

GLOBALIZATION AND THE WELFARE STATE

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1. Introduction

It is a cliché that the welfare state is in crisis. Large-scale public provision of social insurance and social services to redistribute wealth and reduce social risk has been perhaps the defining characteristic of the mixed economies of the postwar OECD. But today this type of welfare state is considered an outmoded institution, a luxury that can no longer be afforded. The specter in the first part of the next century of rapidly increasing ratios of people dependent on the state to those in work and paying taxes will certainly haunt welfare state planners. But most analysts believe that the problems of the welfare state in the last decades of the 20th century can be traced to the rapid integration of international markets for goods, services and capital.¹

The widespread support for the notion that globalization has undermined the welfare state is somewhat surprising given the results of the most systematic empirical studies on the subject. Quantitative research has found neither clear nor consistent globalization constraints on government spending or taxation in the OECD [Garrett 1998a, Quinn 1997, Swank 1998a, 1998b]. Indeed, in many cases, the globalization-size of government relationships tend to be positive. These results are consistent with the view that globalization has a distinct political logic of “compensation” that may override the lowest common denominator economic “efficiency” pressures highlighted in the popular debate on the welfare state. The compensation perspective emphasizes three points [Garrett 1998b]. First, market integration has tended to increase inequality and economic insecurity in the advanced industrial countries. Second, this creates strong incentives for governments to ameliorate market dislocations using the policy instruments of the welfare state. Finally, these policies may not necessarily be detrimental to macroeconomic performance or the interests of finance and industry.

This paper evaluates the relative impact of the efficiency and compensation perspectives on the globalization-welfare state nexus using panel data for 18 OECD countries over the period 1961-1994.² The paper is distinctive in at least three ways. First, the effects of three facets of contemporary market integration – in addition to the traditional trade share of GDP – are analyzed. The share of total imports from low wage economies is used to test the common supposition that the migration of production and jobs to less developed countries has put considerable downward pressure on the welfare state. The volume of inflows and outflows of foreign direct investment allows us to explore whether the multinationalization of production eviscerates welfarism. Finally, international financial liberalization is used to examine the domestic effects of the international mobility of liquid capital.

The second distinctive feature of the paper concerns the operationalization of welfare state effort. In common with most existing studies, we begin by focusing on patterns of government expenditures. Following Esping-Andersen [1990], we also distinguish between the public provision of social services such as health and education (operationalized as government consumption expenditures) and income transfer programs such as age pensions and unemployment benefits (social security transfers) because these potentially different political economic dynamics. However, we also analyze the way revenues are raised by comparing the taxation of capital, labor and consumption. Taking the revenue side into account is important because overall welfare effort is a function of both how money is spent and how it is raised. All else equal, one would expect capital taxation to be the most progressive form of taxation (i.e. the most downwardly redistributive), with taxes on labor income occupying an intermediate position, and consumption taxes the most regressive form of revenue raising.³ Thus, comparing two

countries that provide similar levels of income transfers and social services, we should consider the one that relies relatively more on capital taxation to fund its programs to be the more generous welfare state.

Finally, the paper uses an empirical methodology that is more conservative in its assumptions than is common in the literature, and hence is unlikely to exaggerate any of the relationships under consideration. The regressions are estimated using panel corrected standard errors. This will tend to increase the standard errors of estimates (and hence decrease their statistical significance) compared with other estimators in data sets such as ours where the number of time periods (a maximum of 34 years) is less than twice as large as the number of cross sections (a maximum of 18 countries) [Beck and Katz 1995]. We also use a lagged dependent variable to take into account the stickiness over time of welfare state programs and tax structures [Beck and Katz 1996].⁴ Moreover, we include a full battery of dummy variables for both country and year fixed effects to take into account cross national and intertemporal variance that is not explained by any other regressors. As a result, we are confident that the relationships we report are not artifacts of inappropriate econometric assumptions or specification errors.

Four major results stand out (see Table 1). First, total trade had a negative and significant effect on both facets of welfare state expenditures – the provision of social services and income transfer programs – as well as total government spending. This finding is not necessarily inconsistent with Cameron's [1978] and Katzenstein's [1985] influential arguments about the (institutionally-mediated) historical trajectories of different welfare state regimes. But it does suggest that, in the short run at least, efficiency considerations are more important than compensation ones in the short run. The tax-trade relationships were much weaker. There was

only one marginally significant trade coefficient in the tax regressions: trade was associated with lower consumption tax rates. Given the regressivity of this form of taxation, this relationship is more consistent with the compensation perspective than the efficiency view.

Second, imports from low wage economies had scant impact on welfare effort. The low wage imports coefficients were not significant in any of the spending regressions. As with total trade, however, low wage imports were weakly associated with lower rates of consumption taxation – supporting the compensation perspective.

Third, foreign direct investment was not associated with less welfare effort. This variable was insignificant in all the spending regressions. The tax results were considerably stronger, but they suggest that compensation concerns dominated efficiency ones. Foreign direct investment was associated with higher effective rates of corporate taxation, but lower rates of labor taxation. Rather than shifting the burden of taxation from mobile capital to immobile labor (as the efficiency perspective would suggest), foreign direct investment was associated with heavier reliance on capital and less reliance on labor for raising revenues to fund government spending.

Fourth, international financial openness had mixed effects. On the one hand, liquid capital mobility was weakly associated with lower total government spending. But this effect was not evident when either component of spending – government consumption or social security transfers – was isolated from total expenditures. On the other hand, international financial openness was not associated with lower capital tax rates, which is perhaps the single aspect of fiscal policy that the efficiency perspective would most clearly predict to be constrained by capital mobility. Moreover, financial openness was associated with lower labor tax rates, implying a net shift of revenue raising from labor to capital.

Taken together, these results do not clearly suggest the dominance of the efficiency or compensation perspectives with respect to welfare state effort. There are, however, interesting and consistent differences between the spending and taxation results, and between the effects of trade growth and footloose capital. Where globalization had significant effects on government spending, these were associated with smaller public economies. These effects were quite weak with respect to footloose capital – either multinational firms or financial interests – but stronger for total trade, which has traditionally been associated with public sector expansion. In contrast, the significant globalization effects on taxation were consistent with the compensation perspective. Moreover, these effects were at least as pronounced for foreign direct investment and international financial openness as for trade.

Thus, it seems that one the historical nexus between trade (and partisan politics) and government spending is taken into account (by using country dummy variables), increasing trade exposure in recent years has been the facet of globalization that has most clearly put downward pressure on welfare state expenditures. But trade growth has had less impact on the way the tax burden is distributed, and its only significant effect was to reduce consumption taxes. In contrast, the increasing exit opportunities for multinational firms and financial capital have not resulted in expenditure cuts across the board. Moreover, the rise of footloose capital has been associated increases in capital taxes relative to those on labor.

The remainder of the paper is divided into five sections. Section 2 elaborates the efficiency and compensation hypotheses about the effects of globalization on fiscal policy. Section 3 describes over-time and cross-national variations in market integration, government spending and taxation among the industrial democracies. Section 4 discusses the methodological issues inherent

in trying to isolate the effects of globalization on welfare state effort. The panel regression estimates are analyzed in Section 5. Section 6 draws out the implications of this paper for the broader study of the interaction between global markets and national politics.

2. Efficiency, Compensation and the Welfare State

The Efficiency Hypothesis

Conventional views about the constraining policy effects of globalization highlight two factors – increasing competition in international goods and services markets and the ability of the holders of capital to move money and production around the world in search of higher rates of return. The proposed paths from competitiveness constraints and footloose capital to welfare restraint can be summarized briefly.

The welfare state is considered by many to be uncompetitive [Pfaffer 1991, Pierson 1991]. There is no market for publicly provided services. Income transfer programs distort labor markets and bias intertemporal investment decisions. Moreover, government spending must be funded, often by borrowing in the short term, and ultimately by higher taxes. Taxes on income and wealth directly erode the bottom lines of asset holders, and this is exacerbated the more progressive tax systems are. Borrowing results in higher real interest rates, depressing investment. If this also leads to an appreciation in the real exchange rate, the competitiveness of national producers is decreased.

The efficiency costs of the welfare state are thought to be particularly high in product markets where pure cost considerations are critical to competitiveness. Competition from law

wage/small welfare state economies has featured prominently in the policy debate. If Nike can produce shoes in Malaysia at comparable quality to those in Oregon, but at one-tenth of the cost, jobs will be lost in the US unless American wages and benefits are cut. But the argument is not confined to low skill/low value-added sectors. The globalization of technology and communication has, for some, affected competitive conditions in even the most sophisticated product markets. The classic example is software engineers telecommuting from Bangalore to Seattle and Silicon Valley [Greider 1997].

According to the efficiency hypothesis, therefore, there is a zero-sum quality to the relationship between trade and the welfare state. It does not matter whether one considers trade liberalization as a conscious choice of governments (to reap the benefits of trade (scale economies, comparative advantage, and the like) or as the result of exogenous innovations in transportation and communication. Either way, there must be an inverse relationship among the OECD countries between exposure to trade and the generosity of income transfer programs.

This logic is thought to be even more evident with respect to footloose capital. The threat by multinational firms to move production from one country to another in search of higher returns seems omnipresent. The notion that firms can simply evade the competitiveness costs of big government by exiting the national economy, for example, has been at the forefront of European debates in the 1990s about the crisis of the welfare state.

The apotheosis of the exit argument, however, concerns the domestic effects of the international integration of financial markets (in bonds, currencies, equities, and ever more exotic derivatives). Traders operating 24 hours a day move massive amounts of money around the globe more or less instantaneously in ceaseless efforts to arbitrage profits. For many, the potential for massive capital flight has rendered the financial markets the ultimate arbiter of government policy.

In an already infamous aside, American political strategist, James Carville, is said to have wryly observed: “I used to think that if there was reincarnation, I wanted to come back as the president or the pope. But now I want to be the bond market: you can intimidate everyone” [*The Economist* 1995: 3].

The logic underpinning assessments like these is straightforward. Governments are held to ransom by mobile capital, the price is high, and punishment for non-compliance is swift. If the policies and institutions of which the financial markets approve are not found in a country, money will hemorrhage unless and until they are. In turn, financial capital is usually thought to disapprove of all government policies that distort markets, and welfare state programs are among the most prominent villains.

In sum, the efficiency hypothesis contends that the welfare state should have been a clear target for globalization-induced retrenchment in recent years. From the Depression until the 1970s, it may have been possible for governments to expand welfare effort at little or no cost – because this was a period of relative closure in the international economy. In the contemporary era of global markets, however, the trade off between efficiency and welfare is harsh and direct. Governments have no choice but to bow to the demands of the market, and lowest common denominator pressures should be the pervasive features of contemporary welfare state dynamics.

The Compensation Hypothesis

The efficiency view focuses solely on one aspect of the globalization-welfare state nexus – the economic costs of big government. This neglects the assertion made by a long line of scholars – from Polanyi [1944] to Ruggie [1983] and Katzenstein [1985] to Garrett [1998a] and Rodrik

[1997] – that there are also clear political incentives to expand welfare effort in response to internationalization.

Market integration may benefit all segments of society in the long run through the more efficient allocation of production and investment. But the short-term political effects of globalization are likely to be very different. Expanding the scope of markets can be expected to have two effects that would increase citizen support for the welfare state – increasing inequality and increasing economic insecurity. The effect of trade in the OECD is likely to be more pronounced on inequality than insecurity. In accordance with Heckscher-Ohlin models, expanding trade will reduce demand for relatively scarce factors of production (labor) while increasing demand for capital intensive production [Wood 1994]. However, trade patterns are not particularly volatile in the OECD, and as a result insecurity is unlikely to rise appreciably (in contrast with less developed countries) [Rodrik 1997].

Turning to the multinationalization of production, one might expect that this facet of globalization would increase insecurity more than inequality in the OECD. To take a simple example, the building of a new plant by a multinational firm generates numerous benefits not only for its owners but also for those it employees and those who provide services to these employees. Thus, multinationalization of production may decrease inequality. In contrast, the threat that a firm would close down a plant to move operations to another country is likely substantially to increase economic insecurity.

Finally, the globalization of finance can be expected to increase both economic insecurity and inequality. The primary beneficiaries of financial market integration are the owners of liquid assets and those in the finance sector – or more specifically, large financial houses. It is less clear that these benefits trickle down to other segments of society. Moreover, unexpected volatility in

markets conditions comes hand in hand with financial globalization – as all the headline crises of the 1990s attest. The insecurities associated with this volatility are likely to be very large indeed.

All of the above arguments suggest that globalization may increase demands on governments to cushion market-generated inequality and insecurity by welfare state expansion. In turn government compensation could help maintain support for an open international economy [Ruggie 1983]. Rising inequality and insecurity provide fertile terrain for populist, isolationist and protectionist backlashes. Increasing welfare state effort mitigates these pressures and hence helps maintain public support for openness. Moreover, some go even further to suggest that the stability generated by the welfare state has direct benefits for investment, productivity, growth and competitiveness [Alesina and Perotti 1996, Garrett 1998a].

These claims about the economic benefits of government compensation would be moot if global market developments in recent years have made it impossible for governments to expand the welfare state to meet rising citizen demands. Ruggie [1996], for example, believes this to be the case. He contends that the compensation incentives for governments to expand welfare effort have been overwhelmed by the efficiency constraints of globalization. The remainder of this paper assesses the validity of this contention.

3. Globalization and Welfare State Effort

Globalization

This subsection makes two basic points about the four facets of market integration analyzed in this paper – total trade volumes, dependence on imports from low wage economies,

foreign direct investment and financial openness. The first point is a commonplace. The extent to which the OECD economies are internationally integrated has increased consistently and markedly since 1960. The only exception to this trend is imports from low wage economies, which constituted a considerably smaller portion of total OECD imports in the 1980s than in the 1960s and 1970s (though this percentage rose quite sharply in the early 1990s). Second, large cross-national variations in market integration endure among the OECD countries. This is well known for overall trade, but significant differences between countries are also characteristic of the data on low wage imports, foreign direct investment and financial market integration.

These over time and cross-national trends are interesting in their own right. For our purposes, however, the data show that empirical efforts to isolate the policy consequences of globalization must decompose market integration into its different components and take into account both over-time and cross-national variation. Multivariate panel regression is the ideal methodology for this type of analysis.

Figure 1 presents unweighted annual averages for the 18 countries in this study with respect to total trade and low wage imports over the 1961-1994 period. The average sum of exports and imports in the OECD increased from around 45% of GDP in the early 1960s to around 65% of GDP in the early 1990s. Although there were some spikes in the data, around the oil shocks and other major movements in the international business cycle, the clear trend was for the advanced industrial countries to become significantly more involved in international trade.

The data on low wage imports belie common perceptions of western markets being swamped by goods from LDCs. The portion of total imports into the 18 countries coming from outside the OECD (but excluding imports from OPEC) declined from around 23% of total imports in the early 1960s to around 17% from the middle 1970s to the late 1980s, before rising

again to almost 20% in 1994. To be sure, much of the decline in the middle period is due to the dramatic increases in energy imports into the OECD (reducing the portion of low wage imports, even if their volume was increasing). However, there is no evidence that trade with non-oil producing low wage economies has grown at a faster rate than intra-OECD trade in recent decades.

Figure 1 about here

Figure 2 presents data on foreign direct investment and international financial integration. Inflows and outflows of foreign direct investment rose dramatically from a low base in the countries studied over the 1962-1993 period. However, it is clear that the real takeoff for foreign direct investment was the mid 1980s. From 1985 to 1989, FDI increased as an average portion of GDP from 1.0 % to 3.5%. A considerable amount of this increase can be attributed to the EU's internal market program, but it is clear that the late 1980s was a golden age for FDI in non-European OECD countries as well. FDI declined somewhat after 1989, presumably as a result of the international recession in that period.

Figure 2 about here

Measuring the international integration of financial markets is a complicated matter. Economists are very reticent to conclude from the explosion of international capital flows in recent years that financial markets have become more internationally integrated.⁵ This paper follows the recent trend in political economy research by using a policy-based measure of financial integration instead of a flows-based measure or other alternatives.⁶ Specifically, we use Quinn's [1997] 14-point index for international financial openness, which is based on a detailed coding of the IMF's reporting of *Exchange Arrangements and Exchange Restrictions* in member countries. On this measure, it is clear that there has been a consistent increase in international financial

openness in the past three decades, with the average score on the Quinn index in 1994 being above 13 out of a maximum possible score of 14. Thus, this measure tells essentially the same story as the flows data: the international mobility of financial capital is a key component of contemporary globalization in the OECD.

Table 2 shows, however, that despite the general trend towards globalization, there continue to be considerable differences in the ways the 18 countries in this study are integrated into the international economy. In the period since 1985, annual trade constituted on average more than 100% of GDP in Belgium, Ireland and the Netherlands, but less than 40% in Australia, Japan and the US. These variations in trade are well known, but less attention has been paid to other facets of economic integration. Annual average imports from wage imports comprised more than one-third of total imports in Japan and the US, but less than 10% in Ireland and Switzerland. Annual foreign direct investment was more than 5% of GDP in Belgium, the Netherlands and the UK, but less than 1% in Ireland and Italy. Finally, Germany, Netherlands and the UK scored a perfect 14 on the international financial openness index, whereas the score was less than 11 for Japan.

Table 2 about here

The other thing to note about the different facets of market integration in the post-1985 period is that the positions of countries were not highly correlated across market segments. To take the clearest example, the correlations with the financial openness index were: -0.02 (total trade), -0.12 (low wage imports), and 0.28 (FDI). Foreign direct investment was moderately correlated with total trade (0.44) and low wage imports (0.37), but these figures are not as high as some might have thought.

Taken together, Figures 1 and 2 and Table 2 amply demonstrate that – notwithstanding the common rhetoric of the emergence of a seamless global economy – market integration has not been a unidimensional phenomenon that has affected all of the industrial democracies equally. One important implication of this fact is that the best way to analyze the effects of globalization is to disaggregate the phenomenon into its different components and to compare variations not only over time but among countries as well.

Welfare State Effort

Figures 3 and 4 display over time trends in the two facets of welfare state effort analyzed in this paper – patterns of government spending and taxation. Total government spending – as well as consumption expenditures and social security transfers – increased steadily from the early 1960s through the early 1980s, with the fastest rate of growth occurring during the OPEC-induced recessions in the mid and late 1970s. Spending declined slightly in the mid 1980s, but this trend was reversed when the international recession hit in 1989. Indeed, total spending and social security transfers both comprised a greater portion of GDP in 1994 (over 54% and 21% respectively) than in any other year since 1961. Consumption expenditures did not quite return to their mid-1980s peak (of just under 20% of GDP) by the end of the period under study.

Figures 3 and 4 about here

The data on taxation in Figure 4 are more interesting and require some explanation. These data represent the efforts by a team of economists to measure average effective tax rates on capital, labor and consumption [Mendoza 1997]. Their efforts represent a considerable improvement over other possible ways of measuring national tax systems. On the one hand, labyrinthine mazes of tax legislation comprising not only multiple rates but also myriad

exemptions and qualifications make it virtually impossible to generate meaningful cross-national indicators of national tax systems on the basis of formal policy. On the other hand, using reported revenues data from different types of taxation does not give us any sense of the rates of which different activities are taxed.

In contrast, Mendoza and his collaborators have computed effective tax rates that seek to compare pre- and post-tax incomes and prices, using national accounts and revenue statistics. The effective capital tax rate is calculated as the sum of households' capital income taxes, corporate income taxes, taxes on immovable property, and taxes on financial and capital transaction, divided by the total operating surplus of the economy (i.e. profits). The effective labor tax rate is individual income tax revenues divided by wages and salaries, property and entrepreneurial income, and the operating surplus of private unincorporated enterprises. Finally, the effective consumption tax rate is ratio of revenues derived from all indirect taxation to the pre-tax value of aggregate consumption.

From the standpoint of welfare state effort, we are more interested in comparisons among these effective tax rates than in their levels, per se. Since government spending increased considerably from the 1960s to the 1990s, it is not surprising that tax rates rose over the same period as well (though not as quickly given increasing deficits over this period [Garrett 1998b]). Figure 4, however, shows that over time the average mix of taxation for the 18 countries has become somewhat less progressive – more revenues have been raised from tax sources that target poorer people. In 1965, the average effective rate of capital taxation was more than 10 percentage points higher than that on labor, which was in turn 5 points higher than the consumption rate (the most regressive form of taxation). By the early 1990s, although the capital rate had increased by more than 10 points to almost 40%, the labor tax rate had grown much more rapidly to the point

where it was just as high as the capital rate. On a much lower base, consumption taxes increased by about 5 points between 1965 and 1992. Thus, these over time trends offer some support for the notion that globalization has had regressive consequences for tax systems.

Let us now turn to cross-national comparisons of taxing and spending in the post-1985 period. Table 3 demonstrates the well-known differences in government spending across the OECD. Total government spending in Belgium, Denmark, the Netherlands and Sweden was more than 55% of GDP, whereas it was less than 40% in Australia, Japan, Switzerland and the US. Similar variations are evident with respect to consumption expenditures and social security transfers, though the countries at the top and the bottom vary somewhat. Among big spenders, for example, the Belgian and Dutch welfare states are characterized by large transfer budgets but relatively less spending on the provision of public services – a result of the historical dominance of Christian democracy in these countries. But precisely the reverse is true for two of the paradigmatic social democratic welfare states of Denmark and Sweden [Esping-Andersen 1990].

The cross-national differences in effective tax rates are much less familiar to most scholars of the welfare state. The post-1985 averages for our 18 countries are reported in Table 4. Five countries had effective capital tax rates of above 45%. Of these, only two were in countries typically thought of as large welfare states – Finland and Sweden – whereas the other three were in conventionally labeled welfare laggards – Australia, Japan and the United Kingdom. At the bottom end of the distribution, effective capital tax rates were below 30% in Austria, France, Germany, Italy and Switzerland – hardly a set of free enterprise countries on most definitions. Taken as a whole, the cross-country correlation between these rates and total government spending was essentially zero (-0.05).

Table 4 about here

The league table of effective labor and consumption tax rates more closely mirror spending-based views of welfare effort. The correlation between total spending and the labor tax rate in the post-1985 period was 0.82; the corresponding spending-consumption tax correlation was 0.74. Labor tax rates were above 45% in Belgium, France, the Netherlands and Sweden, whereas they were less than 30% in Australia, Japan, New Zealand, the UK and the US. Consumption taxes were highest in the Nordic countries and lowest in Australia, Japan, Switzerland and the US.

The picture that emerges from these data with respect to tax regimes is complicated. Sweden is a high tax state across the board, whereas Switzerland is its low tax analogue. But other countries have interesting mixes of taxation. The UK has a very high capital tax rate but a very low labor rate, whereas France and the Netherlands are the opposite. Australia, Japan and the United States are all high capital tax-low consumption tax countries. More generally, there was essentially no correlation between (progressive) capital and (regressive) consumption taxes (-0.02). Higher capital tax rates were somewhat correlated with lower labor tax rates (-0.34), while there was a moderate correlation between labor and consumption rates (0.48).

We draw three conclusions from these spending and taxation data. First, government spending is not a good proxy for overall welfare state effort. Analysts should delve more deeply into the funding of the welfare state than has hitherto been the norm. Second, when thinking about the relationships between globalization and taxation, it seems reasonable to compare capital tax rates which (from the efficiency standpoint) should have decreased with more market integration against labor and consumption taxes which should have increased. Globalization should have made tax systems more regressive by shifting the burden away from mobile capital and onto immobile labor and increased reliance on regressive consumption taxes. Finally, the

combination of over time changes with cross-national differences in welfare effort means that any efforts to identify globalization effects on welfare state effort should analyze panel data. We now move on to such an analysis.

4. Methodology

The full data matrix used in this paper comprises 18 countries x 34 years (i.e. the maximum number of observations in the regressions is 612). Missing data, however, meant that we actually analyze panels of smaller and varying sizes depending on the country and year coverage of the relevant variables. In these regressions, the years of the first and last observations for each country time series were not always the same. However, we did not have any interrupted time series to take into account.

In recent years, considerable attention has been paid to mitigating the statistical problems generated by panel data for ordinary least squares (OLS) regression. We use panel-corrected standard errors (as implemented by Stata) and lagged dependent variables to deal with the problems of heteroskedasticity and autocorrelation and to take into account dynamics, as suggested by Beck and Katz [1995, 1996]. There is, however, an additional methodological issue that should be discussed – fixed effects for different countries and years.

The norm among economists is to use country dummy variables in panel regressions that pool data over time for different countries (the so called LSDV model – least squares dummy variable). For example, Rodrik's [1997] analysis of trade and government spending in the OECD includes country fixed effects. This acknowledges that there may be inherent features of different countries that affect the outcomes of interest, but that are not accurately captured by any of the

included regressors. More technically, if we cannot reject the null hypothesis that the intercepts for each country time series in the panel are the same, one should include country dummy variables to take this into account.

In welfare state research, however, studies tend not to control for country fixed effects [Hicks and Swank 1992, Huber, Ragin and Stephens 1993]. One reason often given is that some regressors tend to vary more across countries than over time within countries. We consider this a mistake. Panel regressions, by definition, weight over-time and cross-unit variance equally. If a regressor varies only little over time and but greatly across countries, and if the inclusion of country dummies has a substantial effect on the direction, magnitude or statistical significance of the variable, the appropriate response is not to exclude the country dummies. Rather, the analyst should conclude that the relevant variable is part of the underlying historical fabric of a country that affects the dependent variable and that is not captured by any of the time and country-varying regressors. When these fixed effects are taken into account, the apparent effects of year-to-year fluctuations in the variable could well be very different than when country dummies are not included.

Introducing country fixed effects is particularly important when analyzing the welfare state because at least two regressors that are standard in most models – government partisanship and trade exposure – tend to vary more across countries than over time within them. With respect to trade, for example Cameron [1978] and Katzenstein [1985] both argue that there is a historical relationship between trade and welfare state effort. Small, trade dependent economies tended to have production that was concentrated in relatively few sectors in the early 20th century. This was conducive to rapid unionization, which in turn was fertile ground for building strong labor and

social democratic parties. Finally, these parties tended to build big welfare states in the post WWII period. This is a very different argument from Ruggie's [1983] notion of embedded liberalism. For Ruggie, the American welfare state expanded immediately after World War II because the government chose to liberalize trade, and realized they had to compensate market losers directly for the dislocations liberalization generated.

These are obviously quite different arguments. One would like to be able to test them against each other. This is possible in a panel regression, but only if country fixed effects are included. Large and significant parameter estimates for small economies that have long been big traders would support the historical thesis; significant positive coefficients on the trade variable would support Ruggie's argument. Without the country dummies, however, the trade variable would be positive and significant and it would be impossible to assess the independent merits of the different arguments.

A similar type of reasoning suggests that panel regression should also include dummy variables to take into account time specific effects. If all the countries in the system are subject to common shocks in a given year, this should be taken into account through a series of year dummy variables lest these shocks contaminate the regressors of direct interest. This seems particularly important when one is analyzing fiscal policy in the past 30 years. Consider the following stylized facts about the early 1980s. Countries across the board in the OECD became more ideologically conservative irrespective of whether they were governed by the left or the right. But in the early 1980s, a number of left wing governments were removed because citizens blamed them for the deep recession following the second OPEC shock. In this period, government spending growth slowed down. In a panel regression without year dummies, the partisanship variable would likely

be highly significant and suggest that right wing governments cut spending. The inclusion of year dummies, however, might generate large negative coefficients for the early 1980s years, and render the partisanship variable insignificant.

Thus, we estimated a series of panel regression of the following general form:

$$WELF_{it} = b_1 WELF_{it-1} + \sum b_j GLOBAL_{jit} + \sum b_k CONTROLS_{kit} + \sum b_l COUNTRY_i + \sum b_m YEAR_{mt} + m_{it}$$

In this equation, the b's are parameter estimates; the subscripts i and t denote, respectively, the country and year of the observations; μ is an error term. WELF is the relevant dependent variable – total government spending, government consumption expenditures, social security transfers (all as %GDP), and effective rates of taxation on capital, labor and consumption. The vector of j GLOBAL variables represents the various indicators of integration into international markets used in the regressions – total trade (%GDP), low wage imports (%total imports), inflows and outflows of foreign direct investment (%GDP) and the international financial openness index.

X represents a vector of k control variables. Higher unemployment rates could be expected to put upward pressure on spending (particularly income transfers) and to be associated with lower tax rates. GDP growth in a given year should have been associated with higher spending/GDP ratios and lower capital and labor taxation (but higher rates of consumption taxation) due to stickiness in budgets. Higher dependency ratios are likely to be associated with higher levels of spending, and possibly with higher rates of taxation as well. Finally, we also included the portion of cabinet portfolios held by social democratic/labor parties and Christian democratic parties because these are commonly associated with greater welfare state effort [Hicks and Swank 1992, Huber, Ragin and Stephens 1993].

The regressions also include full batteries of $i-1$ country dummy variables and $t-1$ year dummies to control for unit and temporal fixed effects. The US, generally considered a welfare laggard across the board, is the excluded (reference) country in all the regressions. Thus, the coefficients on the country dummies represent how much higher or lower than the US a country's "equilibrium" welfare effort is (after the effects of all the other regressors is taken into account). 1961 and 1965, the first years for which the data are available, are the excluded year dummies in the spending and taxation regressions respectively. The coefficients on the reported year dummies thus reflect how much higher or lower welfare effort was in the given year than in the reference year (again, controlling for everything else in the equations).

5. Results

Government Spending

The government spending regression results are reported in Table 5. As expected, patterns of government spending were very sticky over time (the coefficients on the lagged dependent variables were over 0.9). The batteries of country and year dummy variables were also highly significant, and this demonstrates the importance of controlling for both unit and time fixed effects in analyses of this time. The control variables behaved more or less as expected. Higher growth was associated with less spending, betraying a classical countercyclical pattern. Similarly, unemployment tended to be correlated with higher spending, but this was only significant in the social security transfers equation. Higher ratios of dependents to those in work also tended to increase spending, but this effect was not statistically significant in the consumption spending equation.

Table 5 about here

In contrast with much previous research, neither of the government partisanship variables was statistically significantly associated with higher total government spending, nor with consumption expenditures, nor with social security transfers. Recall that a number of papers report support in panel data for Esping-Andersen's [1990] argument that Christian democracy is associated with larger transfer budgets and that social democracy is associated with more consumption spending on social services [Hicks and Swank 1992, Huber, Ragin and Stephens 1993]. We suspect that the basic reason our results are so different is that the effects of partisanship on spending are historical and take many years to materialize; year to year variations in partisanship seem not to affect spending in any clear or consistent way. Controlling for lagged spending levels certainly takes into account some of these historical dynamics. Moreover, the pattern of country dummy coefficients, which one can interpret as the historical "equilibrium" level of spending in a country relative to the (excluded US) when the effects of all other regressors are taken into account, is very interesting. Consider the total spending equation. If one includes neither lagged spending nor any fixed effects dummies (but with an $ar(1)$ correction), the left government coefficient was positive and significant at the .05 level, while that for Christian democracy was positive and almost significant at .1.⁷ But these partisan effects vanish using the full specification in Table 5.

With respect to the fixed effects in the total spending equation, the five largest positive country dummy variable parameter estimates were those for Belgium, Denmark, the Netherlands, Norway and Sweden. In turn, Denmark and Sweden had the highest dummy variable coefficients in the consumption spending equation, whereas the Netherlands and Belgium had the highest coefficients in the transfers equation. Denmark and Sweden have long been paradigmatic social

democratic welfare states, in which left-labor parties dominated politics for much of the postwar period. Belgium and the Netherlands are two leading examples of Christian democratic welfare states. Thus, our results do not suggest that partisanship doesn't affect welfare effort. Rather, partisanship is likely to have been an important historical element in the evolution of welfare state regimes in these countries. But the regressions in Table 5 do make clear that year-to-year changes in partisanship within countries are much less important than historical differences among them.

Turning to the globalization parameter estimates, the most startling set of results concern total trade. Recall that Hicks and Swank [1993] and Huber, Ragin and Stephens [1992] report support in their panel data for Cameron's [1978] argument that trade and government spending covary positively in the OECD. We find, however, that trade is consistently and negatively associated with government spending. Our finding is similar to those reported by Rodrik [1997: 62]. Why are Rodrik's and our results so different from previous studies? The simple answer is that Rodrik and we include the full battery of country and year dummies in our analysis, whereas Hicks and Swank and Huber, Ragin and Stephens do not control for these fixed effects.

We have already argued that the effects of government partisanship on spending are felt through the historical evolution of welfare state regimes, rather than year to year changes in the recent past. This seems to be even truer for trade. If one regresses trade on total government spending without the inclusion of a lagged dependent variable (but with an ar(1) correction) or fixed effects, its parameter estimate is 0.118 with a t-ratio of 8.5.⁸ Including a lagged dependent variable but not fixed effects renders the trade coefficient virtually zero and far from statistically significant.⁹ But the trade coefficient is negative and significant with the specification used in Table 5.

This pattern of results clearly suggests that trade is an important part of the evolution of a welfarist syndrome – precisely as Cameron [1978] and Katzenstein [1978] argued. The five countries with the largest country dummy variable parameters in the total spending equation are Belgium, Denmark, the Netherlands, Norway and Sweden. These countries have also been big traders for a long time. In 1960 (the year before our analysis begins), for example, the Netherlands, Belgium and Denmark had the three largest trade/GDP ratios in our sample, while Denmark ranked fifth and Sweden eighth. Of course, all are also countries with histories of either social democratic or christian democratic hegemony.

Why were short-term fluctuations in trade not associated with higher levels of government spending in the past thirty years? With respect to the compensation hypothesis, trade may not generate much demand for government compensation in the OECD because, unlike the LDCs, patterns of trade are not very volatile, or because the amount of inequality generated by trade in the OECD is small [Richardson 1995]. On other hand, one could argue that the efficiency costs of government spending re trade competitiveness are large. At this level of analysis, we can only conclude that short-term efficiency considerations seem to dominate compensation incentives with respect to trade. But we should note that the magnitude of this short term efficiency effect was quite small. An increase in trade of one standard deviation in the full sample – equivalent to 27.5 GDP points – would have cut total government spending by a little over 0.82 points of GDP. The corresponding figures for government consumption and social security transfers were 0.25 and 0.39 points, respectively.

The other globalization results in Table 5 are much weaker. Neither low wage trade nor foreign direct investment was significantly associated with any of the spending measures. Higher levels of international financial openness were associated with lower total spending, but this

parameter estimate was only significant at the .1 level. Moreover, the substantive effect of increased capital mobility was also small – a one standard deviation increase in the openness index would have reduced total spending by 0.22 points of GDP.

The final thing that should be noted about Table 5 concerns the year dummy variables. Above and beyond all the other effects in the regressions, it is clear that government spending spiked up in the aftermath of major downturns in the international business cycle (above and beyond the effects captured by the GDP growth and unemployment variables). In 1974 and 1975, for example, total spending was more than 2 points of GDP higher than in the reference year, 1961 (controlling for the effects of all other regressors), and about 1.5 higher than in 1973. Spending then declined somewhat until the next recession hit in 1980-1982. The same pattern was evident in the increased spending associated with the economic downturn in the early 1990s.

In sum, the evidence in Table 5 suggests three basic things about the political economy of welfare spending. First, cross-national historical differences matter far more than year-to-year variations for two variables highlighted in the welfare state literature – government partisanship and exposure to trade. Second, to the extent that globalization in the post-1960 period did exert an influence on welfare spending, the effects were more consistent with the efficiency view than the compensation perspective. Finally, the substantive magnitude of these globalization constraints, however, was quite small.

Rates of Taxation

The taxation results are reported in Table 6. In reading these results it should be recalled that variables that are associated with higher rates of capital taxation can be understood as increasing welfare effort because these taxes are highly progressive. Moreover in the context of

the globalization debate, positive parameter estimates in the capital tax rate equation on any of our indicators of market integration would be supportive of the compensation perspective over the efficiency view. But the converse is true for labor and consumption taxation, which are more regressive types of taxation. Here, positive globalization coefficients would support the efficiency thesis because they would mean that governments chose to increase more regressive forms of taxation as their economies became more international integrated.

Table 6 about here

Let us begin by discussing the control variables. All three of the effective tax rates were quick sticky over time (though the coefficients on the lagged dependent variables were somewhat smaller than in the spending regressions). Higher unemployment tended to be associated with lower tax rates, particularly capital taxes. Higher growth rates, were correlated with lower capital and labor tax rates, but with higher consumption taxes. There is some evidence that higher dependency ratios increased taxes, particularly for capital tax rates.

The year dummy variables were highly jointly significant in the capital and consumption tax regressions, but not quite significant at the .1 level for labor taxes (despite the fact that numerous individual dummies were significant at traditional levels). In the capital tax equation, rates increased (relative to the reference year, 1965) across during the recessions that followed the first and second oil shocks. – 1974-1977, 1980-1982. Unlike the spending equations, however, this pattern was not repeated in the early 1990s, when equilibrium rates declined. The pattern of year dummy variable coefficients in the labor tax rates equation suggests that the propensity of the OECD countries to tax labor (holding everything else in the equation constant) increased more or less steadily from the mid 1960s to the early 1990s. Given the joint insignificance of these dummies, however, we should not pay too much attention to them. Finally,

there was a general tendency for consumption taxes to rise from the mid 1960s to the mid 1980s, but the dummy variable parameter estimates for the subsequent years decreased again. Taken together, these data do not lend much support to the widespread notion that a broad-based ideological shift to the right swept the OECD in the 1980s.

The parameter estimates for the country dummy variables indicate the underlying propensity for countries to have higher or lower tax rates than the reference case of the US. In all the tax equations, these dummies were highly jointly significant, but the patterns are quite different from those in the spending equations. Most countries in the sample had lower equilibrium effective rates of capital taxation than the US. Sweden's rate was marginally higher than that in the US, whereas the UK's was more than 3.5 points higher. In contrast, Austria, France and Switzerland taxed capital at a rate that was more than 6 points lower than in the US. The pattern of country dummies in the labor tax equations is more familiar. Effective rates were more than 2 points higher than in the US in France, Germany, the Netherlands and Sweden, but they were more than 1 point lower in Australia and Japan. Finally, in the consumption rate equation, it is clear that the US relies less on consumption taxes than all other countries except Japan.

Thus, the parameter estimates for the country dummies in Table 6 generate a picture of the underlying tax structure in different OECD countries that defy simple labels of high and low tax regimes. The US is one of the OECD's heaviest taxers of capital, but among the least reliant on consumption taxes. Austria, France and Germany tend to tax capital at much lower rates than most countries do. All the European countries (except Switzerland) rely quite heavily on consumption taxes whereas none of the other OECD countries does. Once all of these year and country fixed effects were taken into account, it was again the case that year-to-year variations in

government partisanship did not have the effects commonly alluded to in the literature [Swank 1998a]. But unlike the spending case, no clear picture emerges of the historical evolution of tax regimes. More research into this question is warranted.

Now consider the effects of our battery of market integration variables on taxation. Many commentators assert that taxation represents the thin edge of the globalization wedge against big government. If globalization constraints are apparent anywhere, they should have been associated with lower rates of capital taxation and higher rates of labor and consumption taxation. There is no evidence in the data, however, that is consistent with this efficiency logic of globalization-induced changes in effective tax rates.¹⁰ The only significant trade effects were in the opposite direction – higher total trade and greater reliance on low wage imports were associated with lower effective consumption tax rates. Increasing trade by one standard deviation would have been associated with a 0.50 point reduction in the consumption tax rate; the corresponding effect for low wage imports was a rate reduction of 0.28 points.

Even more surprisingly, international financial openness was not associated with higher capital taxes. But its coefficient in the labor tax equation was significant – and negative.¹¹ Increasing financial openness by one standard deviation would have cut the effective labor tax rate by 0.27 points. Finally, foreign direct investment was associated with higher effective capital tax rates and lower labor tax rates, precisely the opposite of the conventional wisdom. An increase in foreign direct investment of one standard deviation would have led to a 0.62 point increase in the effective rate of capital taxation, and a 0.23 point cut in the corresponding labor tax rate. Thus, all the significant globalization parameter estimates in the tax equations suggest that the incentives for government to compensate losers through more progressive overall systems of taxation are stronger than the efficiency constraints to make taxation more regressive.

6. Globalization and Income Transfers

This paper has explored the empirical merits of two contending perspectives on the relationship between globalization and the welfare state. The efficiency perspective highlights the purported costs of government in an era of highly integrated markets. The compensation view focuses on the potential political consequences of integration in terms of increased inequality and insecurity. The efficiency approach predicts globalization-induced cuts in welfare effort, whereas the compensation thesis predicts no cuts and possible expansion.

The balance sheet from the empirical analysis in this paper is mixed. On the one hand, we found some evidence of globalization-constraints on government spending. But these were mostly concentrated in the effects of total trade, rather than the purportedly newer and more important manifestations of market integration such as imports from low wage economies, foreign direct investment and financial capital mobility. Once the historical relationship between trade, domestic political institutions and the welfare state is taken into account (using lagged dependent variables and country dummies), the marginal effect of greater exposure to trade in the period under analysis was to lower government spending (but the magnitudes of this effect were small). International financial openness was associated with lower total government spending, but not with lower spending on either component of the welfare state – consumption expenditures or social security transfers.

On the other hand, the evidence on effective rates of taxation was far more supportive of the compensation perspective than the efficiency view. Trade was not associated with lower

capital tax rates, but it was associated with small reductions in consumption taxes – the most regressive form of revenue generation. Foreign direct investment was associated with higher rates of capital taxation but lower rates of taxation on labor income. International financial openness was not correlated with higher capital tax rates, but it did have the effect of cutting labor taxes.

We are confident about the veracity of these empirical claims given the cautious methodological stance we have adopted. Nonetheless, our results do raise a series of questions about the underlying political economy of welfare state effort in the era of global markets. Does, and if so, by how much, does globalization increase inequality and insecurity? Does, and by how much does, the welfare state redistribute wealth and risk? Does, and by how much does, the welfare state harm macroeconomic performance? Do these relationships vary by the facet of market integration under consideration, and the type of welfarist policy? Further empirical analysis is required to understand the channels linking market integration to taxing and spending policies. We wish here to propose some speculative hypotheses that are consistent with the results in this paper.

Why does trade put downward pressure on welfare spending? Conventional economic reasoning would suggest that the macroeconomic benefits of trade are great – in terms of comparative advantage, scale economies and the like. Moreover, some scholars have argued that welfare state spending reduces growth [Barro 1998] and this effect should be more pronounced in more open economies. Thus, the efficiency costs of welfare spending are arguably quite high. On the other hand, there are good reasons to believe that the political dislocations associated with trade – and hence the incentives for governments to cushion them through greater welfare effort – are relatively small. Wood [1994] may be right that greater exposure to trade increases inequality

in the OECD, but most economists believe that the magnitude of this effect is limited [Richardson 1995]. Moreover, Rodrik [1997] has argued that trade does not greatly increase citizens' economic insecurity in the OECD because trade patterns in these countries are not very volatile.

Why does foreign direct investment and international financial openness not result in less welfare effort? Few would deny that foreign direct investment is a key driver of economic growth, even in the industrial democracies. The case for financial market integration is somewhat murkier. But the more relevant question is how can countries attract and keep footloose capital if they preside over large welfare states? One answer is that the benefits of the the welfare state are substantial. Government can provide a range of collective goods that are undersupplied by the market. These certainly include things like human capital accumulation, physical infrastructure and research and development – as new growth theory suggests. But one could also argue that social stability and support for the open international economy itself is also an important collective good that governments can help maintain through large welfare state effort [Alesina and Perotti 1996, Garrett 1998b]. This seems all the more plausible where the specter of short-term market volatility is powerful, as is clearly the case with respect to financial markets.

But these speculations should be examined in future research. The basic objective of this paper has been to show that the welfare state-globalization nexus is more nuanced than either simplistic efficiency or compensation theses would suggest. Globalization has not induced a pervasive race to the bottom in welfare state regimes. Nor have governments responded to market integration by increasing their welfare state effort across the board. The reality lies somewhere between these two extremes, and scholars would be well served by comparing the political

economy of different facets of globalization and different aspects of welfare state effort, rather than trying to make grandiose generalizations.

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Table 1. Compensation, Efficiency and the Globalization-Welfare State Nexus

Dependent variable	Total government spending	Government consumption expenditures	Social security transfers	Capital tax rate	Labor tax rate	Consumption tax rate
Independent variables						
Total trade	- efficiency	- efficiency	- efficiency	NS	NS	- compensation
Low wage imports	NS	NS	NS	NS	NS	- compensation
Foreign direct investment	NS	NS	NS	+ compensation	- compensation	NS
International financial openness	- efficiency	NS	NS	NS	- compensation	NS

The + and – signs denote the direction of relationships.

Efficiency denotes a significant parameter estimate implying that globalization was associated with less welfare state effort.

Compensation denotes a significant parameter estimate implying that globalization was associated with more welfare state effort.

NS denotes that the parameter estimate was not statistically significant at the .1 level.

Table 2. Post-1985 Economic Integration

	Total trade ^a	Low wage imports ^b	Foreign direct investment ^c	International financial openness ^d
Australia	36.0	21.4	3.3	11.2
Austria	75.6	14.2	1.0	12.1
Belgium	139.6	10.8	6.5	12.0
Canada	54.6	14.3	1.7	13.6
Denmark	64.2	13.3	1.9	13.0
Finland	52.8	21.8	2.1	11.4
France	43.4	16.9	2.8	11.9
Germany	49.8	18.9	1.6	14.0
Ireland	115.2	9.2	0.3	11.3
Italy	40.7	17.9	0.9	12.3
Japan	18.4	34.6	1.0	10.6
Netherlands	100.1	12.8	5.6	14.0
New Zealand	55.7	15.3	.	12.8
Norway	70.9	13.7	2.1	11.6
Sweden	61.2	11.5	3.6	11.8
Switzerland	70.8	8.9	4.2	13.0
United Kingdom	51.1	15.6	5.3	14.0
United States	20.9	34.3	1.4	13.8

Data are averages for 1986-1994 or last available year.

- a. Value of exports plus imports (%GDP). *OECD Historical Statistics, 1960-1994*.
- b. Imports from non-OECD countries excluding OPEC (% total imports). *OECD Historical Statistics, 1960-1994*.
- c. Inflows plus outflows of foreign direct investment (%GDP). *IMF Balance of Payments Statistics* (various).
- d. 0-14 index, with higher scores denoting more openness [Quinn 1997].

Table 3. Post-1985 Government Spending

	Total spending	Government consumption	Social security transfers
Australia	37.8	17.8	10.0
Austria	51.4	18.5	20.6
Belgium	57.4	15.2	23.9
Canada	48.0	20.3	13.3
Denmark	59.8	25.4	18.5
Finland	51.8	21.9	18.8
France	51.5	18.7	22.0
Germany	47.4	19.9	15.6
Ireland	45.2	16.0	15.5
Italy	53.0	17.1	18.2
Japan	32.7	9.4	11.4
Netherlands	58.9	14.9	25.8
New Zealand	.	16.2	.
Norway	53.5	20.8	18.2
Sweden	64.1	27.2	21.1
Switzerland	32.6	13.6	14.8
United Kingdom	43.4	21.0	13.3
United States	36.9	17.8	11.6

All spending data from OECD, *Historical Statistics 1960-1994*.

Table 4. Post-1985 Effective Tax Rates

	Capital	Labor	Consumption
Australia	47.4	18.2	8.5
Austria	22.5	40.4	21.1
Belgium	36.3	47.7	16.4
Canada	42.2	29.7	12.5
Denmark	34.7	44.3	35.7
Finland	45.3	34.0	30.5
France	25.8	45.8	19.5
Germany	28.1	42.4	15.7
Ireland	.	.	.
Italy	28.6	41.4	14.2
Japan	49.9	27.5	5.5
Netherlands	31.2	51.9	18.5
New Zealand	36.6	25.5	17.6
Norway	38.7	39.8	35.5
Sweden	62.4	50.4	24.7
Switzerland	28.2	33.0	8.2
United Kingdom	56.9	25.6	16.8
United States	41.0	28.9	4.8

Data from Mendoza [1997] and are averages for 1986-1992 or the latest available year. See the text for definitions of the effective tax rates.

Table 5. Government Spending, 1961-1994

	Total spending ^a	Government consumption ^b	Social security transfers ^c
Spending t-1	0.911***	0.911***	0.939***
Unemployment ^d	0.033	-0.019	0.047***
Economic growth ^e	-0.362***	-0.121***	-0.157***
Dependency ratio ^f	0.097*	0.009	0.057***
Left cabinet portfolios ^g	-0.003	0.000	0.000
Christian Democratic cabinet portfolios ^h	-0.005	-0.002	-0.002
Trade ⁱ	-0.030***	-0.009***	-0.014***
Low wage imports ^j	0.023	0.000	0.008
Foreign direct investment ^k	0.006	-0.022	-0.005
International financial openness ^l	-0.095*	-0.004	-0.004
Australia	0.775*	0.217	0.276
Austria	3.843***	0.651***	1.770***
Belgium	5.941***	1.039***	2.687***
Canada	2.517***	0.636***	0.763***
Denmark	4.061***	1.248***	1.408***
Finland	2.820***	0.717***	1.376***
France	2.367***	0.365***	1.137***
Germany	3.210***	0.675***	1.154***
Ireland	3.450***	0.830***	1.248***
Italy	3.153***	0.440**	1.198***
Japan	0.980**	-0.386**	0.871***
Netherlands	5.404***	0.767***	2.533***
Norway	4.155***	0.923***	1.831***
Sweden	4.412***	1.272***	1.543***
Switzerland	2.029***	0.022	1.526***
United Kingdom	1.904***	0.692***	0.671***
1962	0.058	0.173	-0.703***
1963	-0.141	0.084	-0.753***
1965	0.283	0.060	-0.789***
1966	0.047	0.162	-0.492*
1967	0.855**	0.349**	-0.736***
1968	0.840**	0.200	-0.525**
1969	0.549	0.120	-0.409
1970	0.599	0.323**	-0.500**
1971	0.694*	0.485***	-0.527**
1972	0.694*	0.207	-0.629***
1973	0.487	0.167	-0.324
1974	1.808***	0.671***	-0.549**
1975	2.600***	0.940***	-0.181

Table 5. Government Spending, 1961-1994

1976	1.204**	0.372**	0.293
1977	1.216**	0.305*	-0.209
1978	1.620***	0.397**	-0.389**
1979	1.580***	0.351*	-0.225
1980	1.524***	0.651***	-0.403***
1981	2.182***	0.540***	-0.541***
1982	1.958***	0.413**	-0.053
1983	1.413**	0.302	-0.171
1984	1.317**	0.137	-0.413**
1985	1.846***	0.483**	-0.576***
1986	0.974	0.307	-0.400**
1987	0.901	0.280	-0.511***
1988	0.897	0.108	-0.462***
1989	0.778	0.150	-0.489***
1990	2.117***	0.621***	-0.567***
1991	2.163***	0.647***	-0.166
1992	2.204***	0.519**	-0.032
1993	1.943***	0.169	0.190
constant	0.040	1.499*	-0.798
Obs.	529	531	522
panel	17x32	17x32	17x32
F-test country dummies	0.000	0.000	0.000
F-test year dummies	0.0000	0.0000	0.0000
X ²	chi2(57) = 52393.09	chi2(57) = 54827.06	chi2(57) = 67815.75

Regressions estimated using Stata xtglsl with panel corrected standard errors. The excluded (reference) country is the United States; the excluded year was 1961.

* p<.1; ** .01<p<.05; *** p<.01

All data from *OECD Historical Statistics, 1960-1994* except where specified.

- e. Current government disbursements plus gross capital formation and purchases of land and intangible assets (%GDP).
- f. Government final consumption expenditure (%GDP).
- g. Social security benefits for sickness, old age, family allowances, etc., social assistance grants and unfunded employee welfare benefits paid by general government (%GDP).
- h. Unemployment rate.
- i. Per capita economic growth rate.
- j. % of total population under 15 or over 64.
- k. % of cabinet portfolios held by left parties [Swank 1995].
- l. % of cabinet portfolios held by Christian democratic parties [Swank 1995].
- m. Value of exports plus imports (%GDP).
- n. Imports from non-OECD countries excluding OPEC (% total imports).

Table 5. Government Spending, 1961-1994

- o. Inflows plus outflows of foreign direct investment (%GDP). *IMF Balance of Payments Statistics* (various).
- p. 0-14 index, with higher scores denoting more openness [Quinn 1997].

Table 6. Effective Rates of Taxation, 1965-1992

	Capital	Labor	Consumption
Tax rate t-1	0.697***	0.805***	0.808***
Unemployment	-0.336**	-0.034	-0.051
Economic growth	-0.600***	-0.086***	0.062**
Dependency ratio	0.416*	0.075	0.011
Left portfolios	0.008	0.003	0.000
Christian Democratic portfolios	0.025	0.001	0.000
Trade	-0.032	0.018	-0.018*
Low wage imports	-0.071	0.004	-0.032**
Foreign direct investment	0.418**	-0.153**	-0.007
International financial openness	-0.019	-0.117**	-0.005
Australia	-1.550	-2.777***	0.424
Austria	-7.350***	0.569	3.315***
Belgium	-0.931	1.383	3.642***
Canada	0.274	-0.499	1.316**
Denmark	-2.076	1.985**	5.913***
Finland	-0.069	-0.136	4.674***
France	-6.192***	2.119***	2.602***
Germany	-4.968***	2.056***	2.192***
Italy	-3.712**	1.944***	1.651***
Japan	1.206	-1.004**	-0.138
Netherlands	-3.070	3.393***	3.459***
Norway	-3.058	0.249	5.957***
Sweden	0.506	2.589***	3.551***
Switzerland	-7.663***	-0.223	0.521
United Kingdom	3.555**	-0.865*	2.310***
1966			-0.643
1967	1.350	0.233	-0.536
1968	0.967	0.224	-0.519
1969	3.765**	0.931*	0.211
1970	3.032*	0.478	-0.084
1971	0.270	0.153	0.005
1972	2.161	0.653	-0.560
1973	2.871*	0.627	-0.728*
1974	4.745***	0.993*	-0.989***
1975	2.601	1.039*	-0.756**
1976	4.787***	1.624***	-0.048
1977	5.334***	1.335**	-0.174
1978	2.620	1.057*	-0.187

Table 6. Effective Rates of Taxation, 1965-1992

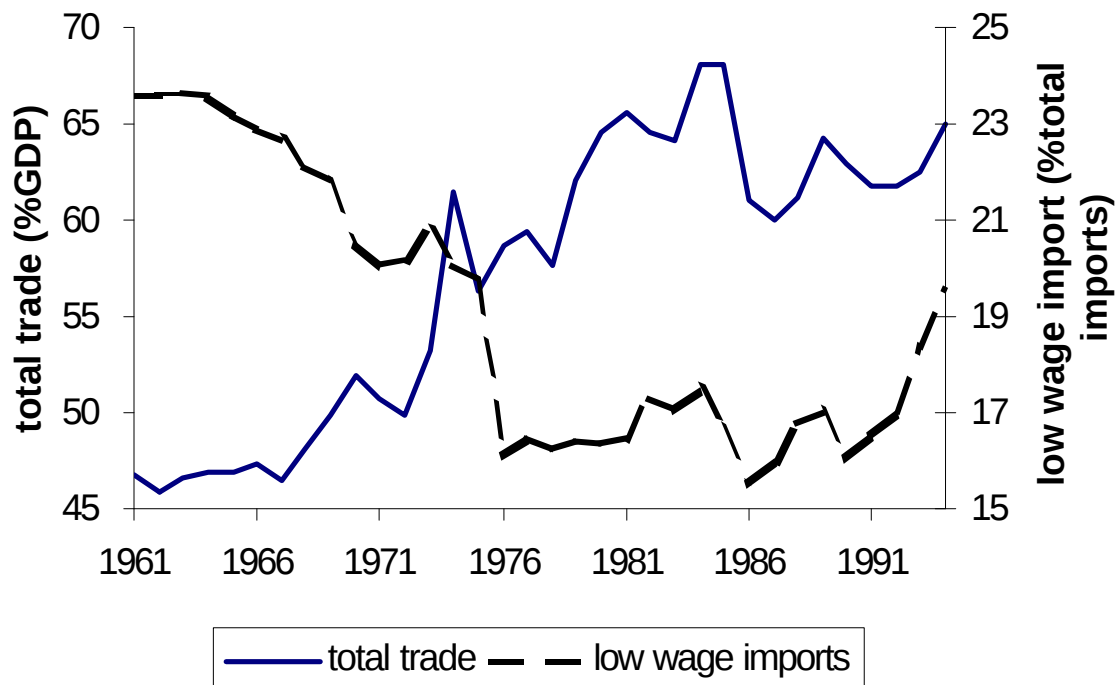
1979	3.415**	1.423**	-0.187
1980	6.178***	1.164*	0.285
1981	6.610***	1.544**	0.318
1982	5.116***	1.454**	0.061
1983	3.529*	1.851***	0.476
1984	6.900***	1.824***	0.676**
1985	6.788***	2.241***	0.319
1986	7.589***	2.457***	0.289
1987	5.252***	2.392***	0.252
1988	6.119***	2.605***	0.145
1989	5.040**	2.227***	0.042
1990	5.420***	2.239***	-0.098
1991	4.619**	2.408***	
1992	2.237	2.796***	
constant	-0.277	2.926	2.253
Obs.	337	337	355
panel	16x27	16x27	16x26
F-test country dummies	0.0000	0.0000	0.0000
F-test year dummies	0.0000	0.1123	0.0003
X ²	chi2(51) = 5131.52	chi2(51) = 38100.13	chi2(50) = 43202.62

Regressions estimated using Stata xtgl with panel corrected standard errors. The excluded (reference) country is the United States; the excluded year was 1961.

* p<.1; ** .01<p<.05; *** p<.01

All tax data from [Mendoza 1997]. See the text for definitions of the effective tax rates.

Figure 1. Trade, 1961-1994



**Figure 2. International Finance and Production,
1962-1993**

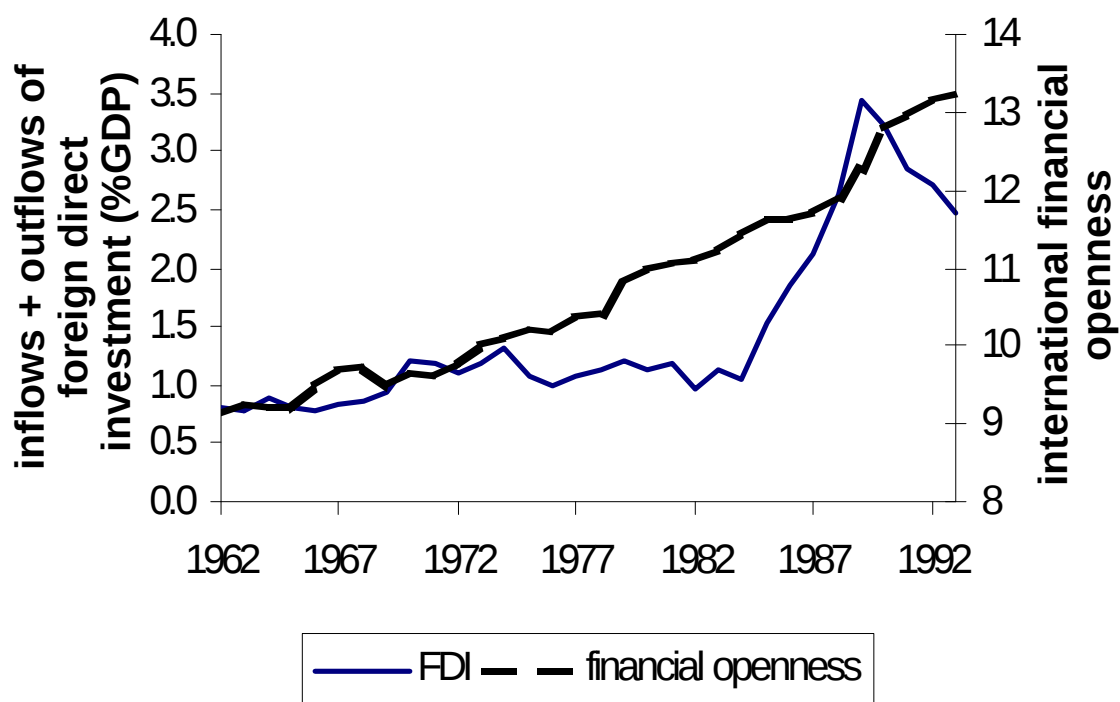


Figure 3. Government Spending, 1961-1994

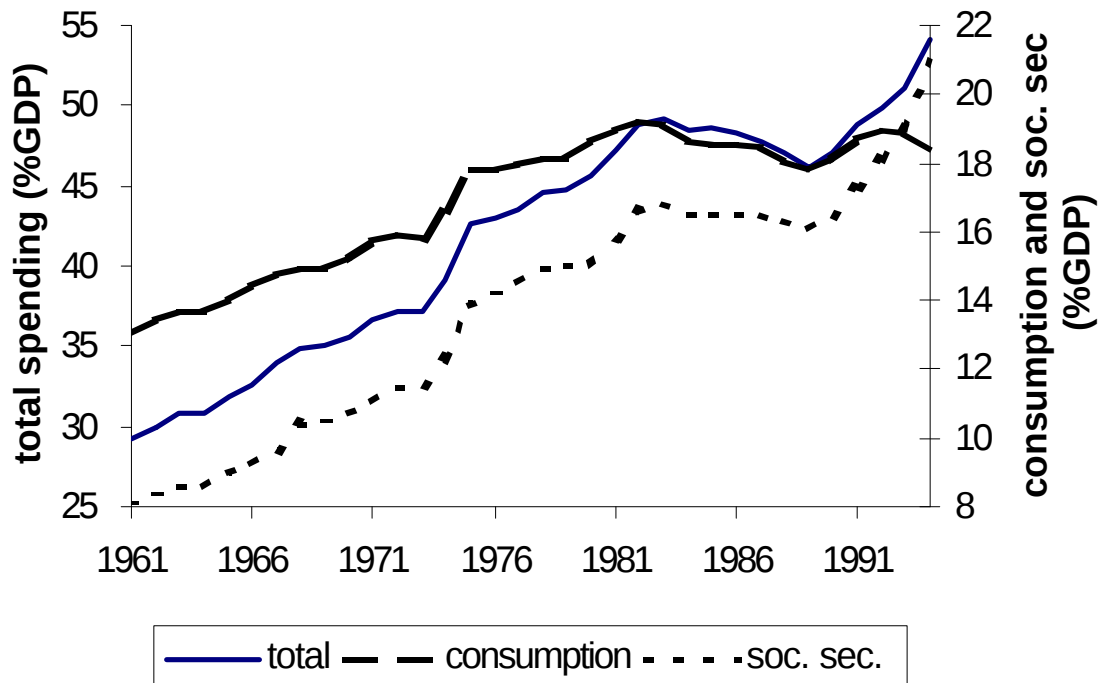
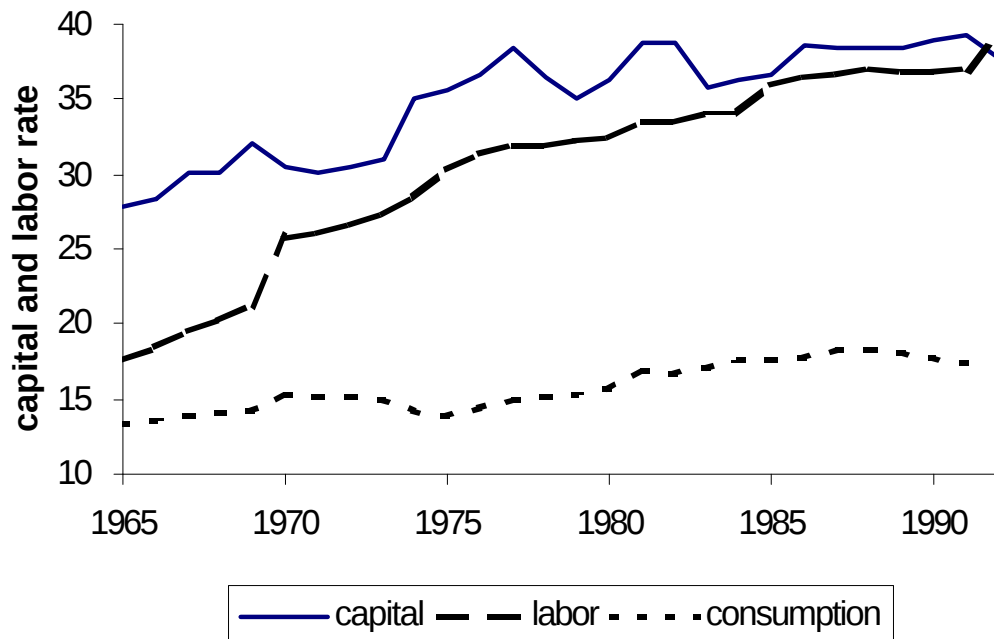


Figure 4. Effective Tax Rates, 1965-1993



Endnotes

¹ The more prominent commentators positing dire effects of globalization on domestic politics and society, including the welfare state, are Friedman [1999], Greider [1997] and Yergin and Stanislaw [1998]. Academic studies tend to be somewhat more sober, but often reach similar conclusions. See for example, Hirst and Thompson [1996], Kurzer [1993] and Strange [1996].

² The countries comprise all OECD members for which all the relevant data are available: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States.

³ These comparisons come with a *ceteris paribus* qualifier. Capital taxes, for example, can be made less progressive by allowing firms generous depreciation schedules. The number and thresholds for different tax brackets affect the progressivity of labor income taxes. Exempting staples reduces the regressivity of consumption taxes. Nonetheless, the ranking of taxes presented here is likely generally to hold.

⁴ Once the lagged dependent variables were included, the residual serial correlation was not high enough to warrant an AR(1) correction.

⁵ To take a very simple example, it is not surprising that capital flows took off in the mid 1970s. The end of the Bretton Woods fixed exchange rate regime meant that hedging in financial markets was essential to counteract potential volatility in exchange rates. More generally, increases in capital flows may only reflect an uncertain climate for investment. Conversely, there could be no capital flows at all in a truly global financial market, if all capital was already efficiently invested.

⁶ There are two other candidate measures – savings-investment correlations and covered exchange rate differentials. The savings-investment approach is better used to describe financial integration for a group of countries. It is much less well suited to analyzes such as this one that are interested simultaneously in both cross-national and over-time variation. Covered interest rate differentials do not suffer from this problem, but the data are only available for a restricted set of countries and years.

⁷ The model regressed unemployment, per capita income, the dependency ratio, left portfolios, Christian democratic portfolios and trade on total spending using Stata's `xtgls` with the `pcse` and `corr(1)` options. The parameter estimate and standard error for the left government variable were 0.011 and 0.004, while those for Christian democracy were 0.016(0.011). Full details are available from the authors.

⁸ This is the same equation reported in note 7.

⁹ The coefficient and standard error were 0.002 and 0.003. Full details are available from the authors.

¹⁰ This is also true of the only other systematic study of the relationship between globalization and taxation in the OECD of which we are aware [Swank 1998a].

¹¹ These results are different from those reported by [Rodrik 1997: 64]. One potential reason for the difference is that Rodrik did not include lagged tax rates in his equations.