

# **Immigration, Globalization, and Unemployment Benefits in Developed EU States**

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## **Abstract**

At a time of mounting concern about how traditional welfare states will react to globalization, there has been increasing interest in specifying how global economic forces affect domestic welfare policies in industrialized states. Building on theories from the political economy and comparative institutions' literatures, we analyze an overlooked aspect of globalization—the flow of immigration. Focusing on states in the European Union, we present a theoretical model that highlights the relationships between domestic political institutions, globalization, and immigration pressures. Our findings highlight how immigration in conjunction with domestic political institutions affects unemployment entitlements, while labor market integrative forces remain in the background. When analyzing the effects of economic shocks on unemployment benefits, we argue that the movement of labor trumps the pressure of labor integration.

Immigration has become a crucial issue to the future of European welfare states. The economic integration process has loosened border controls among most European Union member states, generating large flows of immigrants looking for employment in new countries (Nannestad 2007). Not surprisingly, a substantial body of literature on labor immigration and western welfare states supports the argument that immigration of labor tends to be a disadvantage for recipient states while an advantage for immigrants themselves (Banting 2000; Hunger 2000; Nannestad 2007). Immigrants can find new jobs, but existing labor markets may strain under the burden of additional workers, adding to the pressure on welfare budgets.

In both the comparative welfare policy and globalization literatures, researchers have overlooked how this movement of workers may affect governments' actions in unemployment policies. Rather than emphasizing globalization as a capital-led enterprise, we theorize globalization from the standpoint of labor, emphasizing the intertwining of labor markets across EU states. By combining neoliberal theories with a compensation approach to welfare policy, we argue in this paper that by focusing on the effects of the movement and integration of labor markets on unemployment policy that we balance the literatures' typical foci on capital-driven theories.

We are interested in uncovering whether integration, combined with immigration, influences unemployment provisions. To this end, we ask: As states become more integrated into the EU labor market, does this increased economic pressure force them to retrench their unemployment policies? In addition, does increased immigration affect the generosity of unemployment provisions in EU member states? However, we argue that the effects of these globalizing pressures may depend on other factors. While our focus is on cross-state pressures, we contend that as with most public policies, domestic political institutions are driving forces for change, so we argue for an interactive theory where

the effects of immigration will depend on who controls the parliament and the effective power of labor unions.

Relying on the context of EU economic integration, which facilitates economic openness and labor mobility, we examine how immigration, integration, and domestic political institutions affect unemployment entitlements in EU states. We find that these relationships are dependent on the level of immigration with states bowing to the labor pressures for maintaining unemployment provisions. For instance, more integrated countries have higher levels of unemployment benefits when immigration rates are higher. And the influence of immigration comes largely through the domestic institutions: higher immigration rates are associated with larger benefit levels when left parties carry a majority of parliamentary seats and when union membership is above 35 percent. These findings point to an answer: those domestic political partners affiliated with workers—left-leaning political parties and labor unions—help to shore-up the unemployment provisions in the face of increased labor market pressure brought on by rising immigrant numbers.

## **Immigrants, Open Labor Markets, and Welfare States: the Economic and Institutional Forces**

Explaining the relationship between globalization, EU economic integration, and welfare states in advanced industrialized countries has been a central point for both political economists and policy makers. Scholars of neoliberal reform of social welfare policies—e.g., cutting benefits, tightening eligibility, etc.—have focused their concerns on whether economic globalization has played a significant role in fostering these reforms (Basinger and Hallerberg 2004; Bommers and Geddes 2000; Favell and Hansen 2002; Ha 2008; Kivst 2004; Rhodes 1995; Swank 2005).

For countries in Europe, the economic integration process mirrors the global economic trend in that it increases capital mobility, trade liberalization, and labor mobility (Rhodes 1995). One direct effect of European economic integration is that the establishment of economic and monetary union leads to a rapid growth of capital mobility and the expansion of the financial market (Cameron 2001). Another macro-economic impact of EU integration is trade liberalization, removing trade barriers and facilitating the free movement of commodities among EU states (Hall 2001). The extensive literature on globalization has focused on these two aspects rather than on the increasing mobility of labor. In fact, integration and globalization are destabilizing European welfare states by affecting wage formation through labor market competition and increasing job mobility (Palier and Sykes 2001). This development is taken by some observers to enforce labor market flexibility (Haldrup, Anderson and Sorensen 2000), while for others it signals an erosion of social standards and in turn possibly the welfare society (Halfmann 2000; Lundborg and Segerstrom 2002).

There have been fears that as the EU develops its labor market integration agenda eastwards, a more integrated labor market could reduce the capability of states to implement or maintain generous social insurance and redistributive policies (Huber and Stephens 2001; Lundborg and Segerstrom 2002; Peridy 2007; Razin and Sadka 2000). Scholars who support this idea of welfare reduction argue that labor immigration can lead to a negative self-selection process; better job opportunities and more generous social welfare motivate workers to migrate (Borjas et.al. 1996; Brooks 2002; 2007; Favell and Hansen 2002; Geddes 2003; Kahler 1992; Walz 1997). Opening the labor market to less developed EU states allows cheap labor to flow toward states with more generous welfare provisions. In order to maintain economic competitiveness in trade markets, domestic employers might pressure governments to reduce welfare compensation. Furthermore, countries with generous welfare policies will face pressures when they compete with countries that do not

have high levels of social provisions in terms of attracting capital investment and exporting manufacturing products (Clarke 2004; Rhodes 2001).

Dissents to the welfare reduction argument are many. First, whether immigrants are assets or burdens to a state may depend on the country's domestic labor market structure, which can vary across countries, as well as across time. If a country desires workers and they do not directly threaten job opportunities for native workers, then labor immigration could be mutually beneficial to both immigrants and natives, which would not add to the fiscal burden of recipient states to maintain generous social welfare programs (Zimmermann 1995). Second, the extensive comparative political economy literature points to a long tradition of egalitarian policymaking in highly-open and internationally-competitive economies (Scheve and Slaughter 2006). The core argument is that economic globalization may displace native workers and increase political demands on social insurance and redistributive policies (Cusack 1999; Iversen and Cusack 2000; Pierson 1994).

Although the existing literature on economic integration, immigration, and welfare policies is extensive, it reaches no conclusions on how these global pressures affect domestic policy. First, the empirical literature generates opposing predictions in terms of how governments would make policy changes in response to immigration. Second, scholars conceptualize immigration and integration as economic shocks that break current policy equilibrium and directly link external economic forces to observed policy changes. This might oversimplify the complex relationships among immigration, integration, and policy changes. In the process of EU labor market integration, immigrants enter into existing institutions in their recipient states. How the welfare states incorporate these immigrants into their systems is determined largely by the domestic context of the recipient states. By omitting the link between global economic forces and a variety of institutional settings, one cannot gain a comprehensive understanding of the relations between immigration

and welfare states.

## **Integrating Immigration, the Labor Market, and Domestic Institutions into an Interactive Model of Welfare Change**

In our theoretical approach, we focus on the interplay between immigration, integration, and domestic political institutions. Our argument focuses on the effect of immigration and how it will depend on the context of the country—how integrated it is in the EU and the state’s domestic political situation. Looking first to the influence of integration, we contend that the labor market integration process could be a force that constrains welfare changes. We transcend previous research and theorize about both aspects of the international context—capital and labor.<sup>1</sup> Without including both, we might not be able to have a comprehensive understanding of the relationship between global economic forces and domestic welfare provisions.

We rely on the neoliberal theory’s understanding of economic pressures to inform our argument concerning international labor pressures. Specifically, we argue that the influence of immigration depends on how integrated a country is in the EU’s labor market mechanisms. Labor market integration can constrain the level of immigration to each EU state and thus have both economic and political implications for domestic policy changes (Baur and Zimmermann 1997). As a country becomes more integrated into the EU common market, there will be fewer domestic controls and restrictions on immigration. If the inflow of immigrants is large, domestic labor markets may become more competitive and

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<sup>1</sup>Previously, scholars used indicators for cross-border trade and capital flows for integration measures. Among earlier studies, scholars measured integration as trade volume (Hicks and Swank 1992; Huber, Ragin and Stephens 1993; Rodrik 1998), while others focused on capital flows. For example, Garrett and Mitchell (1997) use import penetration from low wage countries and financial market integration to construct their measures for integration. In more recent studies, scholars focused on international trade exposure (Castles 2001), policy restrictions on capital mobility (Ha 2008; Quinn 1997), and tax rate interdependency (Sanz and Velazquez 2001).

thus pressure governments for welfare reductions. These pressures can be particularly strong if, for legal and/or economic reasons, no differentiation between immigrants and local population is possible (Boeri and Terrell 2002; Ireland 2004; Kivst 2004). When a country implements more restrictive labor market policies and is less integrated into the EU market, they can use exclusive integration policies to buffer the shocks brought by immigration. Hence there might be lower competitive pressures on welfare reduction.

While the interplay of immigration and integration may explain how integrated labor markets can alter the effects of immigration on welfare policies, differing domestic contexts may also clarify why immigration's influences on policy vary across countries and years. Turning now to the link between immigration and domestic political institutions, we contend that for some countries, a change in the number of immigrant workers may result in decreased welfare benefits, while for others it may spark an upswing in entitlements. Specifically, domestic political pressures and institutions can affect the resilience of welfare policies, depending on a country's political configurations. Depending on the political influence of a welfare policy's supporters, a policy may find a reprieve from the threat of retrenchment (Pierson 1994). When the groups of misplaced native workers are large, democratic governments may respond to their demands by maintaining high levels of unemployment compensation.

Political institutions also can influence welfare provisions; research finds that countries governed by left and social democratic parties tend to have higher levels of welfare provisions (Swank 2000; Huber and Stephens 2001). These governing institutions, along with collective labor-capital bargaining systems may play an intervening role by buffering policies from economic shocks brought by liberal market forces (Basinger and Hallerberg 2004; Streeck 1993; Swank 2002). When facing pressures for welfare policy changes, governments must resolve the tradeoffs between making the domestic market more attractive

to capital investment and sacrificing domestic workers' interests by cutting welfare benefits (Basinger and Hallerberg 2004). Reducing unemployment entitlements may be costly if it hurts the governing party's constituents' interests; therefore, left-wing parties may have few political incentives to reduce entitlement levels.

In addition, the challenges brought by economic openness combined with a strong left-labor power context (i.e. left parties and labor unions) can produce a compensation strategy that retains a generous welfare state (Cusack 1999; Iversen and Cusack 2000; and Hall and Soskice 2004). According to Iversen and Cusack (2000), economic openness and the integration process can become forces for welfare expansion instead of retrenchment.<sup>2</sup> This highlights how the relationship between economic pressures (i.e. inflow of immigrant workers) and welfare changes may be contingent upon the configuration of the political system. Depending on a country's mix of political institutions, a government may choose to compensate workers and citizens for market pressures or failures.

To this end, our theoretical arguments support the compensation thesis. Immigration should not have a retrenching effect in countries with "compensating" domestic institutions of left-wing parliaments and stronger labor unions. In order to buffer the domestic labor market and shore up their political support base, we argue that these political actors will either stabilize or increase welfare benefits, rather than "race to the bottom" and retrench their assistance.

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<sup>2</sup>Rudra and Haggard (2005) extend the debate by providing an empirical analysis of developing countries and show that when facing economic pressures brought by globalization, welfare states would have different reactions. They find that authoritarian regimes tend to react more by cutting their welfare benefits than democratized states.

## Research Design

### *Hypotheses*

The relationship between inflows of immigrant workers and domestic welfare changes is more complex than what is described by the neoliberal theory. A more comprehensive theoretical model should integrate both the EU labor market integration forces and the domestic political institutions with immigration. Although the economic shocks brought by immigrants may produce pressures for governments to reduce their welfare provisions, the impacts can vary across these countries. Since they are essentially decision-making institutions that reflect domestic policy preferences in welfare changes (Ha 2008), the political ideology of the government, as well as the strength of the unionized workforce in a country may alter how immigration affects welfare policy decisions.

Based on the above-mentioned conceptualization, our theoretical expectations are: (1) integrative forces at the EU level would condition the effects of increased immigration as an economic shock on unemployment provisions; (2) domestic political institutions will mediate the effects of economic pressures, (2a) when immigration increases in states with parliaments having a larger percentage of left political party seats, we would not expect to observe benefit retrenchment, (2b) when increasing immigration into states with larger unionized workforces, we also would not expect to find decreasing unemployment benefits;<sup>3</sup> From these expectations, we derive the following set of hypotheses:

*H1: Increased immigration into states with higher levels of EU labor market integration will have a positive effect on unemployment provisions.*

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<sup>3</sup>The literature on both of these domestic institutions offers additive hypotheses that expect them to have positive effects on unemployment provisions. Although we agree with these theoretical expectations and they inform our own expectations, in this paper, we are concerned with their interactive effects when combined with immigration.

*H2a: Increased immigration into states with a larger percentage of left party seats in parliament will have a positive effect on unemployment provisions.*

*H2b: Increased immigration into states with a larger percentage of unionized workers will have a positive effect on unemployment provisions.*

### ***Data, Measures, and Method***

To test the aforementioned hypotheses, we pool data on labor immigration, EU labor market integration, domestic institutions, and macro-economic conditions for 15 European states from 1971 to 2007, covering three major waves of EU enlargement: 1957, 1973, and 1995.<sup>4</sup>

*Unemployment Benefits.* For our dependent variable, we use unemployment benefits measured as replacement rates. Specifically, it is the OECD summary measure of average unemployment entitlement, which is defined as the average of the gross unemployment benefit replacement rate. The OECD calculates this measure based on cash replacement rates for two earnings levels, three family situations and three durations of unemployment (Martin 1996; OECD 1994; OECD 2007).<sup>5</sup>

*Immigration.* To measure labor immigration, we use data from the OECD Statistics on international migration. In our empirical models, immigration is measured by the net

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<sup>4</sup>We include 14 EU member states (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden) and Norway in our study. Ideally, we should include all 27 EU member states and analyze all (six) waves of EU enlargement. Due to data availability, we include 15 countries in this paper; all of which are economically more developed than newer member states. Although Norway is not an EU member state, it signed the Agreement on the European Economic Area (EEA) and participates in the Schengen/Dublin co-operation. Norway has participated in the EU economic integration process. Therefore, we include Norway as one of our country cases.

<sup>5</sup>Data are accessed through following webpage: <http://www.oecd.org/dataoecd/52/9/42625593.xls>. Biannual data from 1971 to 2007 are available for the entitlement measure. To obtain annual data for our panel analysis, we interpolate the data by using the average values for the year before and after the missing data point (e.g., Blanchard 1998; Blanchard and Wolfers 2000). The pairwise correlation between the original biannual entitlement measure and the interpolated annual entitlement measure is 1.

migration rate for each country in a given year.<sup>6</sup> It is computed by the following equation:

$$\text{Net Migration Rate} = \frac{\text{Inflow of Immigrants} - \text{Outflow of Immigrants}}{1,000 \text{ Inhabitants}} \quad (1)$$

*Globalization* We include three indicators of globalization to reflect the international flow of labor, capital, and commodities: EU labor market integration, foreign direct investment (FDI), and foreign trade.

EU Labor Market Integration. Labor market integration reflects the international flow of labor. The existing empirical literature provides various ways to measure integration of the capital market in EU, yet provides little information on how to measure labor market integration. Scholars who study the labor market and integration in the EU rely on EU enlargement treaties and domestic labor market restrictions as indicators of labor market openness. Commonly, they quantify integration treaties or domestic policies by creating a set of dummy variables that distinguish which countries participate in a particular EU treaty or adopt a particular labor market restriction policy (Ha 2008; Hansson and Olofsdotter 2008). While both EU treaties and domestic labor market restrictions reflect important policy dimensions of labor market integration, these dummies are relatively static measures that reflect little variation in the level of labor market integration across countries and time.

To construct our integration measure of EU labor markets, we rely on the rule of “one price” for an integrated market. In the presence of a competitive market structure and in the absence of transport costs and other barriers to trade, prices of homogenous products sold in different markets would converge to “one price” because of market forces

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<sup>6</sup>A more direct measure of labor immigration would be an indicator constructed based on counting the stock of foreign workers flowing from less developed countries to EU member states. Unfortunately, data on employed foreign workers by country of origin are only available from 1990 to 2007 in the OECD migration database. If we compare the two measures, one using foreign population and the other based on employed foreign workers, the pairwise correlation is .9774.

(Baele et al.2004; Funke and Koske 2008; Goldberg and Verboven 2005; Rosenbloom 1990; Sarno and Taylor 2002). The rule of one price implies that if assets in spatially separated markets have sufficiently comparable characteristics and are evaluated by the same set of market rules, cross market prices or yield differentials over time constitute a measure that interprets time-varying integration (Baele et al.2004). More specifically, in a fully integrated labor market, the price of labor in different countries would converge toward the same market equilibrium over the long run. If a particular labor market segment (i.e. the labor market in one country) is less integrated into the common market, labor price in that market segment would be more dispersed from the market equilibrium. Based on this concept of price convergence, we construct a labor-price-based measure for EU labor market integration using the OECD annual data on average unit labor cost in each country (OECD 2009). The integration measure is calculated based on the following equation:

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$$\text{EU Labor Market Integration}_{it} = \frac{\text{Unit Labor Cost}_{it}}{\text{EU Average Unit Labor Cost}_t} \quad (2)$$

Figure 1 plots the integration measure for each country. A “1” represents the perfect integration scenario, whereby the domestic labor price is the same as the EU average labor price. As shown in the figure, the ratio measure has been quite dispersed from 1 in both the 1970s and 1980s. The ratio measure has been closer to 1 since the introduction of the Single European Act (SEA), but it still varies across countries.

[Figure 1 about here]

FDI and Foreign Trade. We use foreign direct investment as an indicator of capital mo-

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<sup>7</sup>In equation (2), the nominator is the unit labor cost in country  $i$  at time  $t$ , and the denominator is the EU average unit labor cost at time  $t$ . The unit labor cost indexes are calculated as the quotient of total labor costs and real output in total economy (including manufacturing, industry, construction, trade, transport, communication, financial and business services, market services, and agriculture).

bility and measure it as a share of GDP. For foreign trade, we measure it using total imports and exports as a share of GDP to reflect international flows of goods and commodities. Both of these measures indicate the openness of the domestic economies. Data for them are drawn from the Penn World Tables (Alan Heston, Robert Summers and Bettina Aten 2009).<sup>8</sup>

*Domestic Political Institutions.* Based on the existing literature, we include indicators for two domestic political institutions: (1) Left-wing parliamentary seats, and (2) the effective power of labor unions. We rely on a measure of left parliamentary seats from Swank (2002) that is calculated based on left party legislative seats as a share of all legislative seats.<sup>9</sup> Following the work of Wallerstein, Golden, and Lange (1997), our indicator of union density is net union membership as a share of wage and salary earners in employment. This institutional indicator reflects the domestic wage bargaining system and the industrial relations in advanced democracies.<sup>10</sup>

*Economic Controls.* To isolate the relationship between immigration, labor market integration, and unemployment welfare entitlements, we include two economic control variables that are commonly used in empirical models investigating the political economy of welfare changes. First, we include per capita GDP as a control for the domestic economy, which we expect to be positively associated with unemployment entitlements. Second, we include the unemployment rate as a control for the domestic labor market scenarios,

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<sup>8</sup>PWT (version 6.3) accessed: [http://pwt.econ.upenn.edu/php\\_site/pwt\\_index.php](http://pwt.econ.upenn.edu/php_site/pwt_index.php).

<sup>9</sup>Data for the left government measure are from Swank's "Comparative Parties Datasets: Political Strength of Political Parties by Ideological Group in Capitalist Democracies" ([http://www.marquette.edu/polisci/faculty\\_swank.shtml](http://www.marquette.edu/polisci/faculty_swank.shtml)).

<sup>10</sup>Data for the union density measure are drawn from two sources: (1) Golden, Wallerstein, and Lange's dataset on industrialized democracies, and (2) ICTWSS, a database on the institutional characteristics of trade unions, wage setting, state intervention, and social pacts, maintained by the Amsterdam Institute for Advanced Labor Studies (AIAS). Both datasets use the same equation to calculate the union density measures. Data in the Golden, Wallerstein, and Lange dataset do not cover years after 2000. The ICTWSS database includes data from 1960 to 2007. To maximize our year observations, we merge the two datasets. The correlation between union density measures in these two datasets is .9847.

which we expect to be positively associated with unemployment provisions.<sup>11</sup>

### *Method and Model Specification*

We construct the dataset for our empirical analyses by pooling data for 15 EU states from 1971 to 2007. A common practice for analyzing panel data for comparative political economy models is to use a lagged dependent variable with country fixed effects and panel corrected standard errors based on Beck and Katz's (1995) recommendation. But if non-stationary variables are included and if random-effects are present across country-year cases, then the fixed-effects model specification with a lagged dependent variable will produce biased results (Achen 2000; Baltagi 2008). When testing each of our variables for panel unit roots, we find that variables for foreign trade, GDP, and unemployment rate are not stationary.<sup>12</sup> Therefore, we take a first order difference for these variables.

The second methodological consideration concerns the error structure in our panel data. Beck and Katz(1995) argue that if data have panel level heteroskedasticity and only spatial autocorrelation is present, using a lagged dependent variable with panel corrected standard errors is more efficient. However, we also need to consider the problem of autocorrelation when using a lagged dependent variable(Baltagi 2008), and we do find both panel wise heteroskedasticity and first order autocorrelation. In addition to the lagged dependent variable in our model, we also implement an AR(1) correction for the autocorrelated error structure.<sup>13</sup> Based on the statistical diagnoses, we use ordinary least

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<sup>11</sup>GDP is measured by real gross domestic product per capita, in current prices. Data for per capital GDP are from the Penn World Tables (version 6.3). Unemployment is measured as % of civilian labor force, and the data are from the International Labor Organization(ILO) Yearly Labor Statistics.

<sup>12</sup>The Chi-square statistics (df=30) based on the Fisher Test (Maddala and Wu 1999) for these three variables are: GDP-.0019 (p=1.0000), Trade-24.6716(p=.7408), Unemployment-25.0103(p=.7245). Based on the same test, these three variables are stationary after taking a first order difference.

<sup>13</sup>We conduct the White Test and the test for group wise heteroskedasticity. Group-wise heteroskedasticity is detected, and we conduct the Arellano and Bond Test (Arellano and Bond 1991) for AR(1) and the test results show first-order autocorrelation.

squares (OLS) with a lagged dependent variable and country fixed effects, as well as panel-corrected standard errors and an AR(1) correction.

Our theoretical interests and empirical hypotheses require an interactive model to decipher how immigration, along with integration and domestic institutions shape unemployment benefits. The model includes interaction terms between immigration and integration, as well as immigration and the domestic institutions. Note that the  $i$  and  $t$  index the country and year observations.<sup>14</sup>

$$\begin{aligned}
 \text{Model 1: } Entitlement_{it} = & B_0 + B_E Entitlement_{it-1} + B_I \Delta Immigration_{it} \\
 & + B_N Integration_{it} + B_L LeftParties_{it} + B_U Unions_{it} + B_{IN} \Delta Immigration_{it} \times Integration_{it} \\
 & + B_{IL} \Delta Immigration_{it} \times LeftParties_{it} + B_{IU} \Delta Immigration_{it} \times Unions_{it} \\
 & + B_E \Delta Economic Controls_{it} + \epsilon_{it}
 \end{aligned}
 \tag{3}$$

## Results of Pooled Time-Series Regression Analysis

Our argument focuses on how the movement of immigrant labor shapes unemployment benefits; therefore, it does not hinge on the independent effects of immigration, integration, or domestic institutions affecting entitlements. We contend that immigration plays an intervening role in influencing unemployment entitlements but that the domestic or integrative context of the country influences whether or not unemployment provisions

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<sup>14</sup>Because most empirical studies of globalization and welfare policy use spending measures for welfare, scholars usually lag the variables for domestic institutions. The underlying logic is that fiscal decisions on government spending are made based on yearly cycles. Spending changes in year  $t$  are determined by the institutional characteristics in year  $t-1$ . We do not lag our institutional variables, because we contend that unemployment entitlements are different policy instruments from government budgets. Entitlements are not necessarily reviewed and changed with the budgets; the effects occur outside of budgetary decision-making cycles.

change. Table 1 shows the results from our model.<sup>15</sup>

[Table 1 about here]

Because we interact the variables of interest with other variables, it is best to use statistical simulations to gauge both the substantive and statistical significances of marginal changes in the variables of interest (Brambor et.al. 2006; Kam and Franzese 2007). The figures that we use to show our results rely on the creation of scenarios where we set a variable of interest to two values while allowing another variable to vary across its observed range of values. We hold all other variables in the model constant at their mean levels. For each simulated value of the two interacted variables, we calculate the 95th confidence interval for unemployment entitlement.<sup>16</sup> Note that for each graph we are interested in two relationships: 1) if there are significant differences in the dependent variable's level between the two set values of the first variable, and 2) if there are significant differences in the dependent variable's level across the values of the second variable. From these, we can conclude the impact of each interactive relationship on the level of unemployment entitlement.

Figure 2 presents the predicted level of unemployment entitlement across the range of observed values of change in immigration for two levels of integration. The two scenarios depicted in this figure come from setting integration first to a low level and then a high level (as determined by the observed values at the 10th and 90th percentiles in our data). First, we can see in this figure that across the values of change in immigration, the two integration scenarios overlap, indicating that integration does not have a statistically significant effect regardless of the change in the immigration rate and offering no support

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<sup>15</sup>Note that we performed robustness checks on our results in the form of jackknifing them for each country and year. Given the variance pattern in the integration measure, we also checked our results using a subset of the data, that before 1999.

<sup>16</sup>These figures were produced using the Clarify program (Tomz et.al. 2003).

for Hypothesis #1. Second, to assess the impact of changes in immigration, we need to compare across the confidence intervals for the same scenario. For both low and high levels of integration, the confidence intervals on the left side of the figure do not overlap those on the right side of the figure. Therefore, we can see that changes in immigration do have a statistically significant effect on unemployment entitlement regardless of the level of integration.

[Figure 2 about here]

If we illustrate this same relationship by allowing integration to vary across its observed values and setting the change in immigration at two levels, then in Figure 3 we see another picture of this relationship. At first glance, this figure highlights a significant relationship between integration and changing immigrant flows for countries with mid-range levels of integration. Further analysis reveals that this range of between .5 and 1.1 includes 80 percent of the cases in the study. At the same level of integration, countries with high rates of change in their immigration flows (a 10 percent increase from the previous year) have higher percentages of unemployment benefits than those with a low level of immigration rate change (a 2 percentage point decrease from the previous year). Second, when comparing each immigration scenario across the range of integration, their confidence intervals overlap from less to more integration, indicating no statistically significant influence of integration. The results of the scenarios in these figures point to situations where countries with increased immigration, regardless of the extent of their integration, have more generous unemployment benefits. Therefore, we find no support for Hypothesis #1.

[Figure 3 about here]

When changes in immigration interact with different domestic political contexts, does this lead to varying levels of unemployment entitlement? Beginning with government institutions, Figures 4 and 5 show the results from scenarios illustrating the differences in benefit levels when setting the percentage of left parliamentary seats at two points—a minority (20 percent) or majority share (51 percent) of left party seats—and allowing the change in immigration rates to vary across its observed values. By letting the change in immigration differ across its values in Figure 4, we can see how the government scenarios lead to different benefit outcomes. First, there is no discernible statistical difference between the two scenarios in the level of unemployment benefits as immigrant flows change. The confidence intervals for the scenarios overlap as changes in immigration move from lower to higher levels. However, secondly, there are significant differences in the level of benefits as the change in immigration varies but only when left parties control a majority of parliamentary seats. Larger changes in immigration combined with strong left party support in parliament lead to more generous unemployment provisions, and we find no corresponding relationship when left parties control only 20 percent of parliamentary seats. This offers some support for Hypothesis #2a.

[Figure 4 about here]

Turning to Figure 5 to flesh out this relationship further, we can see a more nuanced picture of how changes in immigration and domestic politics interact to alter unemployment entitlements. We find that a true majority of left party seats is not necessary. When immigration increases substantially from the previous year and the left holds at least 35 percent of seats, then unemployment entitlements are significantly more than when the change in immigration is negative, which supports Hypothesis #2a. In tracing each the level of change in immigration across the range of left party seats, we find that the confidence intervals overlap, indicating that the changing rates of immigration do not

significantly vary across the percentage of left party seats.

[Figure 5 about here]

Next, we turn to how changes in the immigration rate and the effective power of labor unions interact to affect unemployment entitlements. Figures 6 and 7 illustrate the relationship between varying levels of change in immigration, union density, and unemployment entitlements. As Figure 6 shows, there are no significant differences between the levels of entitlements for low and high levels of union density; the confidence intervals overlap across the full range of observed values for immigration change. When comparing each scenario across the range of changes in immigration, we also find no significant relationships; the confidence intervals for each level of union density across changes in immigration overlap.

[Figure 6 about here]

However, in Figure 7, we see that changes in immigration rates do have a significant influence on unemployment entitlements once union density achieves a certain level (around 40 percent). Compared to countries with negative change rates of immigration, countries with higher rates of change have significantly higher levels of unemployment entitlements, but this difference only occurs when countries have substantial labor union power. The results from this scenario offer support for Hypothesis #2b, which suggested that increased immigration into states with substantial labor union power would result in higher unemployment entitlements. When looking at the confidence intervals across union density for the two levels of immigration change, we find overlap, indicating that the different rates of immigration do not significantly vary across the percentage of unionization.

[Figure 7 about here]

## Discussion

How immigration affects unemployment protection is not a straight-forward relationship. From a neoliberal viewpoint, changes in immigrant labor can produce economic pressures on a domestic labor market, resulting in falling benefits. But if we consider the compensation argument, then depending on a country's domestic political context, these same pressures may correspond with higher levels of welfare provisions. Our empirical findings in this paper provide some support for the compensation argument that immigration does not generate a race-to-the-bottom in unemployment entitlements in EU welfare states. The policy mechanisms that support more generous unemployment provisions hinge on the interactive relationships among economic forces and various institutional arrangements. Interestingly, globalization plays less of a role than previous research would have us expect.

Turning to how the movement of immigrant labor interacts with different institutional mechanisms, our empirical results suggest that EU integrative forces demonstrate less of an impact on unemployment entitlements than domestic institutional forces. Immigration has the same effect in countries regardless of their level of integration into the common EU labor market. Countries more open to the market are not more likely to decrease or increase their unemployment benefits. In fact, an increased immigration rate from the previous year has a positive effect on welfare provisions in countries at all levels of integration, illustrating how this globalizing force takes a backseat to the influence of domestic policymakers.

We argue that one reason why the effect of immigration depends on domestic politics is because left parties and labor unions directly represent domestic workers' policy pref-

erences. To make decisions on unemployment entitlements, however, governments need to balance the economic interests of capital and labor (Basinger and Hallerberg 2004). With rising immigration rates, we expect substantial left party strength and labor union strength to have more salient impacts in sustaining high levels of unemployment entitlements. Corresponding with others' findings (Huber and Stephens 2001; Swank 2002), we find that when immigration rates increase and left parties have majoritarian positions in parliament, these parties are able to translate labor preferences into policies that benefit their main constituents.

Furthermore, we find consistent evidence in line with the institutional literature in terms of how both domestic institutions—left parties and labor unions—condition the effects of immigration on unemployment entitlements. As long-term policy provisions for compensating job market risks, unemployment entitlements are determined by both domestic workers' demands and whether there are policymaking institutions that can translate these demands into policies (Burgoon 2001; Iversen and Cusack 2000). We find in both cases that as the share of left party seats in parliaments and the extent of unionization reach a substantial level, the generosity of unemployment entitlements is greater than under other domestic contexts. When either left parties or labor unions are weak, unemployment entitlements do not vary significantly across levels of immigration, indicating that immigration exhibits different impacts on welfare provisions depending on the institutional landscapes.

Under certain conditions, labor market openness and welfare policy may be able to reinforce each other. Our findings suggest the importance of considering various aspects of globalization in order to further disentangle the connections between economic integration, openness, and welfare policy (Burgoon 2001). Domestic policy changes, meanwhile, could vary across time due to different immigration scenarios. The varying policy re-

sponses to globalizing forces might generate very different compensation politics benefit different labor groups in EU member states. Further disaggregating both welfare policy efforts and immigration patterns would contribute to add knowledge for understanding the complex dynamics of welfare compensations.

## **Conclusion**

In this paper, we argue that compared with the capital side of economic globalization, labor immigration can generate higher domestic demands for welfare compensation, through various political mechanisms. Modeling immigration as an economic shock to unemployment benefits, we show that focusing on the capital side of globalization may limit our understanding of how countries adjust their welfare policies under global economic pressures. By including the influences of both capital and labor in our model of welfare policy, we are better able to explain how the interconnectedness of countries at an economic level affects domestic public policies. We show that open labor markets and free labor movement can create pressures for European welfare states to maintain a generous level of unemployment benefits.

The impact of immigrants on unemployment, however, is filtered through domestic institutions. We transcend the unidirectional aspects of these previous arguments by emphasizing the complex and interactive nature of the relationships between immigration and multiple institutions. Our empirical findings demonstrate that the EU labor market integration mechanism shows less impact on welfare changes than domestic political institutions. As global economic forces have generated a more open and interdependent world among states, changes in labor demographics and relevant welfare policies will be an important arena in order to further investigate the relationship between growth, development, and inequality.

## References

- Achen, Christopher H. 2000. Why Lagged Dependent Variables Can Suppress the Explanatory Power of Other Independent Variables. Annual meeting of the Political Methodology Section of the American Political Science Association Los Angeles: .
- Arellano, Manuel & Stephen Bond. 1991. "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations." *Review of Economic Studies* 58:277–297.
- Baile, Leiven et al. 2004. "Measuring European Financial Integration." *Oxford Review of Economic Policy* 20(4):509–530.
- Baltagi, Badi H. 2008. 2008. *Econometric Analysis of Panel Data*. 4th ed. West Sussex, UK: John Wiley & Sons, Ltd.
- Banting, Keith G. 2000. "Looking in Three Dimensions: Migration and the European Welfare State in Comparative Perspective". In *Immigration and Welfare: Challenging the Borders of the Welfare State*, ed. Michael Bommes & Andrew Geddes. New York, NY: Routledge pp. 13–34.
- Basinger, Scott J. & Mark Hallerberg. 2004. "Remodeling the Competition for Capital: How Domestic Politics Erase the Race to the Bottom." *American Political Science Review* 98(2):261–276.
- Baur, Thomas & Klaus F. Zimmermann. 1997. "Integrating the East: the Labor Market Effects of Immigration". In *Europe's Economy Looks East: Implications for Germany and the European Union*, ed. Stanley W. Black. New York, NY: Cambridge University Press pp. 269–310.
- Beck, Nathaniel & Jonathan N. Katz. 1995. "What to do (and Not to Do) with Time-Series Cross-Section Data." *The American Political Science Review* 89(3):634–647.
- Blanchard, Olivier. 1998. *The Economics of Post-Communist Transition*. New York, NY: Oxford University Press.
- Blanchard, Olivier & Justin Wolfers. 2000. "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence." *Economic Journal* 110(462):1–33.
- Boeri, Tito & Katherine Terrell. 2002. "Institutional Determinants of Labor Reallocation in Transition." *The Journal of Economic Perspectives* 16(1):51–76.
- Bommes, Michael & Andrew Geddes. 2000. "Immigration and Welfare States". In *Immigration and Welfare: Challenging the Borders of the Welfare State*, ed. Michael Bommes & Andrew Geddes. New York, NY: Routledge pp. 1–13.
- Borjas, George J., Richard B. Freeman & Lawrence F. Katz. 1996. "Searching for the Effect of Immigration on the Labor Market." *The American Economic Review* 86(2):246–251.

- Brambor, Thomas, William Roberts Clark & Matt Golder. 1994. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14(1):63–82.
- Brooks, Sarah M. 2002. "Social Protection and Economic Integration: The Politics of Pension Reform In an Era of Capital Mobility." *Comparative Political Studies* 35(5):491–532.
- Brooks, Sarah M. 2007. "When Does Diffusion Matter? Explaining the Spread of Structural Pension Reforms Across Nations." *The Journal of Politics* 69(3):701–715.
- Burgoon, Brian. 2001. "Globalization and Welfare Compensation: Distinguishing the Ties and Binds." *International Organization* 55(3):509–551.
- Cameron, David. 2001. "Unemployment, Job Creation, and Economic and Monetary Union". In *Unemployment in the New Europe*, ed. Nancy Bermo. New York, NY: Cambridge University Press pp. 87–118.
- Castles, Francis G. 2001. "Decentralization and the post-war political economy." *Journal of European Social Policy* 11(3):195–211.
- Clarke, John. 2004. "Dissolving the Public Realm? The Logics and Limits of Neoliberalism." *Journal of Social Policy* 33(01):27–48.
- Cusack, Thomas R. 1999. "Partisan Politics and Fiscal Policy." *Comparative Political Studies* 32(4):464–486.
- Favell, Adrian & Randal L. Hansen. 2002. "Markets against politics: migration, EU enlargement and the idea of Europe." *Journal of Ethnic and Migration Studies* 28(4):581–601.
- Funke, Katja & Isabell Koske. 2008. "Does the Law of One Price Hold within the EU? A Panel Analysis." *International Advances in Economic Research* 14(1):11–24.
- Garrett, Geoffrey & Deborah Mitchell. 1997. "International Risks and Social Insurance: Reassessing the Globalization-Welfare State Nexus." Department of Political Science, Yale University.
- Geddes, Andrew. 74. "Migration and the Welfare State in Europe." *The Political Quarterly* 1:150–162.
- Goldberg, Pinelopi K. & Frank Verboven. 2005. "Market Integration and Convergence to the Law of One Price: Evidence from the European Car Market." *Journal of International Economics* 65(1):49–73.
- Ha, Eunyung. 2008. "Globalization, Veto Players, and Welfare Spending." *Comparative Political Studies* 41(6):783–813.
- Haldrup, Neils, Torben M. Anderson & Jan Ros Sorensen. 2000. "Labor Market Implications of EU Product Market Integration." *Economic Policy* 15(38-68).

- Halfmann, Jost. 2000. "Welfare State and Territory". In *Immigration and Welfare: Challenging the Borders of the Welfare State*, ed. Michael Bommers & Andrew Geddes. New York, NY: Rudledge pp. 34–51.
- Hall, Peter A. 2001. "Organized Market Economics and Unemployment in Europe: Is It Finally Time to Accept Liberal Orthodoxy?". In *Unemployment in the New Europe*, ed. Nancy Bermo. New York, NY: Cambridge University Press pp. 52–86.
- Hall, Peter A. & David Soskice. 2004. *Varieties of Capitalism: the Institutional Foundations of Comparative Advantage*. New York, NY: Oxford University Press.
- Hansson, Asa & Karin Olofsdotter. 2008. "Integration and the Structure of Public Spending." *Comparative Political Studies* 41(7):1001–1007.
- Heston, Alan, Robert Summers & Bettina Aten. 2009. *Penn World Table Version 6.3*. Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania.
- Hicks, Alexander & Duane Swank. 1992. "Politics, Institutions, and Welfare Spending in Industrialized Democracies, 1960-1982." *The American Political Science Review* 86(3):658–674.
- Huber, Evelyne, Charles Ragin & John D. Stephens. 1993. "Social Democracy, Christian Democracy, Constitutional Structure, and the Welfare State." *The American Journal of Sociology* 99(3):711–749.
- Huber, Evelyne & John D. Stephens. 2001. *Development and Crisis of the Welfare State Development and Crisis of the Welfare State: Parties and Policies in Global Markets*. Chicago, IL: University of Chicago Press.
- Hunger, Uwe. 2000. Temporary Transnational Labor Migration in an "Integrating Europe and the Challenge to the German Welfare State". In *Immigration and Welfare: Challenging the Borders of the Welfare State*, ed. Michael Bommers & Andrew Geddes. New York, NY: Rudledge pp. 186–204.
- Ireland, Patrick R. 2004. *Becoming Europe: Immigration, Integration, and the Welfare State*. Pittsburg, PA: University of Pittsburg Press.
- Iversen, Torben & Thomas R. Casack. 2000. "The Causes of Welfare State Expansion: Deindustrialization or Globalization." *World Politics* 52(3):313–349.
- Kahler, Mills. 1992. "External Influence, Conditionality and the Politics of Adjustment". In *The Politics of Economic Adjustment: International Constraints, Distributive Politics, and the State.*, ed. Stephan Haggard & Robert Kaufman. Princeton, NJ: Princeton University Press. pp. 89–136.
- Kam, Cindy D. & Robert J. Jr. Franzese. 2007. *Modeling and Interpreting Interactive Hypotheses in Regression Analysis*. Ann Arbor, MI: University of Michigan Press.

- Kivst, Jon. 2004. "Does EU Enlargement Start a Race to the Bottom? Strategic Interaction Among EU Member States in Social Policy." *Journal of European Social Policy* 14(3):301–318.
- Lundborg, Per & Paul S Segerstorm. 2002. "The Growth and Welfare Effects of International Mass Immigration." *Journal of International Economics* 56(1):177–204.
- Maddala, Gangadharrao S. & Shaowen Wu. 1999. "A Comparative Study of Unit Root Tests with Panel Data and a New Simple Test." *Oxford Bulletin of Economics and Statistics* 61(0):631–652.
- Martin, John P. 1996. "Measures of Replacement Rates for the Purpose of International Comparisons: A Note." *OECD Economic Studies* 26:99–115.
- Nannestad, Peter. 2007. "Immigration and Welfare States: A Survey of 15 Years of Research." *European Journal of Political Economy* 23(2):512–532.
- OECD. 1994. *The OECD Jobs Study: Facts, Analysis, Strategies*. Organization for Economic Co-operation and Development.
- OECD. 2007. *Benefits and Wages 2007: OECD Indicators*. Paris, France: OECD Publishing.
- OECD. 2009. *Unit Labor Costs: Annual Indicators*. Oecd.stat ed. Organization for Economic Co-operation and Development.
- Palier, Bruno & Robert Sykes. 2001. "Challenges and Changes: Issues and Perspectives in the Analysis of Globalization and the European Welfare States". In *Globalization and European Welfare States: Challenges and Change*, ed. Robert Sykes, Bruno Palier & Pauline M. Prior. New York, NY: Palgrave Macmillan Ltd. pp. 1–16.
- Peridy, Nicholas. 2007. "Welfare Magnets, Border Effects or Policy Regulations: What Determinants Drive Migration Flows into the EU?" *Global Economic Journal* 6(4):14–39.
- Pierson, Paul. 1994. *Dismantling the Welfare State? Reagan, Thatcher, and the Politics of Retrenchment*. New York, NY: Cambridge University Press.
- Quinn, Dennis. 1997. "The Correlates of Change in International Financial Regulation." *The American Political Science Review* 91(3):531–551.
- Razin, Assaf & Efraim Sadka. 2000. "Unskilled Migration: A Burden or a Boon for the Welfare State." *The Scandinavian Journal of Economics* 463-479.
- Rhodes, Martin. 1996. "'Subverse Liberalism': Market Integration, Globalization and the European Welfare State." *Journal of European Public Policy* 2(3):384–460.
- Rhodes, Martin. 2001. "Globalization, Welfare States and Employment: Is There a European 'Third Way'?" In *Unemployment in the New Europe*, ed. Nancy Bermo. New York, NY: Cambridge University Press pp. 87–118.
- Rodrik, Dani. 1998. "Why Do More Open Economies Have Bigger Governments?" *Journal of Political Economy* 106(5):997.

- Rosenbloom, Joshua L. 1990. "One Market or Many? Labor Market Integration in the Late Nineteenth-Century United States." *Journal of Economic History* 50(1):85–107.
- Rudra, Nita & Stephan Haggard. 2005. "Globalization, Democracy, and Effective Welfare Spending in the Developing World." *Comparative Political Studies* 38:1015–1049.
- Sanz, Ismael & Francisco J. Velzquez. 2001. "The Evolution and Convergence of the Government Expenditure Composition in the OECD Countries." *Public Choice* 119(1):61–72.
- Sarno, Lucio & Mark P. Talyos. 2002. *The Economics of Exchange Rates*. New York, NY: Cambridge University Press.
- Scheve, Kenneth F. & Matthew J. Slaughter. 2006. "Public Opinion, International Economic Integration, and the Welfare State". In *Globalization and Egalitarian Redistribution*, ed. Samuel Bowles Pranab Bardhan & Michael Wallerstein. Princeton, NJ: Princeton University Press.
- Streeck, Wolfgang. 1993. "The Rise and Decline of Neocorporatism". In *Labor and an Integrated Europe*, ed. Lloyd Ulman, William T. Dickens & Barry Eichengreen. Brookings Institute pp. 80–101.
- Swank, Duane. 2002. *Global Capital, Political Institutions, and Policy Change in Developed Welfare States*. New York, NY: Cambridge University Press.
- Tomz, Michael, Jason Wittenberg & Gary King. 2003. "Clarify: Software for Interpreting and Presenting Statistical Results." *Journal of Statistics Software* 8(1):1–30.
- Wallerstein, Michael, Miriam Golden & Peter Lange. 1997. "Unions, Employer Associations, and Wage-Setting Institutions in Northern and Central Europe, 1950-1992." *Industrial and Labor Relations Review* 50(2):379–401.
- Walz, Uwe. 1997. "Dynamic Effects of Economic Integration: a Survey." *Open Economics Review* 8(3):309–326.
- Zimmermann, Klaus F. 1995. "Tackling the European Migration Problem." *The Journal of Economic Perspectives* 9(2):45–62.

Table 1: Effects of Immigration, Integration, and Domestic Institutions on the Level of Unemployment Entitlement in Developed EU Welfare State: 1971-2007

Variable	Coefficient	(PCSEs)
$\Delta$ Immigration	-0.189	(0.154)
Integration	0.957	(0.647)
$\Delta$ Trade	0.005	(0.015)
$\Delta$ FDI	-0.073*	(0.043)
Union Density	-3.106*	(1.627)
Left Seats	0.001	(0.012)
$\Delta$ GDP	-0.0001	(0.0002)
$\Delta$ Unemployment	-0.104	(0.083)
$\Delta$ Immigration $\times$ Integration	-0.068	(0.093)
$\Delta$ Immigration $\times$ Union Density	0.368	(0.260)
$\Delta$ Immigration $\times$ Left Seats	0.005*	(0.003)
Entitlement <sub><math>t-1</math></sub>	0.874**	(0.021)
Intercept	3.904**	(1.142)
N	482	
$\rho$	0.410	
$R^2$	0.963	

\*  $p < .10$ , two-tailed t-test

\*\*  $p < .05$ , two tailed t-test

Notes:

- Dependent variable is the level of unemployment entitlements.
- Coefficients for country dummies not reported.

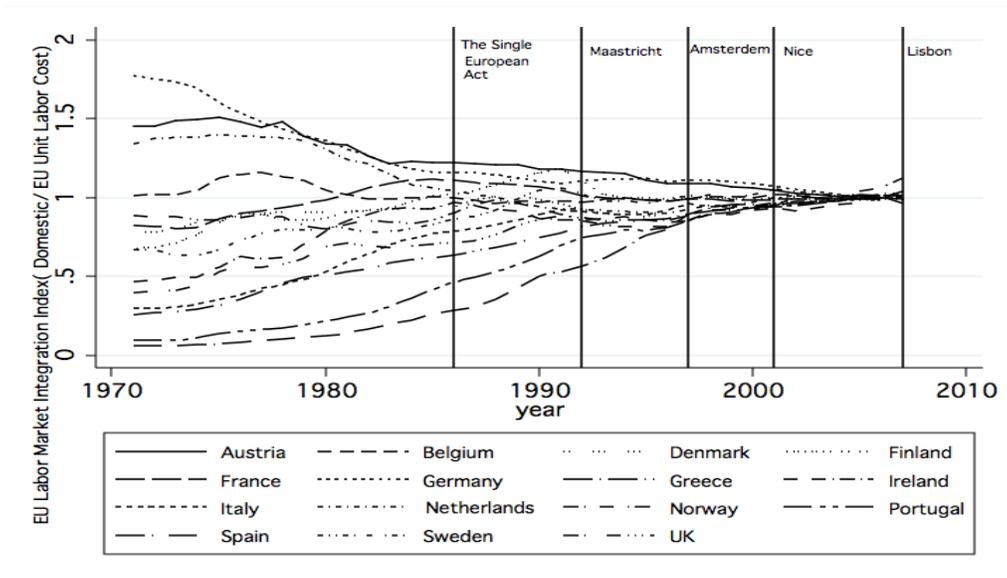


Figure 1: Changes in EU Labor Market Integration:1971-2007 (Data Source: OECD Statistics, the Unit Labor Costs–Annual Indicators)

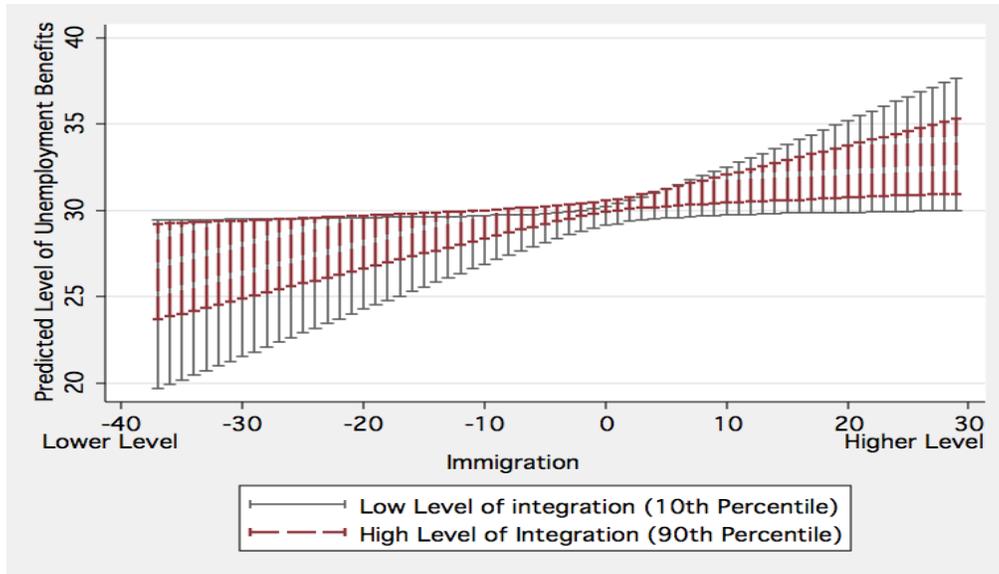


Figure 2: Levels of Integration Across the Range of Immigration  
*Note: All other variables are held at their means.*

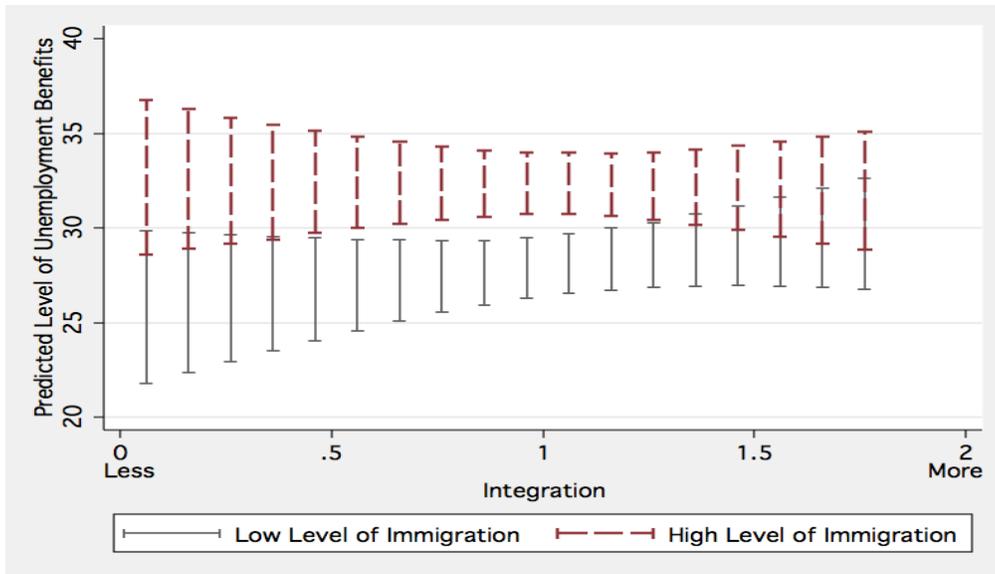


Figure 3: Levels of Immigration Across the Range of Integration  
*Note: All other variables are held at their means.*

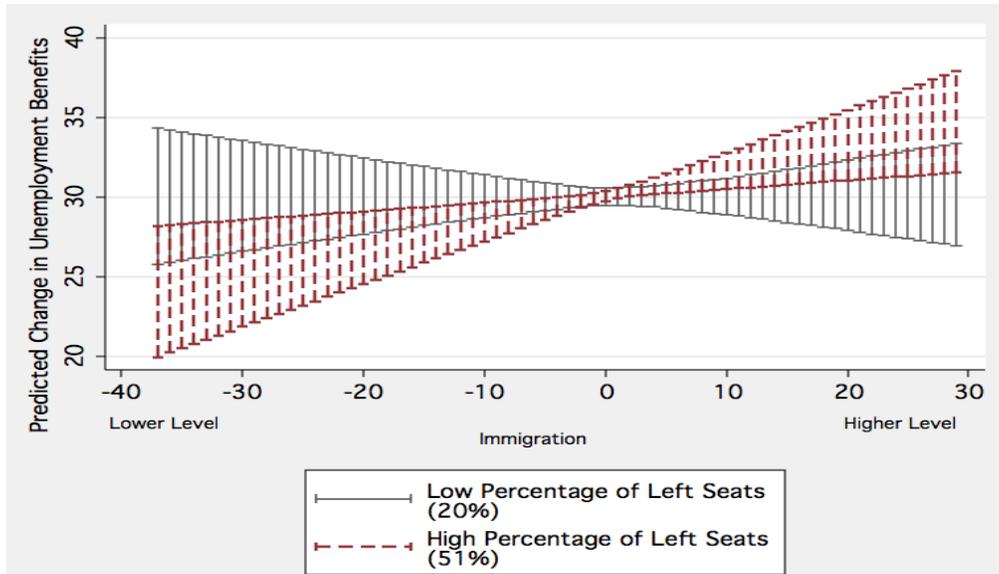


Figure 4: Levels of Left Party Seats Across the Range of Immigration  
*Note: All other variables are held at their means.*

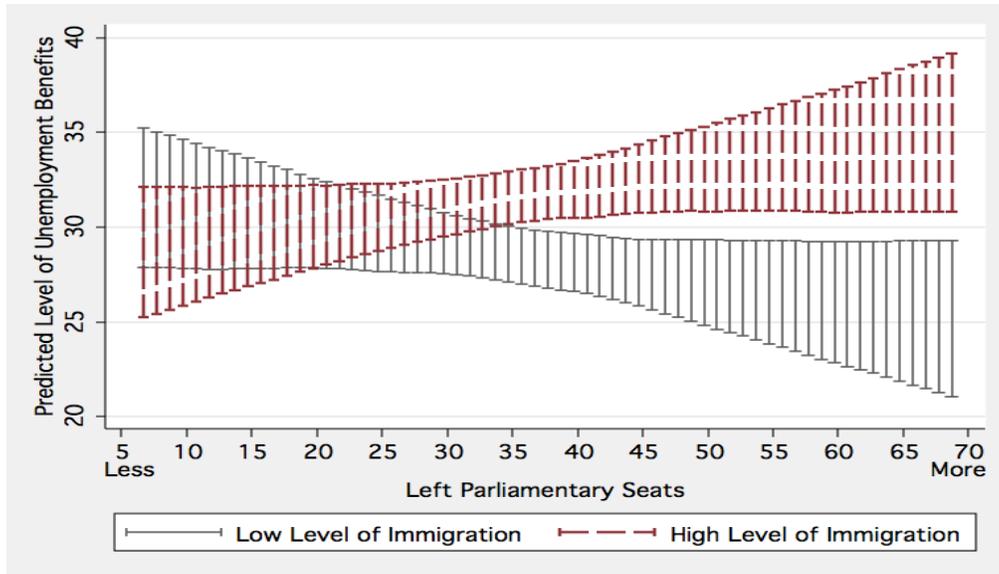


Figure 5: Levels of Immigration Across the Range of Left Party Seats  
*Note: All other variables are held at their means.*

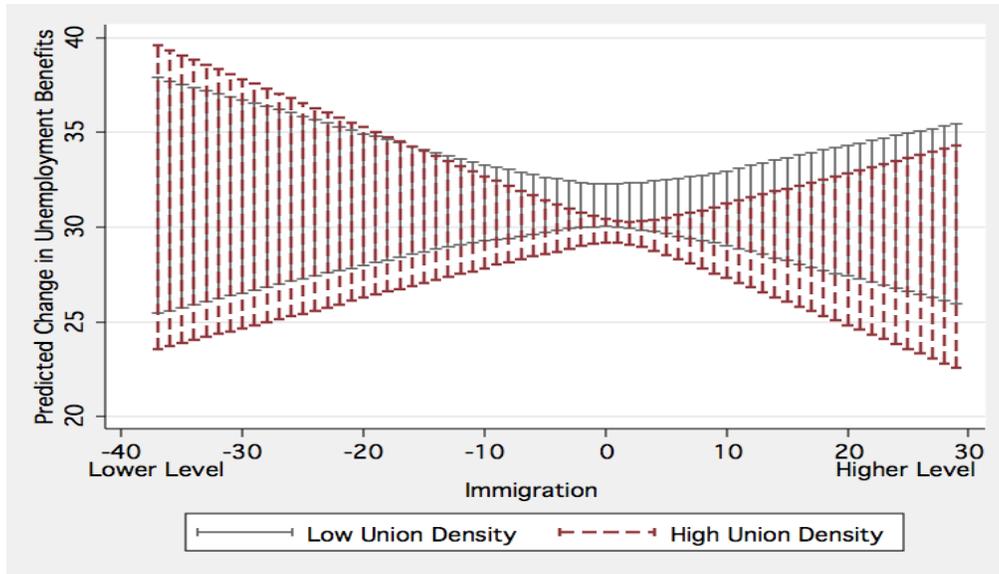


Figure 6: Levels of Union Density Across the Range of Immigration  
*Note: All other variables are held at their means.*

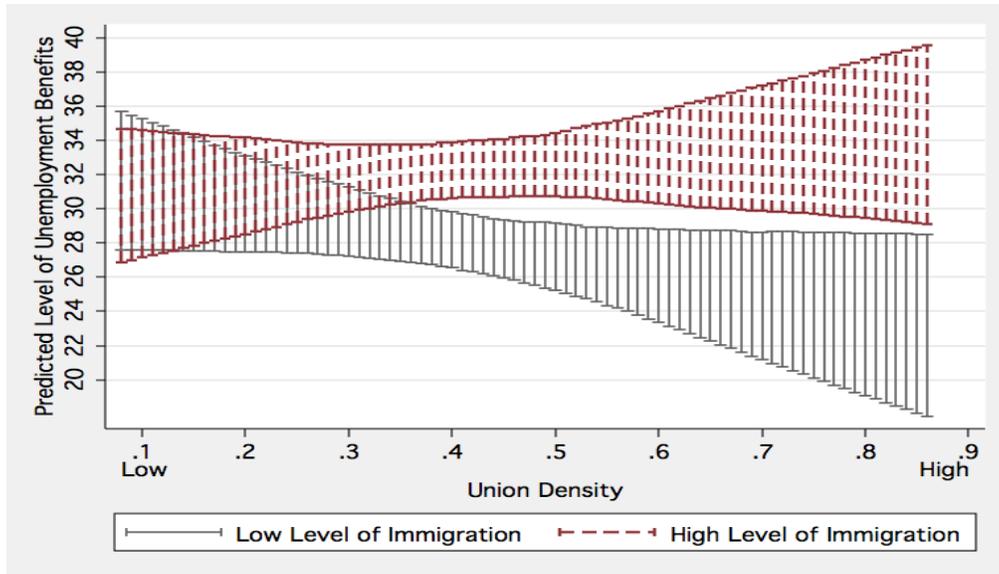


Figure 7: Levels of Immigration Across the Range of Union Density  
*Note: All other variables are held at their means.*