

## Globalization and Perceptions of Economic Insecurity\*

So Young Kim

*One of the fundamental assumptions in the literature on economic globalization is that economic openness generates greater economic volatility and insecurity. Casting doubt on this assumption, this study explores how openness affects workers' perceptions of economic insecurity. Analyzing the combined aggregate and individual-level survey data, I find a significant divergence in the impact of openness between developed and developing countries; both the level and growth of trade are linked to greater perceived job insecurity in the non-OECD countries but to less perceived job insecurity in the OECD countries. Calling into question the openness-insecurity link, this study emphasizes that understanding the complexity of the linkages between globalization and economic insecurity is crucial for assessing various causal arguments of the existing studies of globalization as well as for better understanding the problems and constraints brought up by global economic forces.*

**Keywords:** *Globalization, Economic Insecurity, Economic Volatility, Job Insecurity, Welfare State, Compensation Hypothesis*

### 1. INTRODUCTION

One of the fundamental assumptions in the growing literature on economic globalization is that worldwide economic integration generates greater economic volatility and insecurity. Based on this assumption, recent scholars of international political economy (IPE) have advanced the so-called compensation hypothesis, claiming that globalization would reinforce rather than dismantle the welfare state. According to this argument, increasing global economic integration brings about greater societal demand for the role of the state in compensating the losers of globalization (Burgoon 2001; Garrett 1998, 2001; Garrett & Mitchell 2001; Rodrik 1997, 1998a). Henceforth, rather than being rendered irrelevant in a borderless world (Friedman 2000; Ohmae 1990), the state is as relevant as in the past or even more so as a provider of social protection and insurance in a globalizing world (Mann 1997; Weiss 2000).

The economic volatility/insecurity assumption is widely shared among scholars, policymakers, and the public. In a recent survey of European nations, an overwhelming majority of respondents attributed to globalization such economic illnesses as job insecurity and high unemployment (Wilson et al. 2002). Other public opinion surveys reveal the continuing popularity of welfare programs, which is primarily driven by citizens' perception that economic security has worsened in tandem with increasing economic integration (Boeri et al. 2001; Shapiro & Young 1989). Furthermore, as attested by political protests at virtually every major meeting of international financial institutions, economic anxiety and distress

---

\* Earlier versions of the paper were presented at the Annual Meeting of the Midwest Political Science Association, Chicago, April 2003, and at the Interdisciplinary Colloquium, Center for International and Comparative Studies, Northwestern University, May 2004. I thank the late Michael Wallerstein, Erik Wibbels, and Hyeok Yong Kwon for their valuable comments on various versions of the paper. I also appreciate the insightful comments from the two anonymous reviewers.

spawned by the deleterious effects of global market integration is the principal concern behind the recent backlash against globalization.

Though scholars and commentators on globalization have taken it for granted that economic globalization leads to greater economic insecurity, it has not been studied much whether and how globalization is linked to the perceptions of economic insecurity among the public. This study explores the globalization-insecurity linkage by analyzing a survey question about the importance of job security from the Third-Wave World Values Surveys (1995-97). This study improves upon the existing research on the openness-insecurity relationship in a few aspects. First, while the previous studies relied mostly on individual-level survey data when examining the openness-insecurity linkage (Aldrich et al. 1999; Anderson & Pontusson 2001), this study relates actual levels of openness to perceived job insecurity by merging aggregate economic data with opinion survey data. Second, compared to the existing research focusing on a handful of advanced industrial countries, this study examines and contrasts both developed and developing nations including transitional economies. This inclusion of developing countries is not simply to add more cases but to explore the differential impact of globalization on economic insecurity in countries of disparate levels of political and socioeconomic development.

Indeed, one of the key findings of this study is the divergent pattern of the openness-insecurity relationship between the developed and developing world. Increasing exposure to trade is linked to perceptions of greater job security among workers of non-OECD countries, whereas it is linked to lower levels of perceived job insecurity among those of OECD countries. Another major finding also reveals a differential effect of macroeconomic volatility on perceived job insecurity between developed and developing countries; macroeconomic volatility proxied by output volatility is associated to perceptions of greater job insecurity in the non-OECD sample of countries but not in the OECD sample.

These findings, holding in various sensitivity and robustness tests, pose a puzzle for the aforementioned compensation argument and more generally for the literature on globalization. A central empirical pillar of the compensation argument is the positive association that IPE scholars have found between trade openness and government social spending in most of the postwar decades. The current results suggest, however, that increasing trade does not lead to greater demand for social spending *via* increased worker insecurity in the advanced world, as openness is not linked to higher perceived job insecurity in this region. The causal mechanism linking openness and social spending is thus under-specified despite the voluminous research on the globalization-welfare state nexus.

Also puzzling is the widespread discontent with globalization among the global public. If perceived economic insecurity is not necessarily higher in more open economies of the advanced world, what could then explain such a prevalent sense of economic insecurity and uncertainty among the citizens of these countries? One possibility can be found in the research by Torben Iversen and Thomas Cusack (2000), who attributed the increasing levels of insecurity to domestic industrial and labor-market changes rather than to economic globalization.<sup>1</sup> Further research is clearly required, however, since perceptions of job insecurity in developing countries are still linked to economic openness and thus cannot be attributed to domestic causes only.

---

<sup>1</sup> Iversen and Cusack (2000) argue that an industrial transformation from a manufacturing-based to a service-based economy, namely 'deindustrialization,' is primarily responsible for increasing economic insecurity and consequently for the expansion of the welfare state.

This study is organized as follows. The next section contains a theoretical discussion of the presumed link between globalization and economic volatility/insecurity, followed by the empirical analysis section presenting the data, methods of estimation, and the findings. The final section concludes by discussing the implications of the study.

## 2. GLOBALIZATION, ECONOMIC VOLATILITY, AND INSECURITY

The apparently simple claim that globalization increases economic volatility and insecurity is in fact fraught with theoretical and analytical problems that have escaped close scrutiny in existing research. First, while economic insecurity and volatility are emblematic expressions of economic instability, they are phenomena of different attributes. Economic volatility concerns the *variability* of a certain economic condition or state, which can be measured by an objective economic indicator, whereas economic insecurity is a notion that is partly objective and partly subjective. A high rate of aggregate unemployment is a sign of objective economic insecurity, whereas individuals' anxiety about a potential job loss is an expression of a subjective feeling of insecurity. Despite these differences, existing scholarship has not distinguished clearly between aggregate volatility and economic insecurity, presuming that globalization would have similar or even identical effects on both aspects of economic instability.

Second, as to economic volatility, it is an unresolved issue whether increasing economic openness leads to greater aggregate volatility. Economic integration has dual effects on volatility. Trade-induced specialization according to comparative advantage may generate greater volatility as it concentrates risk in certain sectors or industries, whereas market expansion due to foreign trade can reduce domestic output volatility.<sup>2</sup> Reflecting these theoretical ambiguities, the empirical evidence for the openness-volatility link is largely mixed. Some find a significantly positive effect of trade and financial openness on output volatility (Easterly et al. 2001; Gavin & Hausmann 1996), and others report an insignificant or even a negative impact of openness (IMF 2002).

In contrast, studies of individual-level economic insecurity have generally found a negative effect of globalization on economic insecurity. Scheve and Slaughter (2002) maintain that globalization of production leads to greater worker insecurity since firms facing intense global competition would increasingly substitute away from labor towards other factors. Accordingly, labor demand becomes more elastic, leading to larger variances of wages and of employment. Their longitudinal analysis of the British Household Panel Survey (1991-1999) lends strong support to their conjecture, showing that workers employed in industries with greater foreign direct investment activities are more concerned about economic security. An extensive report recently published by the ILO (2004) also finds a negative impact of trade openness on economic security. Drawing on a number of national surveys of labor market conditions, the report ranks ninety ILO member countries on the Economic Security Index, which is constructed from several labor-related security indicators. An interesting finding of this report is that economic security declines sharply with trade openness at low levels of openness but increases with it at very high levels of openness.

---

<sup>2</sup> Likewise, while a more integrated global financial market would be more susceptible to the contagion of country-specific shocks across borders, it will allow greater opportunities for consumption-smoothing and investment diversification (Kim, 2007).

One possibility in the openness-insecurity linkage that has not been explored in the aforementioned research is that globalization may change perceptions of insecurity directly, unmediated by its effect on aggregate volatility or individual-level insecurity.<sup>3</sup> It is highly probable that global economic integration has worsened perceived economic insecurity without necessarily causing any significant disruption in macroeconomic stability. If then, the discrepancy between the aforementioned findings for the openness-volatility relationship, on one hand, and those for the openness-insecurity relationship, on the other hand, may be understood as the differential effects of globalization on objective and subjective dimensions of economic insecurity.<sup>4</sup>

This study examines this understudied aspect of the openness-insecurity link by analyzing the effects of globalization on perceived economic insecurity. It improves on the existing research in a few important ways. First, while existing survey analyses study the openness-insecurity relationship using only individual-level survey data (Boeri et al. 2001; Wilson et al. 2002), this study relates perceptions of economic insecurity to the actual degree of economic openness measured with aggregate economic data. Second, in contrast to the existing studies studying mostly advanced industrial countries, this study relies on a comprehensive cross-national survey dataset which allows a global assessment of public perceptions of economic insecurity. Third, controlling for the effect of aggregate volatility, this analysis isolates the direct effect of globalization on perceived economic insecurity from its indirect effect working through aggregate volatility. Finally, the study explicitly accounts for the sample selection problem that may well result in public opinion surveys on labor market issues such as the current one, as will be explained later.

### 3. EMPIRICAL ANALYSIS

This section introduces the data and the methods for the analysis of the openness-insecurity link and then presents the major findings.

#### 3.1. Data

Economic insecurity pertaining to the risk of economic misfortune can be manifest in various forms (Anderson & Pontusson 2001; Dominitz & Manski 1996; Manski & Straub 2000). This study focuses on job insecurity among those various aspects of economic insecurity for two reasons. First, job insecurity is a major type of economic insecurity as most people in a modern economy rely on wages for their lives. It is also a fundamental kind of insecurity, since other forms of insecurity such as income insecurity or workplace insecurity ultimately depends on the availability of employment. Second, job insecurity is one of the most commonly asked questions about economic conditions in national economic surveys, thus allowing a cross-national comparison.

---

<sup>3</sup> One of the long-standing debates in political economy concerns the very possibility of a mismatch between objective economic conditions and subjective evaluations thereof (Fiorina 1978; Lewis-Beck 1986).

<sup>4</sup> As reviewed here, the empirical evidence for the openness-volatility link is largely inconclusive, while studies using labor market and household surveys in general find the negative relationship between openness and insecurity.

The current empirical investigation draws on the Third Wave of the World Values Surveys (1995-1997), which is composed of fifty-three national surveys.<sup>5</sup> The following survey question was used to measure perceptions of job insecurity: “Here are some more aspects of a job that people say are important. Please look at them and tell me which ones you personally think are important in a job? Good job security (among the listed aspects).”<sup>6</sup> Responses to this question were coded as one if good job security was mentioned and zero, otherwise. We can reasonably assume those who mention job security as an important concern to have more concern about job insecurity.<sup>7</sup>

Note that the current job security question can impart different meanings depending on the respondent’s employment situation. Though employed workers are more secure than unemployed workers in their objective labor market conditions, the prospect of potential job loss may loom larger for the former than for the latter that have already underwent the event. The same can be said of the partly vs. fully employed workers. The opportunity cost of losing a job may be so high for fully employed workers that they may be more concerned about job security compared to part-time workers. All these considerations point to the need to distinguish the impact of openness on perceived job insecurity for workers of different employment conditions.

The major independent variable in this analysis is the degree of economic openness, which is measured by two aggregate indicators capturing trade and financial integration. Trade openness is measured by the ratio of exports and imports to GDP, and financial openness by the ratio of gross private capital flows to GDP. Also included are the growth rates of the openness variables given the inherently dynamic nature of economic globalization.

As mentioned earlier, we need to net out the indirect effect of openness through aggregate volatility in order to capture the direct impact of openness on economic insecurity. To this end, aggregate output volatility measured by the standard deviation of annual GDP growth rates is included as a control. Additional macro-level variables are included as they are likely to influence the level of perceived job insecurity; economy-wide unemployment rates, government social spending (as a share of GDP),<sup>8</sup> and level of development (GDP per capita).<sup>9</sup> For OECD countries, a more specific spending measure is available — the

---

<sup>5</sup> The final sample was reduced to forty-three countries since some country surveys were not nationally representative or did contain the job security question used for the dependent variable.

<sup>6</sup> These listed aspects are: good pay, not too much pressure, a job respected by people in general, good hours, an opportunity to use initiative, generous holidays, a job in which you feel you can achieve something, a responsible job, a job that is interesting, and a job that meets one’s abilities. Each aspect is asked separately and one was allowed to choose more than one aspect.

<sup>7</sup> A question related to economic insecurity such as the current job security question has a normative implication and thus may well yield a skewed distribution of responses towards one. A glimpse of the response rates, however, reveals a substantial variation across countries. For instance, the percentage of the response mentioning job security as important ranges around 40% to 50% in countries like Columbia and Sweden, whereas it ranges about 60% to 70% for Australia, China, and Finland.

<sup>8</sup> All aggregate measures are the averages for 1990-94 except social spending which is entered as a lagged term given its endogenous nature. I appreciate an anonymous reviewer’s advice in this regard.

<sup>9</sup> Higher rates of unemployment would breed a widespread feeling of economic uncertainty. And greater welfare effort of the state would lead to less perceived job insecurity, as state-provided welfare programs can function as a buffer against economic risk.

combined expenditures on active labor market programs and unemployment compensation (as a share of total social spending). For non-OECD countries, I also control for a regime type, as democracies are expected to show lower levels of perceived job insecurity.

Perceptions of job insecurity depend not only on aggregate conditions but also on various individual characteristics such as age, sex, education, class, and political ideology. Age can be positively or negatively related to perceptions of job insecurity. This is because while seniority practices lead to greater job tenure for old-aged workers, the opportunity cost of a job loss increases with age implying a positive relationship. Women may feel more insecure about their job tenure, especially in countries with unequal labor practices for female workers. Education is particularly important for job insecurity, since it closely correlates with an individual's skill level, which is a chief determinant of one's economic vulnerability. Class, approximated by the self-reported class status, also matters, as it summarizes an individual's relative economic position.<sup>10</sup> Finally, the respondent's political leaning may be a relevant control, given that those with leftist ideologies are more likely to be concerned about employment issues.

### 3.2. Methods

The current empirical estimation of the openness-insecurity relationship draws on the following probit model, as the dependent variable is dichotomous:

$$\text{Prob}(y_i = 1) = \Phi(\beta'x_{i,k} + \gamma'x_{i,h}),$$

where  $\text{Prob}(y_i = 1)$  denotes the probability of mentioning good job security as important,  $x_{i,k}$  is the vector of observations for  $k$  individual-level variables,  $x_{i,h}$  is the vector of observations for  $h$  aggregate-level variables,  $\beta$  and  $\gamma$  are the column vectors corresponding to individual and aggregate regressors, and  $\Phi$  represents the cumulative distributive function for the standard normal distribution.

There is a large amount of missing data in the current dataset, which can pose a problem for unbiased and efficient estimation. Missing data in the current dataset arise from two sources, reflecting the two levels of observations. At the individual level, data may be missing because of individual non-responses to a given survey question. At the aggregate level, missing data are due to the unavailability of some macro-level data for certain countries. As well-known in the literature of missing data, listwise deletion, a common practice in political science research, can lead to bias and inefficiency (Allen 2001; King et al. 2001). In the current dataset, aggregate-level data seem to be missing at random, whereas individual-level data appear to be non-random.<sup>11</sup> At the individual level, those who feel more (or less) insecure may self-select themselves into a group of non-respondents to the job security question. This self-selection behavior arises because the conditions that affect how people feel about job security can also affect whether they express their concern about it.<sup>12</sup>

---

<sup>10</sup> The class variable can also be taken as a proxy for one's income level since the WVS dataset lacks an income variable that is compatible across countries.

<sup>11</sup> This is because there is a similar amount of missing data across the macro-level variables, whereas the job security question used for the dependent variable has a disproportionately large number of missing responses compared to other individual-level variables.

<sup>12</sup> Note, however, that it is not obvious whether those who are more concerned about job insecurity are

In order to deal with the missing data, I used two methods, each applied to the aggregate and the individual-level data, respectively. For the macro-level variables whose missing data appear to be random, I rely on multiple imputations using *Amelia* (King et al. 2001). On the other hand, for the sample selection problem expected for individual-level observations, I use Heckman's two-step procedure modified for the probit model (Heckman 1979).<sup>13</sup>

The data analysis proceeds as follows. The first regressions reported in Table 1 uses the baseline specification for employed individuals, which includes the four openness indicators, three macro-level controls and other individual-level control variables. These baseline results are contrasted between two samples of countries, OECD and non-OECD. Additional regressions are then run to check the robustness of the baseline findings against different model specifications. In the regressions of Table 2, the baseline model is applied to individuals of different employment status to see how the impact of openness on perceived job insecurity varies with employment condition. One set of regressions includes all individuals, and the other includes only fully employed persons. Table 3 presents the sensitivity tests using alternative indicators of openness and additional controls. The last regressions of Table 4 check the sample selection problem. Finally, Figures 1 and 2 illustrate the marginal effects of the aggregate variables on the probability of mentioning job security as important.

### 3.3. Baseline Results

The baseline regressions shown in Table 1 reveal a markedly different impact of openness between advanced and developing countries. The level and growth of trade have a significantly positive effect on perceived job insecurity for the non-OECD sample, whereas both of them are negatively linked to perceived job insecurity in the OECD countries. While the effect of financial openness is somewhat different from those of trade openness, the growth rate of capital flows shows a significantly negative effect in the OECD sample but not in the non-OECD sample. All this suggests that perceived job insecurity increases with trade openness in the non-OECD countries but decreases with it in the OECD countries.

---

more likely to answer the current job security question. Consider the employment status of a respondent, which may well affect both the level of her perceived job insecurity and her probability of answering the job security question. On one hand, a fully employed person may be more likely to answer the job security question because she is easier to contact. On the other hand, a part-time employee may be more likely to do so because she would be more eager to express her concern about job security, in which case sample selection will occur in the opposite direction.

<sup>13</sup> Heckman's two-step method is based on the notion that sample selection is an omitted-bias problem. In this method, the first-stage regression derives the probability for a given sample unit to be observed based on some parameters that are thought to affect such a probability, and the second-stage regression estimates the relationship of main interest with this selection probability added as another regressor. Since standard Heckman models have non-binary dependent variables in the second-stage regression, I rely on a statistical command HECKPROB (in *Stata*) that fits probit models with sample selection, as the dependent variable of my second-stage regression is binary. I appreciate an anonymous reviewer's comments on this point.

**Table 1.** Baseline Findings [Employed Persons]

DV: Perceived Job Insecurity	OECD	Non-OECD
<b><i>Openness</i></b>		
ln Trade	-4.778(.719)***	.043(.002)**
ln Trade Growth	-.281(.039)***	.008(.001)***
ln Private Capital Flows	3.687(.597)***	-.027(.013)**
ln Private Capital Flow Growth	-.078(.012)***	.0001(.0003)
<b><i>Aggregate Controls</i></b>		
Output Volatility	-.778(.122)***	.003(.002)*
ln Unemployment	1.833(.311)***	.080(.012)***
ln Social Spending (1990)	.025(.114)	.051(.012)***
ln GDP per capita	3.070(.530)***	-.219(.013)***
<b><i>Individual Controls</i></b>		
Age	-.001(.001)	.011(.000)***
Sex ( <i>female=0, male=1</i> )	.045(.033)	-.031(.017)*
Education	-.111(.009)***	-.033(.004)***
Class (1=upper to 5=lower)	.015(.011)	.017(.007)**
Ideology (1=left to 10=right)	-.008(.009)	-.004(.003)
Constant	-10.854(.807)***	1.741(.021)***
Pseudo R <sup>2</sup>	.0461	.0333
N	6544	25303

\*\*\*  $p < .01$ ; \*\*  $p < .05$ ; \*  $p < .10$ . Reported are the unstandardized probit coefficients and their standard errors in parentheses. All aggregate variables are averaged for 1990-94, except for social spending measures.

Some of the aggregate control variables also exhibit differential effects on perceived job insecurity between the two samples of countries. Output volatility is linked to greater perceived job insecurity in the non-OECD sample but to perceptions of less job insecurity in the OECD sample. Also, in the non-OECD countries the level of development is negatively related to perceived job insecurity as expected, but positively related to it in the OECD countries. These findings suggest distinct dynamics underlying the openness-insecurity link between the developed and developing regions. Quite puzzling is the result for social spending, as it turns out to heighten rather than lessen perceived job insecurity. In particular, the coefficient on social spending is almost always positive for the non-OECD sample throughout the regressions of the current analysis.<sup>14</sup> This seems to suggest the abuses and mismanagement of government spending programs frequently heard of in the developing countries.<sup>15</sup>

Turning to the individual-level controls, most control variables are significantly related

<sup>14</sup> The coefficient on social spending is consistently positive only in the Non-OECD countries. For the OECD countries, it is positive but insignificant, and furthermore, when a more specific social spending measure (i.e., labor spending) is used, it becomes significantly negative (Table 3).

<sup>15</sup> For instance, in many Latin American countries, police salaries are recorded as social expenditures, and it is not unusual for a ruling government to appropriate even an earmarked share of social spending for different purposes.



with perceived job insecurity in the expected direction in the non-OECD sample. Perceived job insecurity is worse among older, less-educated, lower-class, or female workers. On the other hand, only the education variable is significant for the OECD sample.<sup>16</sup>

### 3.4. Robustness Checks

The regressions of Table 2 explore how the effect of openness varies by the condition of employment given the aforementioned possibility of different interpretations for the current job security question. The upper panel shows the regressions for all individuals and the lower panel for fully employed workers. Virtually all the baseline findings are preserved in this Table, especially those showing the contrasting effect of trade openness between the OECD and non-OECD countries.

**Table 2.** Comparing Baseline Results by Employment Status

DV: Perceived Job Insecurity	OECD	Non-OECD
<b><i>Openness</i></b>	<b>[All Persons]</b>	
ln Trade	-4.651(.630)***	.038(.017)**
ln Trade Growth	-.265(.035)***	.008(.001)***
ln Private Capital Flows	3.665(.521)***	-.007(.011)
ln Private Capital Flow Growth	-.076(.011)***	.0003(.0002)
<b><i>Aggregate Controls</i></b>		
Output Volatility	-.775(.107)***	.006(.002)***
ln Unemployment	1.812(.270)***	.100(.011)***
ln Social Spending (1990)	.139(.099)	.042(.010)***
ln GDP per capita	3.023(.450)***	-.204(.016)***
<b><i>Openness</i></b>	<b>[Fully Employed Persons]</b>	
ln Trade	-4.679(.963)***	.071(.030)**
ln Trade Growth	-.286(.053)***	.007(.001)***
ln Private Capital Flows	3.642(.793)***	-.003(.018)
ln Private Capital Flow Growth	-.077(.016)***	-.0001(.0004)
<b><i>Aggregate Controls</i></b>		
Output Volatility	-.759(.163)***	.016(.004)***
ln Unemployment	1.809(.410)***	.105(.017)***
ln Social Spending (1990)	.155(.156)	.021(.018)
ln GDP per capita	3.152(.693)***	-.111(.029)***

See the notes for Table 1. The individual-level controls are omitted for simplicity of presentation.

Table 3 displays the regressions checking the stability of the baseline estimates against the use of alternative indicators or additional controls. In the OECD regressions, the measure of total social spending is replaced with a more specific measure of state-provided labor protection, and the Quinn Index for capital market openness (Quinn & Inclan 1997) is used

<sup>16</sup> The largely insignificant effects of some demographic variables such as age and sex for the OECD countries seem to indicate active labor market policies of these countries that promote equal rights and protection in the workplace.

as an alternative measure of financial openness. For the non-OECD regressions, two measures of political democracy are added – Polity Score from the Polity IV database and the regime type from the ACLP dataset (Przeworski et al. 2000).

**Table 3.** Sensitivity Checks

DV: Perceived Job Insecurity	OECD	Non-OECD	
<i>Specification Change</i>	Quinn Index & Labor Spending	Polity Score	Regime Type
<b><i>Openness</i></b>			
In Trade	-.024(.075)	.060(.021)***	.056(.020)***
In Trade Growth	-.065(.012)***	.009(.001)***	.011(.001)***
In Private Capital Flows		-.007(.014)	.025(.014)*
In Priv. Cap. Flow Growth		.00001(.0002)	.00004(.0003)
Quinn Index	-.093(.024)***		
<b><i>Aggregate Controls</i></b>			
Output Volatility	.014(.044)	.004(.002)	.005(.002)**
In Unemployment	.455(.090)***	.069(.013)***	.067(.013)***
In Social Spending (1990)		.042(.012)***	-.031(.012)**
In Labor Spending (1990)	-.564(.105)***		
In GDP per capita	.682(.243)***	-.243(.020)***	-.254(.019)***
Polity Score		.009(.003)***	
Regime Type			-.185(.023)***

See the notes for Table 1. The individual-level controls are omitted for simplicity of presentation.

As seen in the size and sign of the coefficients on the openness variables, the key result — the differential effects of trade openness between the developing and developed countries — remain unchanged despite the use of these alternative indicators or additional controls. Furthermore, the negative coefficient estimate on the Quinn Index implies that workers' perceptions of job insecurity are in fact lower in more financially integrated countries in the OECD region.<sup>17</sup>

The final table shows the robustness tests using Heckman's sample selection model. The results for the aggregate variables from the regressions with the sample selection model are very much similar to the baseline results, affirming the divergent effect of trade openness between the OECD and non-OECD sample. As to the selection effect of the employment status, the current result attests to the aforementioned dual implications of the full employment status.<sup>18</sup> Note that the  $\rho$  parameter capturing the error correlation between the main and selection regression is insignificant in the OECD sample but significantly positive in the non-OECD sample, which indicates that in the developing countries those who are not

<sup>17</sup> The results for some of the additional macro-level controls are notable. Surprisingly, the two measures of democracy are associated with greater perceptions of job insecurity. While this result seems counterintuitive, it may be understood as a result of greater political and economic freedom in democratic societies that allow their citizens to express economic concerns more actively.

<sup>18</sup> On one hand, the convenience of interviewing fully employed persons may lead to higher response rates. On the other hand, more secure employment conditions of fully employed workers may make them less interested in the job security question yielding lower response rates.

likely to answer the job security question are also likely to feel more insecure about their job tenure.

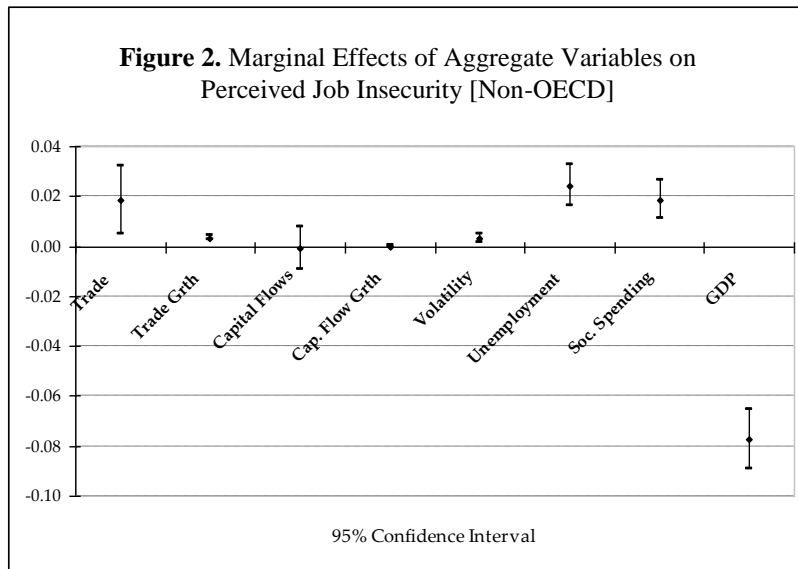
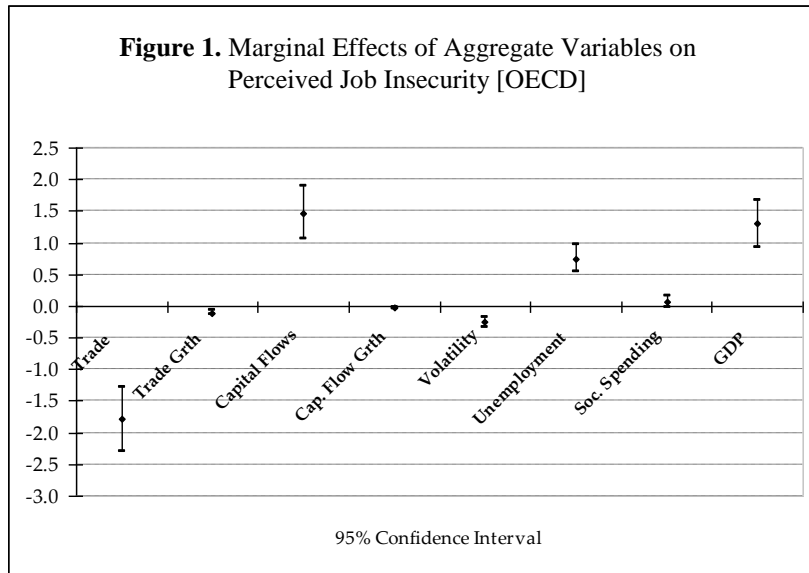
**Table 4.** Checking the Sample Selection Problem

<i>Main Regression</i>	OECD	Non-OECD
<b><i>Openness</i></b>		
In Trade	-4.890(.704)***	.052(.019)***
In Trade Growth	-.0284(.039)***	.009(.001)***
In Private Capital Flows	3.999(.584)***	-.002(.012)
In Priv. Capital Flow Growth	-.077(.012)***	.0004(.0003)
<b><i>Aggregate Controls</i></b>		
Output Volatility	-.707(.012)***	.009(.002)***
In Unemployment	2.039(.305)***	.069(.012)***
In Social Spending	.180(.112)	.053(.011)***
In GDP per capita	3.559(.519)***	-.218(.017)***
<b><i>Selection Model</i></b>		
Fully Employed	.234(.214)	.006(.033)
Age	-.016(.007)**	-.002(.001)**
Sex	-.197(.215)	-.226(.034)***
Education	-.025(.049)	.182(.008)***
Class	.042(.086)	.226(.019)***
Ideology	-.079(.052)	.056(.007)***
Constant	4.084(.677)***	.130(.106)
$\rho$	-.989(4.900)	.682(.070)***
Wald $\chi^2$	199.35***	487.75***
N	6555	26100

See the notes for Table 1. The dependent variable in the selection regression is a dummy variable representing missing responses.

Figures 1 and 2 illustrate the relative effects of the aggregate variables for the two country samples. These graphs based on the regressions of Table 4 display the estimates for the marginal effects of the aggregate variables evaluated at their mean values and the 95% confidence intervals around those estimates.<sup>19</sup> For the OECD countries, the level of trade shows the biggest impact on the probability to mention job security as important. Its marginal effect is to *decrease* the dependent probability by 1.79 (plus or minus 0.26). The second largest effect is of the level of private capital flows, whose marginal effect is to increase the dependent probability by 1.46 (plus or minus 0.21). For the non-OECD countries, the level of trade shows the second biggest effect closely following that of unemployment rates. The marginal effects of trade and its growth are to increase the dependent probability by 0.018 (plus or minus 0.007) and 0.003 (plus or minus 0.0004), respectively.

<sup>19</sup> These estimates tell us how much change would result in the dependent probability from an incremental change in the independent variable, thus allowing a comparison of the relative size of the effects of the different macro-level variables.



#### 4. DISCUSSION AND CONCLUSION

Globalization has brought the issue of economic insecurity to the fore in international political economy, as economic instability due to global integration becomes a major threat to maintaining the social fabric of market societies around the globe. Based on the idea of globalization-induced economic insecurity, scholars of international political economy have advanced a variant of the embedded liberalism thesis (Ruggie 1987) called the compensation

hypothesis. According to this hypothesis, welfare state is not only resilient to the pressures of global economic forces but also increasingly relevant to the globalizing world, as globalization creates more demand for state-provided social protection and insurance against economic insecurity generated by its processes.

Despite the centrality of economic insecurity in the globalization studies and discourses, it has not received close scrutiny whether globalization indeed leads to greater economic volatility and insecurity as well as perceptions thereof. As expounded in this study, the impact of globalization on economic insecurity can take multiple routes. Globalization can raise macroeconomic volatility, though the empirical evidence is mixed. It may also influence people's perceptions of insecurity directly, which possibly explains why a majority of citizens in recent polls turn out to associate globalization to various economic problems even when their economies do not suffer major setbacks.

This study examines the effect of openness on economic insecurity by relating the perception of job insecurity to various measures of economic openness. The probit analysis of the survey responses of the citizens of forty-three countries reveals a notable divergence in the effect of trade on the perceptions of job insecurity between developed and developing countries; trade openness is linked to greater perceived job insecurity in the non-OECD countries but to less perceived job insecurity in the OECD countries.

This finding has an important implication for the studies of globalization. Contrary to the claim that increasing openness generates greater demand for social spending via increasing economic insecurity, the current finding reveals that the causal mechanism is much more complex than the claim suggests. The openness-insecurity link is absent in the developed region, while it is present in the developing region where paradoxically social welfare spending has generally declined with greater openness as shown in recent research (Kaufman & Segura\_Ubiergo 2001; Rudra 2001).<sup>20</sup>

Economic instability, whether manifested in the form of macroeconomic volatility or experienced as personal economic insecurity, takes a center stage in the research on globalization and domestic politics. A growing number of studies have explored the implications of increasing economic insecurity in a globalizing world for political and social instability, economic performance, and partisan politics (Kwon 2003; Moon & Yang 2002; Rodrik 1998b, 2000; Quinn & Woolley 2001). Understanding the complexity of the linkages between globalization and economic insecurity will thus be crucial for assessing the causal arguments of these studies as well as help to advance a better understanding of the problems and constraints brought up by global economic forces.

---

<sup>20</sup> That is, the key assumption of the compensation logic, globalization-induced economic insecurity, holds in the developing world where the outcome — compensatory social spending — is not observed, whereas the openness-insecurity assumption is *not* met in the developed world where the outcome is most visible.

## APPENDIX

Variables	Definition and Source
<b>Perceived Job Insecurity</b>	Dichotomous variable with one (zero) if good job security is (not) mentioned for the survey question – “here are some more aspects of a job that people say are important. Please look at them and tell me which ones you personally think are important in a job?” [V77 from WVS]
<b>Openness</b>	
Trade	Exports plus imports as % of GDP – averaged for 1990-94 [WDI]
Private Capital Flows	Private capital flows as % of GDP – averaged for 1990-94 [WDI]
Quinn Index	Capital market liberalization index, 0 = closed to 14 = most open capital market [Quinn & Inclan 1997]
<b>Aggregate Controls</b>	
Output Volatility	Standard deviation of the annual GDP growth rates (1990-94) [WDI]
Unemployment	Unemployment rates – averaged for 1990-94 [WDI]
Social Spending	Total government social spending as % of GDP, 1990 [WDI]
GDP per capita	GDP per capita, PPP – averaged for 1990-94 [WDI]
Labor Spending	Expenditures on unemployment compensation and active labor market programs as % of total social spending, 1990 [OECDSOC]
Democracy	Polity Score (-10 = autocracy to 10 = democracy) [Polity IV]
Regime Type	0 = democracy, 1 = dictatorship [ACLP]
<b>Individual Controls</b>	All from [WVS]
Education	1 = no formal education to 9 = university level education
Age	Age in years
Class	1 = upper class to 5 = lower class
Sex	0 = female, 1 = male
Ideology	1 = left to 10 = right
Fully Employed	1 if fully employed, 0 otherwise

Data Sources

ACLP: *Democracy and Development Database*, Przeworski et al. 2000.

OECDSOC: *OECD Social Expenditures* [CD-ROM], OECD.

Polity IV: *Polity IV Dataset: Political Regime Characteristics and Transitions, 1800-2003*, Center for International Development and Conflict Management.

WDI: *World Development Indicators* [CD-ROM], World Bank.

WVS: *World Values Surveys*, Ronald Inglehart et al. 1999 [ICSPR Study #2790].

Sample of Countries

OECD: Australia, Finland, Germany, Japan, Norway, Spain, Sweden, Switzerland, United Kingdom, United States.

Non-OECD: Argentina, Armenia, Azerbaijan, Bangladesh, Belarus, Bosnia & Herzegovina, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Dominican Republic, Estonia, Georgia, India, Latvia, Lithuania, Macedonia, Mexico, Moldova, Nigeria, Peru, Philippines, Poland, Puerto Rico, Russia, Slovenia, Taiwan, Turkey, Ukraine, Uruguay, Venezuela, Zambia.

## REFERENCES

- Aldrich, John, et al., 1999, "Racing the Titanic: Globalization, Insecurity, and American Democracy," Presented at the *Annual Meeting of the American Political Science Association*.
- Alt, James, Jeffrey Frieden, Michael Gilligan, Dani Rodrik and Ronald Rogowski, 1996, "The Political Economy of International Trade: Enduring Puzzles and an Agenda for Inquiry," *Comparative Political Studies* 29(6): 689-717.
- Allison, Paul, 2001, *Missing Data*. Thousand Oaks, CA: Sage Publications.
- Anderson, Christopher and Jonas Pontusson, 2001, "Welfare States and Employment Insecurity: A Cross-National Analysis of 15 OECD Countries," Presented at the *Annual Meeting of the American Political Science Association*.
- Boeri, Tito, Axel Borsch-Supan and Guido Tabellini, 2001, "Would you like to shrink the welfare state? A survey of European citizens," *Economic Policy* 32: 7-50.
- Burgoon, Brian, 2001, "Globalization and Welfare Compensation: Disentangling the Ties that Bond," *International Organization* 55(3): 509-31.
- Dominitz, J. and C. Manski, 1996, "Perceptions of Economic Insecurity: Evidence from the Survey of Economic Expectations," *Public Opinion Quarterly* 61: 261-87.
- Duch, Raymond, Harvey D. Palmer and Christopher J. Anderson, 2000, "Heterogeneity in Perceptions of National Economic Conditions," *American Journal of Political Science* 44: 635-52.
- Easterly, W., R. Islam and J.E. Stiglitz, 2001, "Shaken and Stirred: Explaining Growth Volatility," In B. Pleskovic and N. Stern, eds., *Annual World Bank Conference on Development Economics*, Washington, D.C.: World Bank.
- Gavin, M. and R. Hausmann, 1996, "Sources of Macroeconomic Volatility in Developing Economies," *Inter-American Development Bank Working Paper*.
- Fiorina, Morris, 1978, "Economic Retrospective Voting in the American National Elections: A Micro-Analysis," *American Journal of Political Science* 22: 426-43.
- Friedman, Thomas, 2000, *The Lexus and the Olive Tree*, Anchor Books.
- Garrett, Geoffrey, 1998, "Global Markets and National Politics: Collision Course or Virtuous Circle?" *International Organization* 52(4): 787-824.
- Garrett, Geoffrey, 2001, "Globalization and Government Spending," *Studies in Comparative International Development* 35(4): 3-29.
- Garrett, Geoffrey and Deborah Mitchell, 2001, "Globalization, Government Spending and Taxation in the OECD," *European Journal of Political Research* 39(2): 145-77.
- Heckman, James, 1979, "Sample Selection Bias as a Specification Error," *Econometrica* 47: 153-61.
- ILO, 2004, *Economic Security for a Better World*. ILO Socio-Economic Security Program.
- IMF, 2002, *World Economic Outlook*.
- Iversen, Torben and Thomas Cusack, 2000, "The Causes of Welfare State Expansion: Deindustrialization or Globalization?" *World Politics* 52 (3): 313-49.
- Kaufman, Robert and Alex Segura Ubierno, 2001, "Globalization, Domestic Politics and Social Spending in Latin America: A Time-Series Cross-Section Analysis, 1973-1997," *World Politics* 53: 553-87.
- Kim, So Young, 2007, "Openness, External Risk, and Volatility: Implications for the Compensation Hypothesis," *International Organization* 61(1): 181-216.

- King, Gary, James Honaker, Anne Joseph and Kenneth Scheve, 2001, "Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation," *American Political Science Review* 95(1): 49-69.
- Kwon, Hyeok Yong, 2003, "Voting for Social Protection: Has Economic Insecurity Produced Left-wing Voters?" Presented at the *Annual Meeting of the Midwest Political Science Association*.
- Lewis-Beck, Michael S., 1988, *Economics and Elections: The Major Western Democracies*. Ann Arbor: University of Michigan Press.
- Mann, Michael, 1997, "Has globalization ended the rise and rise of the nation state?" *Review of International Political Economy* 4(3): 472-79.
- Manski, Charles and John D. Straub, 2000, "Worker Perceptions of Job Insecurity in the Mid-1990s," *Journal of Human Resources* 35(3): 447-79.
- Moon, Chung-in and Jae-jin Yang, 2002, "Globalization, Social Inequality, and Democratic Governance," In J. S. Tulchin, ed., *Democratic Governance and Social Inequality*, London: Lynne Rienner Publishers.
- Ohmae, Keinich, 1990, *The Borderless World: Power and Strategy in the Interlinked Economy*, London: Collins.
- Przeworski, Adam, et al., 2000, *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990*, Cambridge: Cambridge University Press.
- Quinn, Dennis P. and Carla Inclan, 1997, "The Origin of Financial Openness: A Study of Current and Capital Account Liberalization," *American Journal of Political Science* 41: 771-813.
- Quinn, Dennis P., Carla Inclan and John T. Woolley, 2001, "Democracy and National Economic Performance: The Preference for Stability," *American Journal of Political Science* 45(3): 634-57.
- Rodrik, Dani, 1997, *Has Globalization Gone Too Far?* Washington, D.C.: Institute for International Economics.
- Rodrik, Dani, 1998(a), "Why Do More Open Economies Have Bigger Governments?" *Journal of Political Economy* 106(5): 997-1032.
- Rodrik, Dani, 1998(b), "Where Did All the Growth Go? External Shocks, Social Conflicts, and Growth Collapses," *NBER Working Paper* 6350.
- Rodrik, Dani, 2000, "Participatory Politics, Social Cooperation, and Economic Stability," Presented at the *Annual Meeting of the American Economic Association Meeting*.
- Rudra, Nita, 2001, "Globalization and the Decline of the Welfare States in Less-Developed Countries," *International Organization* 56(2): 411-45.
- Ruggie, John G., 1982, "International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order," *International Organization* 36(2): 379-415.
- Shapiro, Robert Y. and John T. Young, 1989, "Public Opinion and the Welfare State: The US in Comparative Perspective," *Political Science Quarterly* 104(1): 59-89.
- Scheve, Kenneth and Matthew Slaughter, 2001, *Globalization and the Perceptions of American Workers*, Washington, D.C.: Institute for International Economics.
- Scheve, Kenneth and Matthew Slaughter, 2002, "Economic Insecurity and the Globalization of Production," *NBER Working Paper* 9339.
- Weiss, Linda, 2000, "Globalization and the Myth of the Powerless State," In R. Higgins, ed., *The Political Economy of Globalization*, Cheltenham, U.K.: Edward Elgar.



Wilson, Shaun, Ian Marsh and Trevor Breusch, 2002, "Job Insecurity and Public Opinion towards Globalization," Presented at the *Annual Meeting of the American Political Science Association*.