Globalization, Veto Players, and Welfare Spending

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Summary:

This paper examines the role of globalization and its interaction with domestic political institutions (veto players) in shaping welfare spending in seventeen advanced industrial countries from 1966 to 1994. My argument is that although globalization forces states to reduce welfare spending, the states’ ability to do so decreases when there are more veto players that can change the status quo in domestic political institutions. My findings indicate that globalization, measured by trade and capital openness, pressured states to reduce their welfare spending. However, the extent to which a state responded to these pressures depended critically on the number of veto players whose agreement was required to put welfare reform into effect.

Key words: globalization, market integration, trade openness, capital openness, domestic political institutions, veto players, and welfare spending.

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Because the world market has become deeply integrated in recent decades, most political economy literature has insisted that globalization should force states to rollback social welfare (Aspinwall 1996; Cerny 1996; Clayton and Pontusson 1998; Drache 1996; Gill and Law 1988; Grieder 1997; Huber and Stephens 1998; Kurzer 1993; McKenzie and Lee 1991; Mishra 1993; Pfaller, Gough, and Therborn 1991; Ross and Trachte 1990; Strange 1996; Van Kersbergen 2000). According to this literature to compete with less developed countries (LDCs) and to attract internationally fluid investments, states have to cut inefficient taxes and then reduce traditional welfare expenditures.

However, welfare spending in most industrialized countries seems to have increased over time. To explain this unexpected phenomenon, several scholars maintain that greater openness poses economic risks and volatility that increase demands for welfare spending as compensation (Cameron 1978; Garrett 1998; Katzenstein 1985; Rodrik 1998; Stephens 1979). Still, there is little economic theory or empirical evidence that supports the causal link between globalization and greater domestic economic volatility. Rather, existing theory and empirical studies show the opposite relationship: the integration of the world market renders the domestic economy less volatile. The falsity of the central premise in the compensation argument casts serious doubt on the causal hypothesis concerning the relationship between globalization and increases in welfare spending.

Rejecting the compensation argument, a few scholars conclude that globalization is not as extensive as popularly believed (Iversen and Cusack 2000; Lewis 1995). While they agree with the economic theory that globalization will eventually pressure governments to reform social welfare, they believe that globalization is not extensive
enough to induce states to reform social welfare. While globalization may not be extensive enough to “overwhelm” the effects of other determinants and to reduce the gross level of welfare spending, no one contests that international economic integration has greatly increased in recent decades. Rather than minimizing the effects of globalization or denying its existence, then, we should shift our attention toward why globalization cannot affect states as much as economists expect.

To examine the puzzling relationship between globalization and welfare spending, I believe that we must consider the effects of domestic political institutions that mediate their relationship. While globalization can pressure states to reform their welfare spending, globalization cannot be a sufficient condition for cutting welfare spending. In fact, it is politically difficult to cut extant welfare expenditures because pivotal actors within the legislative process have to agree on legislative proposals for welfare reform. Therefore, how the pivotal actors or domestic political institutions influence the legislature is equally important in explaining changes in welfare policy.

In recent literature in comparative politics, George Tsebelis (1995; 1999; 2000; 2002) emphasizes the role of “veto players” in policy changes. According to him, a veto player is an individual or collective actor whose agreement is required for a policy change (Tsebelis 1995; 1999; 2000; 2002). A greater number of veto players in states make it more difficult for states to alter their existing policies. This theory of policy change provides us with a key institutional characteristic that can illuminate the puzzling relationship between globalization and welfare spending. While globalization pressures states to reform welfare spending, the extent to which states can respond to this pressure turns on the number of veto players in the states.
For this reason, my research plan is to examine the role of globalization and its interaction with domestic political institutions (veto players) in shaping social welfare spending in seventeen advanced industrial countries. My argument is that although globalization forces states to reduce welfare spending, the states’ ability to do so decreases as the number of veto players required to change the status quo increases. Globalization pressures states to reduce their welfare expenditures. Nonetheless, it does not necessarily result in such policy changes. If a state has a large number of “veto players” who must agree to change the status quo, a veto player whose interests may suffer can easily block the shift in policy. Therefore, even though globalization itself may pressure the governments to rollback welfare compensation, its effect is mediated by the number of veto players. A large number of veto players reduce the likelihood that welfare reform can actually occur.

I have organized this paper into five parts. First, I review the controversy over the relationship between globalization and social welfare. Second, I introduce the veto-player theory and analyze how the domestic political institutions (veto players) interact with globalization to influence welfare expenditures. Third, I shall spell out the models and data that I used to construct my argument. Fourth, I shall present the results of the lagged regressions analyzing the impact of globalization and its interaction with domestic political institutions (veto players) on welfare expenditures. Finally, I shall consider the implications of the results.
I. Globalization and Welfare Spending

As globalization increased, many commentators have argued that globalization has imposed economic and political constraints on welfare spending. According to this view, the internationalization of markets of goods, services, and capital forces states to rollback social insurance benefits and implement efficiency-oriented reforms for social services (Aspinwall 1996; Cerny 1996; Clayton and Pontusson 1998; Drache 1996; Gill and Law 1988; Grieder 1997; Huber and Stephens 1998; Kurzer 1993; McKenzie and Lee 1991; Mishra 1993; Pfaller, Gough, and Therborn 1991; Ross and Trachte 1990; Strange 1996; Van Kersbergen 2000). This view is based on the neo-liberal economic theory that if the government does not interfere, the market itself will select the most efficient institutional solutions among existing alternatives, and that most types of government intervention, except for those related to the provision of public goods, law and order, and property rights, are inimical to the operation of markets. This literature emphasizes that as market integration increases and the national economy merges into the world market, government intervention produces harmful effects and thus, governments feel pressure to scale back their redistributive policies.

In particular, expansion in trade and capital mobility under the globalized world market limits the ability of governments to maintain generous and comprehensive social protection. First, as the national market is more deeply integrated into the world market, manufacturers in advanced industrial countries have to compete with those in Less Developed Countries (LDCs). In competition with LDCs, if investors and producers operate under more generous welfare regimes, they cannot compete as effectively because the existence of strong social welfare implies a higher tax burden, more
regulatory barriers, labor-market rigidities, and a less docile labor movement (Steinmo 1994). As such, as trade openness increases competitive pressures on exposed sectors, states have to pay more policy attention to the competitive needs of investors and producers in the tradable sectors services. Therefore, business interest associations and their spokepeople in the welfare state have frequently argued that “welfare state costs” harmed trade competitiveness (Swank 2002). Thus, policy makers in open economies encountered pressures for reducing social security tax burdens on domestic producers to lower labor costs and facilitate price competitiveness of exports (Drache 1996; Pfaller, Gough, and Therborn 1991).

As capital mobility increased, on the other hand, states have to compete to retain and attract internationally fluid investment. Because mobile asset holders can shift across national borders pursuing the most profitable rate of return on investment, support-maximizing and revenue-seeking governments have to increase business confidence and produce investment incentives. Therefore, under the international capital mobility, governments encourage international firms and financial institutions to remain in the domestic economy alleviating the burdens of high labor costs or corporate taxes, inflationary pressures, and economic inefficiency under welfare states (Aspinwall 1996; Cerny 1996; Gill and Law 1988; Greider 1997; McKenzie and Lee 1991; Ross and Trachte 1990; Strange 1996).

Likewise, most governments in the global economy, irrespective of their ideological or programmatic positions, encountered pressures to reduce social insurance expenditures and pursue market-oriented reforms of social services. During the 1980s and 1990s, governments in Britain, Sweden, German, etc., regardless of their ideological
orientation, have often reduced the generosity of benefits, tightened program eligibility, and implemented cost controls in health and social services (Swank 2002). Moreover, these efforts to restrain the welfare state have occurred when the need for social protection has risen (Clayton and Pontusson, 1998).

However, contrary to the conventional economic expectation, welfare spending in most developed countries seems to have actually increased over time (See Figure 1). To explain this unexpected result, several scholars who oppose the neo-liberal economic view argue that globalization increases welfare spending (Cameron 1978; Garrett 1998; Katzenstein 1985; Rodrik 1998; Stephens 1979). According to them, although greater liberalization and openness in trade and investment may promise aggregate economic benefits, these factors also make the distribution of incomes and jobs across firms and industries unstable, thereby increasing social dislocation and economic insecurity. These burdens force the government to indemnify directly or indirectly workers and firms from the risks of openness. Through the use of a large public sector and welfare spending, therefore, governments in open economies try to smooth business cycles, lessen insecurities and risks, and facilitate adjustments to the competitive pressures that arise from international market exposure (Garrett 1998).

Based on the globalization-volatility-compensation mechanism (hereafter “compensation argument”), several scholars demonstrate that high levels of trade openness and/or capital openness are systematically associated with the expansion of the public economy and social protection in developed democracies (Cameron 1978; Rodrik 1998; Garrett 1998). Compared to the neo-liberal economic view that suggests undifferentiated downward converging effects of globalization on social welfare, the
compensation argument purportedly constructs a more sophisticated causal mechanism between globalization and increases in social welfare spending and attracts students in political economy. However, this compensation argument does not establish any direct causal relationship between globalization and welfare: globalization does not directly cause increases in welfare spending, but rather it creates insecurity and volatility that stimulates domestic political demands for compensatory policies. Therefore, economic insecurity and volatility must be examined to verify the alleged causal link between globalization and increases in social welfare spending.

Still, the assumption that globalization causes higher insecurity and volatility in domestic markets is both theoretically and empirically problematic. First, few established economic theories claim that economic openness causes volatility. Rather, economic openness is supposed to reduce risk and volatility in domestic economies. When domestic producers can easily gain access to international markets, they can reduce their risks when domestic demands slow down. In the same way, when domestic consumers can access international markets, they can reduce their consumption risks when domestic production slows down. Likewise, globalization can actually help smooth production and consumption volatility in domestic markets. Since the world market is much larger than domestic markets, countries that are integrated into the world market can also reduce insecurity and volatility that derives from country-specific economic shocks.

In fact, there are only a few cases where globalization can cause domestic market volatility. According to Torben Iversen and Thomas Cusack (2000), globalization can cause volatility only when international market volatility is greater than domestic market
volatility and/or when trade concentrates more than diversifies risk. However, they argue that there is no theoretical reason to believe that international market volatility is greater than domestic market volatility. They also insist that trade in fact reduces volatility associated with output and demand and benefits the domestic market as long as it occurs in supplementary products. Trade can increase volatility only if specialization occurs in more complementary products since countries will then have similar cycles. However, even when specialization occurs in complementarities, if trade occurs across national markets that are subject to different cycles, trade will actually lead to lower overall volatility. Since most trade within the OECD is intra-industry and occurs across numerous national markets, Iversen and Cusack (2000) claim that there is little reason to believe that trade is associated with more volatility.

There are also few plausible empirical studies that establish the causal mechanism between globalization and domestic market volatility. Rodrik (1997) examines this alleged causal link with a cross-sectional regression using about 100 countries between 1960 and 1992 and shows that external risks, measured not by openness but by trade volatility, increased income and consumption volatility. However, by measuring external risks with trade volatility, he shows not a direct relationship between openness and volatility but rather shows that external volatility is positively associated with domestic economic volatility. On the other hand, Iversen and Cusack (2000) examine the direct relationship between export dependence and manufacturing volatility among sixteen OECD countries between 1970 and 1993 and conclude that no relationship exists between export dependence and any of their measures of volatility: volatility in output, employment, and wages. Moreover, Kenneth Sheve (2001) finds the opposite result:
trade openness is associated with “less” volatility in his test using eighteen OECD countries between 1966 and 1994.

Based on these results, it is certainly intriguing that a number of papers have tested the indirect relationship between globalization and increases in social welfare and found such a relationship to exist. It is highly questionable whether such a relationship really exists when other possible determinants of welfare policy are appropriately controlled. Iversen and Cusack (2000), for example, find not only that Garrett’s (1998) results do not appear to support the compensation argument but also that the statistical significance of the positive relationship between globalization and welfare spending in the Garrett’s (1998) empirical tests is highly sensitive to the precise specification of the control variables. In sum, there is no theoretical or empirical evidence that verifies the link between globalization and domestic economic volatility. The falsity of the key premise in the compensation argument casts serious doubt on its causal hypothesis concerning the relationship between globalization and increases in welfare spending.

Rejecting the compensation argument, a few scholars even insist that globalization is not as extensive as popularly believed (Iversen and Cusack 2000: Lewis 1995). While they agree with the economic theory that globalization will eventually influence states’ policy decisions, they argue that globalization is not extensive enough to create large or noticeable economic changes and to constrain the macroeconomic or microeconomic sovereignty of any country. Even if trade with developing countries were to induce distributional conflicts, such trade is so small compared with the commerce with other developed countries, that globalization does not really impact welfare spending in most industrialized countries (Iversen and Cusack 2000). Karen Lewis
(1995) also argues that despite increasing concern about capital mobility, domestic investors continue to hold almost all of their wealth in domestic assets.

Similarly, the increases in welfare spending have raised serious doubts about the viability of neo-liberal economic theory in explaining the relationship between globalization and welfare spending and have precipitated controversy over whether globalization constrains, spurs, or has little impact on welfare spending. While the compensation argument that globalization actually stimulates welfare spending sounds plausible, as I explained above, there is no theoretical and empirical evidence that proves its globalization-volatility-welfare compensation mechanism. In fact, this literature seems to be inspired by the mere fact that both globalization and welfare spending have increased together.

Still, this time-varying bivariate correlation between globalization and welfare spending suffers from two major limitations. First, the impact of globalization cannot be assessed simply by monitoring changes in welfare spending. There has always been considerable variation in the extent to which different countries are integrated into the world market. Second, demographic or economic conditions that are not included in the bivariate correlation can affect welfare spending. The composition of welfare spending can be altered in two different ways. First, the current government can deliberately alter welfare spending by changing the level of spending or by shifting the expenses from elsewhere to welfare spending or vice versa. Second, welfare spending can be automatically altered by the changes in demographic and economic conditions because existing social security legislation specifies the beneficiaries. For instance, increases in the aged population and unemployment rate can affect the composition of welfare
spending because existing social security legislation already specifies the beneficiaries who are entitled to receive pensions and unemployment benefits. Figure 2 shows that both the aged population and unemployment rate has rapidly increased in recent decades. It is likely that welfare spending is driven more by demographics and the business cycle than by political conditions. While this does not mean that globalization is irrelevant to welfare spending, it does suggest that we must control for these relationships to isolate the effects of globalization on welfare spending.

Is the third argument, then, that globalization is not as extensive, as many students believe, convincing? While globalization may not be extensive enough to “overwhelm” the effects of other determinants and to reduce the gross level of welfare spending, no one challenges the claim that international economic integration has greatly increased in recent decades. Figure 3 obviously reveal that globalization has increased in recent decades. First, trade openness, measured by the amount of import and export as a share of GDP, has increased over time. Second, two indicators of capital openness, capital mobility, measured by the absence of capital control, and foreign direct investment, have increased dramatically in recent decades.

Rather than concluding that globalization is not in process, then, we should question why globalization does not influence welfare spending as much as neo-liberal economic theory anticipates. To answer this question, we must not overlook the fact that it is politically difficult to cut welfare expenditures. Even though globalization may pressure states to reform social welfare policies, globalization cannot be a sufficient condition for cutting welfare spending. Downward convergence of welfare spending depends on other factors of the strategic situation, especially on whether pivotal political
actors or institutions, which can change policies, can agree on whether to change the status quo. While most literature neglects this topic, we should not ignore the fact that not only the level of welfare expenditures but also their variation among countries has increased over time (See Figure 4). This increased variation of welfare expenditures helps us solve our problem: countries may respond to the same external pressures from globalization in different ways. Consequently, we should first understand the institutional factors that mediate the relationship between globalization and welfare spending.

II. Globalization, Veto Players and Welfare Reform

Institutions are important because once a particular course of action for an institutional procedure has been initiated, it becomes progressively more difficult for subsequent governments to alter the course of the original institutional path. Institutions are also important because they mediate between social demands and policy decisions and affect whether interest groups can achieve their objectives. Since a state is essentially a set of institutions that process pressures from economic interests and organized groups and produce binding decisions or policies, there has been increasing scholarly interest in the nature of institutions that levers economic interests and organized groups in policy battles (Huber, Ragin, and Stephens 1993).

In current comparative politics literature, George Tsebelis (1995) focuses on how the nature of domestic political institutions affects the ability of states to alter (either increase or decrease) policy. Tsebelis (1995) especially underscores “veto players” as a measure of domestic political institutions that affect policy change. In his definition, a
veto player is an individual or collective actor whose agreement is required for a policy change. Since veto players can block or water down policy proposals, increasing the number of veto players disperses decision-making authority in a state and limits the extent to which demands for altering the status quo will actually influence policy decisions (Tsebelis 1995; 1999; 2000).

To measure the number of veto players, Tsebelis (1995) divides “veto players” into institutional veto players and partisan veto players. Institutional veto-players are presidents and chambers of legislatures that are created by the state constitution. Because institutional veto players have formal veto power on policy issues, an increase in the number of institutional veto players reduces the possibility that policy change occurs. Partisan veto players are parties in governing coalitions. Because a coalition government is expected to have more difficulties in changing a policy than a single-party majority government, an increase in the number of partisan veto-players also reduces the extent that demands for shifting policy can be successful. According to Tsebelis (1995), although the higher number of institutional veto-players in a political system hinders policy change, if the same party or coalition of parties controls all the decision-making organizations, significant policy change can occur in the system (“congruence”). Therefore, both institutional and partisan veto players in a political system should be considered to measure the effective number of “veto players.”

The veto player theory provides us with a key institutional characteristic of domestic political institutions that influences the extent of policy change. Based on this theory, several scholars have studied important policy changes (Andrews and Montinola 2001a; 2001b; Bawn 1999; Claassen 2001; Crepaz and Moser 2002; Hallerberg and
Basinger 1998; 2001; Henisz 2001; O’Reilly 2001; Treisman 2000; Tsebelis 1999; 2002; Tsebelis and Chang 2001). While the existing literature successfully proves the individual effect of veto players on several policy changes, little literature has explored how veto players interact with globalization to affect welfare spending. To illuminate the puzzling relationship between globalization and welfare spending, however, we need to examine the interaction between globalization and veto players and the ways in which such players limit the effects of globalization.

When trade becomes more open, and capital becomes more mobile, states may feel pressure to reduce their welfare spending to maintain favorable macroeconomic performance. Even if globalization may affect states in the same way, the degree with which states can respond to the pressure should be different according to the number of veto players. States with one veto player will be able to react quickly to the pressure, while states with many veto players will respond more incrementally, if at all. Therefore, when globalization pressures states to reform welfare in the same ways, holding other determinants equal, the extent of welfare reform is most significant in states with the fewest veto players. For example, the United Kingdom, where only one party controls the government, has more room to reform welfare. On the other hand, the extent of welfare reform is smallest in states with the most veto players. For example, from 1986 to 1990, when five parties (the pentapartito) constituted most of the ruling coalitions, Italy had less opportunity to reform welfare.

Thus, although globalization may force states to reduce welfare spending, the states’ ability to do so decreases as the number of veto players required to change the status-quo increases. To understand why globalization could not affect welfare spending
as much as neo-liberal economic theory predicts, we therefore have to consider the role that domestic political institutions/veto players play in limiting the effects of globalization on welfare spending. My hypotheses, then, are:

Hypothesis 1. *Globalization pressures states to reduce welfare spending.*

Hypothesis 2. *The extent to which states can respond to these pressures depends on domestic political institutions (the number of veto players)*

### III. Models and Data for Analysis

In this paper, I build a series of regression estimates of welfare spending to delineate the effects of globalization and its interaction with domestic political institutions (veto players) on welfare spending. Because I cannot cover the full range of difference in welfare spending or provide country-by-country description here, I do not construct sophisticated simultaneous equation models that accurately reflect the complicated effects of domestic economic and political conditions. Instead, I am focusing exclusively on the patterns of change and stability in key aspects of globalization (trade and capital openness) and its interaction with domestic political institutions (veto players) across major OECD countries, controlling for important determinants of welfare spending.

In what follows, I plotted welfare spending as a share of GDP for seventeen advanced countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United Kingdom between 1966 and 1994. Although changes in recent years can reflect the impact of globalization more accurately, because of lags with
data collection, I end my study in 1994. The observations in the analysis are country-years and seek to explain cross-national and longitudinal variation in welfare expenditures in seventeen advanced industrial countries. To account for a variety of potential (unmodeled) country specific effects, I include country dummy variables. I also include lagged dependent variables to control for serial correlation and use Beck and Katz’s (1995; 1996) correction for heteroskedasticity.

Table 1 shows five models used to analyze the effects of veto players on the relationship between globalization and welfare spending between 1966 and 1994. In all of the equations, the $b$’s are parameter estimates, and Welfare denotes annual welfare expenditures as shares of GDP. The subscripts $i$ and $t$ denote, respectively, the country and year of the observations. Trade and Capital are trade and capital openness. VPs is the number of veto players, and “*” is a multiplication dot. The $k$ (seventeen) dummy variables are denoted by Country (Thus, the intercept is suppressed).

Models 1.1, 1.2, 1.3 and 1.4 are regression models used to predict the determinants of welfare expenditures. Model 1.1 is a model with Trade, Capital, and their interactions with VPs (the number of veto players). The high correlation (.76) between interaction terms (Trade*VPs and Capital*VPs) can often overwhelm the regression models. Then, the results cannot show the real effects of veto players on the relationship between globalization and welfare spending. To check the influence of the collinearity of the interaction terms and examine the effects of each globalization indicator and its interaction with the number of veto players, I separately regress Model 1.2 with Trade and Trade*VPs and Model 1.3 with Capital and Capital*VPs.
I also regress Model 1.4 with Trade*Capital and Trade*Capital*VPs. Thus, the multiplication of Trade and Capital (Trade*Capital) is an integrated measure of globalization in Model 1.4. While trade and capital openness are not correlated to each other (r = .12), both trade and capital openness pressure states to reduce welfare spending. For example, even if a country has a small amount of trade openness, the country will be pressured to reduce welfare expenditures if it has a large amount of capital openness. In the same way, even if a country has a small amount of capital openness, the country will be pressured to cut welfare expenditures if it has a large amount of trade openness. Therefore, it is useful to make an integrated measure of globalization. Because domestic political institutions (veto players) do not necessarily respond to the pressures from trade and capital openness separately, the integrated measure helps us to assess the impact of veto players on the relationship between globalization and welfare spending more efficiently than Model 1.1.

Table 2 summarizes the variables. The dependent variable is welfare expenditures as a share of GDP. As a measure of welfare spending, I use social security transfers that are composed of public pensions and unemployment benefits. My main concern in this paper is the welfare expenditures that neo-liberal economists consider to be inimical to the operation of markets and to be reduced under the pressure of globalization. Therefore, I don’t include civilian government consumption, composed of beneficial expenditures on education and health, which even neo-liberal economists agree to be beneficial to the markets.

The main independent variables are globalization and its interaction with veto players. To measure the degree of national political economies’ vulnerability in the
global economy, I use trade openness and capital openness. First, trade openness (Trade) is the amount of import and export as a percentage of GDP. Although this measurement for trade openness can be challenged as an appropriate indicator of globalization, it is difficult to generate meaningful and comparable cross-national data on globalization. Since Trade is generally used as a measure of trade openness, I will use it as one of my globalization measurements.

Second, I use two measurements for capital openness: capital mobility (Capital) and foreign direction investments (FDI). First, I use Quinn and Inclan’s (1997) index of the liberalization of capital markets as a measure of capital mobility. For interpretative convenience, I changed the index to percentage terms (0 to 100%). The index captures the formal-legal environment and the potential for international flows: “financial restrictions” and “international legal agreement.” While the index captures “potential” mobility of capital, the index can be problematic measuring the effects of veto players on policy changes because the index itself is the sum of policy decisions on capital mobility. As an alternative measure of capital openness, I thus include foreign direct investments (FDI) as a share of GDP that is the “actual” movements of capital.

Last, the interaction between globalization and the number of veto players is measured in various ways: Trade*VPs, Capital*VPs, FDI*VPs, Trade*Capital*VPs, and Trade*FDI*VPs. The number of veto players is the effective number of “veto players” that Tsebelis (1995) operationalizes in terms of both institutional and partisan divisions. As I noted earlier, my argument is that globalization has a negative impact on welfare spending, but domestic political institutions (veto players) mediating between globalization and welfare spending reduces the negative impact. The interactive
(multiplicative) terms captures the mediating effects of veto players on the relationship between globalization and welfare spending. Therefore, the globalization variables, trade and capital openness, should have negative parameters but their interactions with veto players should have positive parameters.

I also include an additional model (Model 2) to confirm my hypotheses. According to my hypotheses, veto players do not “determine” but “reduce” the effect of globalization on the welfare spending. Therefore, my argument should be supported not only by the “signs” of the parameters of globalization and its interaction with veto-players but also by the “size” of the parameters of them: the positive effect of interaction terms should not be larger than the negative effect of globalization. Models 2.1, 2.2, 2.3, and 2.4 are partial derivatives of Models 1.1, 1.2, 1.3, and 1.4 in terms of globalization. So, the models measure the changes of welfare spending according to the changes of globalization. To confirm my hypotheses, the values of Model 2 should be negative or equal to zero for any number of veto players.

To isolate the effects of globalization and domestic political institutions on welfare spending, I also include control variables that are commonly used in investigations of the welfare-globalization nexus.

First, the old age population is expected to increase social welfare spending (Hicks and Swank 1992; Huber, Ragin, and Stephen 1993; Pampel and Williamson 1989). The old age population is the population sixty-five years and over as a share of the total population.

Second, the unemployment rate is expected to increase welfare spending since the increased number of the unemployed means more spending on them. However, since a
higher unemployment rate means poor economic performance, it also decreases welfare spending. As such, the real effect of the unemployment rate should be considered after controlling other economic factors.

Third, GDP per capita is expected to increase welfare spending. According to Wagner’s law, the demand for government services is income-elastic since public goods are luxuries. Since rises in the level of economic development increase public altruism, aggregate wealth is also believed to increase the revenue base of the welfare state (Hicks and Swank 1992; Pampel and Williamson 1989). Because of skewness, log transformation is used for real GDP (Gross Domestic Products) per capita.

Fourth, welfare spending may automatically respond to the inflation rate. On the one hand, the inflation rate can automatically reduce welfare spending because inflation reduces real monetary value, and welfare spending as a share of GDP can reflect a real measure of payments. On the other hand, under social or political pressure, policy makers can over-zealously respond to inflation and over-compensate for inflation. Thus, the inflation rate can either reduce or increase welfare spending.

Fifth, government deficits in the previous year are expected to be negatively associated with welfare spending. Even though the government wants to expand welfare spending, a large budget deficit may pressure the government to reduce welfare spending.

Sixth, leftist party power is expected to increase welfare spending. Although the strength of partisan politics on policy decisions was questioned under the concern about globalization, several scholars have still argued that political parties could retain an important independent role in economic policy-making (Boix 1998; Garrett 1998). As such, leftist party power is measured by the share of leftist seats in parliaments.
Seventh, the organized strength of labor is expected to increase welfare spending. Although both union density and coordination (Golden 1993) should be used to measure union strength precisely, I choose the simpler union density, the number of union members relative to the size of the labor force (Visser 1991) because the concept is easier to measure and interpret.

Last, recent studies show that incumbents increase transfer payments before elections to win votes. As such, pre-election indicators are used to measure the pre-election effects.

### IV. Results of Lagged Regression Analysis

The results of welfare spending equations are reported in Table 3 and Table 4. Table 3 uses capital mobility (Capital) as a measure of capital openness, but Table 4 uses FDI (foreign direct investments). In all eight equations, the coefficients on the lagged dependent variables are statistically significant. The previous year’s welfare spending explains almost 79 to 82% of the following year’s welfare spending. Once a welfare program is institutionalized, it would be hard for the government to reduce the spending. All eight regressions have high adjusted R-squared. The regression results are robust to changes of control variables.

In Table 3, Model 1.1 (Trade+Capital) includes Trade, Capital, Trade*VPs, and Capital*VPs, but only Trade shows statistical significance with the expected negative sign. When Trade and Trade*VPs are separately included in Model 1.2 (Trade), they show strong statistical significance with expected negative and positive signs. The coefficients are also substantively meaningful. According to the coefficients of trade
openness, as globalization increases 1%, welfare spending decreases .03%. If a country increases its trade openness moderate (62%: the mean of trade openness), welfare spending decreases 1.9% (13% of welfare spending). Globalization certainly pressures states to reduce their welfare spending. However, if the country has a large number of veto players, the amount of the cut of the welfare spending decreases. For example, if a country with moderate trade openness (62%) has four veto players (.002*62*4 = .5%), the reduction of welfare spending will be reduced from 1.9 % to 1.4% (1.9% - .5%). Likewise, the higher number of veto players moderates the negative impact of trade openness on welfare spending. On the other hand, Capital does not show statistical significance in its separate model (Model 1.3: Capital). As I discussed earlier, because the index of capital mobility is measured by the sum of policy decisions (the removal of restrictions on capital), the index of capital mobility (Capital) may not capture the effect of veto players on welfare policy decisions efficiently.

Model 1.4(Trade*Capital) uses the multiplication of Trade and Capital (Trade*Capital) as one indicator of globalization. The regression results strongly follow my hypotheses. Globalization (Trade*Capital) has a strong negative impact on welfare spending (-.0002), but its interaction with veto players (Trade*Capital*VPs) reduces the negative impact (.00002). The results are also substantively meaningful. If a country has moderate globalization (4878:the mean of Trade*Capital), welfare spending decreases 1% (.0002*4878). But, if the country has four veto players (.00002*4878*4=.4), the reduction will be reduced to .6% (1-.4). In the same way, even if a country has the largest globalization (14477: the maximum of Trade*Capital), if the country has the largest number of veto players (5), the reduction of welfare spending will be reduced
from 3% to 1.5% (.0002*14477 - .00002*14477*5). Considering that the mean of welfare spending is 15%, saving 1.5% is a huge impact (10% of welfare spending). Among the control variables, the unemployment rate and labor power consistently show strong statistical significance in all of the four equations of Table 3. First, as the unemployment rate increases 1%, welfare spending increases about .09%. If a country has 5% unemployment rate (the mean), welfare spending in the country increases .45% (3% of welfare spending). It is straightforward to understand that the increased number of the unemployed in most developed countries increased welfare expenditures on them (See Figure 4). In the same way, if the labor power increases 45% (the mean), welfare spending increases 1%. If labor has the full power (100%), it can increase welfare expenditures 1% (7% of welfare spending).

The aged population, log GDP per capita, and the inflation rate also have their statistical significance while not consistent. In particular, the old age population has a large substantive impact on the level of welfare spending. According to the coefficient (.15), if the old age population increases 13% (the mean), welfare spending increases 2% (13% of welfare spending). This huge impact is natural considering the dramatic increases in the old age population in all of the developed countries (See Figure 2). Log GDP per capita also has a huge impact on welfare spending. According to the coefficient (.52 and .49), if a country has a moderate level of wealth (8.9: the mean), the welfare spending increases 4.5%(30% of welfare spending). Compared to the old age population and log GDP per capita, the inflation rate has a moderate impact on welfare spending. If the inflation rate increases 6.5% (the mean), welfare spending increases .2% (1% of welfare spending). Yet, policymakers certainly over-compensate for inflation.
On the other hand, government deficits, leftist party power, and pre-election year indicators do not show any statistical significance. It is especially notable that leftist party power does not have any significant impacts on welfare spending. One may suspect that Labor (labor power) induces collinearity problems with Left (leftist party power). Yet, the correlation is not significant ($r = .36$), nor does the coefficient significant of left power (Left) become even after removing labor power (Labor) from the regression. Under the impact of globalization, the influence of leftist party power seem to be weaken, while the strength of labor unions still seems to be influential to welfare spending.

As we observed in Table 3, capital openness measured by capital mobility (Capital) does not independently show statistical significance. As I noted earlier, the index of capital mobility itself is the sum of policy decisions (the removal of restrictions on capital). Therefore, I ran the regression models with an alternative measurement of capital openness, foreign direct investments (FDI), in Table 4. As we can see, foreign direct investment and its interaction with veto players consistently show its statistical significance with expected negative and positive signs. In Model 1.1 ($Trade + FDI$), Trade, FDI, and FDI*VPs show strong statistical significance with expected signs. While Trade*VPs does not have statistical significance, this must result from its collinearity with FDI*VPs. In Model 1.3 ($FDI$) and Model 1.4 ($Trade*FDI$), both globalization variables (FDI and Trade*FDI) and their interactions with the number of veto players (FDI*VPs and Trade*FDI*VPs) also follow expected negative and positive signs with strong statistical significance. These results mean that increases in trade and foreign direct investments pressure states to reduce welfare expenditures, but the reduction is
moderated by a higher number of veto players. In general, foreign direction investments seem to perform better as an indicator of capital openness in my regression models.

In sum, the empirical results in this paper largely support my argument about the effects of globalization and veto players on welfare spending and yield the following conclusions. First, globalization has a direct effect on suppressing welfare spending. Increases in trade openness leads to significant reductions in welfare spending. Among the indicators of capital openness, foreign direct investments also show a strong negative association with welfare spending. I began this paper by discussing debates on the relationship between globalization and welfare spending. Then, I demonstrated how the compensation argument, in which risks and volatility caused by globalization increased welfare spending, could be theoretically and empirically misleading. After carefully controlling the other plausible factors that might influence welfare spending, the empirical findings in this paper provide evidence that globalization is in fact negatively associated with welfare expenditures. These results support not only my critique of the compensation argument but also imply that an integrated world has its real effects on welfare spending.

Second, combined with the downward pressure of globalization, the number of veto players in a country’s national political process has a direct effect on suppressing the pressure from globalization on welfare spending. Thus, the number of veto players affects the extent to which states reduce welfare spending in reaction to pressures from globalization. As a result, empirical evidence largely supports my argument that although globalization pressures states to reduce welfare expenditures, the states’ ability
to do so decreases as the number of veto players needed to change the status quo increases.

Last, the changes in demographic and economic conditions seem strongly related to the increased levels of welfare spending. In particular, a considerable increase in the average age of the population, the unemployment, GDP per capita and inflation rate is particularly strongly related to the increased level of welfare spending. While the strength of labor union increases welfare spending, the leftist party power is not significantly related to welfare spending. These results suggest that the increased level of welfare spending was mainly driven not by deliberate change in welfare policy but by automatic change driven by changes in demographic and economic conditions.

V. Discussion and Conclusion

The broader purpose of this paper was to determine the impact of globalization on welfare spending. My primary purpose was to demonstrate how domestic political institutions (veto players) limit the impact of globalization in shaping welfare spending. The results in this paper suggest that, even when international economic pressures might dictate a reduction in welfare spending, welfare reform will not be as sweeping as neoliberal economic theory predicts in countries where agreement among several institutions and/or parties is required. A government’s ability to respond to these pressures can depend crucially on existing domestic political institutions and particularly on the number of veto players which must approve any change in policy. Even when one of the respective veto players in the domestic arena presumably wants significant cuts in welfare spending, when it has to win approval for its proposal from the other veto-
players, it has to make compromises with those veto players, which then inevitably reduces the scope of welfare reform. Therefore, even if the neo-liberal economic view correctly assumes that states respond immediately to the pressure of globalization, the full downward convergence of welfare spending under complete market and capital openness may take considerable time.

While this paper helps explain variation in welfare policies confronting international economic integration, it is only a partial explanation for the gross level of welfare expenditure. I have tried to explain only the extent to which welfare policy will change in reaction to changing international economic integration. While I do emphasize that veto players matter and will affect welfare policies under the downward pressures of globalization, I have not claimed that the veto player itself determines the gross level of welfare spending. I also do not have any judgment on whether welfare reform or cuts are favorable for a country. The results of this paper only suggest that domestic political institutions, namely the number of veto players, significantly affect how states react to changing international conditions and as such, help to explain cross-national variation in welfare expenditures in response to pressures from globalization. Overall, the results in this paper consistently supported my argument. Even when states were confronting similar external pressures from globalization, states with more veto players could not change their welfare policies as much as those with fewer veto players. Therefore, the argument and findings here have important potential implications for the relationship among globalization, veto players, and welfare spending.
Table 1. Models used to Analyze the Effects of Veto Players on the Relationship between Globalization and Welfare Spending, 1966-1994

Model 1. Models Used to Predict the Determinants of Welfare Spending

Model 1.1  Trade + Capital

\[
\text{Welfare}_a = b_1 \text{Welfare}_{a-1} + b_2 \text{Trade}_a + b_3 \text{Capital}_a + b_4 \text{Trade} \cdot \text{VPs}_a + b_5 \text{Capital} \cdot \text{VPs}_a + b_6 \text{POP65}_a + b_7 \text{Unemployment}_a + b_8 \text{GDPC}_a + b_9 \text{Inflation}_a + b_0 \text{Deficit}_{a-1} + b_1 \text{Left}_a + b_2 \text{Labor}_a + b_3 \text{Election}_a + \sum (b_i \text{ Country}_i) + \mu_a
\]

Model 1.2  Trade

\[
\text{Welfare}_a = b_1 \text{Welfare}_{a-1} + b_2 \text{Trade}_a + b_3 \text{Trade} \cdot \text{VPs}_a + b_4 \text{POP65}_a + b_5 \text{Unemployment}_a + b_6 \text{GDPC}_a + b_7 \text{Inflation}_a + b_8 \text{Deficit}_{a-1} + b_9 \text{Left}_a + b_0 \text{Labor}_a + b_1 \text{Election}_a + \sum (b_i \text{ Country}_i) + \mu_a
\]

Model 1.3  Capital

\[
\text{Welfare}_a = b_1 \text{Welfare}_{a-1} + b_2 \text{Capital}_a + b_3 \text{Capital} \cdot \text{VPs}_a + b_4 \text{POP65}_a + b_5 \text{Unemployment}_a + b_6 \text{GDPC}_a + b_7 \text{Inflation}_a + b_8 \text{Deficit}_{a-1} + b_9 \text{Left}_a + b_0 \text{Labor}_a + b_1 \text{Election}_a + \sum (b_i \text{ Country}_i) + \mu_a
\]

Model 1.4 Trade*Capital

\[
\text{Welfare}_a = b_1 \text{Welfare}_{a-1} + b_2 \text{Trade} \cdot \text{Capital}_a + b_3 \text{Trade} \cdot \text{Capital} \cdot \text{VPs}_a + b_4 \text{POP65}_a + b_5 \text{Unemployment}_a + b_6 \text{GDPC}_a + b_7 \text{Inflation}_a + b_8 \text{Deficit}_{a-1} + b_9 \text{Left}_a + b_0 \text{Labor}_a + b_1 \text{Election}_a + \sum (b_i \text{ Country}_i) + \mu_a
\]

Model 2 Models Used to Confirm Veto Player Theory and the Hypotheses

Model 2.1  Trade + Capital

\[
\frac{\partial \text{Welfare}_a}{\partial \text{Trade}_a} = b_2 + b_4 \text{VPs}_a \leq 0, \text{ and } \frac{\partial \text{Welfare}_a}{\partial \text{Capital}_a} = b_3 + b_5 \text{VPs}_a \leq 0
\]

Model 2.2  Trade

\[
\frac{\partial \text{Welfare}_a}{\partial \text{Trade}_a} = b_2 + b_4 \text{VPs}_a \leq 0
\]

Model 2.3  Capital

\[
\frac{\partial \text{Welfare}_a}{\partial \text{Capital}_a} = b_2 + b_4 \text{VPs}_a \leq 0
\]

Model 2.4  Trade*Capital

\[
\frac{\partial \text{Welfare}_a}{\partial \text{Trade} \cdot \text{Capital}_a} = b_2 + b_5 \text{VPs}_a \leq 0
\]
Table 2. Variables Used to Predict Welfare Spending, 1966-1994

I. Welfare Spending (dependent variables)
   • Welfare: welfare spending, social security transfers as a percentage of GDP. Consists of benefits for sickness, old-age, family allowances, etc., social assistance grants and welfare. (mean = 14.66, sd=5.04, range:4.5–28.8)

III. Globalization
   1. Trade: trade openness, the sum of import and export as a share of GDP
      (mean = 61.67, sd=26, range:16–151)
   2. Capital: capital mobility (in percentage). Capital mobility consists of ‘financial restrictions’ and ‘international legal agreement.’ Financial restrictions are restrictions on exchange payments (imports, invisibles, capital) and exchange receipts (exports, invisibles, capital). (mean=78, sd=15.62, range:36–100)
   3. FDI: foreign direct investment as a percentage of GDP (mean=1.01, sd=1.08, range: -1.5–5.66)
   4. Trade*Capital: interaction between trade openness and capital mobility
      (mean = 4878, sd=2421, range: 953–14477)
   5. Trade*FDI: interaction between trade openness and foreign direct investments
      (mean = 70, sd=96, range: -81–679)

IV. Veto Players
   1. VPs: number of veto players (mean=2.29, sd=1.31, range:1.00–5)
   2. Trade*VPs: interaction between trade openness and the number of veto players
      (mean =146.59, sd=128.22, range: -42–751.45)
   3. Capital*VPs: interaction between capital mobility and the number of veto players
      (mean=181, sd=113.16, range: 37–563.89)
   4. FDI*VPs: interaction between foreign direct investments and the number of veto players
      (mean=2.28, sd=3.09, range: -7.23–23.07)
   5. Trade*Capital*VPs: interaction of trade openness, capital mobility, and the number of veto players
      (mean=11715, sd=10777, range: -6271–72383)
   6. Trade*FDI*VPs: interaction of trade openness, foreign direct investment, and the number of veto players
      (mean=155, sd=388, range: -663–3342)

V. Control Variables
   1. Lagged dependent variable: lagged welfare spending
   2. POP65: old age population, population 65 years and over as a share of total population
      (mean=12.62, sd=2.46, range:6.49–17.78)
   3. Unemployment: unemployment rate (mean=5.14, sd=3.98, range: -4.82–18.23)
   4. GDPC: log of real GDP per capita (mean=8.94, sd=0.69, range: 7.15–10.05)
      (mean=6.48, sd=4.34, range: -0.70–24.20)
   6. Deficit: government budget deficits as a percentage of GDP in the previous year (mean = 1.68, sd=4, range: -10.17–16.22)
   7. Left: left party power, left seats as a percentage of total seats in parliaments
      (mean=38.57, sd=13.23, range:6.49–17.78)
   8. Labor: labor power, union density, union members as a share of the labor force
      (mean=45.27, sd=16.84, range: 9.9–85)
   9. Election: pre-election year indicator (mean=.31, sd=.35, range:0–1.83)
  10. Country dummies: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United Kingdom

   3. Data for foreign direct investment is from World Development Indicator, World Bank 2002.
   4. Data for the number of veto players is from Tsebelis, George, Veto Player Dataset available at http://www.polisci.ucla.edu/tsebelis.
Table 3. The Determinants of Welfare Spending (Trade and Capital), 1966-1994

<table>
<thead>
<tr>
<th>Variable</th>
<th>Trade+Capital</th>
<th>Trade</th>
<th>Capital</th>
<th>Trade*Capital</th>
</tr>
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</tr>
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<td>-.03***</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>range: 6.10–68.40)</td>
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<td>.03**</td>
<td>.02**</td>
<td>.02*</td>
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Number of cases: n=493
Adjusted r-squared: .99

Note: 1. The dependent variable is welfare spending, the social security transfers as a percentage of GDP, and the lagged dependent variable is the lagged social security transfers. Welfare spending is ranged from 4.5 to 28.8 with mean=14.66 and standard deviation=5.04. See Table 2 for detailed variable descriptions.
2. Estimation is by least squares with standard errors corrected for panel heteroskedasticity. Each regression also includes dummies for countries (not shown for space), and the constant variable is suppressed.
3. The parenthesis denotes a panel-corrected standard error (adjusted for heteroskedasticity and contemporaneous correlation). Statistical significance is based on one-tailed tests. *** P<.001; **.001<P<.05; *.05<P<.10
### Table 4. The Determinants of Welfare Spending (Trade and FDI), 1966-1994

<table>
<thead>
<tr>
<th>Globalization</th>
<th>Trade+FDI</th>
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<th>FDI</th>
<th>Trade*FDI</th>
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<td>-.03***</td>
<td>-.03**</td>
<td>-.28***</td>
<td>-.003**</td>
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<tr>
<td>FDI</td>
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<td>-.28***</td>
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<td>Control Variables</td>
<td></td>
<td>.81***</td>
<td>.82***</td>
<td>.79***</td>
</tr>
<tr>
<td>Lagged dependent variable</td>
<td></td>
<td>(mean=14.34, sd=5.05, range: 4.4~28.8)</td>
<td>(se=.04)</td>
<td>(se=.04)</td>
</tr>
<tr>
<td>Old age population</td>
<td>.05</td>
<td>.05</td>
<td>.21***</td>
<td>.21***</td>
</tr>
<tr>
<td>(mean=12.62, sd=2.46, range: 6.49~17.78)</td>
<td>(se=.1)</td>
<td>(se=.08)</td>
<td>(se=.09)</td>
<td></td>
</tr>
<tr>
<td>Unemployment</td>
<td>.11***</td>
<td>.09***</td>
<td>.09***</td>
<td>.08***</td>
</tr>
<tr>
<td>(mean=5.14, sd=3.98, range: -3.7~23.07)</td>
<td>(se=.03)</td>
<td>(se=.03)</td>
<td>(se=.03)</td>
<td></td>
</tr>
<tr>
<td>Log GDP per capita</td>
<td>.52**</td>
<td>.49**</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>(mean=8.94, sd=.69, range: 7.15~10.05)</td>
<td>(se=.26)</td>
<td>(se=.26)</td>
<td>(se=.22)</td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>.04**</td>
<td>.04**</td>
<td>.03*</td>
<td>.02</td>
</tr>
<tr>
<td>(mean=6.48, sd=4.34, range: -24.20)</td>
<td>(se=.02)</td>
<td>(se=.02)</td>
<td>(se=.015)</td>
<td>(se=.02)</td>
</tr>
<tr>
<td>Government deficit</td>
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<td>.01</td>
<td>-.007</td>
<td>-.001</td>
</tr>
<tr>
<td>(mean=.168, sd=4, range: 10.17~16.22)</td>
<td>(se=.02)</td>
<td>(se=.02)</td>
<td>(se=.02)</td>
<td>(se=.02)</td>
</tr>
<tr>
<td>Left power</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>(mean=38.57, sd=13.23, range: 6.10~68.40)</td>
<td>(se=.01)</td>
<td>(se=.01)</td>
<td>(se=.01)</td>
<td></td>
</tr>
<tr>
<td>Labor Power</td>
<td>.03**</td>
<td>.03**</td>
<td>.02*</td>
<td>.02*</td>
</tr>
<tr>
<td>(mean=45.27, sd=16.84, range: 9.9~85)</td>
<td>(se=.01)</td>
<td>(se=.01)</td>
<td>(se=.01)</td>
<td></td>
</tr>
<tr>
<td>Election</td>
<td>-.08</td>
<td>-.06</td>
<td>-.07</td>
<td>-.05</td>
</tr>
<tr>
<td>(mean=.31, sd=.35, range: 0~1.83)</td>
<td>(se=.1)</td>
<td>(se=.1)</td>
<td>(se=.1)</td>
<td></td>
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<tr>
<td>Number of cases :</td>
<td>n=493</td>
<td>n=493</td>
<td>n=493</td>
<td>n=493</td>
</tr>
</tbody>
</table>

**Note:**
1. The dependent variable is welfare spending, the social security transfers as a percentage of GDP, and the lagged dependent variable is the lagged social security transfers. Welfare spending is ranged from 4.5 to 28.8 with mean=14.66 and standard deviation=5.04. See Table 2 for detailed variable descriptions.
2. Estimation is by least squares with standard errors corrected for panel heteroskedasticity. Each regression also includes dummies for countries (not shown for space), and the constant variable is suppressed.
3. The parenthesis denotes a panel-corrected standard error (adjusted for heteroskedasticity and contemporaneous correlation). Statistical significance is based on one-tailed tests. *** P<.001; **.001<P<.05; *.05<P<.10
Figure 1. Changes of Welfare Spending

![Graph showing changes in welfare spending (% of GDP) from 1965 to 1995.]

(available at http://www.lisproject.org/publications/welfaredata/welfareaccess.htm)

Figure 2. Changes of Old Population and Unemployment Rate

![Graph showing changes in old population (% of total) and unemployment rate from 1965 to 1995.]

(available at http://www.lisproject.org/publications/welfaredata/welfareaccess.htm)
Figure 3. Changes of Globalization

Figure 4. Changes of Welfare Spending by Country
References:


Notes:

1 Hallerberg and Basinger (2001) have examined the relationship between trade openness, veto players and tax reform. Yet, their model did not capture the interaction between trade openness and veto players for tax reform.

2 The United States is excluded because it is not included in the veto player dataset.

3 See Hsiao (1986) for a detailed description of the role of country dummies.

4 Rodrik (1998) also use the multiplication term of two indicators of globalization in his regression analysis.

5 The main budget for total public expenditures consists of two large components: social security transfers and civilian government consumption. Social security transfers is mostly composed of public pensions and unemployment benefits, and civilian government consumption is composed of in-kind benefits such as public provision for education and health. Consistent with aging populations and rising unemployment in most industrialized countries, the budget for social security transfers increased much faster than that for civilian government consumption. Since the transfers became the largest part of government spending in the 1980s and 1990s, most scholars used it as a measure of welfare spending.

6 See Table 2 for detailed descriptions.

7 The data set comes from George Tsebelis’ website, http://www.polisci.ucla.edu/tsebelis/ According to Tsebelis (1999) and Tsebelis and Change (2001), this simple count of the number of veto players can be unsatisfactory because it does not consider the degree of partisan differences among veto players. For example, a social democratic-Green coalition in Germany presumably can move farther away from the status quo than a
Conservative-Communist coalition in Greece. Therefore, they show that ideological distances between partisan players and between two successive governments are also important for taking into account state structure in predicting policy changes. As the ideological distance between partisan players increases, changing the status quo becomes more difficult and as the ideological distance between two successive governments increases, changing the status quo becomes easier.

I tested both of the ideological distances in my regressions, but the evidence for ideological distance as a measure of the effect of the veto player was weak. They showed either statistical insignificance or significant with inconsistent directions. One reason for this result may be that the efficiency losses to increasing the number of veto-players are simply more critical than the actual distance in ideological preferences. Because of limited space, I am reporting only the results with the absolute number of veto players in this paper.

8 The same regression, Model 1.2(Trade), is included in Table 3 and Table 4 to compare it with the results of Capital and FDI easily. So, there are in fact seven equations.

9 Please also note that the conditions on Model 2 are satisfied in all of the four models.