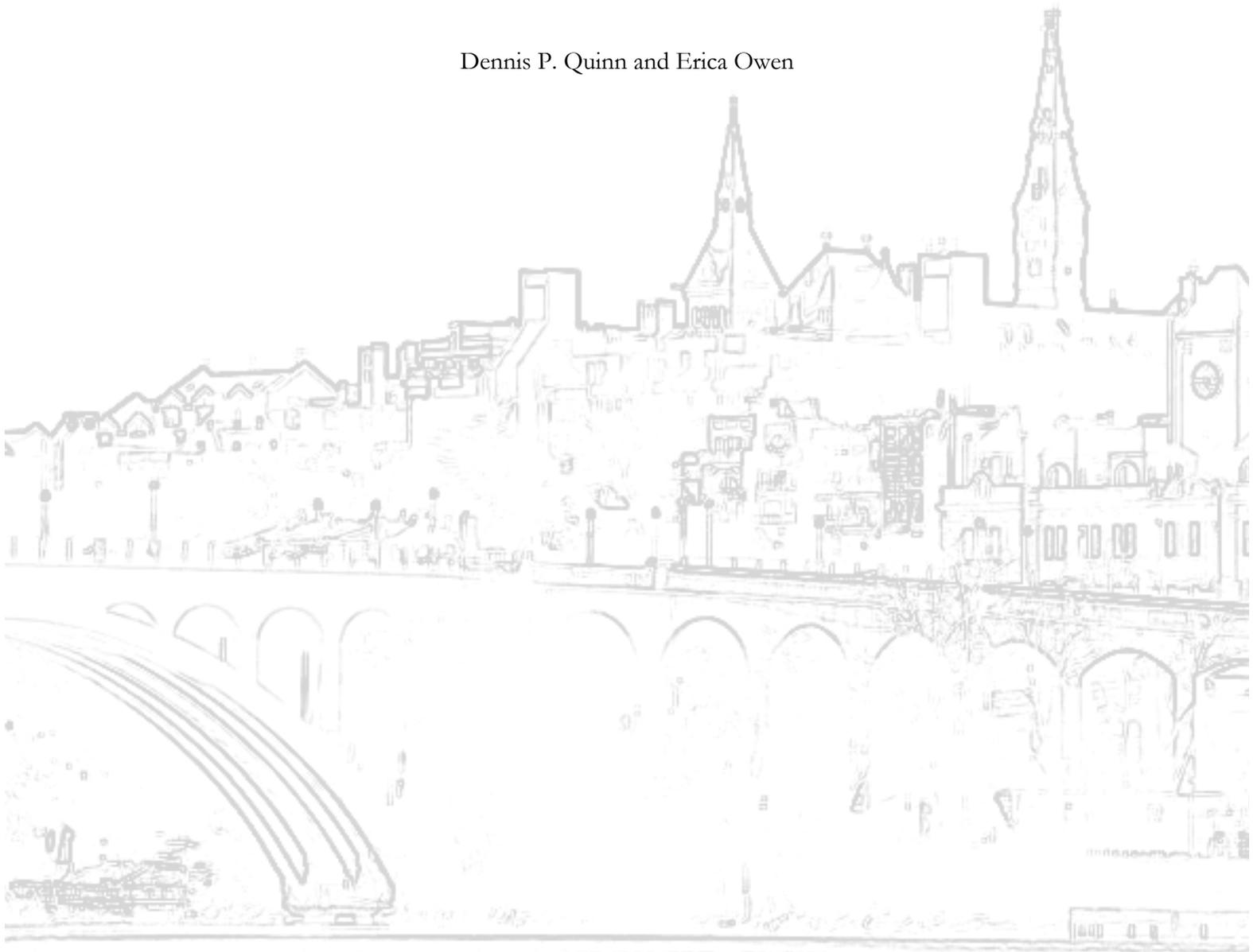# Does Economic Globalization Influence the U.S. Policy Mood?: A Study of U.S. Public Sentiment, 1956-2008

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"Does Economic Globalization Influence the U.S. Policy Mood?: A Study of U.S. Public

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ABSTRACT

The U.S. economy has increasingly integrated with the world economy, with effects on prices, employment, wages, and job security. Does the increasing economic globalization of the U.S. influence policy mood and voter sentiment? Previous research has shown that voters enjoy the benefits of economic globalization but demand compensation for the risks associated with openness. We hypothesize therefore that voters adopt a "compensatory" model, whereby higher levels of exports lead voters to a rightward shift in policy preferences and higher levels of imports lead voters to a leftward shift. We expect that increased international financial liabilities (assets) lead to a leftward (rightward) shift in preferences. We use James Stimson's "Mood" from 1956 to 2008 as the dependent variable, and estimate Error Correction models. The results are that forces of economic globalization strongly influence policy mood. Rising imports and increasing financial liabilities lead to a leftward shift in Mood.

The "policy mood" is generally defined as the climate of public opinion and public sentiment regarding the public's latent preferences over government policy. (See Page and Shapiro 1983, 1992; Stimson 1999, which are among the leading studies.) The policy mood among American voters has been found to have a main dimension that links issues in terms of "left/right" or "more government/less government" scope of activity. In Stimson's wording, "the first dimension of American public opinion is the welfare state/size of government controversy that divides the parties" (2004, 81).

Scholarly studies show that policy mood is an important determinant of U.S. public policy, especially on issues salient to the public. (See, e.g., Erickson, MacKuen, and Stimson 2002; Page and Shapiro 1983; Smith 1999; Stimson 1999; Stimson, MacKuen, and Erikson 1995; Wlezien 1995. See Burstein 2003 for a review. See also Hill and Hinton-Andersson 1995; Zaller 1992.) Similar results for other indicators of public sentiment on public policy have been shown internationally. See, e.g., Franklin and Wlezien (1997) on the influence of voter preferences for European unification and European Union policies; and, Quinn and Toyoda (2007) on the influence of anti-capitalist sentiment on economic globalization.

Given the policy mood's centrality in influencing public policy outcome in U.S. politics, scholars have turned to studying the determinants of policy mood, generally using Stimson's measure (1999), "Mood." Erickson, MacKuen, and Stimson (2002), in perhaps the most systematic study of Mood, reported that current inflation and changing unemployment were associated with rightward and leftward shifts (respectively) in Mood, 1956-96.

The U.S. economy has changed markedly in the past few decades. Of particular interest to this paper, *the U.S economy is vastly more integrated into the world economy in terms of flows of goods, services and finance, with resulting effects on prices, employment, wages, and job security.*

This paper asks, how has the increasing economic integration of the U.S. economy influenced aggregate measures of voters' attitudes, particularly Mood?

This paper joins findings and theory from two largely separate literatures: analyses of aggregate U.S. public opinion with studies of economic globalization and policy outcomes. We review the literature on the internationalization of the U.S. economy. We propose that economic globalization variables influence policy mood, and do so in a manner consistent with, as termed in international political economy research, the "compensation hypothesis." In the following section, we review existing explanations of Mood. A replication and extension of Erickson, MacKuen, and Stimson (2002) presents a puzzle: the statistically significant relationship of inflation and unemployment with Mood that characterizes the first half of the period studied disappears in the second half of the period.

It is this puzzle that helps motivate the paper. We discuss why economic globalization affects policy mood and the mechanism through which this occurs. We then present the data and methods in the following section. To test the hypotheses, we use Error Correction (EC) models. To the base models, which build on models from Durr (1993), Erickson, MacKuen, and Stimson (2002), Stevenson (2001) and Wlezien (1995), we add various indicators of international trade and financial integration. We employ robustness checks to see whether the effects we find for international variables are proxies for changes in inequality or technological advances. We also find robust support for our argument that international trade and financial variables are key determinants of Mood.

The Internationalization of the U.S. Economy

The United States economy is increasingly open to trade. As evidence, note that imports plus exports of goods and services as a percentage of GDP has risen from 11% in 1977 to roughly 29% in 2010 (BEA 2011). The U.S. is nearly completely open to international financial flows: the

stock of U.S. international financial assets and financial liabilities as a percentage of GDP have risen from roughly 33% to more than 275% for the most recent available date (BEA 2011; Lane and Milesi-Ferretti 2007).

Within these flows is evidence of deterioration in the relative world position of the U.S. economy. The U.S. has gone from a net exporter to a net importer and from a net creditor to a net debtor. The trade deficit averaged -4.5% of GDP for the decade of the 2000s; and the net change in the U.S. international financial position for 2000 to 2008 averaged -17% of GDP per year.

The supposition of this paper is that both the magnitude and the direction of the flows of trade and capital will influence the U.S. policy mood. To explain why this relationship exists, we begin by reviewing the evidence regarding the effects on exports and imports on the U.S. economy.

Trade flows are primarily generated through firm behavior. Bernard and Jensen (1999, 2003) show that firms that export are correlated with superior economic performance on many dimensions compared to firms that do not: higher employment, sales, wages, productivity, and investment. A particularly important finding they report is that 'within' industry reallocation of production from non-exporters to exports accounts for 20% of U.S. productivity growth in manufacturing. (See also Melitz 2003.)

Conversely, firms in import competing industries that do not participate in export trade, compared to firms that do, have slower employment growth, pay lower wages, are far more likely to fail, and far are more likely to switch industries. (See Bernard et al. 2007.) The exceptions to increasing firm mortality and morbidity in import-competing industries are those firms that have themselves reallocated production abroad, and are importing back into the U.S. These intrafirm import trades (also called 'related party import transactions') have accounted for between 45 and 48% of the value of all U.S. goods imports since the early 1990s. (Census Bureau 2006, 2010.) In import competing sectors, increasing imports has been associated with U.S. job losses.

Given the behavior of U.S. firms, higher levels of exports translate into employment and wages gains, higher productivity, and higher domestic investment. Given the competition facing U.S. firms in many industries, higher levels of imports in import competing sectors are associated with lower domestic wages, employment, and investment, plus higher risks of firm failure.

The trade imbalances in the U.S. economy have to be offset on U.S. balance sheets by increases in U.S. international financial liabilities. (See Lane and Milesi-Ferretti 2006, 8-12, for a discussion.) These liabilities are rights held by non-residents to a future income stream from a nation's productive assets. A nation's international financial liabilities are the portfolio equity liabilities, foreign direct investment (FDI) liabilities, and debt liabilities its citizens and governments owe to non-residents.

These financial liabilities, however, translate into diminished current and future U.S. consumption as the U.S. repays the obligations. Large international financial imbalances imply diminished growth and employment prospects in the U.S. High levels of international financial liabilities also lessen the ability of a nation and its citizens to endure shocks.

A nation's international financial assets are the portfolio equity assets, FDI assets, and debt assets non-residents owe its citizens and government. Higher levels of assets are claims to future consumption, and enhance the ability of a nation, its firms, and its citizens to endure shocks. These are a rights held by residents to a future income stream from foreign assets. Recent scholarship has shown that capital exports by residents of rich countries to other R&D productive countries enhance the capital exporting country's growth. (See, e.g., van Pottelsberghe and Lichtenberg 2001).

Higher levels of international financial assets translate into increased corporate profits, higher longer run domestic growth rates, and increased long-run consumption for domestic residents. Higher levels of international financial liabilities translate into long-run consumption for non-residents and into a diminished ability of the U.S. to insulate itself from shocks.

Public Opinion and Economic Globalization

Given the effects of economic integration on the economy, we now consider how individuals' attitudes toward this phenomenon. A large literature in international political economy suggests a relationship between domestic policy outcomes, such as welfare spending and tax rates, and economic globalization. (See, e.g., Swank 2006.) Although analysis of policy mood has generally been centered in American politics, insights from the IPE literature have important implications for models of policy mood, especially as trade and financial flows become increasingly salient to the American public. In this section, we review existing survey evidence about voter attitudes toward openness to trade and investment.

Paradoxically, even as the U.S. economy has become increasingly integrated with the world economy, the American public expresses limited enthusiasm for economic globalization. Survey respondents express minimal support for free trade *per se*, unless free trade is accompanied by "government programs to help workers who lose their jobs."[1] In looking to the Government to address problems of free trade, respondents are concerned with workers losing jobs from trade because respondents generally believe that free trade hurts job security, and that imports cost more

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[1] Four surveys asking identical questions were undertaken in 1999, 2002, 2004, and 2006 by PIPA, CCFR, PIPA, and CCFR (respectively). Respondents who favored free trade if the "government [has] programs to help workers who lose their jobs" were 66, 73, 60, and 43% of the 1999, 2002, 2004, and 2006 samples, respectively. Respondents who did not favor free trade were 14, 9, 22, and 36% of the respondents in 1999, 2002, 2004, and 2006, respectively. Respondents who favored free trade without worker assistance were 18, 16, 13, and 15% of the 1999, 2002, 2004, and 2006 samples, respectively.

jobs than exports create (CCFR 2007; CCFR 2004; Kull 2004).[2] This evidence suggests that a

substantial portion of the public continue to have reservations about free trade because of its

distributional effects on the number of jobs, wages, and job security.

Opinion survey data on international financial transactions are far thinner than those for

international trade, but a consistent pattern also emerges from the few survey questions asked. In

March 1989, Gallup, on behalf of Times Mirror, asked:

> "There are different opinions about foreign investment in the U.S. Some people think that
> foreign investment is necessary and has a positive influence on our economy. Others say
> that foreign investment is dangerous because it allows outsiders too much control over our
> affairs. Which view is closer to your own?

Of the respondents, 70% answered "bad," and 18% answered, "good." (Times Mirror 1989.)

Among those answering "bad" in the March 1989 survey, 36% cited Americans not "owning"

America as a reason, followed by "threat to national security/control of country" at 20%, followed

by "loss of economic power/influence" at 17%. Of those who answered "good," job creation was

the top reason at 36%. Other survey questions show similar results.[3]

By this evidence, a substantial number of respondents appear to regard the foreign

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[2] For example, in the Chicago Council of Foreign Relations survey of July 2004, 64% of

respondents said that international trade was bad for job security, and 56% report that trade was bad

for creating jobs (CCFR 2004, 41). An April 2007 CCFR survey reported similar results. a PIPA

2004 poll reported 63% of respondents saying that "more jobs are lost from imports" compared to

8% of respondents saying that "more jobs are gained from exports" (PIPA 2004).

[3] The Program on International Policy Attitudes (PIPA 2000) asked the same question in 1999: Of

the 600 respondents, 42.7% answered "necessary/positive," and 51.5% answered "dangerous."

(PIPA 2000, Q90, p. 20.)

acquisition of U.S. assets or firms unfavorably. The motivation of respondents is seemingly for loss of U.S. "ownership" and "control."

The "Compensation Model"

In light of the apparent reservations of public toward the distributional consequences of economic integration, scholars have asked what politicians can do to garner or maintain support for liberal economic policies. The "compensation" model is a prominent international relations theory concerning how democratic governments manage the risks of international economic integration. The core thesis of the compensation model is that, as Kim (2007) put it, "economic globalization bolsters rather than undermines the welfare state by increasing public demand for social protection against externally generated economic instability." Among the pioneering studies of the relationship between trade openness and compensatory policies and institutions are Katzenstein 1985 and Cameron 1978. See also Burgoon 2001; Garrett 2001; Garrett and Mitchell 2001; and Rodrik, 1998. (Cf. Iversen and Cusack 2000; Kim 2007.) Studies of financial globalization also show evidence consistent with the compensation hypothesis: see Brune et al. 2001 and Quinn 1997.

The starting point of the compensation hypothesis is that exposure to economic globalization increases the voter's sense of economic insecurity. The survey evidence presented above suggests that this is the case. In a systematic study, Scheve and Slaughter (2004) find "that globalization increases worker insecurity, [and] that foreign direct investment (FDI) by multinational enterprises (MNEs) is the key aspect of integration generating risk" (2004, 662). They show, in a panel of British respondents, that those who work in sectors with high levels of inward and outward foreign direct investment experience higher levels of economic insecurity. Similarly, Walter (2010) finds in a study of Swiss respondents, that those hurt by globalization are more likely to express feelings of economic insecurity. Aldrich et. al (n.d.) find that those with greater feelings of job insecurity are more likely to favor increased government spending and government provision of jobs.

Building on these findings, recent studies of individual policy preferences examine whether policy outcomes designed to compensate those hurt by globalization actually affect policy preferences. In other words, does compensation create greater support for liberal economic policies? Hays, Ehlrich and Peinhardt (2005) find that respondents in countries with more social spending or compensation programs are less likely to oppose trade protectionism, even in industries that compete with high levels of imports (486). This suggests that governments can achieve support for liberal policies in exchange for protection from instability. Walter (2010) finds that how one is affected by globalization affects preferences over welfare spending, and in turn, preferences over welfare spending affect vote choice. See also Scheve and Slaughter (2001).

These examples demonstrate the potential link between globalization and aggregate policy preferences. Yet, analysis that examines how indicators of economic globalization affect aggregate measures of U.S. public opinion remains conspicuously absent. Existing work on aggregate policy mood does not take into consideration or theorize the ways in which changes in the exposure of the U.S. to the global economy affect domestic public opinion

Hypotheses

Given the depth of scholarship showing that voter demands for social protection vis-à-vis trade increase with trade exposure, our expectation is that increased imports will bring forth a leftward shift in aggregate policy mood, which would be for greater government involvement. As imports rise and domestic jobs are threatened, we expect voter demands for increased government assistance, which translate into a leftward shift in Mood. With rising exports, however, the demand for social protection would likely diminish, thus translating into a rightward or conservative shift in Mood. This leads to the first of our hypotheses:

H1a. Increasing levels of imports will lead to a leftward shift in Mood.

H1b. Increasing levels of exports will lead to a rightward shift in Mood.

International financial flows have grown markedly in the past few decades, with potentially profound consequences for a country's financial stability, exchange rate policy, and domestic monetary and fiscal policy. (See Eichengreen 2001 for a comprehensive review. See Freeman, Hays, and Stix 2000 for discussions of some of the political consequences of financial globalization.) We expect that the direction of international financial flows will have a differentiated effect on Mood analogous to the direction of trade flows. We expect that Mood will move leftward with higher levels of international liabilities, and rightward with higher levels of international assets.

H2a. Increasing levels of international financial liabilities will lead to a leftward shift in Mood.

H2b. Increasing levels of international financial assets will lead to a rightward shit in Mood.

Prior Studies of the Determinants of Mood

We build on a large body of work that examines the determinants of policy mood. Previous models of Mood can be roughly grouped into those that emphasize economic conditions and those that focus on previous policies. Foremost in the first group is work that has focused on the effect of more objective measures of the state of the economy on Mood. Erickson, MacKuen, and Stimson (2002) found that higher rates of unemployment bring forth a liberal policy mood shift, while increases in consumer price indices bring forth a conservative shift. In other words, the public prefers more government spending when unemployment is high and less government spending when inflation is high.

Durr (1993) suggested that prospective economic expectations influenced policy mood. Durr argued that:

> shifts in domestic policy sentiment along a liberal-conservative continuum may be understood in part as responses to changing economic expectations. Specifically, expectations of a strong economy result in greater support for liberal domestic policies, whereas anticipation of declining economic conditions pushes the national policy mood to the right. (1993, 158)

Thus negative (positive) expectations about future economic performance led to a shift in Mood towards a smaller (larger) role for government. Durr constructed an indicator of economic expectations, and examined the influence of economic expectations on a quarterly version of Mood, 1968-88. Durr found that citizen expectations of weak future economic performance moved mood rightward, which he interpreted as being consistent with a "budget" model, whereby expectations of prosperous time led citizens to support greater government involvement in the economy.

Stevenson (2001) builds on Durr's work, and proposes a version of a "consumer choice" model to examine two European versions of Mood: Kim and Fording's 1998 indicator of median voter ideology as well as an indicator of ideological self-placement. Stevenson's results show that prior levels of growth (positively), inflation (negatively), and social spending (negatively) influenced Mood. Stevenson (2001) concludes, "People want policy to move left when the economy is expanding and right when the economy is contracting…" (2001, 632). This hypothesis is similar to Durr's, though Stevenson uses lagged values of economic performance, rather than an expectations measure. (Key elements of Durr's expectations measure are no longer available.)

More recently, Kelly and Enns (2010) examine the effects of economic inequality on Mood. Their findings suggest that an increase in inequality leads to a conservative shift in the opinion of the American public.

An alternative explanation for shifts in Mood, proposed first by Wlezien (1995), suggests that citizens respond "thermostatically" to prior policies. In other words, they move left after periods of lower levels of government intervention, and rightward after period of higher levels of government intervention. Erickson, MacKuen, and Stimson (2002) also found that an indicator of prior government policies was negatively associated with Mood, confirming Wlezien's finding of a thermostatic reaction to government policies. Higher levels of government involvement produce a conservative shift, and lower levels of government activities produce a liberal shift.

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An interesting puzzle about the changing nature of the US economy and its relationship with Mood presents itself when we replicate and extend the results of Erickson, MacKuen, and Stimson (2002). As an illustrative experiment about how these changes in the U.S. economy might influence Mood, consider the results of an OLS model of the determinants of Mood, 1956-1996, replicated from Erickson, MacKuen, and Stimson (2002, 223, Table 6.4) presented in Table 1. The data are described in more detail below.

[Table 1 about here]

As in their original model, we confirm that increases in the consumer price index (negatively) and in the current rate of unemployment (positively) statistically significantly influence Mood, 1956-96. In Model 2, when we extend the data to 2008, we find that while inflation and unemployment again affect Mood as hypothesized by Erickson, MacKuen, and Stimson, the coefficients on both variables are decrease in size. In Model 3, we cut the sample in half and find that in the period 1956-1982, inflation and unemployment are significant and the coefficients are approximately the same size as in Model 1. When we examine the latter half of the sample, Model 4 from 1983-2008, we find that inflation and unemployment no longer have a statistically significant effect on Mood. This suggests that the effects of inflation and unemployment are concentrated in the earlier period, and that other factors play an increasingly important role in determining Mood. We propose that international economic integration is the main candidate.

Data and Methods

In this section, we introduce the data and methods used to test the hypotheses. Although our argument generalizes to other countries, we test it in the context of the United States from 1956-2008. We use an error correction model to account for the time series nature of our data, and also discuss analysis of unit root characteristics.

The dependent variable is policy mood, measured using Stimson's Mood.[4] We use the annual series, 1956-2008 of Mood1. This dimension of Mood conveys variation along an axis of more or less government. The main independent variables are measures of international economic activity. Because we expect the direction of trade to affect mood, exports and imports as a percent of GDP are included separately. These data are available from 1956-2008. Similarly, we include financial assets and liabilities as a percentage of GDP. These data are available from 1971-2007. The sources of the data are described in Appendix B.

Prior studies of the determinants of Mood will inform the base models in this paper. Erickson, MacKuen, and Stimson (2002) used inflation and change in unemployment as regressors, and we will as well. We lag inflation one period so as to attenuate possible endogeneity bias between Mood and inflation.[5] The data on prior government policies used in Erickson, MacKuen, and Stimson (2002) are not available, but Stevenson (2001) uses government social expenditures as a percent of GDP as a proxy for prior policies, and we use it here. (See Jacoby 2000 for a discussion of public opinion responses to government spending.) Stevenson 2001 uses lagged values of economic growth, and we use it here as well.

A necessary assumption of standard OLS estimations is that the data are stationary. Many of the series are, however, possibly non-stationary, which can lead to biased inferences or potentially spurious regression in an OLS framework.

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[4] Downloaded from http://www.unc.edu/~jstimson/. We use "Release 2, 2008," with one dimension estimated. We commence the study in 1956, following EMS (2002), using the Mood data for 1955 for the lagged level in the analysis.

[5] Insofar as changes in Mood forecast changes in government taxation and expenditure policy, we can expect economic actors to adapt their behavior to Mood. This is especially likely in the case of inflation, where inflationary expectations quickly influence the CPI.

The possibility of unit roots in most of the series in levels cannot be rejected. As with other scholars, we find that Mood potentially has a unit root. (See DeBoef 2000; Lebo, Walker, and Clarke 2000.) So too do the series for exports, imports, international financial assets, international financial liabilities, and government social expenditures in levels.[6] Inflation, growth, and change in unemployment are stationary, and do not therefore enter the model in error correction format.

A standard estimation approach to time-series modeling in the presence of possible unit roots are Error Correction (EC) models, as used in Durr (1993) and Kelly and Enns (2010). Error correction methods are increasingly common in economics and political science in time series models where unit roots are suspected. The core assumption of EC models is that the dependent variable responds to short-term changes in independent variables, as well as exhibiting an equilibrium relationship with the longer-term levels of the independent variables. For potentially non-stationary variables that could have a cointegrated relationship with Mood, we enter the lagged levels (the long-run variables) and the contemporaneous changes (the shock variables). For stationary series, we use the variables themselves.

The base Error Correction model (1) for the trade variables is:

$$Mood_t = \beta_0 + \beta_1(Mood_{t-1}) + \beta_2(Imports_{t-1}) + \beta_3(Exports_{t-1}) +$$

$$\beta_4(Economic\ Growth_{t-1}) + \beta_5(\Delta Consumer\ Price\ Index_{t-1}) +$$

$$+ \beta_7(Social\ Expenditures_{t-1}) + \beta_8(\Delta Imports_t) + \beta_9(\Delta Exports_t)$$

$$+ \beta_{10}(\Delta Social\ Expenditures_t) + \beta_{11}(\Delta Unemployment_t)$$

$$+ \varepsilon_t \quad t=1956\text{-}2008 \qquad\qquad (1)$$

To this base Error Correction model, we add the international finance variables, which are available over a shorter period: 1970-2007.

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[6] Details of the unit root tests are available from the authors, but are not reported to save space.

Results

We begin with an examination of the correlations in the data through use of factor analysis. Factor analysis identifies underlying components or factors that explain the pattern of correlations in a data set. (See Kim and Mueller 1978.) Once the number of components or factors is established, factor analysis allows us to identify which variables in a data set are correlated with which factors, and how strongly.

The table in Appendix A reports the results of our unweighted factor analysis: correlations above the standard thresholds of .5 or higher and -.5 and lower are reported. Four well-identified underlying variables or factors account for 88% of the identifying variance in the data. Mood is the sole member of a factor accounting for roughly 10% of the variance.

Most of the indicators of international economic and financial openness load positively on the first factor, which accounts for 42% of the variance. The only other variable to load on the first factor is social expenditures in levels. Social expenditures are positively correlated with increasing international economic integration, which is consistent with the compensation hypothesis.

The second factor contains 22% of the variance. Change in employment and change in social expenditures load inversely with changes in imports and economic growth. Rising unemployment and increasing imports are part of a single factor. The third factor contains changes in exports and imports, and well as inflation, and accounts for 14% of the variance.

The main lessons from the factor analysis are that Mood is a unique factor in the analysis and that international economic variables contain much of the identifying variance in the analysis. The international economic variables are not part of a common factor with the domestic economic variables, but bring unique variance to the investigation.

We next present the results of the tests of our hypotheses. We first discuss the results examining the effects of trade. We then add data on financial assets and liabilities, before

performing robustness tests. The results are presented in Table 2. One of the motivations of an EC

model is that the dependent variable, Mood, is in an equilibrium relationship with (at least some)

independent variables. For those variables that are in an equilibrium relationship with mood, a shift

in one of these variables causes Mood to shift as well, at an adjustment rate equal to 1- β_1. We

briefly summarize the results of Models 1 through 5, before discussing the results of our preferred

specification in Model 6.

In Model 1, we build upon the work of Erikson, MacKuen and Stimson (2002) and

incorporate additional domestic economic/political variables thought to affect Mood: economic

growth and social spending. As expected by Erikson, MacKuen and Stimson, inflation has a

negative and significant effect on Mood. In contrast to the expectations of Durr (1993) and

Stevenson (2001), we find that there is a negative relationship between economic growth and Mood.

Positive economic growth leads to a modest conservative shift in Mood; a one percent increase in

economic growth decreases Mood by 0.221 points. This evidence is consistent with "compensation"

model where people prefer more government in lean economic times, rather than the "budget"

model of Durr and Stevenson in which an expansion of the economy leads to demands for larger

government. This relationship is robust to the inclusion of our explanatory variables and is

significant in all six models.

Compared to the results presented in Table 1, inflation continues to have a negative effect on

Mood. Unemployment no longer has a statistically significant coefficient. Neither of the coefficient

estimates for changes or levels of social spending has a significant effect on Mood. Note, however,

that change in unemployment, change in social expenditures, and economic growth are highly

intercorrelated variables loading on the second factor.

In Model 2, we add trade balance (measured as exports minus imports as a percent of GDP)

as the first test of our argument. We find that trade balance has a negative and significant effect on

policy Mood. That is, when the trade balance is negative, Mood moves in a liberal direction (-β*-X), and when the trade balance is positive, Mood moves in a conservative direction (-β*X). Change in the trade balance does not have a contemporaneous effect; in other words a shock to the trade balance does not have an immediate effect on Mood.

This provides initial support for Hypothesis 1. We again find that inflation and economic growth have negative and significant effects on Mood. Interestingly, social spending now has a negative significant effect on Mood, which provides support for the argument that Mood responds thermostatically to the existing policy environment (Erikson, MacKuen and Stimson 2002; Stevenson 2001). This result is robust across further specifications of the model; social spending is negative and significant in three of four remaining models. We expect that social spending also plays another role; not only is it a proxy for prior policy, but also a mechanism of compensation. In other words, it is plausible that as social spending increases, the public feels more secure, and thus demands less compensation, i.e. a conservative shift in Mood.

In Model 3, we test hypotheses 1a and 1b more explicitly by including separate measures of imports and exports, as specified in Equation 1. Looking first at imports, we see that imports have a positive and significant effect Mood, which supports Hypothesis 1a. Exports are significant at the 85 percent level, as is the contemporaneous effect of imports; however, the estimated coefficient for change in exports is not statistically significant. At this point, it is important to note that there is a high degree of correlation among many of these variables, as evidenced by the factor analysis.

Turning to Hypotheses 2a and 2b: in Model 4 of Table 2, we include measures of financial assets and liabilities. In this model, the coefficient on the lagged value of Mood is again large, suggesting that it takes many periods for the system to return to equilibrium. The shock to financial liabilities has the only statistically and substantively significant effect on Mood. A one-unit increase in international financial liabilities moves Mood a half-point in a liberal direction.

In Model 5, we include measures of trade and financial variables so as to test all hypotheses in the same model. In this model, both imports and changes in imports are positive and statistically significant. This supports Hypothesis 1a: as imports increase, there is a leftward shift of Mood. The adjustment term is no longer statistically significant ($(1-\beta_1)$/s.e.), suggesting that an error correction model is not the right specification. However, the autoregressive conditional heteroskedasticity (ARCH) test is statistically significant, which implies higher order serial correlation among squared residuals in the model. In the case of positive serial correlation, if left uncorrected, the results will be contaminated with a downward bias in standard errors. Where there is negative serial correlation, the direction of the bias in coefficients and standard errors is unknown; thus it is necessary to explore the underlying error structure.

Accordingly, Model 6, which takes into account this structure, is our preferred specification. Model 6 is estimated using autoregressive least squares (RALS). Diagnostics reveal that there is up to fourth order correlation in the error terms.[7] In this model, Mood adjusts to disequilibria at a rate of 53.5 percent each period. As hypothesized, levels of exports have a negative and significant effect on Mood, while imports have a positively significant effect on Mood. In total, a one-unit increase in the level of exports shifts Mood to the right 3.071 points ($\beta_3/(1-\beta_1)$), while the largest portion of this change, a rightward shift of 1.643 points, is realized in the next year. The shock to exports is not significant, so the effect of a change in the level of exports is not realized until the next period. Turning to imports, a one unit increase in imports leads to shifts Mood to the left by 1.018 points in the next period; the total effect is a 1.902 leftward shift. These findings support Hypotheses 1a and 1b. The effects of imports and exports on Mood are substantively important.

Turning to financial globalization, we find also support for Hypotheses 2a and 2b. Liabilities have a significant effect in levels and contemporaneously. A one unit positive shock to liabilities

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[7]See the notes to Table 2.

increases Mood by 0.503 points in the current period – this is the short-term impact of this change and it is contemporaneous. If this shift in the level of liabilities is maintained, the long-term relationship between Mood and liabilities will be in disequilibria. This will produce an additional shift of 0.622 points to the left, of which, a 0.333 point shift is realized in the next period. Similarly, an increase in the level of assets decreases Mood by 0.596 points in the next period and has a total effect of a 1.114 point rightward shift in Mood.

In summary, the core results broadly confirm the long-standing view that policy mood is influenced by economic outcomes. What is new is the finding that *increasing globalization of the U.S. economy influences Mood*. International economic variables – imports, exports, international financial assets, and international financial liabilities – influence Mood in a manner consistent with the "compensation" hypothesis from international political economy. Economic growth also influences Mood in a manner consistent with the compensation hypothesis.

Robustness

In this section, we discuss the robustness of our findings to several alternative hypotheses. We add additional variables to our base models reported in Table 2. Models 1, 3, 5, and 7 contain the full models, including the trade and international financial variables. Models 2, 4, 6, and 8 omit the international financial variables while including the trade variables. The omission of the international finance variables gains both degrees of freedom and adds more observations.

First, we examine whether inequality, as proposed by Kelly and Enns (2010), is driving changes in Mood such that the international economic variables proxy for changes in inequality. Kelly and Enns (2010) argue that increases in inequality will lead to a conservative shift in Mood. A traditional Heckscher-Ohlin factor model, however, suggests the opposite relationship. Openness to trade in an economy benefits those factors that are comparatively abundant. In the U.S., globalization has benefited capital and skilled labor at the expense of less-skilled labor, contributing

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to rising economic inequality. If this were true, we would expect to find a positive relationship between inequality and Mood. The results are presented in Models 1 and 2 of Table 3. Although not robust, we find that changes in inequality, measured using the Gini coefficient, have a contemporaneous effect on Mood in Model 1, in the direction predicted by Kelly and Enns. An increase in inequality produces a rightward shift in Mood.[8] International economic variables have estimated coefficients roughly similar to the models in Table 2. Imports in levels and changes in liabilities have statistically significant and positive coefficient estimates.

[Table 3 about here]

We also examine the robustness of our results while controlling for the effects technology as manifested through increasing returns to a skill premium. Acemoglu and Autor (2010, p. 8) construct an indicator over time of the premium paid to college-educated workers compared to those with high school educations (adjusted for composition). They develop a "Ricardian" model in which technological advances allow for work that is easily codified to be done by machine (at home or abroad), driving down the wages paid to unskilled (or codifiable) work. The intuition is that skill-biased technological changes, manifested as skill premiums, could confound our international trade and finance results. The skill premium variables do not enter the models with statistically significant effects. Again, we find support for argument that international economic variables affect Mood in a manner consistent with the compensation hypothesis.

We next examine the possibility that the apparent influences of international economic openness are instead those of technological change per se. There is vigorous academic debate over whether technological change or trade is more responsible for increased inequality. The

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[8] We include a dummy variable for 1993 to control for change in Census Bureau survey methodology for GINI that produced a one-time increase in measured inequality. See Appendix A. Our results are in general consistent with the findings of Kelly and Enns (2010).

conventional wisdom suggests that technological change is the key determinant (Krugman 2000), although recent work suggests that globalization factors are also important contributors (Burnstein and Vogel 2010, Krugman 2008). Technological changes can reveal themselves in several ways: greater factor productivity is one prominent way. It is important to control for this, because even in a closed economy, some of the shifts we attribute to international forces would take place through technological innovation. To test this, we include a measure of multifactor productivity (MFP) from the Bureau of Labor Statistics in Models 5 and 6. Change in MFP is negative and significant in in model 5. An increase in MFP leads to an immediate conservative shift in Mood. This is not surprising since increasing MFP is often associated with economic growth, which also has a negative effect on Mood. As above, the effects of our variables of interest remain robust to the inclusion of this variable.

In models 7 and 8, we add the GINI, skills premium, and multifactor productivity variables. Despite extensive information overlap among the variables, the coefficient estimate for change in liabilities is statistically significant and positive. The estimated coefficient for the levels import term is statistically significant and positive in both models 7 and 8; the export term is negative, statistically significant, and substantively large in model 8, which includes a longer time and more degrees of freedom.

We note the economic growth has a robustly significant negative relationship with Mood in the models in Table 3. As economic conditions improve, voter sentiment moves in a more conservative direction. As economic conditions deteriorate, voter sentiment moves in more liberal direction. This supports the compensation model, rather than the budget model.

Durr 1993 proposed that economic expectations influenced Mood. We add Durr's indicators of economic expectations to our models in Table 2. (Results are not reported to save space, but available from the authors.) Because of data limitations on the economic expectation variables, the

sample begins in 1961, and ends in 2004. The signs of the coefficient estimates of the export and import levels variables are identical to those in Table 2, and each of the terms is statistically significant beyond the .01 level. The trade coefficient estimates are in every case larger than those in Table 2. The trade results are robust to the inclusion of the economic expectations terms.

Conclusions

The theory and findings presented here have important implications for the relationship between voter sentiment and globalization. We ask if, and how, the policy mood of U.S. voters responds to the changing nature of the economy and its integration into the world economy.

The evidence strongly shows that Mood responds to economic globalization in a manner consistent with the "compensation" hypothesis from the international political economy literature. In other words, voters prefer higher levels of government involvement in the face of deterioration in the U.S. position. Rising imports and international financial liabilities move Mood leftward; rising exports and international financial assets move Mood rightward. We tested our theory using an error correction model. While we cannot be too confident about the precision of the coefficient estimates in all models, the evidence is that the net effect of economic globalization and the declining relative position of the U.S. in the world economy has been to move voter sentiment and Mood leftward, increasing liberal sentiment.

This analysis provides an important link, not only between separate literatures in American politics and international political economy, but also studies of individual preferences and those of domestic policy outcomes. One area of future research is to examine whether these shifts in policy mood, in conjunction with increasing economic integration, are reflected in domestic spending outcomes. Another area is to explore whether a similar relationship can be found between policy mood and international economic outcomes in other developed democracies.

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Table 1

Sample	Model 1 1956-1996	Model 2 1956-2008	Model 3 1956-1982	Model 4 1983-2008
Mood1 $_{t-1}$	0.727*** (0.082)	0.803*** (0.065)	0.702*** (0.107)	0.769*** (0.127)
ΔUnemployment $_t$	0.935*** (0.322)	0.683** (0.281)	1.07*** (0.361)	-0.042 (0.435)
CPI $_{t-1}$	-0.447*** (0.128)	-0.318*** (0.101)	-0.513*** (0.152)	0.16 (0.299)
Constant	18.208*** (5.250)	12.967*** (4.059)	20.074*** (6.991)	13.194* (7.041)
Obs.	41	53	27	26
Adj. R^2	0.846	0.835	0.881	0.701
AR 1-2 test [p-value]	[0.983]	[0.834]	[0.121]	[0.415]
ARCH 1-1 test [p-value]	[0.128]	[0.212]	[0.116]	[0.575]
Normality test [p-value]	[0.446]	[0.584]	[0.636]	[0.04]**

Notes: * p-value < .1; ** p-value < .05;   *** p-value < .01. Model 1 is a replication of Erickson, MacKuen, and Stimson 2002

Table 2.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Sample	1956-08	1956-2008	1956-2008	1971-2007	1971-2007	1975-2007
Mood1 $_{t-1}$	0.672***	0.713***	0.71***	0.730***	0.874***	0.465***
	(0.087)	(0.086)	(0.086)	(0.128)	(0.136)	(0.140)
Unemploy $_{t-1}$	0.148	0.177	0.503	-0.024	0.354	0.526
	(0.598)	(0.573)	(0.648)	(0.853)	(1.057)	(0.876)
Inflation $_{t-1}$	-0.365**	-0.233**	-0.264**	-0.095	-0.285	-0.158
	(0.102)	(0.111)	(0.115)	(0.176)	(0.209)	(0.173)
Social spend $_{t-1}$	-1.025	-0.538***	-0.484*	-0.643*	-1.123*	0.827
	(1.340)	(0.144)	(0.285)	(0.359)	(0.624)	(0.862)
Growth $_{t-1}$	-0.221*	-0.252**	-0.281**	-0.266*	-0.428**	-0.352**
	(0.112)	(0.111)	(0.115)	(0.148)	(0.165)	(0.144)
Δ Social spend	0.754	0.455	0.006	-0.424	-0.191	-0.361
	(1.32)	(1.324)	(1.373)	(1.913)	(2.101)	(2.044)
Trade balance $_{t-1}$		-0.487**				
		(0.192)				
Δ Trade balance		-0.672				
		(0.512)				
Imports $_{t-1}$			0.44**		1.396**	1.018**
			(0.191)		(0.571)	(0.445)
Exports $_{t-1}$			-0.497		-0.331	-1.643***
			(0.334)		(0.418)	(0.487)
Δ Exports			-0.291		-0.757	0.597
			(0.601)		(0.818)	(0.945)
Δ Imports			0.898		1.709**	0.305
			(0.566)		(0.805)	(0.810)
Liabilities $_{t-1}$				0.136	-0.011	0.333**
				(0.088)	(0.104)	(0.147)
Assets $_{t-1}$				-0.196	-0.138	-0.596***
				(0.122)	(0.128)	(0.191)
Δ Liabilities				0.512**	0.389	0.503**
				(0.223)	(0.232)	(0.188)
Δ Assets				-0.252	-0.107	-0.205
				(0.155)	(0.167)	(0.151)
Obs.	53	53	53	37	37	33
Adj. R^2	0.853	0.866	0.864	0.799	0.819	
Constant	23.67***	22.51***	22.886	23.969	13.485	35.633
	(5.864)	(5.707)	(5.786)	(9.394)	(10.11)	(11.09)
AR 1-2 test pval	[0.773]	[0.923]	[0.838]	[0.488]	[0.617]	
ARCH 1-1 p-val	[0.182]	[0.758]	[0.448]	[0.216]	[0.041]**	[0.614]
Normality test p	[0.192]	[0.468]	[0.625]	[0.837]	0.384]	[0.611]

Notes: * p-value < .1; ** p-value < .05; *** p-value < .01. In model 5, the β for AR1 is 0.321* and the β for the AR4 term is -0.849***. The AR2 and AR3 terms are not significant.

Table 3 – Robustness Checks

	Model 1 Inequality	Model 2 Inequality w/Trade only	Model 3 Skill Premium	Model 4 Skill Premium w/ Trade only	Model 5 MultiFactor Productivity	Model 6 MultiFactor Productivity w/ Trade only	Model 7 All variables	Model 8 all variables w/ trade only
	1971-2007	1972-2008	1975-2007	1964-2007	1971-2007	1956-2008	1971-2007	1968-2008
		RALS	RALS	OLS	OLS	OLS	OLS	OLS
Mood1 $_{t-1}$	0.985***	0.788***	0.451***	0.714***	0.844***	0.750***	0.681***	0.773***
	(0.156)	(0.150)	(0.144)	(0.133)	(0.128)	(0.095)	(0.226)	(0.213)
ΔUnemployment, $_t$	1.115	0.759	0.605	0.014	0.166	0.335	0.906	1.036
	(1.154)	(1.161)	(0.878)	(0.914)	(0.996)	(0.676)	(1.253)	(1.184)
Inflation, $_{t-1}$	-0.242	-0.340	-0.121	-0.461	-0.123	-0.263**	-0.210	-0.319
	(0.238)	(0.242)	(0.187)	(0.212)	(0.218)	(0.125)	(0.231)	(0.241)
Social spending, $_{t-1}$	-1.046	-0.295	0.645	-0.556	-0.633	-0.284	-0.183	0.096
	(0.606)	(0.675)	(0.855)	(0.364)	(0.690)	(0.373)	(0.792)	(0.582)
Growth $_{t-1}$	-0.438**	-0.228	-0.446***	-0.319*	-0.474**	-0.281*	-0.574**	-0.349*
	(0.163)	(0.190)	(0.144)	(0.157)	(0.210)	(0.164)	(0.251)	(0.202)
ΔSocial spending $_t$	-1.979	-1.056	-0.994	1.244	-1.144	0.335	-3.884	-1.007
	(2.344)	(2.306)	(1.923)	(1.798)	(2.098)	(1.600)	(2.909)	(2.406)
ΔImports $_t$	2.053**	0.543	-0.125	0.994	1.7842**	1.175*	1.075	1.345
	(0.799)	(0.677)	(0.728)	(0.692)	(0.819)	(0.648)	(1.062)	(0.949)
ΔExports $_t$	-1.188	0.152	0.824	-0.009	-0.880	-0.605	-0.080	0.098
	(0.954)	(0.872)	(0.802)	(0.729)	(0.766)	(0.659)	(1.134)	(0.958)
Imports $_{t-1}$	1.688***	0.686**	1.475***	0.663**	1.577**	0.646*	1.491*	1.532**
	(0.561)	(0.297)	(0.476)	(0.275)	(0.703)	(0.345)	(0.766)	(0.663)
Exports $_{t-1}$	-0.358	-0.386	-2.094***	-0.290	-0.845*	-0.660*	-0.709	-1.152**
	(0.510)	(0.428)	(0.633)	(0.369)	(0.470)	(0.368)	(0.544)	(0.542)
ΔLiabilities $_t$	0.562**		0.354*		0.317		0.432*	
	(0.237)		(0.183)		(0.222)		(0.247)	
ΔAssets $_t$	-0.245		-0.010		-0.132		-0.304	
	(0.178)		(0.158)		(0.164)		(0.193)	
Liabilities $_{t-1}$	0.050		0.099		0.254		0.327	
	(0.134)		(0.157)		(0.178)		(0.294)	
Assets $_{t-1}$	-0.238		-0.390*		-0.308*		-0.407	
	(0.154)		(0.184)		(0.159)		(0.238)	
Gini $_{t-1}$	-31.367	-47.9149					-210.185	-22.954
	(57.93)	(43.11)					(121.8)	(102.00)
ΔGini $_t$	-208.599**	-77.694					-190.517	-98.952

(93.03)	(91.58)					(112.10)	(90.120)
1993 $_t$ 4.216	1.387					2.084	2.327
(2.583)	(2.584)					(2.841)	(2.525)
Δ Skill premium $_t$		-1.325	2.263			42.265	18.907
		(16.11)	(20.33)			(32.23)	(29.970)
Skill premium, $_{t-1}$		25.427	-14.008			39.206	6.239
		(15.85)	(10.88)			(36.690	(30.330)
MFProductivity $_{t-1}$				-0.491	-0.069	-0.309	-0.356
				(0.384)	(0.106)	(0.507)	(0.2260
ΔMFP $_t$				-0.763**	-0.226	-1.011**	-0.300
				(0.347)	(0.299)	(0.441)	(0.360)
Uhat_4	0.067	-0.988***					
	(0.228)	(0.141)					
Constant 18.331	33.876	26.360	27.119	49.068	23.604	110.572	44.054
(26.57)	(19.90)	(11.00)	(8.705)	(25.51)	(6.085)	(57.88)	(38.60)
Obs. 37	37	33	45	37	53	37	41
Adj. R^2 0.836			0.830	0.843	0.863	0.852	0.799
AR 1-2 test [p-value] [0.9937]			[0.796]	[0.532]	[0.978]	[0.270]	[0.571]
ARCH 1-1 test [p-value] [0.697]	[0.360]	[0.503]	[0.748]	[0.743]	[0.626]	[0.775]	[0.349]
Normality test [p-value] [0.423]	[0.202]	[0.642]	[0.125]	[0.480]	[0.637]	[0.998]	0.312

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REFERENCES

Acemoglu, Daron, and David Autor. 2010. "Skills, Tasks and Technologies: Implications for Employment and Earnings." In *Handbook of Labor Economics, Volume 4,* Orley Ashenfelter and David E. Card (Eds.) Amersterdam: Elsevier.

Bernard, Andrew B., and J. Bradford Jensen. 1999 "Exceptional Exporter Performance: Cause, Effect, or Both?" *Journal of International Economics* 47:1–25.

Bernard, Andrew B., and J. Bradford Jensen. 2004. "Why Some Firms export." *Review of Economics and Statistics* 86(2): 561-569 Also published as (2001): "Why Some Firms Export," NBER Working Paper No. 8349.

Bernard, Andrew B., J. Bradford Jensen, Stephen J. Redding and Peter K. Schott. 2007. "Firms in International Trade." *The Journal of Economic Perspectives* 21(3): 105-130.

Box-Steffensmeier, Janet M., and Renee M. Smith. 1998. "Investigating Political Dynamics Using Fractional Integration Methods" *American Journal of Political Science* 42(2): 661-689.

Brune, N., Garett, G., Guisinger, A., Sorens, J. 2001. The Political Economy of Capital Account Liberalization. Unpublished manuscript.

Burgoon, Brian. 2001. "Globalization and Welfare Compensation: Disentangling the Ties that Bind." *International Organization* 55(3):509-551.

Bureau of the Census. 2006. "U.S. Goods Trade: Imports and Exports by Related-Parties 2005." Washington, D.C.: U.S. Census Department News, 12 May.

Bureau of the Census. 2010. "U.S. Goods Trade: Imports and Exports by Related-Parties 2009." Washington, D.C.: U.S. Census Department News, 12 May.

Bureau of Economic Analysis (BEA). 2011. "National Economic Accounts: Table 3." Accessed at http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm.

Bureau of Labor Statistics (BLS). 2011. "Multifactor Productivity Tables: Historical Multifactor
   Productivity Measures." Accessed at http://www.bls.gov/mfp/mprdload.htm.

Burstein, Ariel and Jonathan Vogel. 2010. "Globalization, Technology, and the Skill Premium: A
   Quantitative Analysis." NBER Working Paper No. 16459.

Burstein, Paul. 2003. "The Impact of Public Opinion on Public Policy: a Review and an Agenda."
   Political Research Quarterly 56:29-40.

Cameron, David. 1978. "The Expansion of the Public Economy: A Comparative Analysis"
   American Political Science Review 72(4):

Chicago Council on Foreign Relations (CCRF). 2006. (2004.) *Global Views 2004: American Public
   Opinion and Foreign Policy.* Chicago: CCFR. Accessed at:
   http://thechicagocouncil.org/UserFiles/File/Global_Views_2004_US.pdf

DeBoef, Suzanne. 2000. "Persistence and aggregations of Survey Data Over Time: From
   Microfoundations to Macropersistence." *Electoral Studies* 19(1):9-29.

Durr, Robert H. 1993. "What Moves Policy Sentiment?" *American Political Science Review*
   87:158-70.

Erikson, Robert S., Michael B. MacKuen, and James A. Stimson. 2002. The Macro Polity. New
   York: Cambridge University Press.

Franklin, Mark N., and Christopher Wlezien. 1997. "The Responsive Public: Issue Salience, Policy
   Change, and Preferences for European Unification." *Journal of Theoretical Politics*
   9(3):347-363.

Freeman, John R., Jude C. Hays, and Helmut Stix. 2000. "Democracy and Markets: The Case of
   Exchange Rates. *American Journal of Political Science* 44(3):449-468.

Garrett, Geoffrey. 2001. "Government Spending Around the World." *Studies in Comparative
   International Development* 35(4):2-29

Garrett, Geoffrey, and Deborah Mitchell. 2001. "Globalization, Government Spending and Taxation in the OECD. *European Journal of Political Research* 39(2):145-177.

Hays, Jude, Sean Ehrlich and Clint Peinhardt. 2005. "Government Spending and Public Support for Trade in the OECD: An Empirical Test of the Embedded Liberalism Thesis." *International Organization* 59(2): 473–494

Heston, A., Summers, R., Aten, B. 2006. The Penn World Table, Version 6.2. Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September.

Hill, Kim Quaile, and Angela Hinton-Andersson. 1995. "Pathways of Representation: A Causal Analysis of Public Opinion-Policy Linkages." *American Journal of Political Science* 39: 924-35.

Iversen, Torben, and Thomas R. Cusack. 2000. "Deindustrialization or Globalization?" *World Politics* 52(April):313-49.

Jacoby, William. 2000. "Issue Framing and Public Opinion on Government Spending," *American Journal of Political Science* 44: 750-67

Jones, Arthur F., Jr., and Daniel H. Weinberg. 2000. "The Changing Shape of the Nation's Income Distribution, 1947-1998." *Current Population Reports* Washington, D.C.: U.S. Census Bureau (P60-204: June).

Katzenstein, Peter. 1985. *Small States in World Markets.* Ithaca: Cornell University Press.

Kim, Heemin, and Richard Fording. 1998. "Voter Ideology in Western Democracies, 1946-89." *European Journal of Political Research* 33:73-98.

Kim, J., and C.W. Mueller. 1978. I*ntroduction To Factor Analysis: What It Is and How to Do It.* Sage Publications, Newbury Park, CA.

Kim, So Young. 2007. "Openness, External Risk, and Volatility: Implications for the Compensation Hypothesis." *International Organization* 61(1):181-216.

Krugman, Paul R. 2000. "Trade, Technology and Factor Prices." *Journal of International Economics* 50(1): 51-71.

Krugman, Paul R. 2008. "Trade and Wages, Reconsidered*." Brookings Papers on Economic Activity* Spring: 103-154

Kull, Stephen. 2004. "Americans on Globalization, Trade, and Farm Subsidies." The American Public on International Issues: The PIPA/Knowledge Networks Poll. Accessed at www.worldpublicopinion.org.

Lane, Philip R. 2008. "Update on the External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2006." Personal correspondence (author) with P.R.Lane 7 October.

Lane, P.R., and G.M. Milesi-Ferretti. 2007. The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2004. *Journal of International Economics* 73(2):223-250.

Lebo, Michael J., Robert W. Walker, and Harold D. Clarke. 2000. "You Must Remember This: Dealing with Long Memory in Political Analyses." *Electoral Studies* 19(1):31-48.

Melitz, Marc J. 2003. "The Impact of Intra-industry Reallocations and Aggregate Industry Productivity." *Econometrica* 71(6):1695-1725

Page, Benjamin I., and Robert Y. Shapiro. 1983. "Effects of Public Opinion on Policy." *American Political Science* Review 77: 175-90.

Page, Benjamin L., and Robert Y. Shapiro. 1992. *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences.* Chicago: The University of Chicago Press.

Pew Research Center. March 16, 2006. "Bush Approval Falls to 33%; Congress Earns Rare

Praise." Access at: http://people-press.org/reports/display.php3?ReportID=271

Program on International Policy Attitudes (PIPA). 2000. *American on Globalization:*

Questionnaire and Results. Access at: http://www.pipa.org/OnlineReports/Globalization/

AmericansGlobalization_Mar00/AmericansGlobalization_Mar00_quaire.pdf

Quinn, Dennis. 1997. "The Correlations of Change in International Financial Regulation."

American Political Science Review 91(September):531-551.

Quinn, Dennis P, and A. Maria, Toyoda. 2007. "Ideology and Voter Sentiment as Determinants of

Financial Globalization." *American Journal of Political Science* 51(April):344-363.

Rodrik, Dani. 1998. "Why Do More Open Economies Have Bigger Governments?" *Journal of*

Political Economy 106(5):997-1032.

Scheve, Kenneth, and Matthew J. Slaughter. 2004. "Economic Insecurity and the Globalization of

Production." *American Journal of Political Science* 48(October):662-674.

Scheve, Kenneth and Matthew J. Slaughter. 2001. "What Determines Individual Trade-Policy

Preferences?" *Journal of International Economics* 54(2):267-292.

Smith, Mark A. 1999. "Public Opinion, Elections, and Representation within a Market

Economy." *American Journal of Political Science* 43: 842-63.

Stimson, James A. 1999. *Public Opinion in America: Moods, Cycles, and Swings.* 2nd Edition.

Boulder: Westview Press.

Stimson, James A. 2004. *Tides of Consent: How Public Opinion Shapes American Politics.*

Cambridge: Cambridge University Press.

Stimson, James A., Michael B. MacKuen, and Robert S. Erikson. 1995. "Dynamic Representation."

American Political Science Review 89:543-565.

Swank, Duane. 2006. "Tax Policy in an Era of Internationalization: Explaining the Spread of

Neoliberalism." *International Organization* 60(4):847-882

Times Mirror. March 1989. "The People, Press, and Politics: Public Opinion About Economic Issues."

Access at: http://people-press.org/reports/pdf/19890301.pdf

van Pottelsberghe de la Potterie, B., Lichtenberg, F. 2001. „Does foreign direct investment transfer

technology across borders?" *Review of Economics and Statistics* 83(3): 490-497.

Walter, Stephanie. 2010. "Globalization and the Welfare State: Testing the Microfoundations of

the Compensation Hypothesis." *International Studies Quarterly* 54(2): 403-426.

Wlezien, Christopher. 1995. "The Public as Thermostat: Dynamics of Preferences for Spending."

American Journal of Political Science 40:981-1000.

Zaller, John R. 1992. *The Nature and Origins of Mass Opinion.* New York: Cambridge University

Press.

APPENDIX A. Factor Analysis

| VARIABLE | Component | | | |
	1	2	3	4
Fin. Assets	0.977			
Fin. Liabilities	0.974			
Imports	0.947			
Δliabilities	0.899			
Δassets	0.828			
Social Expend	0.819			
Exports	0.769			
Δunemployment		0.95		
Δsocial		0.9		
Δimports		-0.648	0.548	
Growth		-0.9		
Δexports			0.906	
CPI			0.688	
Mood				0.929
TS Squared Loadings	5.9	3.1	1.95	1.38
% of Total Variance	42.15	22.02	13.96	9.82
Cumulative % of Variance	42.15	64.17	78.13	87.95
Descriptive Content of Factor	Int'l Economy	Economic Change	trade inflation	Policy Mood

Notes: Unrotated Matrix with Eigen Values > 1.
Extraction Method: Principal Component Analysis.

Appendix A. Measures and Data Sources

Economic Growth. Real growth per capita. We estimate Models with PPP-adjusted growth and real growth per capita. The former is from Penn World Tables 6.2 and the latter from IMF's International Financial Statistics. The series produce nearly identical results.

Exports and Imports. Exports and Imports are as a Percentage of GDP, and come from two sources: the Penn World Tables 6.2 (Heston et al. 2006), and the IMF's International Financial Statistics. These are standard indicators in IPE. (See, e.g., Swank 2006.)
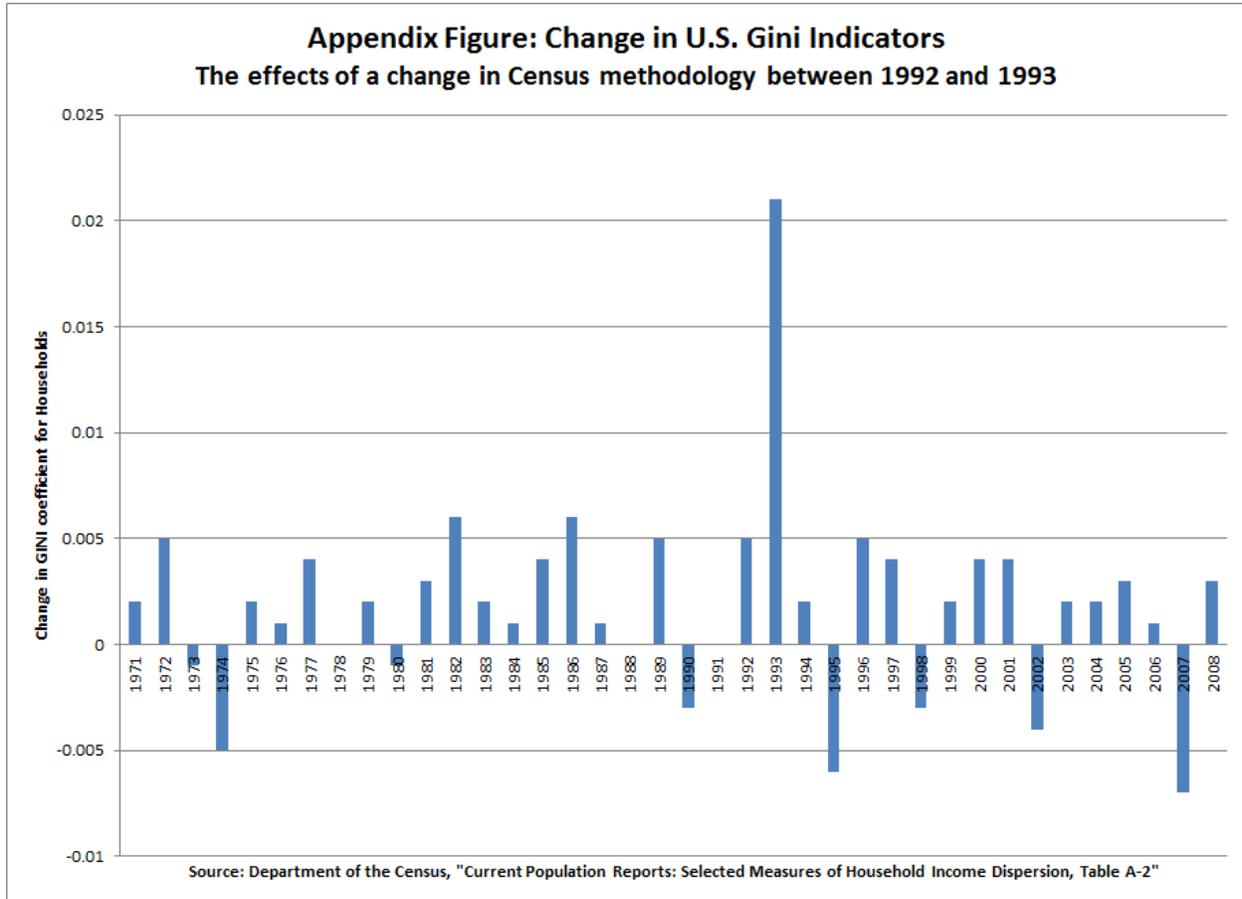
International Financial Assets and Liabilities. These data are as a percentage of GDP and are taken from Lane and Milesi-Ferretti 2007. The published data are available from 1970-2006. Data for 2007 are by courtesy of Philip Lane (Lane 2008).

Prior Government Policies. We follow Stevenson 2001 and use government social expenditures as the indicator of prior government policies. The data are Government social benefits as a percentage of GDP, and are taken from the BEA website (Table 3.12, line 1).

Inflation and Unemployment. The unemployment series is the unemployment rate of economically active individuals from the Bureau of Economic Analyses web site (annual); the CPI is from the Bureau of Labor Statistics.

GINI Coefficients. We take GINI data from the U.S. Census Bureau, *Current Population Survey*. The data are available at from the Census Bureau at

http://www.census.gov/hhes/www/income/data/historical/inequality/taba2.pdf. The Bureau cites a change in methodology between 1992 and 1993.   The Census Bureau notes that this methodological change "had profound effects of the upper end of the income distribution by recording income levels that had been previously underreported." (Jones and Weinberg, 2000, 1.) The Bureau reports that it was 'unable to determine precisely the proportion of the increase in income inequality between 1992 and 1993 that is attributable to this change. (Jones and

Weinberg, 2000, 1.) See the appendix figure below for a visual representation of the magnitude of the effect. To offset the methodological change, we estimate the GINI models with a dummy variable for 1993.

Appendix Figure: Change in U.S. Gini Indicators
The effects of a change in Census methodology between 1992 and 1993

Source: Department of the Census, "Current Population Reports: Selected Measures of Household Income Dispersion, Table A-2"

Multifactor productivity. The historical measure of multifactor productivity (MFP), 1948-2009, comes from the Bureau of Labor Statistics, and is available at http://www.bls.gov/mfp/mprdload.htm. MFP is for the private business sector, and excludes data for government enterprises.

Skills Premium. These data are the "composition adjusted college/high-school log weekly wage ratios" from Figure 1 in Acemoglu and Autor 2010. The data measure the skill premium paid to more educated workers over time, adjusting for the composition of work. The data are available at http://econ-www.mit.edu/faculty/dautor/data/acemoglu.