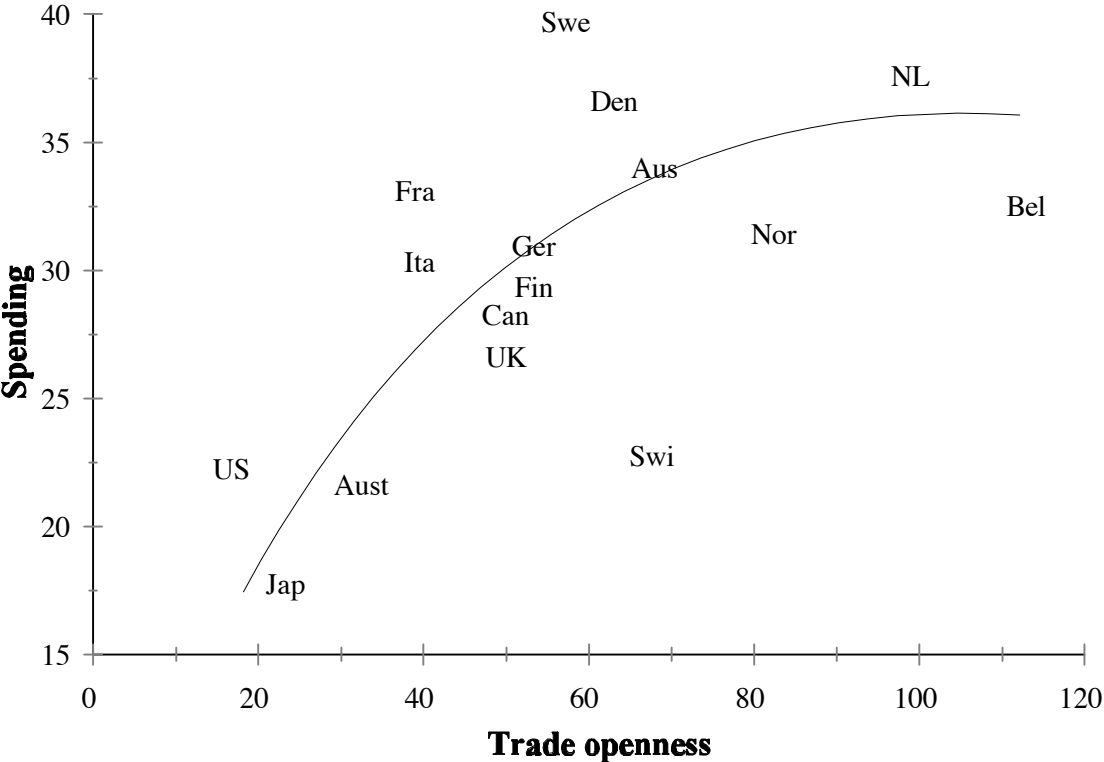
“[P]erhaps the most important effect of globalization is to increase social dislocations and economic insecurity, as the distribution of incomes and jobs across firms and industries becomes increasingly unstable. The result is that increasing numbers of people have to spend ever more time and money trying to make their future more secure. (...) Given this nexus between globalization and economic insecurity, it is not surprising that government policies that cushion market dislocations by redistributing wealth and risk are at least as popular today as they have ever been (1998, p. 7).

Garrett repeats these claims throughout his book (see, for example, ch. 2, p. 8; ch. 4, p. 12; ch. 6, p.3), but he makes no effort to demonstrate that labor market volatility is in fact positively related to trade openness (or globalization more generally). This is important since, in the words of Rodrik, “[a]s a logical matter it is entirely possible that the converse ... would be true” (1998, p.10??). Indeed, *a priori* it is quite conceivable that high exports is associated with *lower* volatility, at least in countries with advanced industrial sectors. The reason is that participation in

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<sup>1</sup> Switzerland is a rather big outlier and was not included in Rodrik’s figure.

**Figure 2. Trade openness and public spending in 16 OECD countries, 1960-1993 (percent).**



*Notes:* Government spending is civilian government consumption plus social transfers as a percentage of GDP; trade is exports plus imports divided by the GDP.

*Sources:* OECD, *National Accounts*, Part II: Detailed Tables (1997).

international trade makes it possible to escape excessive dependence on small home markets, much the same way as stock funds spread the risks across several industries and, increasingly, several national markets. Although trade implies greater specialization, the bulk of the trade between advanced economies is intra-industry and does not lead to excessive dependence on a single industry. Indeed, many industries in countries with small home markets can prosper only by taking advantage of the production of scale that global markets afford.

Rodrik *does* show a direct link between external risks, measured by terms of trade volatility, and internal income volatility and spending (1998, 1021-23). But this only shows that price volatility on external markets translates into domestic income volatility and greater spending, not whether producers for foreign markets experience greater price swings than producers for domestic markets. One needs to ask whether output volatility of industries increases with export dependence, and whether such volatility translates into greater swings in industrial wages and employment. In order to answer this question, I compared the volatility in output, employment, and wages in the manufacturing sectors of 16 OECD countries with very different levels of export dependence (see Figure 3). Output and wages are measured in real terms, and volatility is defined as the standard deviation of annual growth rates between 1970 and 1993. As a baseline for the comparison, the figure also shows volatility in a completely non-traded (but private) service sector — community, social, and personal services (indicated by the three dotted vertical lines).<sup>2</sup>

Contrary to the logic of Garrett's and Rodrik's argument, there is *no* relationship between the export dependence of manufacturing (measured as the value of exports divided by manufacturing value-added) and any of the volatility measures. The only variable weakly related to export dependence is output volatility, but the association is in the *opposite* direction of the one implied by the openness argument. Nor is there any evidence that the traded manufacturing sector is more volatile than the average for the completely sheltered service sector. Finally, it is noteworthy that there is absolutely no association between the level of volatility and Katzenstein's distinction between small corporatist welfare states and large liberal (or statist) ones.

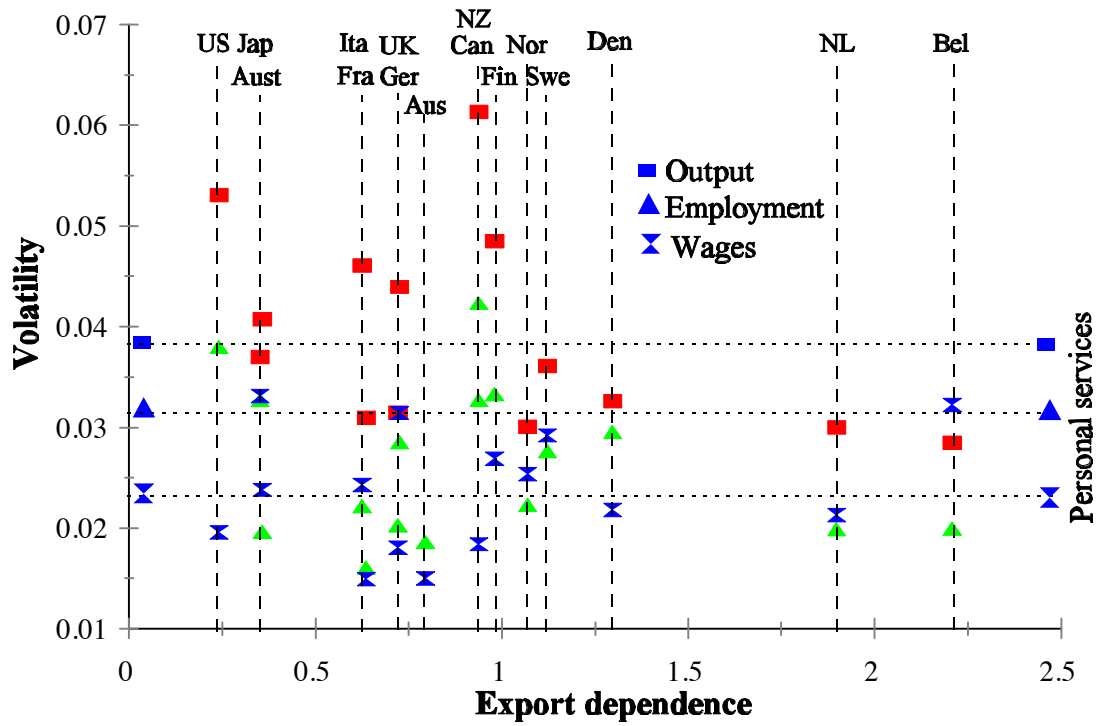
It can be objected that the presented figures are too aggregated to pick up the volatility experienced in particular industries or even in particular firms. However, the pattern does not change if we examine volatility at the more fine-grained 2-digit industry level. Of course, it is still logically feasible that volatility varies with trade at even lower levels of aggregation. Yet, this would be odd because in order for that to be compatible with the volatility figures at higher levels of aggregation it must be the case that workers in more open economies are systematically less

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<sup>2</sup> The government sector *is* less volatile, but it does not make sense to include it in the comparison since it is supposed to be growing as a *consequence* of high volatility in exposed sectors.



**Figure 3. Trade dependence and production volatility across 16 OECD countries.**



*Notes:* Export dependence is the total value of manufacturing exports divided by value added; volatility is the standard deviation in the rate of growth in manufacturing output, employment, and wages in the period 1970-93. Output data is not available for Austria; only employment data is available for New Zealand.

*Sources:* OECD, *The OECD STAN Database* (1994).

likely to find jobs outside their own specific branch compared to workers in more closed economies. To my knowledge, no economic argument predicts such a relationship.

Moreover, the more specific the sectors, the less the effect of volatility on the risks faced by workers. The reason is that when the level of aggregation decreases, the substitutability of workers' skills is increases. For example, it is much easier for a metalworker in one car firm to find a job in another car firm than it is for that same worker to find a job in a chemical firm or, more difficult still, in a service sector firm. The really threatening prospect for a worker is not to

have to have to work for another employer in an essentially identical job after a brief spell of unemployment. Rather, it is the risk of permanently losing his or her job in a particular branch of the economy, and having find another job requiring very different skills. Such forced career changes are associated with longer unemployment spells and larger pay cuts, and ordinarily people cannot carry employer-provided benefits with them when this happens. If this is the type of insecurity that propels the most intense demands for government intervention (which is consistent with the logic of the openness argument), then there is little evidence that trade is an important causal agent of welfare state expansion.

### **The Case for Deindustrialization**

The linkage between the transferability of skills across occupations, on the one hand, and job and pay insecurity, on the other, creates an important coupling between major sectoral transformations and demands for decommodifying policies. As is well understood in political economy, transferability of skills is a key source of labor market power because it makes individuals less dependent on any single employer, or on employers in any particular branch of the economy. Consequently, when jobs are destroyed across firms and industries with low substitutability of skills, it undercuts workers' labor market power and exposes people to greater risks. The largest labor market risks are therefore generated across the interfaces between economic sectors requiring very different forms of skills.

This logic is reinforced when we consider that the mobility of privately provided social benefits, such as health insurance and pensions, tend to be limited by the transferability of skills. The reason is that when skills are firm-specific, employers have an incentive to provide non-transferable company benefits, both as a tool of control over its workforce, and as an incentive for their employees to acquire additional firm-specific skills. Correspondingly, if skills are industry-wide, there is a rationale for employers in that industry to provide benefits that are transferable across firms, but only within the industry. Although the latter depends on the ability of employers to collude in the provision of both skills and benefits, the point is that *the transferability of benefits will not exceed the transferability of skills in the absence of state intervention.*

The correspondence between the scope of employer-sponsored insurance and the

transferability of skills is important in understanding why labor market risks propel demand for state intervention. Since workers who have to transgress the interfaces defined by skill discontinuities simultaneously lose market power and employer-provided benefits, it is only through the mediation of the state that workers can protect themselves against the risks of major shifts in the economic and occupational structure. Such protection comes in the form of state-guaranteed health and old age insurance (which makes it possible to move across sectoral interfaces without losing benefits), early retirement and certain forms of disability insurance (which makes it easier *not* to have to move across these interfaces), as well as direct employment in relatively secure publicly provided service occupations.

In principle, in order to gauge the extent to which people are exposed to labor market risks of the sort just described we would have to create a “map” of the labor market in which skill boundaries were marked by thick or thin lines according to the degree of skill transferability across those boundaries. The exposure to risk of any individual could then be calculated as a function of the probability of having to travel across any one of the boundaries times the non-transferability of skills and employer provided benefits. Clearly, the data needed to make such calculations with any degree of confidence are lightyears away. Just to mention a few difficulties, what measures should we use to gauge skill transferability? How do we assess the comparative scope and transferability of employers benefits? How do we attach probabilities to individual workers’ prospect of having to move across any and all of the skill boundaries in the economy? It is dubious that we could do this, even in a very crude form, for individual countries and restricted time periods.

What makes deindustrialization a useful empirical concept for our purposes are the following:

i) Most skills acquired in manufacturing (and agricultural) occupations travel very poorly to services occupations. Even low-skilled blue-color workers find it hard to adjust to similarly low-skilled service sector jobs because they lack something that, for want of a better word, is often referred to as "social skills". In other words, the distinction between services and the traditional sectors represent a particularly ‘thick’ skill boundary in the economy;

ii) The boundary between manufacturing and services has been subject to a lot of "traffic" in most countries since the early 1960s. To get a feeling for magnitudes, it is useful to make some comparisons to the employment volatility measure introduced in the previous section. Imagine that instead of using deviations from the *mean* to measure volatility of employment growth, we used *negative* deviations from zero (no change). The volatility measure would then jump by a factor of about five, and unlike the original measure, this one would not count "good news" (employment growth) as a cause for heightened labor market insecurity.

iii) To the extent that transferability of private benefits is limited by occupational proximity, forced movement from manufacturing to services is a particularly impenetrable barrier to benefit transfer. Employers in the two sectors are usually organized in different associations and do not cooperate in the provision of training or benefits. Frequently a switch in employment across the two sectors also require workers to change their membership in unions and unemployment insurance funds.

Deindustrialization, measured as net shifts in employment out of the traditional sectors, is certainly not the only source of labor market risks, and the theoretical argument is much more general. Still, it is difficult to imagine that deindustrialization, as a practical matter, has not been among the most important sources of labor market risks during the past three decades. Not only are the gross figures for deindustrialization large, there is also considerable variance in this variable across time and space.<sup>3</sup> For example, in an early industrializing country like the United States, industrial employment as a percentage of the adult population declined by only 3 percentage points between 1960 and 1995, whereas for a late industrializer like Sweden, the figure is 13 percent. If we add to these figures the decline of agricultural employment on the ground that it has been driven by a similar process of technological progress coupled with market saturation, these numbers increase to 6 and 22 percent, respectively.

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<sup>3</sup> There seems to be a misconception that deindustrialization is uniform across countries, and therefore cannot explain cross-national variance in the speed of welfare state expansion. At least this is one of the only reasons I can imagine for why not a single large-N, cross-national study of the welfare state has focused on the effects of deindustrialization.

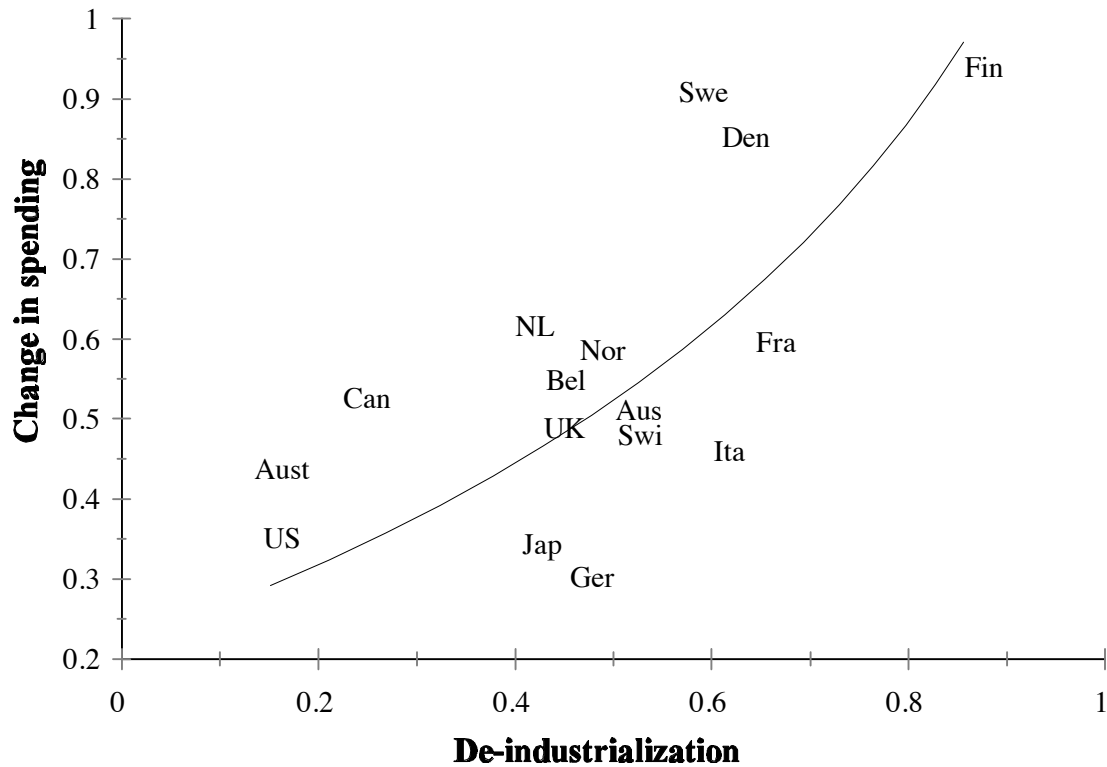
The difference in these figures translates into very large numbers of people. As a thought experiment, imagine that the US had gone through the same decline as Sweden in the 1960-95 period. The implied *increase* in the *net* number of permanently lost jobs in the primary and secondary sectors of the economy would then have amounted to about 23 million workers! Would such a dramatic rise in the number of dislocated workers have affected popular attitudes toward state, and paved a different path for the development of the American welfare state? There is no way of knowing for certain, of course, but it certainly seems plausible, and we can draw on the comparative evidence for support.

Figure 4 shows the association between the average annual figures for deindustrialization - in the sense of the joint employment losses in industry and agriculture — and the comparable figure for the expansion in total government spending. As expected, there is a positive association which is of about the same strength as that between openness and spending (Figure 2). There is some clustering around the mean, but this is mainly due to averaging over a 35-year period (as will become apparent later). Most of the countries have gone through periods of both relatively slow and relatively rapid deindustrialization, and the temporal order of these swings varies.

### **The Labor Market Risk Structure and Partisan Politics**

In the context of incomplete private markets for risk, the prospect of losing the labor power of ones skills -- and hence income, employment, and employer-provided benefits -- becomes a powerful motivational force in the formation of policy preferences. In turn, it is the capacity of the state to reduce such uncertainties through transfers and public services that links the labor market risk structure to demands for welfare state expansion. This is why we would expect deindustrialization to be linked to welfare state expansion in democracies. But the welfare state is not merely a source of insurance. It is also a vehicle for partisan politicians to *redistribute* risks. This can be done by guaranteeing income and employment for those facing high risks -- i.e., those with few marketable skills -- and imposing a net tax on those in more secure positions. In

**Figure 4. Deindustrialization and change in welfare spending for 16 OECD countries, 1960-93.**



*Notes:* Government spending is the average annual change in civilian government consumption plus social transfers as a percentage of GDP; De-industrialization is the average annual reduction in employment in industry plus agriculture as a percentage of the working age population.

*Sources:* OECD, *Labour Force Statistics* (various years); OECD, *National Accounts*, Part II: Detailed Tables (1997).

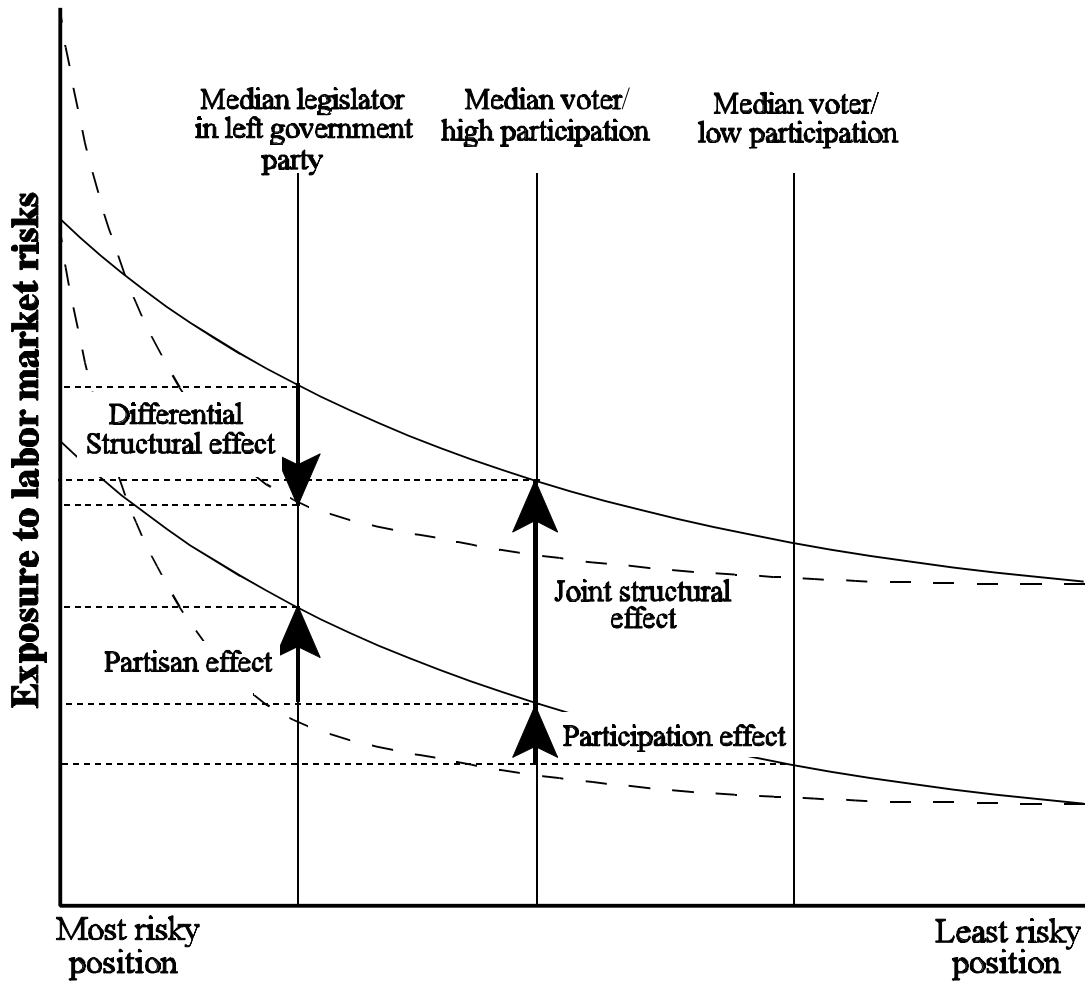
In addition to shifts in the level of risks, it is therefore necessary to take account of factors that affect the distribution of these risks and to determine the political weight accorded to individuals in different locations in the distribution.

Figure 5 maps a hypothetical distribution of risks and provides a classification of changes that

affects either the distribution or the political salience of particular positions in the distribution. What is labeled *joint structural effects* refer to vertical shifts in the level of the curve, and it is such level-changes that are implied by both the deindustrialization and trade openness arguments. The more people are affected by trade exposure or deindustrialization, so the arguments go, the higher the location of the risk curve. *Differential structural effects* refer to changes in the shape of the risk distribution. For example, it has been argued that technological change in the past three decades has shifted relative labor demand towards high-skilled workers, and away from low-skilled workers (Bound and Johnson 1992; Krueger 1993). A similar effect has been attributed to growing trade with low wage countries because such trade undercuts the market position of low-skilled workers (Wood 1994 and Leamer 1984, 1996). Note, however, that if such changes are truly differential — i.e., raises risks for some, but lowers them for others — the likely effect will be to *reduce* the demand for compensation in the center-right portion of the distribution where the politically pivotal voter is likely to be located. This is in fact the position taken by Rodrik (1997, ch. 4), and it is not obvious how Garrett (1997, ch. 2, p. 8) can use the Wood-Leamer argument in support of his general openness thesis — i.e., that trade openness spurs demand for compensation.

Just as the shape and location of the risk curve is subject to variation across time and space, so is the “center of gravity” of political influence (something Garrett is careful to explain). In particular, as the center of gravity of political influence shifts from right to left in the distribution, we expect welfare policies to become not only more generous, but also more redistributive. In turn, the literature has focused on three variables that determine this political center of gravity. Two of these concern electoral politics. What I call *participation effects* occur when vote-abstaining is uneven across the distribution and changes in turnout therefore shifts the location of the median voter (Meltzer and Richard 1981). In particular, it is well known that poorly educated and low-income people in tenuous labor market positions are less likely to vote than better educated and higher-income people. This leads to the expectation that a higher voter turnout shifts the political center of gravity to the left (Lijphart 1997), with the expected effect of

Figure 5. The labor market risk structure and the effects of exogenous shocks.



increasing public spending (Mueller and Murrell 1986) and/or redistribution (Husted and Kenny 1997).<sup>4</sup>

*Partisan effects* refer to government deviations from median voter preferences. Although it is widely recognized that the median voter exerts a powerful centripetal influence on party platforms in two-party systems (Downs 1957; Cox 1990), as well as on government formation in

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<sup>4</sup> For some government services a shift to the preferences of a lower-income voter can reduce spending if income elasticity of demand for services is high (Kenny 1978).



multi-party systems (Laver and Schofield 1991), there are good reasons to expect that government policies can deviate from the preferences of the median voter. The influence of party activists (Aldrich 1983, 1997; Tsebelis 1990), cross-cutting policy dimensions (Laver and Shepsle 1997; Wren and Iversen 1997), and ideology (Hibbs 1977; Huber et al. 1993) -- especially in the context of disciplined parties -- all point to the possibility for non-centrist party governments. To the extent that this is the case, left governments will pay more heed than right ones to the preferences of those exposed to the greatest labor market risks.

A third factor determining the center of gravity of influence, not shown in the figure, is the control over policies enjoyed by organized groups. The better organized high risks groups are, the more influence they are likely to exert. The form of organization may also matter because relatively inclusive and centralized labor market organizations diffuse power in the labor market to groups that would otherwise have little political clout. Centralized and encompassing labor movements are the most important examples here, and they have been subject to intensive analysis in the neo-corporatist and class power literatures (e.g., Goldthorpe 1984; Stephens 1979; Korpi 1983; 1989).

Summarizing this section, public spending is likely to go up as the general level of labor market risks rises (the joint structural effect), as participation increases (the participation effect), and as policy influence shifts to the left (the partisan effect). On the other hand, a bifurcation of the risk structure -- as the result of shifts in relative demand for different types of labor -- is likely to reduce the generosity of spending. The main contention of this paper is that deindustrialization, *not* trade, has been the principal force pushing the risk-curve -- and hence the societal demand for public compensation and risk-sharing -- upwards. By contrast, the primary effect of (left) partisan politics has been to redistribute risk through particular spending choices.

## **Empirical Evidence**

The evidence presented below covers 15 OECD countries over a 33-year period from 1961 to 1993.<sup>5</sup> The data was grouped into 11 three-year periods primarily to overcome problems of

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<sup>5</sup> The countries are: Austria, Belgium, Canada, Denmark, Finland, France, Germany (West), Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and United

defining a proper lag structure for a model with a large number of very different types of variables.<sup>6</sup> Hence, the data set consists of a total of 161 (15\*11) observations, although 15 observations were lost in the regression as a result of lagging some variables.

The 1960-95 period represents the historically most dramatic phase of growth in welfare spending. Transfer payments more than doubled from 8.5 percent of GDP in 1960 to over 20 percent in 1995, and government consumption increased from about 9 percent of GDP in 1960 to over 16 percent in 1995. The cross-national variance in transfers (measured by the coefficient of variation) declined somewhat over time, but it rose for government consumption. Measured in terms of the difference between the smallest and biggest “spenders”, divergence increased in both categories of spending. Thus the transfers payment gap increased from 10 to 15 percent of GDP, and the government consumption gap from 6 to 15 percent of GDP. In other words, this data represent not only considerable inter-temporal variance, but also large cross-national differences - a good testing ground for competing explanations of welfare state expansion.

Figure 6 summarizes the set of explanatory variables according to their main effect on the labor market risk structure, and indicates the way in which each was measured. The direction of the effect on spending of each theoretical variable is also noted with +/- signs which, taken together, constitute the set of hypotheses to be tested. Note in particular that the factors that have been argued to produce joint structural effects — openness and deindustrialization -- are predicted to primarily affect total spending, whereas the other factors (whether having differential structural, or influence, effects) are predicted to affect both spending levels and distribution.

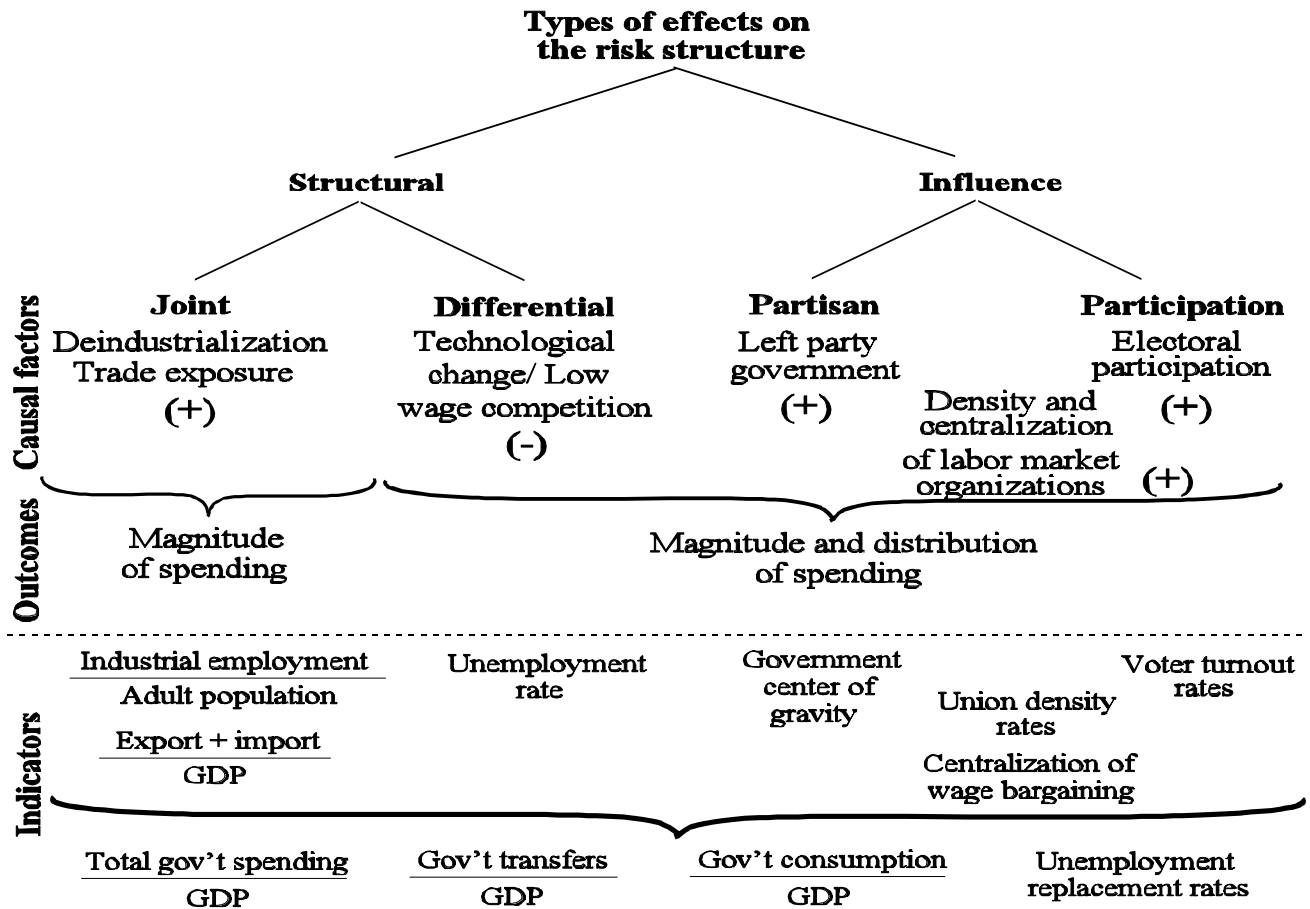
The rationale behind the choice of variables, their specific measurement, as well as the data sources are explained below. It should be emphasized that a set of carefully constructed variables designed to control for non-discretionary spending has been included, which is not listed in Figure 6.

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States.

<sup>6</sup> Moreover, for one of the dependent variables, unemployment replacement rates, only bi-yearly data is available.

Figure 6. Theoretical variables and their measurement



**Dependent variables.** I use a set of four different dependent variables to gauge both overall spending levels, and the composition of such spending. Total civilian spending and government transfers are useful measures of the overall generosity of the welfare state, but they say little about the redistributive impact of such spending. Civilian government consumption is more useful in this respect because the bulk of such spending goes to the provision of services that are made available to all at low or no cost. As an indicator of the distributive dimension of transfer payments, I use unemployment replacement rates. Since the unemployed can be presumed to belong to relatively high-risk groups in the labor market, replacement rates is a good indicator of

the extent to which policies re-distribute such risks.<sup>7</sup>

More specifically, the variables are measured as follows:

*Government transfers.* All government payments to the civilian household sector, including social security transfers, government grants, public employee pensions, and transfers to non-profit institutions serving the household sector. Sources: Cusack (1991), updated from OECD, *National Accounts, Part II: Detailed Tables* (various years).

*Government consumption.* Total government consumption of goods and services net of military spending as a percentage of GDP. Sources: Cusack (1991), updated from OECD, *National Accounts, Part II: Detailed Tables* (various years), and *The SIPRI Year Book* (Stockholm: SIPRI, various years).

*Total spending.* The sum of government transfers and government consumption as a percentage of GDP. Sources: As above.

*Unemployment replacement rates.* The average gross income replacement rate for a “typical” 40-year worker in various family situations, averaged over three years of unemployment with the first year weighted twice that of the second and third. Source: OECD, *Database on Unemployment Benefit Entitlements and Replacement Rates* (undated).

**Independent theoretical variables.** The measurement of most of the independent variables is straightforward. The main difficulty is to find good indicators for technological change and competition from low wage countries. The latter should be picked up as a differential structural effect from LDC trade (i.e., one that primarily affects distribution), but I also added *unemployment rates* to the analysis since these can be seen as reasonable proxies for the *effect* of changes in relative demand and supply conditions. Since unemployment disproportionately affects those in precarious labor market positions, it should give us a good idea of the extent to which differential structural effects increase or lower spending. Of course, in order to pick up this effect it is necessary to control for the spending effects of unemployment, which is accomplished by the automatic transfer variable described below.

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<sup>7</sup> I focus the analysis of replacement rates on the post oil-shock period, because unemployment compensation was not a contested political issue in the full employment 1960s.

The other theoretical variables are measured as follows:

*Deindustrialization.* 100 minus the sum of manufacturing and agricultural employment as a percentage of the working age population. Since this is often misunderstood, I underscore that the base is the working age population, *not* the labor force. While the government can affect the latter, it cannot have much of an influence over the former. Source: OECD, *Labour Force Statistics* (various years).

*Trade openness:* Total exports and imports of goods and services as percentage of GDP. Source: OECD, *National Accounts, Part II: Detailed Tables* (various years).

*Left government center of gravity.* This is an index of the partisan left-right “center of gravity” developed by Cusack (1997). It is based on (i) Castles and Mair’s (1984) codings of government parties’ placement on a left-right scale, weighted by (ii) their decimal share of cabinet portfolios. The index varies from 0 (extreme right) to 4 (extreme left), although most observations are much closer to the mean. The data was generously made available by Thomas Cusack.

*Concentration of union power.* This variable is the product of union density and the centralization of union power in wage bargaining. Density is measured as the number of union members relative to the labor force, while centralization is measured by a time-sensitive index of centralization of wage bargaining. Sources: Visser (1989; 1996); Iversen (1998).

*Electoral participation.* The data is based on voter turnout rates as recorded on an annual basis in Mackie and Rose (1991) and in the *European Journal of Political Research*.

**Controls.** Two controls deserve particular emphasis. Both are designed to remove non-discretionary elements of government spending, and they are important to get a well-specified model. The first relates transfer payments to changes in unemployment and demographics that generate “automatic” disbursements of payments according to rules that cannot be readily altered in the short run. Typically, studies control for such effects by including variables for unemployment and the number of people above the pension age. However, Cusack (1997) has developed a more satisfactory measure that takes account of the fact that the generosity of transfers varies across countries. The measure is referred to as *automatic transfers* and defined as follows:

$$\text{Automatic transfers} = \text{generosity}(t-1) \cdot \Delta \frac{\text{unemployed} + \text{population}>65}{\text{population}}(t).$$

where generosity is the percentage share of transfers in GDP relative to the percentage share of

the dependent population in the total population at time  $t-1$ . In other words, changes in size of the dependent population — the unemployed and the retired — causes an automatic increase in transfers at time  $t$ , the size of which depends on the generosity of transfers in the previous period (according to prevailing rules). The source for the unemployment and population figures is OECD, *Labour Force Statistics* (various years).

Another non-discretionary element of spending concerns government consumption. Because productivity increases in public services are generally lower than in the rest of the economy, while especially wage costs tend to follow productivity increases in the rest of the economy, the price level of government services will grow at a faster rate than the general price level (the “Baumol effect”). At constant provision levels, government consumption will therefore increase as a share of GDP. This non-discretionary effect of relative price changes can be removed by another measure developed by Cusack (1997). It is here called *automatic consumption* and is defined as follows:

$$\text{Automatic consumption} = \frac{\text{gov consumption}}{\text{GDP}}(t-1) \cdot \left( \frac{\Delta \text{gov deflator}(t)}{\text{gov deflator}(t-1)} \right) \Bigg/ \left( \frac{\Delta \text{GDP deflator}(t)}{\text{GDP deflator}(t-1)} \right)$$

where *gov deflator* is the price deflator for government services, and *GDP deflator* is the price deflator for the whole GDP. The equation simply says that if prices on government services grow faster than the general price level, government consumption will automatically increase by a proportional amount. The analysis included the following additional controls:

*Capital markets openness* is a measure for capital market liberalization presented in Quinn and Inclan (1997). This control was included to check whether the effect of globalization may run through capital market rather than product market integration.

*Per capita income* measured in terms of real GDP per capita (in 1985 US dollars at purchasing power equivalents) is intended to capture possible effects of Wagner’s “law” -- the notion that demand for welfare services is income elastic (i.e., spending rises with wealth). Source: Penn World Tables.

*Unexpected growth* is a variable emphasized in Roubini and Sachs (1989). It is defined as real GDP per capita growth at time  $t$  minus average real per capita growth in the preceding period. The variable is intended to capture the logic that budgeting relies on GDP forecasts based on performance in the recent past. If growth is unexpectedly high it reduces spending as a proportion of GDP.

*Country dummies* are included to control for nationally specific effects. For example, Esping-Andersen (1990) has forcefully argued that the institutional blueprints for many of today's welfare states were established in the pre-WWII period, and that these institutional characteristics keep reproducing the contemporary development of the welfare state. This dynamic is not captured by any of the other variables and therefore would show up as country specific effects. Likewise Huber, Ragin, and Stephens (1993) has argued that the greater the opportunities for minorities to block new spending bills – i.e., the greater the number of veto points in the political system – the less likely it is that new legislation will be passed or implemented. Since their index of government structures varies across my 15 cases, but not across time, the effect will be picked up by the country dummies.

### **The statistical model**

There are numerous ways to model government spending. The most satisfactory from the perspective of being able to disentangle short- and long-term effects is an error correction model, using changes in spending as the dependent variable. This model is also preferable on technical grounds when there is high co-variation between dependent and independent variables across time (“co-integration”).<sup>8</sup> Although there are no good tests for co-integration, Figure 1 above strongly suggests its presence. The model has the following form:

$$\Delta Spending(t) = \beta_1 \cdot Spending(t-1) + \beta_2 \cdot Deindustrialization(t-1) + \beta_3 \cdot \Delta Deindustrialization(t) + \beta_4 \cdot Trade\ openness(t-1) + \beta_5 \cdot \Delta Trade\ openness(t) + Influence\ var's + Controls + \epsilon,$$

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<sup>8</sup> For details see Beck (1992).

where  $t$  refers to time periods, and  $\Delta$  is the first difference operator.

The parameter for the lagged dependent level variable ( $\beta_1$ ) indicates whether spending reaches stable equilibrium levels over time, as well as the speed with which this occurs. If an equilibrium *does* exist, which is the presumption,  $\beta_1$  must be between 0 and -1. Note also that some independent variables have been entered as both lagged levels --  $X(t-1)$  -- and as first differences --  $\Delta X(t)$ . Although it is not intuitively obvious, it can be shown that the parameter for a *level* variable shows the permanent (or long-term) effect of a one-off change in that variable; the parameter for a *change* variable shows the transitory (or short-term) effect of a one-off change in that variable.

If a variable exhibits only transitory effects, unless it changes continuously, spending will eventually revert back to its original level. Since all the theoretical variables are defined as proportions (either of the GDP or of the working age population), they cannot grow (or fall) indefinitely, and will therefore have no long-term effects on spending *unless* the parameters for their lagged levels are significant.<sup>9</sup> This does not mean that transitory effects are uninteresting. For example, if the entire effect of deindustrialization was transitory, the implication would be that any expansionary effects would be matched by cutbacks of the same size once the process came to a halt. But the distinction between permanent and transitory effects is a very useful one to keep in mind when interpreting the results.

Finally, it should be noted that the use of differences, rather than levels, as the dependent variable has no substantive implications for the interpretation of the results. The model is mathematically identical to one that uses levels on the left hand side, and includes a lagged level variable on the right hand side (to see this, simply add the lagged level of the dependent variable on both sides of the above equation). I use changes as the dependent variable to signal the dynamic nature of both the data and the arguments; it does not preclude an analysis of the causes of differences in levels.<sup>10</sup>

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<sup>9</sup> This does not *have* to be the case. One of the control variables, GDP per capita growth, can in principle continue to grow indefinitely.

<sup>10</sup> Using a levels on the LHS, however, has the unfortunate consequence of making the R-squared statistics useless as a measure of explanatory power (because most of the variance will be



## Findings

The results of the regression analysis are shown in Table 1. Column (1) is the benchmark model for total spending, and includes only the trade openness variable plus the controls. Contrary to the expectation, trade has no statistically significant effect on spending. It is only if we exclude one or both of the automatic spending variables, or replace them with less refined ones, that it is possible to get some weak support for the openness hypothesis. What this shows is the importance of having good controls for the automatic spending increases that are generated by demographic shifts and by changes in the relative prices of government services (see Iversen and Cusack 1998 for a more detailed discussion of this point).<sup>11</sup>

The negative results for trade are unaltered when including the other theoretical variables in the total spending equation (column 2). Although it can always be objected that the trade openness is important for a different set of countries, or for a different period of time, suffice it to say that if trade openness is irrelevant in explaining expansion in welfare spending for 15 OECD countries over a 33 year period, the scope of the argument is considerably more limited than originally conceived.

### *Deindustrialization and political influence effects*

Instead, deindustrialization stands out as the most important factor for explaining overall spending, and its substantive effect is quite remarkable.<sup>12</sup> Thus, a one standard deviation increase in deindustrialization is associated with a *permanent* increase in spending of 0.9 standard deviations. Another way to convey the implications of these results is to put numbers on our earlier counter-factual thought-experiment of bringing the speed of deindustrialization in the US up to that of Sweden over the 1960-95 period. The results suggest that this would have increased the equilibrium level of spending in the US from 25 percent of GDP (the actual level in 1995) to

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explained by the LDV).

<sup>11</sup> I experimented with log transforming the openness variable, but it has little effect on the results while complicating their interpretation.

<sup>12</sup> The adjusted R-squared also goes up by a substantial 5 percentage points.

**Table 1. The causes of welfare state expansion, 1961-93.**

	Total government spending		Government transfers	Government consumption	Replacement rates	
	(1)	(2)	(3)	(4)	(5)	
Intercept	2.74	-15.14	-3.15	-7.92	-0.31	
Level of dependent variable (t-1)	-0.17 (-4.73)***	-0.25 (-5.10)***	-0.33 (-6.00)***	-0.22 (-5.67)***	-0.71 -8.99	
<b>Structural variables</b>	Deindustrialization (t-1)	0.25 (3.58)***	0.14 (3.13)***	0.12 (3.47)***	0.01 (3.25)***	
	Change in deindustrialization (t)		0.40 (4.23)***	0.27 (3.74)***	0.17 (3.74)***	
	Level of trade openness (t-1)	-0.00 (-0.01)	-0.01 (-0.77)	0.00 (0.36)	-0.01 (-1.38)	-0.00 (-2.94)***
	Change in trade openness (t)	0.00 (0.04)	0.00 (0.10)	0.00 (0.18)	0.01 (0.74)	-0.00 (-2.04)**
	Unemployment (t-1)		-0.12 (-1.57)	-0.07 (-1.14)	-0.08 (-2.37)**	0.00 (0.65)
	Left government (t-1)		0.05 (0.21)	-0.20 (-1.08)	0.25 (2.02)**	0.03 (2.67)***
<b>Influence variables</b>	Left government shift (t)		0.20 (0.96)	0.08 (0.53)	0.11 (1.06)	0.02 (2.35)**
	Voter turnout (t-1)		0.05 (1.40)	0.00 (0.08)	0.03 (2.08)**	0.00 (0.17)
	Change in voter turnout (t)		0.02 (0.45)	-0.00 (-0.08)	0.02 (0.94)	-0.00 (-0.39)
	Concentration of union power (t-1)		0.02 (0.91)	-0.02 (-1.07)	0.03 (2.74)***	0.00 (0.57)
	Capital market liberalization (t-1)	0.17 (1.78)*	0.06 (0.56)	0.13 (1.54)	-0.03 (-0.56)	-0.01 (-1.74)
<b>Control variables</b>	Per capita income (t-1)	-0.00 (-1.18)	-0.00 (-1.63)	-0.00 (-0.57)	-0.00 (-1.86)	-0.00 (-1.79)*
	Unexpected growth (t)	-0.56 (-8.61)***	-0.47 (-7.18)***	-0.31 (-6.10)***	-0.17 (-5.25)***	0.00 (0.39)
	Automatic transfers	1.09 (7.15)***	0.83 (4.92)***	0.65 (4.88)***	-	-
	Automatic consumption	1.24 (5.28)***	1.01 (4.44)***	-	0.74 (6.67)***	-
Adj. R Squared (N)	0.69 (150)	0.72 (150)	0.63 (150)	0.67 (150)	0.57 (90)	

Key: \*p<0.10; \*\*p<0.05; \*\*\*p<0.01.

Note: The results for country dummies are not shown.

40 percent of GDP which is close to current Swedish levels (which stand at 49 percent). These are staggering numbers, but perhaps befitting for shocks of the magnitude we are talking about: a net loss of 25 million jobs. If true, this offers a simple explanation for the “lag” of the US welfare state without any references to the “exceptional” character of American political culture. At a minimum, these figures show that deindustrialization is an important explanatory variable in accounting for cross-national differences in the size of the welfare state.

Another feature of these results, which has already been acknowledged, deserves emphasis: The effect of deindustrialization *persists* over time. While we would expect voter participation to have permanent effects on policies — since it permanently alters the preferences that are given political clout — one might have suspected that the effect of deindustrialization would be transitory in nature. But this is not the case. Although the transitory effect, which is large in the first period, quickly dissipates, the total effect of deindustrialization remains stable and even creeps up over time (until the point where spending reaches an equilibrium).

It is thus clear that the spending effect of deindustrialization gets “locked in” by organizational and institutional factors that are exogenous to the present model. This finding supports Pierson’s (1994, 1996) thesis that the politics of welfare state retrenchment is not simply the politics of welfare state expansion in reverse. Even though the process of deindustrialization is the causal agent in the expansion of the welfare state, the disappearance of this causal agent will not lead to a full-scale retrenchment -- it will “merely” retard further expansion. However, the character of the political game over welfare policies is likely to change when compromises involving overall expansion are no longer feasible; a point to which I shall return in the final section.

Regarding the control variables in the model, note that income per capita — contrary to Wagner’s Law — is negative (although only borderline significant).<sup>13</sup> There is no

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<sup>13</sup> This negative finding for Wagner’s law is common in the literature, and it is entirely consistent with a labor market risk argument. If income across the economy grows at a faster rate, the potential for future individual income gains is also greater, while the risk of losses are smaller.

appreciable effects of capital market liberalization, while both the automatic transfer and consumption variables have the predicted (and highly significant) effects. Finally, higher GDP growth, as we would expect, reduces spending by driving up the denominator in the spending variables faster than the numerator.

There are no significant effects on total spending of either the government partisanship variable, voter turnout, or the concentration of union power although they are all in the expected (positive) direction. However, this picture changes in interesting ways once we split spending into its main components: government transfers (column 3) and government consumption (column 4). Concerning transfers, left governments have no effect (or a slightly negative one) on spending, but in the case of government consumption left governments spend significantly more than right ones. Because the total spending results pool effects for both transfers and consumption the net impact is small. Clearly, therefore, left and right governments differ profoundly in their preferences over the *form* that welfare spending take. Right governments prefer the use of transfer payments because they do not involve direct state participation in service production, and because transfer payments can be more easily designed to preserve earnings and status differences. Left government prefer direct public service production, not primarily because it replaces the market, but because equal access to free or low-cost services is highly redistributive. These results are supported by the findings for voter turnout and concentration of union power which both have a significant and permanent upward effect on consumption.

Interestingly enough, if trade openness *does* have any lasting effects on spending, it appears to be a *negative* one affecting the consumption side (although the effect is not statistically significant). This lends weak support to the argument by trade economists that trade liberalization exposes low-skilled workers to greater competition from low wage countries (Wood 1992; Leamer 1984, 1996). Since such competition raises the risk curve for those already at the high-risk end of the distribution, while it may well be welfare-improving for all others (similar to the example in Figure 5), it reduces the political support

for redistributive spending.<sup>14</sup> This logic is also supported by the results for unemployment replacement rates which indicate that both trade and capital market liberalization have significant negative effects. Furthermore, note that the independent effect of unemployment (after control for the automatic spending effects of higher unemployment) is negative and statistically significant. Again, this suggests that differential shifts in the risk structure do indeed have a dampening effect on spending, especially when such spending is redistributive.

### *Employment trade-offs and political choices in the post-industrial economy*

It can be objected to my interpretation of the political variables that left party governments could achieve their distributive goals by altering the distributive effects of transfer payments rather than engaging in direct service provision. Especially in countries where the moderate left has dominated government power, there are no compelling reasons that consumption should be heavily favored over transfers. After all, the ideological goal of socializing production has been abandoned by virtually all social democratic parties as both unnecessary and potentially damaging for the economy. Yet, social democratic governments have engaged in extensive public provision of social services that could be supplied through the market. The explanation for this puzzle, I submit, has to do with the interaction between the pursuit of equality, and the logic of service employment expansion.

To see this, first consider the effect of government partisanship on unemployment replacement rates (column 5), which is a good indicator for the redistributive effects of a category of transfers that became politically highly salient following the first oil crisis (before then it was not an issue of partisan contention). Note that in contrast to total transfer payments, left governments are far more likely than right ones to raise replacement rates. Thus, a shift in the government center of gravity from the moderate right to the moderate left (a change of 2 points on the index) is predicted to raise replacement rates by 14 percentage points.

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<sup>14</sup> But why this is not the case for transfer payments is an intriguing question. It appears that the trade and unemployment variables are “stealing” power from each other and alternately accounting for the differential structural effect.

The effects of left partisanship extends to other aspects of the social wage, and to wages proper. The government can -- through a variety of social, regulatory and incomes policies that includes, but are not limited to, unemployment compensation policies -- influence the overall earnings structure;<sup>15</sup> something that has been recognized in countless studies on the rise of the labor movement and social democracy. What is interesting from our perspective is the way in which such distributive policies condition the expansion of service sector employment (the flip side of deindustrialization), as illustrated in Figure 7. The figure shows the relationship between earnings equality -- measured as the earnings of a worker in the bottom earnings decile relative to the earnings of the median worker (“d1/d5-ratios”) — and the average annual increase in private services employment as a percentage of the working age population (the same way we have measured all the other employment variables).<sup>16</sup> The association is strong — Norway is an outlier for obvious reasons — and it holds up over time and after control for a variety of relevant factors (Iversen and Wren 1998). The link between equality and employment is also insensitive to the particular definition of the dependent variable (see Glyn 1997).

The likely explanation for this relationship has to do with slow rates of productivity growth in services — a phenomenon first recognized by Baumol (1967) and informing some subsequent work in economics.<sup>17</sup> Table 2 compares OECD’s estimates of the total factor productivity growth in different industries and services since 1970 (the earliest date for which this data is available). Note that there is a big productivity gap between industry and services, and that this gap -- with the sole exception of construction -- holds across all

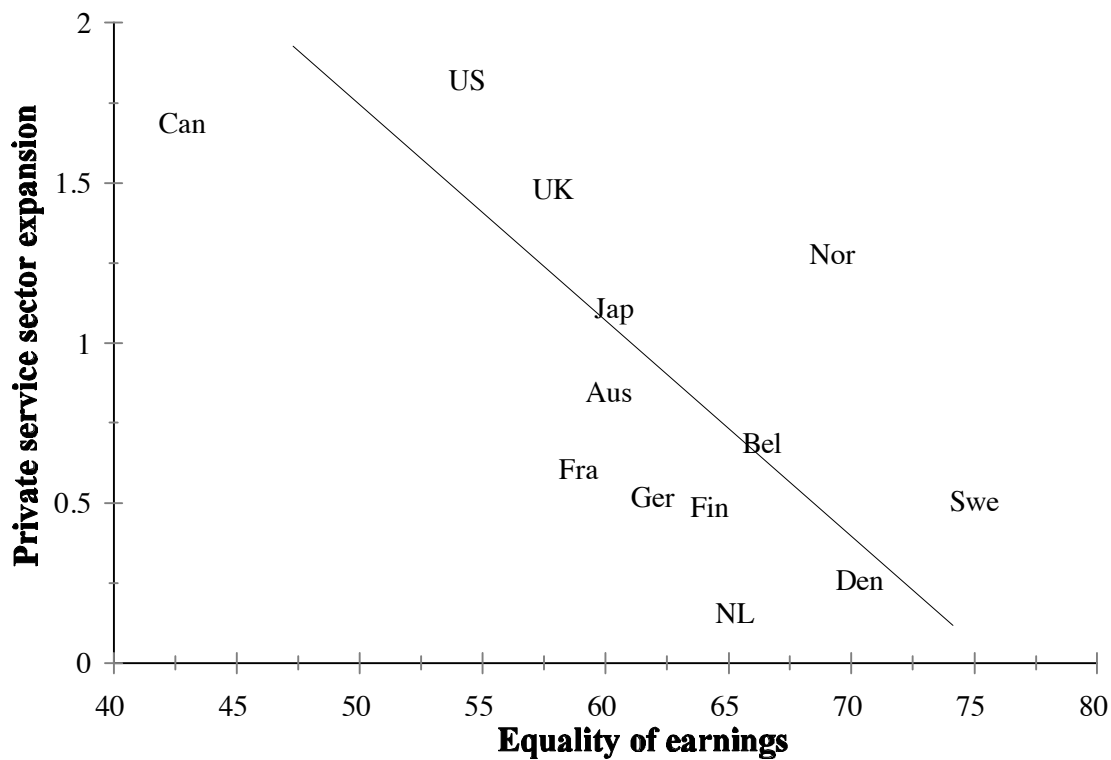
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<sup>15</sup> Policies affecting the earnings structure include minimum wage legislation, mandatory employer social contributions, automatic cost of living adjustments, collective bargaining extension laws, and a host of regulatory measures that affect the strengths of unions and the pressure on employers to compete on the basis of wage costs.

<sup>16</sup> The time constraint is dictated by the data which is not available prior to 1970.

<sup>17</sup> See Appelbaum and Schettkat (1994; 1995); De Gregorio, Giovannini and Wolf (1994); and Rogoff (1996).

**Figure 7. Earnings equality and private service sector expansion, 1970-1992.**



*Notes:* Equality of earnings is the ratio of gross earnings (including all employer contributions for pensions, social security etc.) at the top of the tenth and fifth deciles of the earnings distribution. Private service sector expansion is the average annual increase in employment in all private services as a percentage of the working age population.

*Sources:* OECD, *OECD Employment Outlook* (1991, 1996); OECD, *International Sectoral Data Base* (1997).

branches and time.<sup>18</sup> The implication is that if wages are compressed across sectors -- and 1/5 ratios are a good measure of such compression -- it slows down the expansion of services employment *unless* demand is highly price-inelastic. For some services -- such as

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<sup>18</sup> For similar results, see Gordon (1987).

producer, educational and medical services -- it may well be that demand *is* price inelastic, but for a broad variety of other services -- especially wholesale, retail trade, restaurants and hotels, community, social and personal services -- it is probably not.<sup>19</sup>

If the government therefore cares about employment in addition to equality, it is forced to expand the government provision of low-productivity service jobs. This is precisely the pattern documented by Esping-Andersen (1993), and it is consistent with the pattern of partisan effects that we observe in the data. Left governments engage in public policies that advance earnings equality, and they compensate for the adverse employment effects by raising public sector employment. Liberal governments, by contrast, refrain from interfering with the market mechanism and seek to restrict social policies to compensation for labor market risks that affect people across the board. The US is the archetypical example here with low government consumption at around 12 percent of GDP, high private service employment at close to 40 percent of the working age population, and very high (and rising) earnings inequality (Figure 7). By contrast, the Scandinavian countries are highly egalitarian, and substitutes public for private employment in services. Thus, government consumption in these countries is between 19 and 24 percent of GDP, while private service employment is only between 22 and 25 percent.

A “conservative” alternative to both the Liberal and the Social Democratic model is to curb gross labor market inequalities, but refrain from expanding public service production by relying on transfer payments and tax codes which encourage the provision of low-productivity services -- caring for old people, child care, preparation of food etc. — within the family (Esping-Andersen 1994; Huber et al. 1993). Belgium, the Netherlands and Germany are exemplars of this alternative, featuring relatively high levels of earnings equality (Figure 7), public consumption at low US levels, but also very low female participation rates of around 60 percent compared to between 71 and 75 percent in the US and Scandinavia.

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<sup>19</sup> I say “probably” because we really do not have any data on such elasticities, and therefore have to make guesses based on the nature of services.



**Table 2. Average annual rates of growth in total factor productivity for 14 OECD countries, 1970-94.**

	1970-74	1975-78	1979-82	1983-86	1987-90	1991-94	1970-94
<b>AGRICULTURE*</b>	<b>4.6</b>	<b>1.2</b>	<b>3.6</b>	<b>2.5</b>	<b>2.7</b>	<i>n.a.</i>	<b>3.7</b>
<b>INDUSTRY</b>	<b>2.0</b>	<b>1.5</b>	<b>-0.1</b>	<b>1.5</b>	<b>1.4</b>	<b>1.8</b>	<b>1.6</b>
<i>Manufacturing</i>	2.8	1.8	0.1	1.6	1.3	2.7	2.1
Textiles	3.2	0.8	0.3	1.3	0.2	2.2	1.7
Chemicals	3.8	3.7	0.6	0.7	1.4	4.1	2.6
Machinery and equipment	3.6	0.7	0.5	1.7	1.6	3.4	2.6
<i>Electricity, gas and water</i>	3.0	1.5	-1.3	1.0	0.6	0.5	1.8
<i>Transport, storage and communication</i>	2.2	1.7	0.3	2.1	3.2	2.0	2.7
<i>Construction</i>	-1.2	0.0	-0.4	0.7	0.3	-0.4	-0.4
<b>SERVICES</b>	<b>0.2</b>	<b>0.2</b>	<b>-0.5</b>	<b>0.4</b>	<b>-0.4</b>	<b>-0.5</b>	<b>-0.2</b>
<i>Private services</i>	0.8	0.2	-0.6	0.7	-0.4	-0.5	0.4
Wholesale, retail, restaurants and hotels	1.8	0.5	-0.9	1.1	0.1	-0.5	0.9
Finance, insurance and real estate	0.4	0.2	-0.4	0.9	-0.4	-0.2	0.0
Community, social and personal services	0.4	0.1	-0.4	0.3	-0.7	-0.6	-0.2
<b>GAP</b>	<b>1.8</b>	<b>1.3</b>	<b>0.4</b>	<b>1.1</b>	<b>1.8</b>	<b>2.3</b>	<b>1.8</b>

\* Based on estimated labor productivity; n.a.: data not available.

Source: OECD, *International Sectoral Data Base* (1996).

Summarizing the empirical results, deindustrialization -- *not* trade openness -- has been the main engine of welfare state expansion since the early 1960s, and it accounts for the bulk of the inter-temporal and cross-national variance in the rise of transfer payments. But while governments of all stripes have raised spending in response to the labor market dislocations caused by deindustrialization, left governments have shaped transfers in a more egalitarian direction, and have heavily favored direct government service provision over transfers. An important reason for the linkage between egalitarianism and growth of public consumption is that earnings compression retards growth of price-elastic private services. Finally, the results strongly suggest that voter turnout is a crucial determinant of the popular demand for, and supply of, welfare spending.

## Objections to the argument

The empirical results are clearly supportive of the claim that deindustrialization is an important source of welfare state expansion whereas trade or capital market integration is not. But a number of logical and empirical objections can be raised against the findings. In this section I briefly address these objections one at a time.

Trade is the cause of deindustrialization.

It is conceivable that the fierce competition accompanying growing trade, not internally generated changes in technology and demand conditions, is what propels the process of deindustrialization. Especially the growing trade with less developed countries has been argued to cause a range of labor intensive industries in the north to go out of business (see Wood 1994, Saeger 1997). If that were the case, deindustrialization would become an interesting adjunct to the globalization story, but not an alternative.

I am not hostile to this interpretation, but there is no evidence for this view in the data. Statistically speaking, most of the variance in deindustrialization is explained by initial levels of industrialization, while openness plays no role. Using deindustrialization between 1960 and 1993 as the dependent variable, and the level of industrialization and openness in 1960 as the independent variables, the regression equation is as follows (with standard errors in parentheses):

$$\text{Deindustrialization} = -1.1 + 0.077 * \text{Industrialization} + 0.005 * \text{Openness} \quad (R^2 = 0.71). \\ (0.014) \qquad \qquad \qquad (0.005)$$

The result for openness is actually weaker if we use openness towards LDC trade instead of overall trade, and capital market integration is likewise unrelated to deindustrialization.

What the data suggest is that countries go through sectoral employment cycles where late industrializers generally industrialize further than other countries in a shorter span of time, and correspondingly go through the phase of deindustrialization later and more rapidly.

Figure 8 illustrates the pattern using manufacturing employment data for Sweden and the

US since the end of the last century.

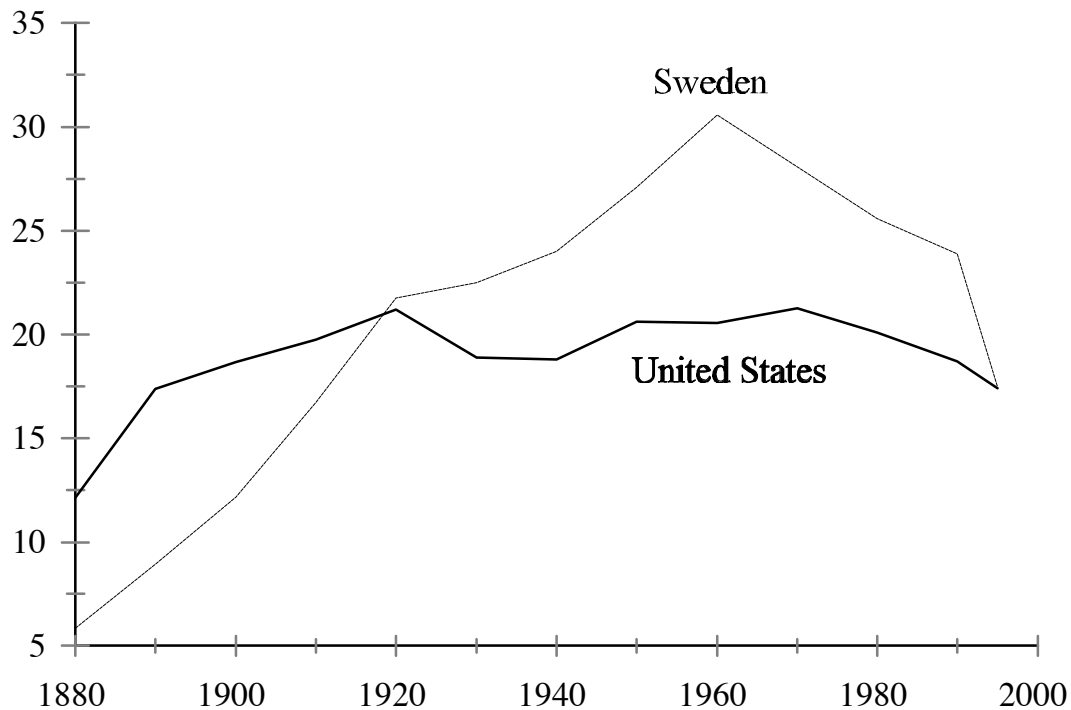
A more detailed analysis of the causes of deindustrialization, based on time series data, shows that the phenomenon is largely explained by a combination of rapid productivity growth in agriculture and manufacturing combined with a shift in demand away from manufactured goods towards services (see Iversen and Cusack 1998). There is no evidence that either trade -- whether measured as balances or as absolute shares of total or LDC trade -- or capital market openness cause deindustrialization. These findings echoes those of a detailed OECD study by Rowthorn and Ramaswamy (1997).

The results reflect reversed causality.

The analysis in Iversen and Cusack (1998) also lends no support to the notion that deindustrialization is the result of, rather than the cause of, welfare state expansion. There is no indication that a rising welfare state, and the associated increase in taxation, has “crowded out” industrial employment. Despite the economic notion of the distortionary effects of taxation, it appears that workers and unions willingly “purchase” greater state protection and insurance without trying to pass on the bill in the form of higher real wage demands.

In my experience, most readers are quite willing to accept this result, but many will maintain that there exists some kind of “accounting relationship” between the spending and deindustrialization variables. For example, increasing public consumption means employing more people in the public sector, and since public employment is an element in the denominator of the deindustrialization variable, there must be an accounting relationship between spending and deindustrialization. This logic is simply incorrect. The denominator is defined as the total working age population, not as the labor force, and it therefore cannot be affected by spending except through the birth rate. So although it is true that public employment affects an element in the denominator, it is *not true* that this affects the total size of the denominator. The only logically valid argument about reversed causality is that government spending causes employment in industry and agriculture to decline. Yet, there is little evidence for such an effect in either the literature or the present data.

**Figure 8. The evolution of manufacturing employment as a percentage of the working age population in Sweden and the United States.**



Deindustrialization is absorbed by natural attrition

So long as the natural movement of people into retirement — natural attrition — is sufficiently large, so it may be argued, deindustrialization need not have any effect on the level of labor market risks. Hence, the causal mechanism in the deindustrialization story does not hold. This argument confuses the net effect of a set of variables with the independent effect of these variables. It is true that natural attrition in any market segment will increase the job security of workers by reducing supply relative to demand, just as new entry into a segment will increase job insecurity by raising supply relative to demand. This is why early retirement, as a public policy, is a way to ameliorate such insecurities, and this is why spending on early retirement schemes is causally linked to deindustrialization. This does not alter the thesis that reduction in the labor force due to deindustrialization has an the

independent, risk-augmenting effect on the labor market. Regardless of the level of natural attrition, we always expect deindustrialization to increase job insecurity.

The results are sensitive to the base used in the deindustrialization measure

It will be recalled that deindustrialization is defined as simply 100 minus the employment in the traditional sectors of the economy. The base of 100 could be defended on grounds it constitutes a natural upper limit (no more than the entire working age population can be engaged in agriculture or industry). But in reality the peak value for traditional sector employment vary across countries, as suggested by Figure 8 above, although we do not necessarily have a “natural” definition of the relevant reference period in which to identify this peak, nor always the necessary data. The base of 100 is therefore arbitrary, and it may be supposed that this choice affects the results. As it turns out, this choice does not matter because of the inclusion of a full set of country dummies. The only effect of changing the base of the deindustrialization variable is to alter the coefficients on the country dummies. This complicates the interpretation of these coefficients, but since country dummies are already a measures of our ignorance, this is really irrelevant. The “correct” national base for the deindustrialization variable is simply another item in the long list of unknowns that enter into the determination of the country dummy coefficients.

### **Conclusion: The Welfare State at the End of the Industrial Society**

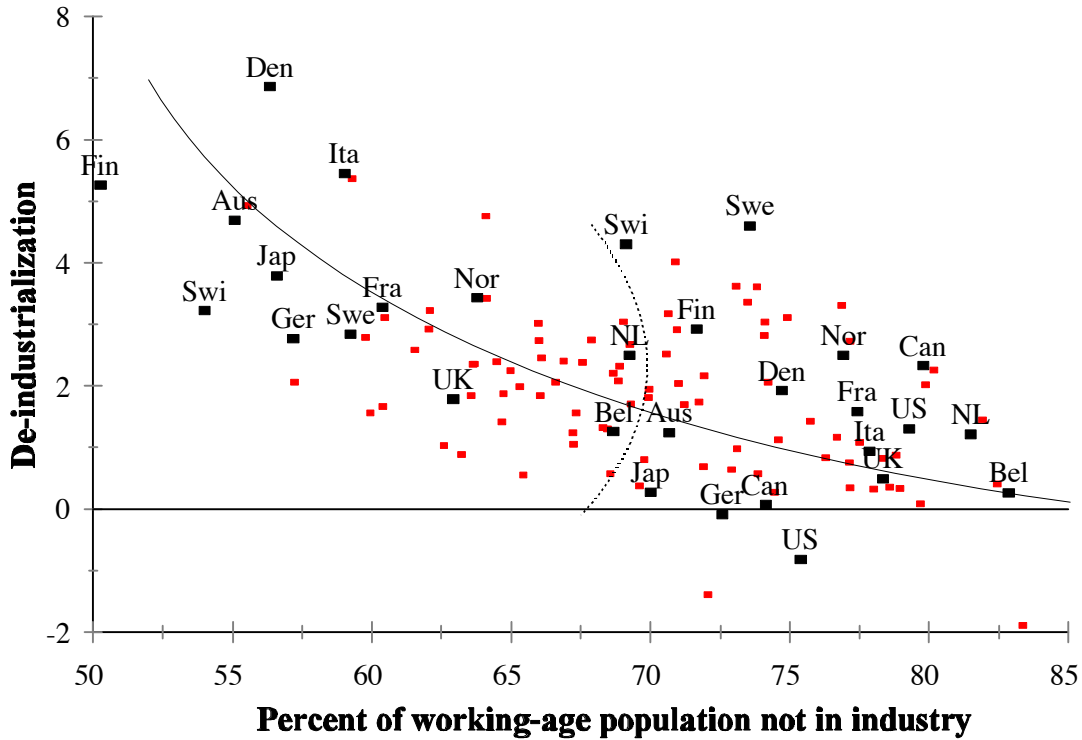
Based on data for 15 OECD countries over a 35-year period, there is little evidence that trade, or capital mobility for that matter, has played an important role in the expansion of the modern welfare state. Correspondingly, there is no support for the idea, proposed by Katzenstein (1985), that large countries will become more akin to small corporatist welfare states as they grow increasingly exposed to the vagaries of international markets. On the other hand there is also little evidence that globalization is a major threat to the welfare state. With a few qualifications that I note below, international variables simply do not appear to be very important in explaining the general dynamics of the modern welfare state.

Instead, what has propelled much of the expansion of the welfare state since the

early 1960s is a dynamic process of technological progress combined with the saturation of markets for agricultural and industrial products. I have referred to this process as deindustrialization because its main feature is the rapid decline in industrial employment, or, if one prefers, the disappearance of the blue-collar working class. The magnitudes of the labor market displacements accompanying deindustrialization compare to those associated with the industrial revolution, and they have shaped popular preferences for government-mediated risk-sharing and social compensation. The speed of the deindustrialization process, however, has varied greatly across countries depending on the timing of industrialization. Moreover, the political-institutional consequences of the process have been mediated by partisan politics. Whereas right governments have expanded income- and status-preserving transfer payments, left governments have altered the social wage in a more egalitarian direction and compensated for the associated job losses in low-productivity private services by expanding government-financed provision of services.

A pressing question remains to be answered: What happens when the deindustrialization process comes to a halt? Figure 9, which shows the relationship between the share of the working age population outside industry and the speed of deindustrialization, clearly suggests that such a slowdown is occurring. From very different starting points in the early 1960s (the labeled entries to the left of the dotted line), all countries have been converging on a “post-industrial” equilibrium in the 1990s (the labeled entries to the right of the dotted line), albeit at very different speeds. This process of convergence has been accompanied by a slowdown in the pace of deindustrialization (the vertical axis), although there is clearly heterogeneity in this regard. If we add the most recent changes on the vertical axis to the numbers on the horizontal, it would be seen that most countries have now surpassed the 80 percent mark for the non-industrial share of the working age population. Only four “laggards,” Austria, Japan, Germany and Switzerland, are still below 75 percent, and these countries -- which represent a mix of relatively open and closed economies -- are consequently the best candidates for future welfare state expansion. This is a prediction that flows from no other theoretical argument that I am aware.

**Figure 9. Convergence towards the service economy, 1960-1995.**



*Notes:* Labeled dots are the first (1960-63) and last (1992-95) observations in the data set. Early observations fall to the left of the dotted line, except in the cases of Canada and the US where both observations are to the right of the line. The un-labeled dots represent the observations of intervening years.

As we have seen, the consequence of a slowdown, or even end to, deindustrialization is not welfare state retrenchment. As explained by Pierson (1994), the costs of such retrenchment is concentrated on vocal constituencies, and most people have simply become too dependent on the welfare state to want its dismantlement. However, the slowdown is likely to be accompanied by more intense distributive battles between those in secure and those in insecure labor market positions. If people in secure positions know that they are highly unlikely to end up in insecure ones, i.e., face low labor market risks, they

have less reason to be solidaristic with those in insecure positions. This effect is reinforced by processes that have resulted in an increasing bifurcation of the labor market risk structure. The shift in demand away from low-skilled and towards high-skilled — whether due to the introduction of more skill-intensive technologies, growing exposure to competition from low-wage countries, or a combination — has been an important factor in this bifurcation. The increase in the number of single-parent families and the division of services into a low-skilled and a knowledge-intensive sector may have contributed to the division between secure and insecure workers.

The form that these distributive conflicts take varies across countries depending on past policy-responses to deindustrialization. In Scandinavia, where the welfare state has taken a distinct public service character, calls have intensified for the privatization of more and more services (Stephens 1996). In addition, solidaristic wage policies have run into difficulties, at least partly because high-skilled/well-educated segment of the labor force have sought to break out of the centralized bargaining system and take advantage of their improved labor market position (Pontusson and Swenson 1996; Iversen 1996; 1999). In United States recent conflicts have centered around the introduction of tougher means-testing as well as a strengthening of the incentives for people on welfare to take jobs in the low-paid service sector (Myles 1996). In still other countries, such as Italy and the Netherlands, where service jobs are scarce in *both* the private and public sectors, conflicts have intensified between “insiders” and “outsiders” (Esping-Andersen 1993). In all systems, political demands for the exclusion of foreigners in the benefits of the welfare state seem to have intensified.

Whatever their particular form, however, one of the most important implications of the deindustrialization argument is that the emergence of the mature “post-industrial” economy will be associated with an intensification of distributive conflicts. This general conclusion stands in sharp contrast to the post-materialism thesis advanced by Inglehart (1987, 1990) and others, but it helps us to understand why contentious welfare state reforms in many countries rose to the top of the political agenda in the 1980s and 1990s.



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