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# Globalization and the Welfare State: Testing the Microfoundations of the Compensation Hypothesis

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The debate on how globalization affects the welfare state has so far largely neglected to examine the microlevel causal mechanism underlying different macrolevel claims. Based on survey data from Switzerland, this article provides empirical microfoundations for the so-called compensation hypothesis. It finds that globalization losers are more likely to express feelings of economic insecurity. Such feelings, in turn, increase preferences for welfare state expansion, which in turn increase the likelihood of voting for the Social Democratic Party. The analysis also shows that globalization losers and winners differ significantly with regard to their social policy preferences and their propensity to vote for left parties. The article is innovative on two counts: First, it uses a number of different and more nuanced indicators measuring individuals' positions as beneficiaries or losers of increasing global competition. Second, rather than focusing on one particular part of the causal chain, it tests the entire individual-level causal mechanism implied by the compensation hypothesis.

### Introduction

The question of how globalization affects the welfare state has been hotly debated in the literature. A whole body of research has emerged to address the relationship between the increasing internationalization of production and the provision of social security, but has arrived at contradictory conclusions. Proponents of the so-called *compensation hypothesis* argue that globalization leads to welfare state expansion, as governments strive to compensate potential globalization losers for the risks associated with increased international competition and volatility (Cameron 1978; Ruggie 1982; Katzenstein 1985; Rodrik 1998). This argument essentially has two components: a demand- and a supply-side component. On the demand side, it holds that globalization increases voters' demand for social protection. On the supply side, governments satisfy this demand by supplying a more generous welfare state.

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Other scholars doubt that globalization leads to welfare state expansion. One group of skeptic authors focuses on the supply side, and points to governments' reduced ability to provide social spending in a world characterized by mobile capital (Cerny 1995; Rodrik 1997). They argue that even if globalization increases demand for more social protection, it creates efficiency dynamics that constrain governments' ability to supply it. A second group of critics challenges the compensation argument at a more fundamental level. Focusing on the demand side, these scholars reject the notion that globalization affects the demand for welfare state expansion at all (Iversen and Cusack 2000; Rehm 2007, 2009).<sup>1</sup>

The jury is still out on this debate. Empirically, many authors find that higher integration into the world economy coincides with bigger welfare states, either because integration increases domestic economic volatility or globalization-induced structural adjustment (for example, Hicks and Swank 1992; Garrett 1998; Rodrik 1998; Bernauer and Achini 2000; Burgoon 2001; Garrett and Mitchell 2001). These supportive findings of the compensation hypothesis have been challenged by a number of studies. Some authors question the openness–volatility-welfare nexus (Down 2007; Kim 2007), whereas others find that changes in economic openness and globalization have had a negative impact on public spending (for example, Rodrik 1997; Garrett 2001; Genschel 2002; Busemeyer 2009). Other authors argue for a more nuanced understanding of the relationship between globalization and the welfare state (for example, Burgoon 2001; Adserà and Boix 2002; Swank and Steinmo 2002; Mares 2004, 2005; Rickard 2006).

One reason for these inconclusive results is that much effort has been invested in empirically examining the macro-level implications of the competing arguments, whereas less attention has been paid to empirically testing the causal mechanism linking the macro-level phenomena at the micro level. This macrolevel bias is particularly surprising considering that the demand-side part of the causal mechanism is mainly situated at the micro level: the increasing internationalization of production increases social and economic risks, which in turn decreases individuals' feeling of economic security and leads them to demand more social protection as compensation.<sup>2</sup> Rather than actually test this causal chain on the individual level, however, most authors examine only whether welfare states and government spending in more "globalized" countries have been expanding or not. Although these studies provide important insights, they have a hard time answering to what extent these two macrolevel phenomena are causally related. In particular, studies that do not find a macro-level relationship between globalization and welfare state expansion cannot tell us whether this is because there is no globalization-induced demand for compensation (demand side), or whether globalization pressures prevent such demands from translating into actual policy outcomes (supply side).

Recently, some authors have begun to evaluate parts of this causal mechanism at the micro level. These studies have provided important insights, but are not without limitations. First, these studies have produced contradictory results. Rehm (2007, 2009) finds no support for the compensation argument's claim that sectoral exposure to international competition has an effect on individuals' social policy preferences, whereas Scheve and Slaughter (2004) use a different measure of globalization exposure and find support for the logic of the compensation argument. Second, these studies rely on a limited number of indicators of globalization exposure. They typically either focus on some aspect of

 $<sup>^{1}</sup>$  These scholars argue that deindustrialization, rather than globalization, drives the demand for welfare state expansion.

<sup>&</sup>lt;sup>2</sup> Ultimately, this globalization-induced demand for social protection is then argued to produce a relationship between globalization and welfare state expansion on the macro level when policymakers supply such compensation.

international trade or on foreign direct investment (FDI), but almost no study investigates how different dimensions of globalization affect individual preferences. Third, none of these studies provides a test of the entire micro-level causal mechanism conjectured by the compensation hypothesis, but rather focus on certain parts of the causal chain.

The shortcomings of existing research suggest that a more comprehensive test of the compensation argument's microfoundation is urgently needed if we want to understand the causal relationship between globalization and the welfare state. A more thorough analysis seems particularly called for as researchers increasingly build on the findings of these micro-level studies. For example, some studies justify their assumptions of worker opposition to further globalization by citing Scheve and Slaughter's (2004) finding that people in more internationalized economic sectors feel more economically insecure (for example, Li 2005; Ha 2008). Given that the findings of this study are limited to the case of Great Britain and to the effect of FDI, it seems imperative to investigate to what extent they extend to other countries and to other types of international exposure as well.

This article presents such a comprehensive test of the compensation hypothesis' micro-foundations. It is innovative on two counts: First, it uses a number of different and more nuanced indicators measuring individuals' positions as beneficiaries or losers of increasing global competition, that take into account that high-skilled individuals may be affected by globalization quite differently than low-skilled individuals. Second, rather than focusing on a particular part of the causal chain, it tests the entire individual-level causal mechanism implied by the compensation hypothesis. The article begins with a discussion of this causal mechanism, linking globalization and welfare state expansion at the micro level. It argues that this mechanism comprises several direct and indirect micro-level links between individuals' positions in the global economy, risk perceptions, and policy and partisan preferences. The second part of the article uses survey data from Switzerland to test whether these implications of the compensation argument can be observed empirically. Switzerland is the prototype of a small open economy. Its economy is very export-oriented and has open borders for international capital movements (Quinn 1997). Swiss citizens are therefore highly exposed to international competition and international economic shocks and hence likely to experience the effects of globalization—both negative and positive—very strongly. Not surprisingly, the early versions of the compensation argument were based partly on an analysis of the Swiss experience (Katzenstein 1985). For these reasons, Switzerland appears particularly well-suited for an analysis of the compensation hypothesis at the individual level.

The empirical findings for the Swiss case support the causal logic of the compensation argument. There is strong evidence for the direct links, implying that globalization exposure increases individual job insecurity, job insecurity enhances preferences for welfare state expansion, and such preferences are positively related to partisan preferences for the Left. In addition, the results also show that globalization losers not only feel systematically more insecure than globalization winners, but also demand more social protection and are more likely to vote for the left.

# Linking Globalization and the Welfare State at the Micro level. The Causal Mechanism of the Compensation Hypothesis

To explain why economic openness might lead to bigger governments, proponents of the compensation hypothesis argue that governments expand the welfare state in an effort to insure the citizens in open economies against the risks

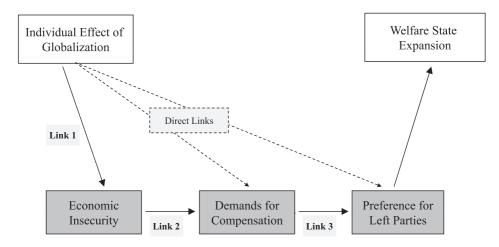


Fig 1. Globalization and Welfare State Expansion: The Causal Chain

associated with globalization (Rodrik 1998). Increased integration in the global economy is argued to lead to more insecurity among citizens, either because of increased domestic economic volatility or because of globalization-induced structural adjustment. Therefore, these individuals want more social protection from the state. When this demand is translated into the policy-making arena, globalization leads to an expansion—or at least to no retrenchment—of the welfare state at the macro level. The individual-level causal chain of the compensation argument thus comprises three causal links: (i) the link between an individual's position in the globalized economy and his or her feelings of economic security; (ii) the link between feelings of economic insecurity and policy preferences for more social protection; and (iii) the link between preferences for social protection and a politically consequential expression of these preferences.<sup>3</sup>

Figure 1 summarizes the causal chain linking globalization with welfare state expansion, which I discuss in more detail below. The chain begins with the link between globalization and feelings of economic insecurity (link 1), then links insecurity and demands for compensation (link 2), and finally related compensation demands to partisan preferences for parties championing an encompassing welfare state (link 3). The final link between these partisan preferences and the macro-level policy outcome represents the supply side of the compensation argument.4 Figure 1 also includes two direct links that associate the individual effect of globalization with (i) an individual's compensation demands and (ii) his or her partisan preference. For a test of the validity of the compensation argument, these direct links are particularly important. Other than the indirect causal links 2 and 3, which could be caused by a number of alternative mechanisms, the direct links contain predictions that are unique to the compensation argument. Extending the analysis beyond the three links in the micro-level causal chain and additionally teasing out the indirect relationships implied by the compensation argument therefore allows us to clarify and test the effects of globalization more specifically. Empirical support for both types of links would provide strong evidence in favor of the causal mechanism suggested by the compensation argument.

<sup>&</sup>lt;sup>3</sup> The embedded liberalism literature (Ruggie 1982) implies a fourth link, arguing that only globalization losers, who are being compensated for their losses, will support a further opening of the economy.

<sup>&</sup>lt;sup>4</sup> There is a vast literature that tests this supply side part of the compensation argument and the question whether left-wing parties are in fact capable of supplying an expansion of social policies in the face of globalization (for example, Pierson 1996; Ross 2000; Allan and Scruggs 2004; Klitgaard 2007). This article limits the analysis to the demand side of the argument.

## Link 1: Globalization and Economic Insecurity

The starting point for the individual-level causal chain between globalization and public spending is concerned with the relationship between an individual's position in the global economy and his or her perception of economic insecurity. The compensation hypothesis implies that globalization increases individuals' feeling of economic risk. Even though it could be argued that this effect should apply to all citizens of an open economy, because of the higher volatility associated with an open economy, it seems more plausible to assume that the effect varies among individuals. Globalization losers are likely to be much more negatively affected by economic openness than globalization winners, because they face higher risks to receive low wages or to lose their job altogether. Consequently, the effect of economic openness on the individual feeling of economic security should be particularly pronounced for globalization losers, whereas globalization winners should feel least insecure.

The empirical evidence for the link between globalization and individuals' feeling of economic insecurity almost exclusively relies on the oft-cited study by Scheve and Slaughter (2004).<sup>5</sup> Using British public opinion data for the years 1991–1999, these authors show that individuals employed in industries characterized by high rates of FDI express higher levels of economic insecurity than individuals in more sheltered sectors. Their findings provide support for the compensation hypothesis' causal claim that openness increases individuals' perception of social risk. Yet, three issues stand in the way of accepting the compensation hypothesis' causal claim on the basis of these results. First, the estimated effect of international competition on individuals' feeling of insecurity is fairly small in substantive terms; second, the study only focuses on one dimension of individuals' exposure to international competition (FDI), and third, the validity of the results beyond the British context still needs to be assessed.

### Link 2: Economic Insecurity and Welfare State Preferences

The next step in the compensation argument is the link between an individual's feeling of economic insecurity and his or her preference for welfare state expansion. Many explanations of welfare state expansion are based on the argument that social policy serves as insurance for risks that private insurance markets fail to cover (Varian 1980; Sinn 1995; Iversen and Soskice 2001; Moene and Wallerstein 2001). Empirically, there is some evidence for this argument. Iversen and Soskice (2001) find that individuals who believe that they would have a hard time finding a new job if they were looking for one, are more supportive of social spending. Following this logic, the compensation hypothesis implies that individuals facing globalization-induced risks turn to the state to provide them with cover against loss of income and similar risks caused by increased economic integration. This argument suggests a connection between an individual's feeling of economic insecurity and his or her social policy preferences: more insecure individuals should prefer more social protection. This logic also implies a direct relationship between individuals' exposure to global competition and social

<sup>&</sup>lt;sup>5</sup> On a related issue, several studies show that an individuals' risk exposure (for example, in terms of skill specificity) tends to have statistically significant effects on their perceptions of economic insecurity (Cusack, Iversen, and Rehm 2006; Anderson and Pontusson 2007). Providing more indirect micro-level evidence on the openness-structural adjustment-insecurity link, studies on the determinants of individuals' trade policy preferences show that individuals who stand to gain economically from trade liberalization and to some extent individuals employed in industries with a comparative advantage are more likely to express a preference for trade liberalization than individuals who stand to lose from such liberalization measures (Scheve and Slaughter 2001a; Baker 2005; Hays, Ehrlich, and Peinhardt 2005; Mayda and Rodrik 2005, Hays 2009).

policy preferences: globalization losers should be more strongly in favor of social protection than globalization winners.

Most studies on the risk-insecurity-social policy preference nexus empirically bypass the feeling of economic insecurity and simply assess the direct relationship, asking whether "objective" measures of an individual's risk exposure, such as the person's sector of employment or level of skill specificity, are directly linked with his or her redistributional preferences (Svallfors 1997; Bean and Papadakis 1998; Iversen and Soskice 2001; Cusack et al. 2006; Rehm 2007). These studies implicitly assume that a higher level of risk exposure will increase individuals' economic insecurity. They show that individuals who are confronted with higher risks are generally more likely to express a preference for more social protection, either in the form of social insurance or in terms of redistribution. A number of studies specifically explore the indirect link between globalization exposure and social policy preferences. Here, the evidence has been mixed. On the macro level, it has been shown that the median preference for redistribution is higher in more open countries (Balcells Ventura 2006). On the micro level, however, Rehm (2007, 2009) does not find any evidence that individuals employed in tradable sectors or in industries with a comparative disadvantage are more amenable toward redistribution. Hence, empirically, the validity of the second causal link put forward by the compensation argument is still an unresolved question.

## Link 3: Social Policy Preferences and Vote Choice

The final demand-side link in the compensation argument posits that globalization demands will be effectively voiced in the political arena. To have an actual political impact, it is not sufficient that globalization losers have a preference for more social spending. Rather, these demands have to be brought into the political sphere and gain sufficient political force to result in the desired policy change. As individuals cannot achieve this on their own, their best option is to support those political parties most likely to advocate their cause in the political arena. Even though there is considerable debate to what extent such demands are translated into actual policy (for example, Allan and Scruggs 2004; Klitgaard 2007), compensation-demanding voters' best strategy is to support parties that advocate welfare state expansion and more redistribution, and thus, parties of the left. Even though rarely explicitly discussed, the compensation hypothesis thus also implies a connection between redistributive preferences and partisan preferences. To effectively ensure a representation of their interests in the policy-making arena, individuals in favor of welfare state expansion can thus be expected to vote for parties that advocate such policies.

There is ample evidence that social policy preferences are strong determinants of party choice, but it is less clear whether this effect is related to globalization. Empirical research on the effects of globalization on electoral politics has only recently begun to emerge (for an overview, see Kayser 2007). A small strand of literature investigates the effect of (openness-induced) economic insecurity on individuals' voting behavior, but provides mixed results. At the individual level, two studies of the 1996 US presidential election (Mughan and Lacy 2002) and of the 1998 election to the Australian Federal House of Representatives (Mughan, Bean, and McAllister 2003) find that job insecurity increases the likelihood that an individual will vote for parties that run on an anti-globalization platform. At the same time, however, Fernandez-Albertos (2006), Hellwig and Samuels (2007), and Hellwig (2008) find that economic internationalization reduces the impact of economic considerations on voting choices altogether. Empirically, it

<sup>&</sup>lt;sup>6</sup> This in turn has a profound effect on party politics by transforming the national political space and party platforms (Kriesi, Grande, Lachat, Dolezal, Bornschier, and Frey 2006).

is still unclear whether globalization losers really exhibit a systematically higher probability of voting for parties of the left. Yet, this is an important part of the causal mechanism underlying the compensation hypothesis.

To summarize, the compensation hypothesis has several micro-level empirical implications, which link globalization and welfare state expansion both directly and indirectly. Focusing on the demand side of the argument, I argue that three causal links represent the mechanism between globalization and demands for welfare state expansion: a link between individual exposure to globalization and insecurity (link 1), a second link between insecurity and demands for compensation (link 2), and a final link between compensation demands and individuals' partisan preference (link 3). The direct links suggest that globalization losers should not only feel more insecure, but also demand more social protection as compensation for the increased risks they face, and vote for parties that champion social insurance and redistribution. In contrast, globalization winners should, in addition to feeling more secure, demand less social protection, and be less likely to vote for the parties of the left.

## Conceptualization, Operationalization, and Method

As we have seen, the compensation hypothesis builds on a chain of causal relationships at the micro level. To evaluate the demand-side causal chain, I perform a detailed analysis of the effects of globalization on individuals' perceptions, policy preferences, and vote choices in Switzerland. The study is based on microlevel data from the 2007 wave of the World Values Survey (WVS) in Switzerland (Hug and Kriesi 2010). To focus on individuals who are both potentially exposed to globalization pressures and able to express their preferences in a politically meaningful way, this study concentrates on Swiss nationals who are allowed to vote. The study also excludes retired people, because their policy and partisan preferences are likely to be driven by rather different concerns than those of the working-age population, so that they are beyond the argument's scope. This section discusses the conceptualization and operationalization of the various theoretical concepts included in the compensation argument. The next section then performs regression analyses to test the causal chain.

## Identifying Globalization Winners and Globalization Losers

The central concept of the compensation argument is the distinction between globalization winners and globalization losers. Yet, the conceptualization and operationalization of this concept is far from trivial. Research in international political economy typically relies on two distinct macroeconomic models to identify the distributional effects of globalization. These models either emphasize the comparative advantage of certain industries and hence specific factors of production (the sectoral Ricardo–Viner model), or relative factor endowments (the Heckscher–Ohlin and Stolper–Samuelson models). Models in the Ricardo–Viner tradition (Jones 1971; Samuelson 1971) assume that factor mobility is limited and therefore predict that the cleavage between proponents and opponents of economic openness will run along different sectors of production. Most authors expect this cleavage between comparatively disadvantaged and advantaged

<sup>&</sup>lt;sup>7</sup> I chose to focus on only one country for both theoretical and practical reasons. Theoretically, individual attitudes and preferences are highly context-dependent. Limiting the analysis to one common context (Switzerland) allows me to abstract from these intervening factors. The practical reason is that the cross-national survey data from the World Values Survey project does not include the fine-grained sectoral and occupational information used in this article.

<sup>&</sup>lt;sup>8</sup> Not surprisingly, the results presented here weaken when pensioners are included.

<sup>&</sup>lt;sup>9</sup> I define globalization winners and losers in economic terms.

industries (for example, Gourevitch 1986), but an important variant of the sectoral approach classifies globalization winners and losers according to their exposure to international competition. This variant emphasizes the difference between the exposed tradable and the sheltered non-tradable sectors (for example, Frieden and Rogowski 1996; Hays et al. 2005; Hays 2009). New developments in trade theory also distinguish between tradable and non-tradable industries, and point to heterogenous distributional effects of trade within the tradable sector (Melitz 2003; Helpman, Itskhoki, and Redding 2008).

In contrast, factor endowments models, most notably those in the Stolper–Samuelson tradition, assume factor mobility and focus on the effect of economic openness on relative wages (Stolper and Samuelson 1941; Findlay and Kierzkowski 1983). These models argue that a country's comparative advantage lies in those goods and services predominantly produced with the factors of production with which the country is abundantly endowed—in the case of advanced economies this is typically capital and high-skilled labor. Therefore, an opening of the economy increases the demand for and the price of the abundantly available factor of production. Consequently, the owners of abundant factors of production benefit from globalization, whereas those owning scarce factors of production are hurt economically (Rogowski 1989). For advanced economies, this suggests that high-skilled individuals are beneficiaries of globalization, whereas low-skilled workers lose out.

Both approaches provide important clues as to the identity of globalization winners and losers at the individual level. By highlighting the difficulty of simply moving from one job in one industry to another, the sectoral models emphasize how globalization can pose an existential threat to individuals' jobs and wages. In contrast, the factoral model stresses the importance of education and skills. More recent work in political economy has begun to integrate these two models by stressing the importance of factor mobility (Hiscox 2001, 2002a,b). This seems particularly called for as new developments in trade theory have moved beyond the traditional approaches and have highlighted the heterogenous distributional effects of trade (Melitz 2003; Helpman et al. 2008). These models have begun to concentrate on intra-industry variations in the effects of trade and argue that the most efficient and productive firms benefit most from free trade. Helpman et al. (2008) argue that these firms also invest more effort in screening workers, implying that the firms benefitted most by globalization employ workers with above-average qualifications. <sup>11</sup>

I take a slightly different approach than Hiscox and argue that both an individual's sector of employment and his factor endowments determine how globalization affects his or her well-being. Even within the same industry, exposure to global competition can be harmful to some people, but not to others. Take, for example, the textile industry in a developed country like Switzerland: seamstresses are hurt by globalization, whereas high-skilled fashion designers benefit from their access to global markets. Thus, in developed countries, high-skilled individuals in exposed sectors can be characterized as globalization winners, because they can sell their skills to global markets. In contrast, low-skilled

<sup>&</sup>lt;sup>10</sup> However, Hiscox concentrates on long-run trends and conceives the different approaches as a sequence, rather than allowing the sectoral and factoral effects of free trade to play out simultaneously.

<sup>&</sup>lt;sup>11</sup> Note that although all the models discussed were developed to analyze the distributional effects of international trade, they can also be used to shed light on the effects of international economic integration more broadly, because comparative advantage also guides FDI decisions and the decision to offshore certain jobs or production facilities. In this context, the models distinguishing between exposed tradable and sheltered non-tradable sectors are particularly useful, because they draw attention to the fact that not all individuals are equally exposed to the forces of globalization. Looking at the effect of FDI, Scheve and Slaughter (2004) argue, for example, that industries with a high exposure to FDI are likely to exhibit a higher labor-market volatility than industries sheltered from this dimension of globalization.

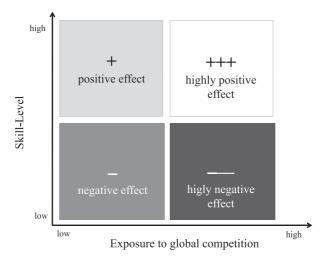


Fig 2. Individual Effect of Globalization Exposure, Conditional on Individuals' Skill Level

individuals in a developed economy working in an exposed sector face serious problems. The goods they produce are most likely to be substituted with imports from low-wage countries and their jobs are the most likely to be moved abroad, so that they can be classified as globalization losers. Individuals working in sheltered industries or occupations constitute an intermediate category. Low-skilled workers in sheltered sectors are less negatively affected by globalization than globalization losers, whereas high-skilled workers in sheltered sectors benefit less from globalization than globalization winners. In other words, compared with equally skilled individuals sheltered from global competition, globalization has a more negative effect on low-skilled individuals and a more positive effect on high-skilled individuals. In sum, this means that low-skilled individuals in sectors or occupations that can easily be moved abroad, such as textile workers, should be most negatively affected by globalization. High-skilled individuals in internationally competitive industries and occupations, such as bank managers, are globalization winners. Figure 2 summarizes this conditional effect of globalization exposure on individuals.

Empirically, this discussion implies that whether a person can be characterized as a globalization loser or a globalization winner depends both on how internationally exposed the industry or occupation is in which the person works (the sectoral dimension) and his or her skill level (the factor endowment dimension). Following this insight, I operationalize the extent to which an individual is hurt or helped by globalization as a combination of his or her sector of employment and factor endowments.

## **Sectoral Dimension: Globalization Exposure**

Industries and professions can be exposed to globalization in a variety of ways. To acknowledge this diversity and to strengthen the robustness of the results, I operationalize individual exposure to international competition in three different ways. Three measures evaluate the potential of globalization-induced job loss from different angles: industry-specific exposure to international trade and FDI, as well as occupation-specific offshoring potential.

First, I use the most established operationalization of globalization and focus on individuals' industry-specific exposure to international trade. Studies analyzing the determinants of trade policy preferences have found statistically and substantially significant differences between individuals in tradable and non-tradable

industries, in exporting and importing industries, as well as between those working in comparatively advantaged and disadvantaged industries (Hays et al. 2005; Mayda and Rodrik 2005; Mayda 2008). However, survey research investigating the effect of trade on social policy preferences finds no such effects (Rehm 2007, 2009). As I am interested in overall exposure to trade, I computed the industry-specific ratio of the sum of exports and imports relative to the industry's gross output, based on data from the OECD's Industry Structural Analysis (STAN) database. He industry data was matched with the information on respondents' industry of employment and each respondent was assigned his industry's trade ratio. The higher the ratio of exports and imports per industry output, the more exposed Swiss workers are to international trade competition.

Second, as suggested by Scheve and Slaughter (2004), I conceptualize an industry's exposure to international economic integration as the industry's exposure to cross-border flows of capital, particularly FDI. As FDI "gives firms greater access to foreign factors of production and thus greater ease of substitution away from workers in any single location" (Scheve and Slaughter 2004:663), it increases the risk of job loss. This risk affects workers' level of economic security, and job security in particular, and therefore is a particularly relevant aspect of globalization in the context of the compensation argument. I operationalize FDI exposure as the logarithm of the magnitude of FDI inflows and outflows in a given industry (Swiss National Bank 2007), relative to that industry's size in terms of its gross value added (Bundesamt für Statistik 2008). 16 To identify an individual's exposure to FDI, I again used the information on individuals' industry of employment. However, since unfortunately the industry classification published for the FDI data and the WVS industry classification match imperfectly, the aggregation procedure only allowed for a differentiation of five types of industries.<sup>17</sup>

The third measure of globalization exposure turns from the industry level to the occupational level, because it has been argued that occupational labor risks are important determinants of individual risk perceptions and policy preferences (Iversen and Soskice 2001; Cusack et al. 2006; Rehm 2009). An individual's exposure to globalization is therefore conceptualized as the ease with which his or her job can be "offshored," that is, moved to another country. Individuals with jobs that can easily be offshored—such as IT programmers or workers in the textile industry—are arguably much more at risk of losing their job to international competition than individuals whose jobs cannot be substituted with jobs abroad—examples are nurses, hairdressers, or teachers. To operationalize this concept, I use the "Offshorability Index" developed by Blinder (2007) and applied to 381 different professions in Switzerland by Muhl

 $<sup>^{12}</sup>$  An important exception is Scheve and Slaughter (2001a), who find no support for such differences in the context of the United States.

<sup>&</sup>lt;sup>13</sup> In results not reported here, I used the measure of sectoral comparative advantage employed by Rehm (2007) and replicate the result that this measure does not have a statistically significant effect. This result suggests that it is in fact the combination of individual trade exposure and skills rather than industry-specific comparative advantage that drives individuals' risk perceptions and social policy and partisan preferences.

<sup>14</sup> http://webnet.oecd.org/wbos/.

<sup>&</sup>lt;sup>15</sup> Variables V243a and V243b. Table A1 in the Appendix provides information on the relative size of each group in the sample compared with official aggregate employment percentages, as well as the industry-specific trade ratios.

<sup>&</sup>lt;sup>16</sup> For a detailed discussion of alternatives to this operationalization and potential problems, see Scheve and Slaughter (2004:665–666). The results are robust to using only FDI inflows or outflows.

<sup>&</sup>lt;sup>17</sup> Variables V243a and V243b. The industries were matched on the basis of their respective descriptions. The aggregate categories are: (i) metals and machines, electronics, industry, construction, agriculture; (ii) whole and retail trade; (iii) financial and holding companies, banks, insurance industry; (iv) transport and communication; and (v) a residual category. Table A2 in the Appendix provides information on the relative size of each group in the sample compared with the estimates about the size of each group from the Swiss Federal Office for Statistics, as well as the value of total FDI inflows and outflows in that industry relative to its gross value added.

(2007). This index measures a job's *potential* to be moved abroad. The criterion for this assessment is whether the service the job provides can be delivered over long distances with little or no degradation in quality. The index ranges from 0 (no offshoring potential) to 100 (high offshoring potential). As the WVS survey not only elicits information on respondents' sector of employment, but also asks for a qualitative description of their current job, I was able to assign each respondent the value for the corresponding profession in Muhl's offshoreability ranking.<sup>18</sup>

#### **Factor Endowments: Skill Level**

In factoral terms, the main line of conflict between globalization winners and losers on the individual level runs between high- and low-skilled individuals exposed to globalization. Factor endowments are consequently conceptualized as an individual's skill level, measured as his or her highest achieved education level ranging from 0 (no education) to 6 (university degree). <sup>19</sup> Of course, individuals can also acquire skills through on-the-job training, which is not captured with this operationalization. Nonetheless, education levels can be argued to provide a good approximation of individual skill levels. An additional caveat is that it is not clear whether education mirrors individuals' economic interests (shaped by their factor endowment), or rather reflects how ideas and information shape individuals' attitudes (for a discussion in the context of trade policy preferences, see Hainmueller and Hiscox 2006). Although I will not be able to rule out this possibility, the prediction of a conditional effect fortunately provides some leverage on this issue. If education was correlated with insecurity, welfare state, and partisan preferences for non-economic reasons alone, this effect should not be affected by the individual's exposure to international economic competition. In contrast, the presence of a conditional effect suggests that education at least partly affects attitudes through the economic interest channel.

# Conditional Effect: Interaction Term between Exposure to Globalization and Skills

As discussed before, neither the sectoral and factoral dimensions alone provide a satisfactory conceptualization of globalization losers and winners. Rather, to account for the conditional character of the concept, I interact an individual's sectoral exposure to globalization (measured as sectoral trade openness, FDI exposure, and offshoreability, respectively) with the respondent's skill level. In a developed country like Switzerland, globalization losers are low-skilled individuals with a strong exposure to international competition. These individuals face the highest risk of globalization-induced job or income loss. At the same time, highskilled individuals in exposed industries or occupations are the main beneficiaries of globalization, because they are likely to produce goods and services in which Switzerland has a comparative advantage. The compensation argument suggests that low-skilled individuals should feel more insecure, demand more social protection, and be more likely to vote for the left the more exposed they are to globalization. This effect should become less pronounced (or even reversed) as skill levels increase. In statistical terms, this should be reflected in a positive coefficient for globalization exposure, which represents individuals with no education, and a negative coefficient on the interaction term between the sectoral and the factor endowment indicators.

<sup>&</sup>lt;sup>18</sup> Variable V242a. The distribution of respondents into different categories of offshoreability roughly corresponds to the overall distribution of offshoreability of jobs in the Swiss population, as calculated by Muhl based on the Swiss census 2000 (see Appendix Table A3).

<sup>&</sup>lt;sup>19</sup> The recoded variable is based on question V238.

Dependent Variables: Economic Insecurity, Welfare State Preferences, and Vote Choice

The causal chain linking globalization with welfare state expansion on the individual level makes predictions about the direct and indirect effects of individuals' vulnerability to globalization on three different dimensions: individuals' feeling of economic insecurity, their social policy preferences, and their vote intention. All three concepts are operationalized with respondents' answers to questions in the Swiss World Values Survey 2007 (Hug and Kriesi 2010). To operationalize individual feelings of economic insecurity, I concentrate on the aspect of economic security that individuals are most likely to fear in the context of globalization: job security. The concept is measured in a somewhat indirect way with a dummy variable coded as 1 if the respondent mentioned a safe job, where one does not have to be worried about losing the job as the most or second most important characteristic the person would look for in a job if he or she were to search for a new employment, and 0 otherwise. 20 Respondents' social policy preferences are operationalized as their opinion of how extensively the state should provide for its citizens. As the compensation argument ultimately aims at explaining welfare state expansion, I measure respondents' general opinion of the role of the state, rather than a specific aspect of social policy, such as full employment, redistribution, or labor policy aspects of immigration. Respondents were asked to classify their opinion on a 10-point scale ranging from the statement The state should take more responsibility to ensure that everyone is provided for to People should take more responsibility to provide for themselves.<sup>2</sup> Low values can be interpreted as a preference for welfare state retrenchment, whereas high values reveal a preference for welfare state expansion. Finally, respondents' propensity to vote for a party advocating welfare state expansion is measured with the question asking which party the respondent would vote for if federal elections were being held the following Sunday. The variable is recoded as a dummy variable taking the value of 1 if the respondent was planning to vote for the Swiss Social Democratic Party (SP).22

### Control Variables

I include a number of socio-demographic control variables that are routinely included in studies that analyze the causes of economic insecurity, social welfare preferences, and partisan preferences at the individual level (for example, Svallfors 1997; Iversen and Soskice 2001; Mughan and Lacy 2002; Scheve and Slaughter 2004; Cusack et al. 2006; Scheve and Stasavage 2006; Anderson and Pontusson 2007; Rehm 2009). These variables include income, gender, age, labor union membership, the sectoral unemployment rate, and whether the person works in the public sector.<sup>23</sup> In addition, I include a measure of respondents' level of risk aversion in the regression models analyzing the determinants of job insecurity to control for potential endogeneity problems arising if individuals who are generally more risk averse (and hence more likely to view a "safe

<sup>&</sup>lt;sup>20</sup> Questions V48 and V49. Respondents were given a list of four items and were asked to indicate the two most important characteristics of a potential new job. The results are substantively robust to operationalizing economic insecurity with a different question, which asks whether respondents *fear that the economic situation will worsen in their neighborhood.* 

<sup>&</sup>lt;sup>21</sup> Question V118.

<sup>&</sup>lt;sup>22</sup> Question V231.

Income is measured on an ordinal 13-point scale (v253). Gender is a dummy variable for female respondents (v235). Age is operationalized as age in years (based on variable v236). Labor union membership is a dummy variable coded 1 for respondents who are either active or inactive union members (v27). The unemployment rate is measured as sectoral unemployment rate in percent, as published by the International Labor Organization (http://laborsta.ilo.org). Public sector employment is a dummy variable coded as 1 if the individual is employed in the public sector or by the government (inst07)

job'' as a priority) self-select into more sheltered sectors and professions.<sup>24</sup> Finally, in the regression analyses of partisan preferences, I include respondents' attitude on EU membership as a control variable to account for arguments that cultural considerations play an increasingly important role in Swiss party politics (Kriesi et al. 2006).<sup>25</sup>

## **Empirical Analysis**

This section empirically evaluates the direct and indirect individual-level hypotheses linking the causal chain from globalization to welfare state expansion. I perform binary logit (links 1 and 3) and ordered logit (link 2) analyses to test the causal mechanism linking globalization and welfare state expansion at the individual level. The regression results are displayed in Table 1 (links 1 and 2) and Table 3 (link 3). Taken together, the results support the argument put forth by the compensation literature that globalization losers feel systematically more insecure, demand systematically more state involvement, and are systematically more likely to vote for the left than globalization winners.

### Link 1: The Determinants of Economic Insecurity

The first set of models (Table 1, link 1) estimate the probability that a person expresses feelings of job insecurity. The results for the control variables are broadly in line with the results of other studies, even though most of the coefficients are not statistically significant (Mughan and Lacy 2002; Scheve and Slaughter 2004; Cusack et al. 2006). Older people, poorer respondents, and men are more likely to express economic insecurity than younger, female, and wealthier respondents. Trade union members place a higher priority on job security, <sup>27</sup> as do individuals employed in sectors struggling with high unemployment rates, and public sector workers. Intuitively, more risk-averse individuals are substantially and statistically significantly more likely to value job safety.

More importantly, the models include the variables characterizing respondents' position in the global economy. Each of the three models contains individual skill levels, the individual's exposure to the global economy (trade exposure, FDI exposure, and job offshoreability, respectively), and the interaction term between these two variables. As expected, the interaction term is negative, whereas the constituent terms for globalization exposure, which represents the effect of globalization exposure for unskilled individuals, is positive. A closer examination of the conditional impact of globalization exposure and skill levels on individuals' feeling of insecurity reveals that the effect of globalization

<sup>&</sup>lt;sup>24</sup> Question V82. Respondents were asked to what extent they would characterize themselves as a person who avoids everything that is dangerous and prefers a secure environment.

 $<sup>^{25}</sup>$  Switzerland is economically highly integrated with the EU (based on bilateral treaties), so that EU membership is predominantly a cultural and emotional issue in Swiss politics.

<sup>&</sup>lt;sup>26</sup> The theoretical model represents a causal chain, so that an alternative to this estimation strategy would be to estimate a system of equations. However, the separate equations estimated here are more robust and less model dependent, I have opted for this option. Nonetheless, future research should explore the conditional effects of globalization in terms of a system of equations. In addition, note that as in most other studies using survey data (for an exception, see Scheve and Slaughter (2004)), the data constitute a cross-section, rather than a panel of respondents. Even though there is little that can be done to address this issue, the reader should keep in mind that there is a potential for unobserved characteristics of individuals to generate spurious correlation between the various independent and dependent variables.

<sup>&</sup>lt;sup>27</sup> Given that the effect of globalization exposure is hypothesized to affect insecurity through the risk of unemployment, it is surprising that the coefficient for the sectoral unemployment rate is not statistically significant. However, despite the imprecise estimate, the results suggest that individuals working in industries plagued by high unemployment rates are substantially more likely to express job insecurity (the first difference is between 4 and 6 percentage points).

Table 1. Logit and Ordered Logit Analyses Testing Links 1 and 2

	Link	Link 1: Preference for a safe job	fe job		Link 2: Preference for more state involvement	nore state involvement	
		Logit regression			Ordered logit regression	t regression	
	Trade model	FDI model	Offshoreability model	Link 2	Trade model	FDI model	Offshoreability model
Education Industry-specific trade	-0.271*** (0.08) 0.729** (0.31)	-0.231** (0.11)	-0.202 (0.13)	0.080 (0.06)	0.101* (0.06) 0.670** (0.28)	0.222*** (0.08)	0.180* (0.10)
Education × trade exposure Industry-specific FDI exposure	-0.154 (0.10)	0.278** (0.13)			-0.199*** (0.07)	0.286*** (0.10)	
$(\log geu)$ Education × FDI exposure		-0.031 (0.03)				-0.059*** (0.02)	
Job offshoreability Education × offshoreability			0.008 (0.01) -0.003 (0.00)				0.018** (0.01) -0.004** (0.00)
Expression of job insecurity				0.453***(0.17)			
Income Female	-0.036 (0.04) $-0.783*** (0.91)$	-0.025 (0.04) -0.743*** (0.91)	-0.040 (0.04) -0.786*** (0.91)	-0.113*** (0.03)	-0.115*** (0.03) -0.095 (0.16)	-0.102*** (0.03) -0.009 (0.16)	-0.105*** (0.03)
Age in years		-0.002 (0.01)	0.002 (0.01)	-0.009 $(0.01)$	-0.010 (0.01)	-0.009 (0.01)	-0.008 (0.01)
Union member	0.089 (0.28)	0.073(0.27)	0.118 (0.29)	0.116 (0.21)	0.023 (0.22)	0.026(0.21)	0.048 (0.23)
Unemployment rate (industry-specific)	0.023 (0.07)	0.083 (0.07)	0.041 (0.07)	0.192*** (0.06)	0.192*** (0.06)	0.205*** (0.06)	0.198*** (0.06)
Public sector employee	0.306(0.24)	0.948* (0.50)	0.098(0.25)	-0.052 (0.19)	0.005 (0.20)	0.327 (0.34)	-0.030(0.21)
Risk aversion	0.273*** (0.08)	0.268*** (0.08)	0.248*** (0.08)	0.080 (0.06)	0.101*(0.06)	0.222*** (0.08)	0.180*(0.10)
Constant	-0.366(0.70)	-1.463 (0.89)	-0.523 (0.74)				
N	578	578	534	809	578	578	534
McKelvey/Zavoina $R^2$	0.183	0.155	0.180	690.0	0.068	0.071	0.060

(Notes. FDI, foreign direct investment. Values in parentheses are standard errors. The results include regional weights. Threshold for ordered logit analyses are not reported. \*\*\*p ≤ .05; \*\*\*p ≤ .05.

exposure on the probability that a person will list job safety as the number one or two priority when looking for a new job, is positive for low-skilled workers for all three measures of sectoral exposure, and statistically significant for the variables measuring exposure to trade and FDI.<sup>28</sup> In contrast, among highly skilled individuals, working in a more exposed sector does not affect their job security to a statistically significant extent, suggesting that these individuals do not feel threatened by globalization. In substantial terms, higher trade exposure and higher offshoreability scores actually decrease insecurity among high-skilled workers.

The differences between globalization losers and globalization winners are considerable in substantial terms. Table 2 presents the predicted probabilities that high- and low-skilled individuals will feel economically insecure depending on whether they are exposed to globalization or not, and the first differences for globalization exposure. Depending on the type of globalization exposure, every second or third globalization loser (that is, low-skilled individuals strongly exposed to globalization) is predicted to experience job insecurity.<sup>29</sup> This is a much higher rate than that among globalization winners, who are high-skilled individuals highly exposed to the international economy. A low-skilled individual exposed to globalization is between three and six times more likely to worry about job security than an equally exposed, but well-educated individual. This finding highlights the relevance of conceptualizing the effect of gobalization as a conditional effect. Furthermore, the first differences in predicted probabilities indicate that moving a low-skilled individual from a sheltered to an exposed sector and holding all else constant, substantially increases his or her job insecurity. This contrasts with the results for high-skilled individuals, where the same exercise has a much smaller and mostly negative effect. These results thus support the first link in the compensation argument's causal mechanism: globalization losers experience more economic insecurity than both globalization winners and individuals working in more sheltered industries or occupations.

## Link 2: The Determinants of Welfare State Preferences

The next step in the causal mechanism linking globalization and welfare state expansion on the individual level implies that individuals who feel economically insecure should prefer an expansion of the welfare state. This link receives strong empirical support, both in direct and indirect terms (Table 1, link 2). The first column investigates the link between insecurity and welfare state preferences.<sup>30</sup> The results from ordered logit regressions show that people who express higher degrees of economic insecurity are indeed significantly more likely to express a preference for higher state involvement, both in substantial and statistical terms. An average respondent who expresses job insecurity is almost 50% more likely to favor welfare state expansion than an average respondent who expresses no such concerns. As before, the control variables largely conform to the results generated by other studies on determinants on social policy and

<sup>&</sup>lt;sup>28</sup> I examined the logit coefficients of globalization exposure conditioned on different skill levels. These coefficients tell us how the coefficient and standard errors on globalization exposure vary as a function of the skill level (Braumoeller 2004:815). The results are available from the author upon request.

<sup>&</sup>lt;sup>29</sup> The differences among globalization winners and losers are likely to be even larger, if the control variables were held at the mean values for the "average" globalization winner/loser rather than the sample medians.

<sup>&</sup>lt;sup>30</sup> As I am interested in the total effect of job insecurity on welfare state preferences, I do not control for globalization exposure in this estimation. Likewise, the analyses of the direct link between globalization exposure and welfare state preferences do not include the job security measure, because I am interested in the total effect of globalization, rather than the effect of globalization net of job insecurity (see also footnote 32). The results are robust, when the variables are jointly included (although the coefficients are of course smaller).

Table 2. Predicted Probabilities and First Differences

	Low-skilled individuals		High-skilled individuals			
Link 1: Job insecurity	,					
	Sheltered (%)	Exposed (%)	$Sheltered \Rightarrow \\ exposed \ (\%)$	Sheltered (%)	Exposed (%)	$Sheltered \Rightarrow \\ exposed (\%)$
Trade	29.69	33.53	3.84	9.81	9.29	-0.52
FDI	17.13	52.42	35.29	6.13	10.74	4.61
Job offshoreability	29.87	41.00	11.13	13.44	6.41	-7.03
Link 2: Pro-welfare si	tate preferences					
	Secure (%)	Insecure (%)	$Secure \Rightarrow \\insecure (\%)$	Secure (%)	Insecure (%)	Secure ⇒ insecure (%
Job insecurity	11.46	16.92	5.46	16.21	23.33	7.12
	Sheltered (%)	Exposed (%)	$Sheltered \Rightarrow \\ exposed (\%)$	Sheltered (%)	Exposed (%)	$Sheltered \Rightarrow \\ exposed (\%)$
Trade	11.65	13.25	1.60	17.92	15.66%	-2.26
FDI	6.43	24.22	17.79	17.26	11.48%	-5.78
Job	9.35	30.39	21.04	20.21	12.60%	-7.61
offshoreability						
Link 3: Vote for Socie	al Democrats					
	Less state (%)	More state (%)	Less state $\Rightarrow$ more state (%)	Less state (%)	More state (%)	Less state $\Rightarrow$ more state (%)
Pro-welfare state preference	9.91	31.36	21.45	9.18	29.56	20.38
	Sheltered	Exposed	$Sheltered \Rightarrow$	Sheltered	Exposed	$Sheltered \Rightarrow$
	(%)	(%)	exposed (%)	(%)	(%)	exposed (%)
Trade	14.62	16.17	1.55	17.22	15.94	-1.28
FDI	17.21	17.98	0.77	20.08	12.54	-7.54
Job offshoreability	7.31	55.57	48.26	25.13	8.00	-17.13

(*Notes.* FDI, foreign direct investment. Predicted probabilities are based on the regression models presented in Tables 1 and 3. A favorable opinion of welfare state expansion is defined as any value equal to or higher than 8 on the 10-point scale. The remaining control variables are held at their sample medians. The predicted probabilities are thus computed for a 47-year-old woman, living in a household with a gross monthly income between 7,000 and 8,000 CHF, who is employed in the private sector with an industry-specific unemployment rate of 4%, and is not a labor union member. Bold numbers indicate first differences.)

redistributive preferences (Iversen and Soskice 2001; Cusack et al. 2006; Rehm 2009). Especially poorer people and respondents employed in sectors affected by high unemployment feel that the state should provide for more social insurance. These results support the notion that more economically insecure individuals demand more social insurance against the risks they face.

To analyze to what extent this relationship can be attributed to globalization pressures, Table 1 therefore also investigates the direct implication of the compensation argument that globalization losers should have a more favorable opinion of welfare state expansion than globalization winners. To investigate this hypothesis, I run regression analyses that substitute the globalization exposure variable and the interaction term for the job insecurity variable. To gauge the

total effect of globalization on welfare preferences, I do not control for job insecurity in these estimations. <sup>31</sup> As before, the expectation for the interaction term is that it should take on a negative sign, meaning that as globalization exposure increases, higher-skilled individuals want increasingly less state involvement than low-skilled respondents. In addition, the constituent term for globalization exposure should be positive, because this coefficient reflects the effect of globalization exposure among low-skilled respondents. The findings presented in Table 1 confirm these expectations: all interaction terms have a negative sign, all constituent terms representing globalization exposure have a positive sign, and all six coefficients are statistically significant. <sup>32</sup>

A closer look at the coefficients of the globalization variables for different skill levels further bolsters the compensation argument. Among low-skilled workers, a higher exposure to international competition of any type increases the demands for welfare state expansion, but when high-skilled respondents are exposed to more global competition, their support for welfare state expansion declines. Except for trade exposure, the negative effect for highly skilled respondents is not statistically significant, suggesting that among highly skilled individuals globalization exposure either lowers their support for social insurance or has no effect at all. Both interpretations are in line with the reasoning of the compensation argument.

The predicted probabilities of pro-welfare state preferences and the first differences presented in Table 2 reflect this finding and show that this conditional effect produces important substantive variation. For low-skilled individuals, moving from a sheltered industry or occupation into an exposed one increases the demand for more government-provided social security. For example, in the case of offshoreability, it triples the likelihood of voicing such demands. In contrast, high-skilled individuals who work in exposed sectors are less likely to prefer a welfare state expansion than highly educated individuals sheltered from the global economy. Except for trade exposure, globalization losers are considerably more likely to demand more social security than globalization winners. Overall, the findings once more provide support for both the causal link between economic insecurity and welfare state preferences, and the direct link between individuals' position in the global economy and these preferences.

## Link 3: The Determinants of Party Preferences

The final individual-level step in the causal mechanism of the compensation hypothesis relates pro-welfare state preferences to the communication of these demands in the political sphere. This final link is evaluated with an investigation of the relationship between individuals' policy preferences and their partisan preferences (Table 3).<sup>33</sup> As argued before, it is plausible to assume that individuals will support those political parties whose political program most closely match their policy preferences, because political parties are the main intermediaries between citizens and policymakers. Hence, the compensation argument leads us to expect that individuals with a preference for welfare state expansion will vote for parties that advocate such an expansion—that is, in the Swiss case, the SP. In addition to this link, the argument also implies

<sup>&</sup>lt;sup>31</sup> As the question on job insecurity only imperfectly captures the many ways in which globalization can affect individuals' feelings of economic insecurity (it does not account for worries about lower or more volatile wages, for example), estimating the total effect of globalization exposure on welfare state preferences allows for a more encompassing investigation of the compensation argument.

<sup>&</sup>lt;sup>32</sup> The positive conditional effect of education for individuals working in sheltered sectors suggests that as discussed before, the education variable captures not only respondents' economic interests but also values and ideas (for example, the idea of a moral obligation for redistribution).

<sup>&</sup>lt;sup>33</sup> As before, I am interested in the total effects of welfare state preferences and globalization exposure, respectively, and therefore estimate them separately. See footnote 30.

Table 3. Logit Analyses Testing Link 3

		Link 3: Vote for Soc	cial Democratic Party	
		Logit re	egression	
	Link 3	Trade model	FDI model	Offshoreability model
Education	-0.017 (0.08)	0.039 (0.09)	0.038 (0.12)	0.290* (0.15)
Industry-specific trade exposure $(X + M)/GDP$		0.523* (0.30)		
Education × trade exposure		-0.137 (0.09)		
Industry-specific FDI exposure (log)			0.026 (0.15)	
Education × FDI exposure			-0.018 (0.03)	
Job offshoreability				0.036*** (0.01)
Education × offshoreability				-0.008*** (0.00)
Welfare state preference	0.158*** (0.05)			
Income	-0.018 $(0.04)$	-0.050 (0.04)	-0.049 (0.04)	-0.066 (0.04)
Female	0.227 (0.24)	0.285 (0.26)	0.261 (0.26)	0.231 (0.25)
Age (years)	0.002 (0.01)	-0.001 (0.01)	-0.000 (0.01)	0.000 (0.01)
Union member	0.749*** (0.29)	0.644** (0.29)	0.639** (0.29)	0.684** (0.31)
Industry-specific unemployment rate	0.048 (0.07)	0.076 (0.08)	0.071 (0.08)	0.105 (0.08)
Public sector employee	-0.142(0.27)	-0.073(0.29)	-0.284 (0.52)	-0.015(0.30)
Anti-EU opinion	-0.444*** (0.11)	-0.479*** (0.12)	-0.494*** (0.12)	-0.430*** (0.12)
Constant	-1.408 (0.93)	-0.506 (0.89)	-0.262 (1.12)	-1.675* (0.95)
N	595	566	566	523
McKelvey/Zavoina R <sup>2</sup>	0.154	0.124	0.119	0.151

(*Notes.* FDI, foreign direct investment; GDP, gross domestic product. Values in parentheses are standard errors. The results include regional weights.  $*p \le .1$ ;  $***p \le .05$ ;  $****p \le .01$ .)

that globalization losers should be more likely to vote for the SP than globalization winners. As before, in statistical terms this leads to the expectation of a positive constituent term for globalization exposure and a negative interaction term.

Table 3 shows the results of logit analyses of the determinants of SP votes in Switzerland.<sup>34</sup> The first column shows a model that analyzes the causal link between respondents' welfare state and partisan preferences. With a positive and statistically significant coefficient, the results show clear support for this link. Table 2 shows that an average respondent who believes that the state should take more responsibility for its citizens is approximately three times more likely to vote for the SP than a respondent who strongly believes in individual (rather than state) responsibility.

The results also suggest that a direct relationship between individuals' vulnerability to economic internationalization and their vote choice exists. As predicted by the compensation hypothesis, the analyses show that globalization losers in Switzerland are more likely to vote for the SP (and hence the party that is most likely to champion welfare state expansion and redistributive policies) than globalization winners. Substantially, all three measures of globalization exposure point in the expected direction, but this result is only statistically significant for exposure to trade and job offshoreability potential. Conditioned on different skill levels, all three exposure measures increase the propensity to vote for the

<sup>&</sup>lt;sup>34</sup> The results are robust to additionally controlling for church attendance, as suggested by recent arguments that cultural considerations play an increasingly important role in Swiss party politics (Kriesi et al. 2006).

Social Democrats among low-skilled workers, but decreases this propensity for highly educated individuals. Although the estimates of the first differences are very heterogenous, <sup>35</sup> they share one important feature: moving from a sheltered to an exposed sector increases the SP vote among low-skilled individuals, but uniformly decreases it among highly skilled individuals.

The findings of this part of the analysis suggest that proponents of welfare state expansion and globalization losers tend to communicate their preferences and needs into the political arena by voting more frequently for the SP, the Swiss party that most strongly advocates more social insurance and redistributive policies. Considering this type of electorate, it is not surprising that the SP has embraced an opening of the economy only on the condition that the losers of this opening are adequately compensated and protected. For example, the party has fought hard for measures to protect potential losers from international competition to accompany the bilateral treaties with the EU, a behavior in line with the compensation hypothesis and embedded liberalism more generally (Ruggie 1982).

#### Discussion

Taken together, the results support the micro-level implications of the compensation hypothesis. All three links on the demand side of the causal chain linking globalization and welfare state expansion are corroborated by the data: globalization losers experience high levels of job insecurity. Individuals experiencing more job insecurity are more likely to favor an expansion of the welfare state, and holding such a view strongly increases the propensity to vote for the Social Democrats. As the latter two findings could also be caused by other factors rather than globalization exposure, I also analyzed to what extent globalization exposure directly affects welfare state preferences and the voting decision. The findings for these analyses support the notion that globalization is in fact an important factor in shaping social policy and partisan preferences. All parameters estimating the total effect of globalization on job insecurity, welfare state, and partisan preferences are correctly signed: among low-skilled individuals globalization exposure always increases insecurity, demand for protection, and partisan preferences for the left, consistent with the expectation that globalization losers face the most adverse effects of international economic integration. All interaction terms are negative, suggesting that respondents experience globalization more positively the more educated they are. In all but one case, 36 highly skilled individuals more exposed to international competition—that is, globalization winners—experience less job insecurity, demand less governmentprovided social security, and are less likely to vote for the left than equally highskilled individuals in more sheltered industries or occupations.

Some caveats remain: although the coefficients for exposure to globalization competition are statistically significant for all three links, not all the point estimates could be precisely estimated and the point estimates of the effect sizes vary widely. The coefficients for both FDI and offshoreability potential are only statistically significant in two out of three links, even though, as discussed before, they point in the expected direction. Moreover, the results of this study are limited to Switzerland. Although this has the advantage of holding constant the context

 $<sup>^{35}</sup>$  Depending on the measure for globalization used, the effect is predicted to be either very large, or almost nil.

 $<sup>^{36}</sup>$  The exception is the effect of FDI on job insecurity, but even here, globalization raises insecurity among high-skilled individuals much less strongly than among low-skilled individuals.

<sup>&</sup>lt;sup>37</sup> The lack of statistical significance is particularly puzzling in the case of the offshoring variable in link 1, given that this variable provides the most fine-grained measure and is highly statistically significant in the subsequent analyses. Note, however, that nonetheless the substantive effect of offshoreability is quite large even for link 1.

in which the survey respondents form their perceptions and preferences, it does not allow us to draw inferences about whether and how the observed differences in preferences between globalization winners and losers translate into differences in the sizes of the welfare states in different countries. Future research should therefore try to replicate the results presented here using larger samples, more targeted survey questions, and cross-national survey data to arrive at more precise estimates of the substantive effects of globalization exposure on individual risk perceptions, policy, and partisan preferences, as well as differences in these effects among countries.

#### Conclusion

To what extent are developments in the global economy and the welfare state related? Are large welfare states indeed a means to compensate the losers of the globalization process? Does a person's position in the global economy shape her perceptions, policy preferences, and voting choices at all? The large literature converging around the so-called "compensation hypothesis" argues that the answers to these questions are yes, but has largely neglected to examine the causal mechanism underlying this hypothesis at the individual level. By examining the three causal links that relate globalization to welfare state expansion at the micro level, this article has provided such an analysis and has found support for the causal foundation of the compensation hypothesis. Swiss globalization losers are indeed more likely to express feelings of economic insecurity. Feelings of insecurity, in turn, increase the likelihood that a person will express preferences for more welfare state involvement, and Swiss individuals with a preference for welfare state expansion are significantly more likely to vote for the Social Democrats, thus increasing the chances that their demands for more social protection will be heard and heeded in the political arena. The analysis has also shown that the effect of globalization exposure is highly dependent on individuals' skill levels. In an advanced economy like Switzerland, globalization benefits well-educated people, but negatively affects those with low levels of education. Studies relying only on measures of globalization exposure or only on factor endowments, rather than their combination, are likely to underestimate the impact of globalization by averaging out its differential effects on globalization winners and losers.

Overall, the findings in this article indicate that it might be unwise to dismiss the compensation hypothesis on the basis of macro-level results alone. For the Swiss case there is substantial evidence supporting each of the three demand-side causal chains linking globalization and welfare state expansion. These results support the argument that vulnerable citizens demand social insurance against the globalization-induced risks they face. How these demands are translated into policy outcomes and to what extent welfare state expansion is supplied in response to these demands is still a matter of intense research. But the results presented here suggest that the pressures on policymakers are indeed real.

As a wider implication, the results more generally reinforce the notion that the individual economic situation strongly affects people's policy preferences. As many macro theories rely on this notion, this is an important finding. The results resonate with other studies that underscore that globalization strongly affects individuals' policy preferences in areas as diverse as trade policy (for example, Hays et al. 2005; O'Rourke and Sinnott 2002; Scheve and Slaughter 2001a), immigration policy (Hainmueller and Hiscox 2007; Mayda 2006, 2008; Scheve and Slaughter 2001b), or exchange rate policy (Frieden 1991; Walter 2008). A clear understanding of how exactly exposure to globalization and other sources of individual risk shape individual preferences is a paramount ingredient of the microfoundations on which many of our macro-level theories rely.

# **Appendix**

TABLE A1. Comparison of Sample with the Aggregate Employment Percentages, Trade Ratio

WVS categories (sec07)	Aggregated sectors	N (742)	% of WVS sample	% of Swiss Labor Force (BFS)	% of Labor Force (OECD)	(Export + import)/ output
1	Agriculture, hunting, forestry	22	2.96	4.0	3.87	49.9
2–7	Employment in industry	137	18.46	16.2	16.74	
	2 Food, beverages, tobacco	22	2.96			37.9
	3 Textiles and leather products	5	0.67			351.8
	4 Publishing and printing	18	2.43			70.3
	5 Chemical industry	14	1.89			149.2
	6 Machinery industry	40	5.39			131.2
	7 Manufacturing	38	5.12			264.8
8	Construction	48	6.47	6.7	7.05	0.0
9	Whole and retail trade	47	6.33	13.4	15.09	0.0
10	Hotels and restaurants	16	2.16	3.7	5.61	0.0
11, 12, 14	Transport, communication, IT	39	5.26	5.3	6.30	0.02
13	Finance and intermediation	59	7.95	5.8	5.21	0.0
18	Real estate, business services	38	5.12	12.3	12.23	0.02
15, 16, 17, 19 + public = 1	Public sector	304	40.97	32.5	26.77	0.0
19, 20	Other community activities, private households	32	4.31	6.9	1.13	20.8

Table A2. Comparison of Sample with Aggregate Employment Percentages, FDI Intensity

WVS categories (sec07)	Aggregated sectors	N (742)	% of WVS sample	% of Swiss Labor Force (BFS)	Sectoral FDI/GDP
1–8	Metal, machinery, electronics, construction, agriculture	207	27.9	26.9	230.83
9	Whole and retail trade	47	6.3	13.4	94.56
13	Finance, intermediation, insurance	59	8.0	5.8	878.76
11,12, 14	Transport and communication	39	5.3	17.5	42.89
10, 15–20, + public = 1	Other services	390	52.6	41.6	10.82

(Notes. FDI, foreign direct investment; GDP, gross domestic product.)

Table A3. Comparison of Sample with Aggregate Employment Percentages, Offshoreability

	N (691)	% of WVS sample	% of Swiss Labor Force / (Muhl 2007)
Highly offshoreable (76–100)	77	11.14	9.91
Offshoreable (51–75)	82	11.87	12.40
Somewhat offshoreable (26-50)	216	31.26	24.34
Not offshoreable (0-25)	316	45.73	53.35

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