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Breaking the Link? How European Integration Shapes Social Policy Demand and Supply

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ABSTRACT:

How does European integration affect the welfare state? This paper argues that European integration has non-complementary consequences for the political economy of welfare spending: European economic integration increases popular demand for social spending, whereas European political integration decreases the supply of social spending. Thus, the conflicting implications of European integration essentially break the link between social policy preferences and social policy. Using statistical models that deal with the multilevel structure of the theoretical argument, we provide evidence for a positive relationship between economic integration and support for social policy. In the second part of the empirical analysis, we find that–based on dynamic model specifications at the country level–higher levels of political integration are associated with lower levels of social spending. Furthermore, we show that social policy responsiveness declines as political integration increases.

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Introduction

Policy-making in democracies is expected to be responsive to the concerns of citizens in order to be legitimate. Earlier research showed that policy-making in liberal democracies broadly follows the dynamics of public opinion, as political representatives depend on public support for re-election (Erikson et al. 2002; Jennings 2009; Page & Shapiro 1983; Soroka & Wlezien 2004, 2005; Stimson et al. 1995; Wlezien 1996). Since conflicts about redistribution and the welfare state are a politically salient issue, empirical studies suggest that the democratic mechanism of opinion representation works particularly well in this policy area (Hobolt & Klemmensen 2008; Soroka & Wlezien 2010; Wlezien 1995). Consequently, different social policy preferences across countries are found to account for persistent cross-national differences in welfare spending (Brooks & Manza 2006*a*,*b*, 2007; Rehm 2011).

This favorable assessment on the functioning of democracy has been challenged by more recent research that identifies significant biases in the responsiveness of policy-makers to public demands (Gilens 2005, 2012; Gilens & Page 2014; Hacker & Pierson 2010; Page et al. 2013). According to this body of literature, both the preferences of the rich as well as the demands from powerful interest groups are more fully reflected in policy-making than the demands from low-income citizens. Most of this work focuses on the USA. Peters and Ensink (2015) apply the argument to the European context. They, too, find significant differences in the responsiveness of European governments to public concerns (see also Bernauer et al. 2015; Giger et al. 2012).

This paper is inspired by these contributions, but takes a somewhat different approach. The responsive literature and its critiques focus on the political representation of public opinion and whether policy-makers weigh the demands from different constituencies unequally. However, this perspective neglects the possibility that policy-makers could be externally constrained in their actions. In other words, politicians—even if they were willing—might be simply unable to respond to public demands due to external forces,

which in the long term could become a serious threat to the legitimacy of decision-making in liberal democracies. The problem should be particularly severe if the same constraints tying the hands of policy-makers fuel public demands for more governmental action. In this case, the ability of policy-makers to deliver gets compromised exactly when the public expects governments to do more to help them cope with a changing socio-economic environment.

Some existing contributions have implicitly applied this line of reasoning by testing separately the demand and supply effect of economic globalization on welfare state spending. Building on the logic of the classical compensation thesis (Cameron 1978; Katzenstein 1985), research by Walter (2010) shows that economic globalization fuels public demand for compensation, i.e., support for higher levels of redistribution and a larger welfare state. On the macro level of policy-making, however, there are indications that economic globalization has become a constraining force for social and public spending (Busemeyer et al. 2009; Jahn 2006).

We believe that the contradictory mechanisms of the public demanding more social spending from the government and policy-makers not being able to deliver should be even more relevant in the context of the European Union (EU). We argue that the logic of *European economic integration*—the process of creating a comprehensive Single Market in the EU—increases public demand for compensatory social policies as workers are exposed to more uncertainty and higher labor market risks in the integrated European market. At the same time, *European political integration*—the parallel process of increasingly replacing national with EU-level policies—has established fiscal constraints on the ability of EU member states to respond to public demands for social compensation policies by obliging them to meet stricter budgetary rules. Put differently, European integration has increased public demands for social intervention at the same time as it has made it harder for policy-makers to respond to these concerns. The result is a situation that may further contribute to the legitimacy crisis of the EU.

To test the empirical implications of the theoretical model we use a two-step approach.

First, we apply a Bayesian mixed-effects within-between modeling strategy of individual preferences, employing five waves of the European Social Survey (ESS) for 22 EU member states observed every two years between 2004 and 2012. We find that within-country changes in economic integration and compliance with economically relevant EU law are systematically related to more support for welfare spending. Second, we examine the determinants of policy output on the macro level in two-way fixed-effects models, which control for average social policy preferences of the general public, the rich, and the poor. We cannot detect any statistical relationship of public preferences with social spending, indicating a lack of responsiveness of policy-making to popular demands for social compensation. However, we find that higher levels of political integration are associated with lower levels of social spending and that policy responsiveness declines as political participation in the EU intensifies. We therefore conclude that—first—citizens do in fact respond to intensified economic competition by demanding more compensation as suggested in the classical compensation thesis, but—second—there is no systematic evidence that policy-makers actually respond to these demands. Our results indicate that this lack of responsiveness is at least partly a consequence of the current institutional set-up of the EU.

The paper proceeds as follows. The next section elaborates on the theoretical argument in detail. We then describe the data, methodology, and statistical specifications used in the analysis. Subsequently, we present empirical findings of our logistic mixed-effects and time-series-cross-section (TSCS) models. Finally, we conclude by summarizing the main contributions and discussing how they link to current political and scholarly debates.

The Argument

In this section, we first discuss the association between economic integration and social policy demand on the micro-level of preferences. Then we turn to the macro-level link

between political integration, social policy output, and government responsiveness.

Economic integration and demand for social policy

By now, there is a large literature on the determinants of individual-level policy preferences towards the welfare state (for a fairly recent overview, see Svallfors 2012). While a wide range of individual and contextual explanatory factors has been identified by this literature, European integration is notoriously absent. We can draw, however, on a body of work that studies the implications of economic globalization for public opinion on the welfare state. Much of this work is inspired by the 'compensation thesis' that goes back to the work of Cameron (1978) and Katzenstein (1985). The basic premise is this: Intensified economic integration triggers increased public demand for social insurance and redistributive compensation from the welfare state.

Recent studies have largely confirmed the validity of the compensation thesis on the micro-level of preferences. These contributions show that globalization increases worker insecurity in advanced economies (Scheve & Slaughter 2004) and this insecurity, in turn, provokes higher demand for redistribution and social insurance via the welfare state (Walter 2010, 2017). In a similar vein, Hays et al. (2005) show that compensatory welfare spending can mitigate the opposition of affected workers against trade liberalization. As a corollary, country-level research has found a positive association between trade openness and welfare state generosity (Rodrik 1998).

We argue that individual-level logic of the compensation thesis is particularly relevant in the context of the EU. We highlight two major channels through which European economic integration may contribute to more economic insecurity among workers. First, the creation of the Single Market has increased economic competition and has created new exit options for mobile capital. This exerts significant downward pressure on wages and employment conditions for many workers. Second, compared to the national political arena, it is much more difficult for labor unions to organize effectively on the European level, which further fuels demand for state intervention.

Coming back to the first point, there is solid evidence that economic integration in the form of the Single Market has defragmented markets and has increased competition (Allen et al. 1998). Badinger (2007) shows that competition in the Single Market led to a significant reduction in firms' mark-ups over marginal costs both in manufacturing and construction industries. Hence, the rise in product market competition implies that there are fewer rents to share and firms pay market-determined wage rates. At the same time, the Single Market of the EU has created a huge labor pool and has opened up new avenues for investment in other European countries. Faced with wage demands from domestic workers, business can now more credibly threaten with using the exit option (Boeri et al. 2001). This can be done either by substituting domestic workers with imported cheap labor from other EU countries or by moving entire business processes to these countries (Egger & Egger 2003; Geishecker 2006; Hassel et al. 2016; Marin 2006). These features of the Single Market have far-reaching implications for the development of wages, as employers have become more likely to base their hiring and firing decisions on cost considerations. Consequently, workers are increasingly confronted with the choice between lower wages or unemployment.

Second, European economic integration has decreased the bargaining power of organized workers and as a result weakened their ability to shield workers from market forces. Growing firm and wage competition across borders weakens the power of unions in collective wage bargaining (Booth et al. 2000). Moreover, capital is more mobile than labor within the borders of the Single Market (Streeck & Schmitter 1991) and so unions are faced with the asymmetric threat of an exit on the part of employers. Even if not exercised, in the presence of this risk "unions find themselves compelled to accept lower wages or less attractive employment conditions in order to save existing jobs" (Scharpf 2002, 649). Streeck and Schmitter (1991) already argued that organized workers' weakness at the national level will also not be compensated at the European level, since unions are mainly organized nationally and capital opposes any kind of EU-centered redistributive collective bargaining in order not to lose competitive advantages (see also Scharpf 1999;

Streeck 1996). By and large, this assessment is still true today (Pernicka & Glassner 2014). The resulting decrease in union power has also strong distributional implications: Tober (2018) shows that the inequality-reducing effect of trade unions is substantially lower in highly integrated countries when compared to less integrated member states.

In principle, these mechanisms by which economic integration affects labor market outcomes are valid both for the process of European integration as well as economic globalization more generally. However, the former differs from the latter not only in terms of location, but furthermore European economic integration reduces transaction costs only among member states and, by implication, raises relative transaction costs for non-EU countries (Krieger-Boden & Soltwedel 2013). As a result, the relative importance of transactions within the Single Market increases as opposed to trade relations outside the EU (Caporaso 1976). More importantly, economic integration within the EU's Single Market is a much more intensified form of economic integration as it is institutionally and legally reinforced by the process of *political integration*, which is heavily geared to promote the removal of trade barriers and the creation of harmonized markets rather than market-correcting rules (Scharpf 1996, 1999, 2010).

Taken together, these considerations suggest that higher levels of economic integration should be associated with more demand for compensation, i.e., demand for redistribution or social insurance (Rehm 2009; Rehm et al. 2012). Thus, our first hypothesis (H_1) on the demand effect of European integration is:

Hypothesis 1 *European economic integration is positively associated with public support for social spending.*

Political integration and supply of social policy

If policy-makers are indeed responsive to public opinion (Brooks & Manza 2006*a*,*b*, 2007; Rehm 2011; Soroka & Wlezien 2004, 2005; Stimson et al. 1995; Wlezien 1996), increasing public demand for compensation policies should go along with an expansion of welfare states at the national level or with a strengthening of the social dimension of the integra-

tion process at the EU level. This would, in the long term, ensure the legitimacy of the European integration project. Previous research suggests that the opposite is occurring. On the level of national welfare states, retrenchment and consolidation are more common policy trajectories than welfare state expansion (Pierson 2001, 2011). On the EU level, the social dimension remains institutionally underdeveloped compared to the economic dimension of European integration (Ferrera 2017). The crucial question we address in the following is whether these developments simply reflect worsening socio-economic conditions or whether they also indicate a genuine lack of responsiveness of policy-makers to public demands for compensation.

The process of political integration—in particular as it relates to the euro as the common currency—introduced a set of rules for fiscal policy-making at the national level. With the signing of the Treaty on the European Union (also known as Maastricht Treaty) in 1992, EU member states obliged themselves to meet the so-called Maastricht convergence criteria before entering the EMU. These criteria require compliance with specific inflation targets, annual government budget deficit and debt-to-GDP (gross domestic product) limits, exchange rate rules, and interest rate levels. To ensure compliance not only at the time of adopting the euro but also in the following years, the Stability and Growth Pact (SGP) entered into force in 1998. In 2011, against the backdrop of the European sovereign debt crisis (Lane 2012), the so-called Sixpack reformed the SGP by tightening its regulations further.[1] The Sixpack also introduced greater macroeconomic surveillance by the European Commission and the Council of Ministers (Leuffen et al. 2013). More recently, the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union—informally known as European Fiscal Compact—was signed by all but two (Czech Republic and the United Kingdom) member states in 2012. The ratifying partners agreed among other things that a country's annual structural deficit may not exceed 0.5 percent of GDP.[2] Furthermore, if they fail to enact domestic laws

[1]For instance, the agreement reinforced the so-called Excessive Deficit Procedure, which defines the steps for penalizing member states that fail to meet either the deficit or the debt criterion.

[2]1 percent of GDP for member states with a debt ratio significantly below 60 percent of GDP.

establishing an independent fiscal self-correcting mechanism within one year of the treaty entering into force, they will face annual fines of up to 0.1 percent of GDP.

Despite this tightening of EMU's fiscal rules, critics have questioned both their effectiveness as well as their successful implementation (e.g., De Grauwe 2008; Hallerberg et al. 2009). Prima facie, history seems to corroborate their point of view. Already at the time of the start of the euro, eight of the 11 countries failed to meet the debt criterion (Austria, Belgium, Germany, Greece, Italy, Malta, the Netherlands, and Spain). In the early 2000s, Germany and France obtained a temporary suspension of the criteria due to their bad fiscal performance. In the recent past, the economic crisis and particularly the subsequent developments in Greece, Ireland, Portugal, and Spain have even more shaken confidence in the functioning of the EMU's fiscal instruments.

Empirical research, however, consistently shows that the EMU indeed has had a considerable impact on fiscal policy in member states. Using a quasi-experimental design based on a synthetic control approach, Koehler and König (2015) find that "the aggregate level of government debt in the euro countries today would be *higher* without the introduction of the euro" (ibid., 331). The authors estimate that EU countries would have increased their level of debt by 36 billion € more per year if they had not introduced the euro. The combined debt in 2010 would have been approximately 397 billion € higher. While these results are mainly driven by core member states, a similar effect can be detected for Ireland and Spain but not for Greece, Italy, and Portugal. Other studies have found similar evidence for a negative effect of political integration on public and social spending (Bertola 2010; Busemeyer 2009; Busemeyer & Tober 2015; Herwartz & Theilen 2014).

Taken together, we posit that the constraints of political integration severely affect the fiscal ability of policy-makers to respond to public demands for more generous welfare state policies. There might be some room for fiscal spending in response to worsening socio-economic conditions—especially rising unemployment—due to automatic stabilizers built into the fabric of European welfare states, but there is little leeway for fiscal

expansion beyond that.[3] These constraints help to explain why there is no systematic association between public support for social policy compensation on the one hand and actual policy output in terms of social spending on the other hand.

Additionally, as suggested by Gilens (2005; 2012; 2014) and others, the responsiveness of policy-makers might be biased in favor of the preferences of the rich. As is well-known from the literature on welfare state attitudes cited above, the rich are more likely to oppose additional spending on the welfare state. Hence, the apparent non-responsiveness of policy-makers to public demands could also reflect their particular responsiveness to the concerns of the rich. In our empirical analysis below, we try to account for this additional explanation too.

In sum, the second hypothesis (H_2) on the supply effect of European integration is:

Hypothesis 2 *European political integration is negatively associated with social spending. The fiscally constraining influence of political integration helps to explain why policy-makers are not responsive to increasing public demands for social policy, in particular in member states which exhibit high levels of institutional participation.*

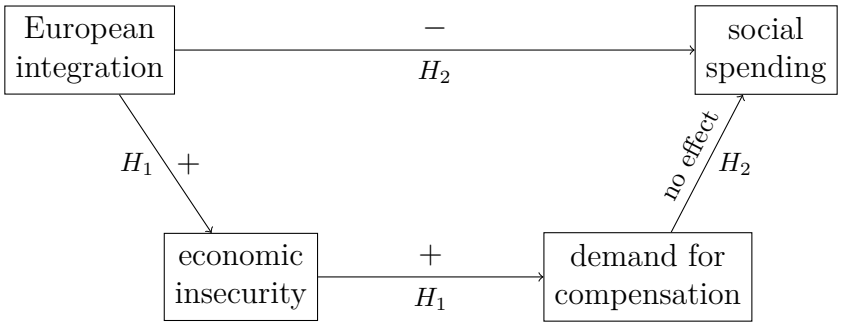
Summary

Figure 1 is a graphical depiction of our argument. In the first step, European economic integration is hypothesized to fuel economic insecurity. This is mainly explained by the rising elasticity of labor demand to wage fluctuations and the declining market power of organized workers. Growing insecurity, in turn, provokes higher demand for more social spending, since workers want to be compensated for the risks they face in the Single Market (H_1).

At the same time, European political integration is expected to exert a depressing effect on the supply of social policy. The EMU and its budgetary rules constrain the leeway of policy-makers at the member-state level, forcing them to curtail social spending.

[3]This is even more true as European integration also fuels tax competition—aimed at attracting mobile capital—between member states (Redoano 2014) and as a result induces lower effective corporate taxes (Streif 2015).

Figure 1: European integration and the political economy of welfare spending.



Consequentially, the fiscal implications of EMU membership effectively inhibit policy responsiveness of governments, which explains why there is no systematic association between public demands for more social spending and actual policy output (H_2).

In short, European integration affects social policy demand and supply simultaneously but in contradictory ways. On the one hand, economic integration fuels public demand for compensation; on the other hand, political integration delimits the fiscal possibilities of national-level policy-makers to respond to these demands. European integration therefore provokes a mismatch between supply and demand, essentially breaking the opinion-policy link.

Empirical Strategy

We test the key implications of the theoretical model in two steps. First, to estimate how individual demand for compensation responds to country-level variation in economic and political integration, we apply a Bayesian mixed-effects within-between modeling strategy. The mixed-effects models draw on five waves of the European Social Survey (ESS) and cover up to 153.120 individuals in 22 member states for the time period from 2004 until 2012. The ultimate size of the sample is delimited by the availability of data for the index on European integration (see next section).

Second, to assess the macro-level impact of political integration on both welfare

spending as well as the policy responsiveness of governments, we employ time-series cross-sectional (TSCS) two-way fixed-effects models. The TSCS analysis is based on 24 countries annually observed for those 9 years, for which the European integration index is available. Thus, we end up with a maximum of 216 observations ($countries \times years$).

Measurement

In what follows, we discuss the measurement of key dependent and independent variables used in the analysis.[4]

European integration. Different attempts have been made to measure the extent of European integration (e.g., Leuffen et al. 2013), but few are specifically concerned with measuring differences in the extent of integration across member states. Recently, however, a new index was released that captures economic and political indicators of European integration (König & Ohr 2013). The index consists of 25 items grouped into four dimensions, which contribute with different weights to the overall index. Two of these four dimensions are of particular interest for this study. The 'Single Market dimension' can be regarded as an indicator of economic integration, whereas the 'Conformity dimension' captures political integration. More specifically, the first dimension—the degree of market relations in the Single Market—is measured by the sum of a country's intra-EU imports and exports as a percentage of GDP (*openness to EU trade*) and as a percentage of its total sum of imports and exports (*importance of EU trade* compared to trade relations outside the EU). The indicator of political integration combines information on *institutional participation* in the Schengen area and membership in the EMU (floating exchange rates; in Exchange Rate Mechanism (ERM) II; in eurozone) with data on member states' *compliance with EU law* (counting infringement proceedings of the European Commission and European Court of Justice verdicts). The component of institutional participation is particularly relevant for our argument on the spending-depressing effect

[4]See the appendix for detailed descriptive statistics on all variables.

of European political integration (H_2), as it captures both important examples of the institutional manifestation of negative integration (Schengen, ERM) as well as the effect of the EMU more directly. For ease of comparability, the data are normalized to a scale ranging from 0 to 100, where 100 represents maximum integration. The indicators are weighted on the basis of a principal component analysis (for more information on the index, see König & Ohr 2013). While the first version of this index contained only 14 countries, we make use of an updated version that includes 24 member states annually observed between 2004 (i.e., the time of the EU Eastern enlargement) and 2012.

Social policy preferences. From a theoretical perspective, we are interested in measuring individual-level demand for compensation policies. This entails both aspects of redistribution as well as social insurance. Unfortunately, the basic module included in all ESS waves only contains a general question about demand for redistribution. Respondents are given this statement: *Government should reduce differences in income levels.* Individuals are then asked whether they (1) disagree strongly, (2) disagree, (3) neither agree nor disagree, (4) agree, or (5) agree strongly.

As Rehm (2009, 863) points out, this survey item has several weaknesses: "the question does not include a budget constraint; the question does not remind people of higher taxes in case they opt for redistribution; there is no mention of specific policy instruments used to achieve redistribution." We largely agree with Rehm's assessment and therefore argue that—due to its broad character—this question arguably measures support for welfare policy more generally rather than specific areas of spending. We turn this measure into a dichotomous variable that takes on a value of 1 in case of strong agreement and 0 otherwise. We apply this strategy because the weakness of the survey item seems to have incentivized respondents to almost never oppose the statement and instead disproportionately frequently settle on general agreement (category 4), resulting in a suspicious cross-country similarity in the density distribution of this answer category (see Figure A7 for detail). By focusing only one those who strongly agree with the statement, we hope

to uncover true cross-national differences and mitigate against the general weakness of the survey item.

Social policy preferences will also enter the dynamic macro-level analysis examining whether average support for social policy systematically affects levels of social spending. For that purpose, we simply take the arithmetic mean of respondents' preferences (on the original scale) of a given country in a given year. We also include average levels of support for different income classes.

Social policy. To capture government social policy efforts we employ social spending data provided by Eurostat, which measure total expenditure on social protection as a percentage of GDP. The use of social spending as an indicator of welfare state effort is common practice in existing political economy research (e.g., Hinnerich & Pettersson-Lidbom 2014; Iversen & Soskice 2015). Although this practice has also become subject of criticism (for instance, Clasen & Siegel 2007; Scruggs 2006), we nonetheless rely on it for two reasons. First, compared to alternatives, information on government expenditure is richly available—both with regard to time and space. Particularly small countries like Malta and member states of Eastern Europe are usually not or only sparsely included in alternative measures of welfare entitlements such as the commonly used generosity indices. Second, given that Eurostat data on public spending is harmonized across member states, data quality is likely to be very high.

Controls. The mixed-effects and TSCS specifications use different sets of control variables. In the mixed-effects models, we include a number of micro-level control variables in order to capture systematic differences between individuals. These controls are age (in years), a gender variable, education (in years), binary information on the respondent's occupation (in education, in paid work, unemployed), union membership, a measure of subjective religiosity, self-placement on a political left-right scale, and subjective income[5].

[5]ESS main income variable lacks comparability over time as its coding was changed after wave three. Therefore, we use a subjective measure of income that was included in all waves (see variable "hincfel"). A value of 1 indicates that respondents are living comfortably or coping on their present income and 0

On the country level, we control for social spending and income inequality before taxes and transfers (pre-fisc Gini index) from Eurostat. Additionally, we include GDP per capita calculated from the Penn World Table (Feenstra et al. 2015).

In the TSCS models, we expect that—besides European integration—the following factors might influence welfare spending: GDP growth, unemployment, public debt, pre-fisc inequality (all from Eurostat) and a measure of partisan control of government (where higher values indicate a higher percentage of left-wing cabinet posts, see variable "gov_party" in Armingeon et al. 2014). As these control variables are pretty standard, we will not discuss them in more detail.

Statistical specifications and methods

Mixed-effects models. To empirically test the argument that economic and political integration affects support for social policy (H_1), we employ a Bayesian logistic mixed-effects within-between modeling strategy.

We denote by Preferences_{ict} the binary response—support for social policy—of individual i ($i = 1, \ldots, N_c$) living in country c ($c = 1, \ldots, 22$) in year t ($t = 2004, 2006, 2008, 2010, 2012$). $\boldsymbol{x}_{ict}$ is a vector of individual-level controls. The country- and time-specific constants are denoted by α_{ct}. Hence, the individual-level mixed-effects logistic regression equation is given by:

$$\Pr(\text{Preferences}^*_{ict} = 1) = \text{logit}^{-1}\big(\boldsymbol{x}_{ict}\beta + \alpha_{ct} + \epsilon_{ict}\big), \tag{1}$$

where ϵ_{ict} is the error term.

Treating the varying intercepts as a function of the country-level factors, the country-level equation is:

$$\alpha_{ct} = \psi_\alpha + \lambda_B \bar{\boldsymbol{z}}_c + \lambda_W(\boldsymbol{z}_{ct} - \bar{\boldsymbol{z}}_c) + \eta_c + \delta_t + \xi_{ct}, \tag{2}$$

otherwise.

where ψ_α is the grand mean of all individual social policy preferences across countries and years. $\boldsymbol{z}_{ct}$ is a vector of country-level variables, in particular economic and political integration. We use a within-between model specification that allows us to estimate within- and between-country effects simultaneously (Bell et al. 2018; Fairbrother 2014). The between-country effect λ_B is calculated as the cross-time mean of each country-level variable, $\bar{\boldsymbol{z}}_c$. Subtracting this term from the original vector $\boldsymbol{z}_{ct}$ gives the within-country effect λ_W. To take account of the cross-classified (non-nested) structure underlying our longitudinal data, we include variance components at all relevant levels: country (η_c), year (δ_t), and country-year (ξ_{ct}) (Rasbash & Browne 2008).

Maximum likelihood estimation of mixed-effects models can produce severely biased coefficients and confidence intervals when the number of countries is small. The problem is particularly serious for country-level estimates and non-linear models (Bryan & Jenkins 2016). In contrast, Bayesian estimation yields much more robust and conservative results (Stegmueller 2013). Thus, we estimate our models in a Bayesian framework using the R package *brms* (Bürkner 2018). Given that the number of groups is relatively small, we assign weakly informative half-t priors on the variance components (Gelman 2006).[6] Furthermore, we center all continuous variables and scale them by two times their standard deviation so that the resulting coefficients can be roughly interpreted in the same way as the unscaled binary indicators (Gelman 2008).

TSCS models. We examine the argument that European political integration suppresses the supply of social policy and thus prevents aggregated social policy preferences from being translated into policy (H_2) by using a TSCS approach.

Given that our dependent variable—social spending—is a naturally trend-ridden indicator, we employ a Prais-Winsten estimator where the serially correlated residuals are modeled as a first-order autoregression or AR1 process. In order to control for groupwise heteroskedasticity and contemporaneous correlation of errors, we apply panel-corrected

[6]We set all population parameters to be *a priori* normally distributed with mean zero and a standard deviation of 1. For the variances in the model we use half-t priors, $t(4, 0, 1)$.

standard errors (Beck & Katz 1995, 1996). Additionally we include country- and time-fixed effects (two-way fixed-effects specification), which account for both unobserved country (e.g., the historical strength of the left might affect both European integration and social spending) and time effects (e.g., the economic and fiscal crisis). This is a quite rigorous test of the argument as much of the variation in the dependent variable will be accounted for by the fixed effects. The basic TSCS regression equation is given by:

$$\text{SocialSpending}^*_{ct} = \gamma_1 \text{PoliticalIntegration}_{ct} + \gamma_2 \text{Preferences}_{ct-1} + \boldsymbol{z}_{ct}\beta + \alpha_0 + \epsilon_{ct}. \quad (3)$$

Finally, to test the argument that political participation in the EMU reduces social policy responsiveness, we estimate following interaction model:

$$\begin{aligned} \text{SocialSpending}^*_{ct} = {} & \gamma_1 \text{Participation}_{ct} + \gamma_2 \text{Preferences}_{ct-1} \\ & + \gamma_3 \text{Participation}_{ct} \cdot \text{Preferences}_{ct-1} \\ & + \boldsymbol{z}_{ct}\beta + \alpha_0 + \epsilon_{ct}. \end{aligned} \quad (4)$$

Model Results

We argue above that European integration increases citizens' demand for social compensation and at the same delimits the leeway of policy-makers to respond to these public concerns. In this section, we present empirical evidence for our theoretical claims.

Demand for social policy

Table 1 presents standardized coefficients (posterior means) and standard errors (posterior standard deviations) from Bayesian logistic mixed-effects models. To save space, we only present and discuss the estimates of our measures of European integration (see Table A4 in the appendix for complete results of all controls).

The results in Models 1-4 show that both within-country economic and political inte-

Table 1: Bayesian logistic mixed-effects estimation of the impact of economic integration on demand for social policy.

	Model 1	Model 2	Model 3	Model 4	Model 5
Economic integration (B)	−0.28	−0.36	−0.31	−0.33	
	(0.24)	(0.24)	(0.24)	(0.26)	
Economic integration (W)	0.11*	0.12*	0.11*	0.11*	
	(0.04)	(0.05)	(0.05)	(0.05)	
Openness (B)					−0.23
					(0.33)
Openness (W)					0.14*
					(0.05)
Importance (B)					−0.04
					(0.31)
Importance (W)					0.00
					(0.04)
Political integration (B)	0.04	0.06	0.11	−0.02	
	(0.26)	(0.24)	(0.25)	(0.27)	
Political integration (W)	0.14*	0.14*	0.14*	0.13*	
	(0.05)	(0.05)	(0.05)	(0.05)	
Participation (B)					0.07
					(0.31)
Participation (W)					0.06
					(0.04)
Compliance (B)					−0.10
					(0.28)
Compliance (W)					0.15*
					(0.06)
Social spending (B+W)		✓			
GDP per capita (B+W)			✓		
Market inequality (B+W)				✓	
Individual-level controls	✓	✓	✓	✓	✓
Standard deviations					
Country	0.55	0.53	0.54	0.52	0.57
Year	0.10	0.11	0.10	0.07	0.08
Country-Year	0.18	0.18	0.18	0.18	0.18

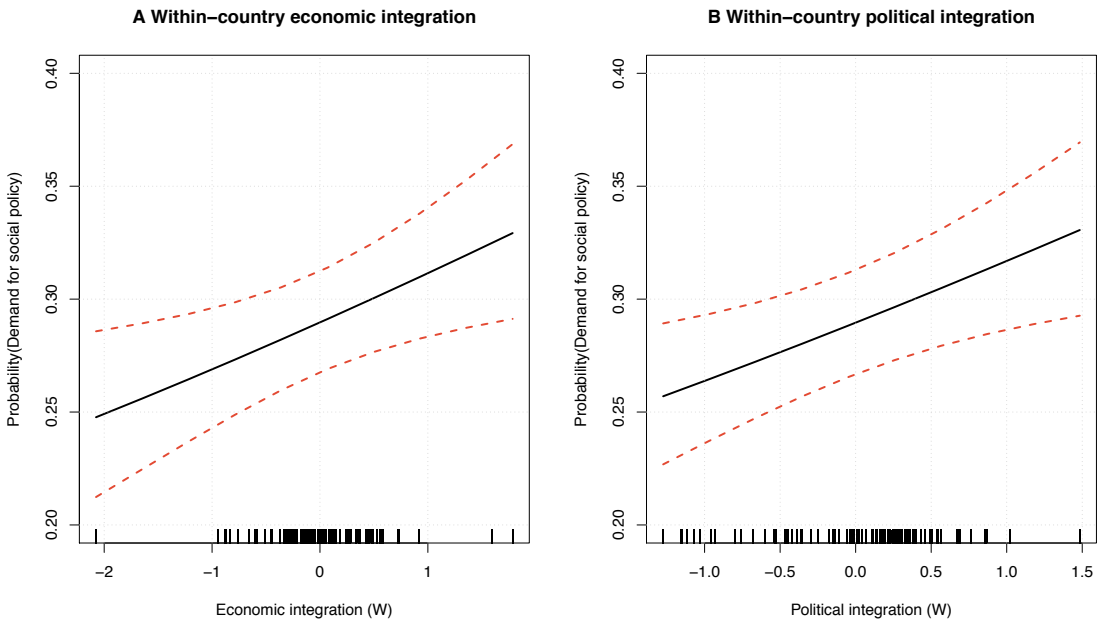
* Zero outside the credible interval. Estimates (posterior means) with standard errors (posterior standard deviations) in parentheses. Based on two chains run for 3000 iterations after a burn-in of 1000. (B) indicates the between-country effect and (W) the within-country effect of a variable.

gration have a positive impact on demand for social policy and are statistically different from zero. In other words, within-country increases in European integration are systematically associated with stronger popular demand for social spending. The between-country effects are not statistically significant. This suggests that the relationship between European integration and demand for social policy runs through changes within countries rather than cross-national differences between countries. None of the other macro-level variables reach statistical significance (see Table A4). These findings are not sensitive to our specific prior choice. Furthermore, they are robust to an ordered logit specification (see Table A5 for these sensitivity tests).

In Model 5, we include each indicator of the economic and political integration indices separately. We find that the effect of economic integration depends on how open a country is to EU trade and not on how important that kind of trade is to trade with the rest of the world (the latter would have contradicted the globalization literature). As for political integration, the effect on demand for social policy is driven by the measure of legal compliance. The pivotal element of this measure (see Table A3 for details) are European Court of Justice verdicts pertaining to the Single Market. This means that the more a country complies with the laws of the Single Market, the higher is the demand for compensation among its citizens. In short, we find strong evidence for our first hypothesis: European economic integration exhibits a positive association with public support for social spending. Furthermore, we are able to show that the logic of the compensation thesis is particularly relevant in the context of the EU due to the legal framework provided by European political integration.

In order to make these effects more tangible, we calculate average marginal predicted probabilities based on Model 1 in Figure 2 (Hanmer & Kalkan 2013). We take the range of economic and political integration respectively, and draw 10 evenly spaced values from that range. Then we hold each of these values constant, while allowing all other variables and variance components to take on all observed values in the data. Taking the mean of the resulting predictions leaves us with average marginal predicted probabilities.

Figure 2: Average marginal predicted probability of demand for social policy by within-country economic and political integration with 95% credible intervals.



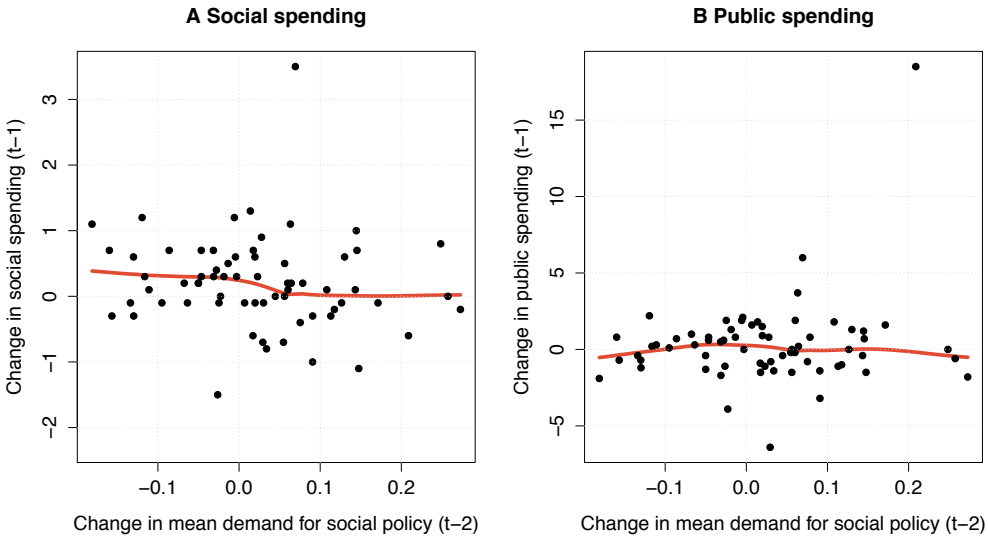
These average probabilities can then be plotted against the value economic and political integration was held at. Additionally, we present 95% credible intervals. Simulating changes in within-country integration from the lowest to the highest observed value[7] increases the probability of demanding more compensation by eight percentage points for economic integration (A) and seven percentage points for political integration (B). In both cases, a one standard deviation increase is associated with an increase in the predicted probability by about one percentage point.

Supply of social policy

To get a first impression of the role of social policy preferences in shaping public policy in recent years, Figure 3 plots changes (to previous observation in the different waves of the ESS) in aggregated social policy preferences on changes (to previous year) in social spending and public spending, respectively. The policy responsiveness literature cited above claims that the supply of welfare policies is driven by or at least related to the

[7]For economic integration, this is Ireland in 2004 (lowest) and Belgium in 2008 (highest). For political integration, this is Spain in 2008 (lowest) and Estonia in 2012 (highest).

Figure 3: Responsiveness to average social policy preferences, 2006-2012.



respective public demand. Hence, we should observe a positive relationship between support for welfare spending and social government expenditure. Panel A of Figure 3 suggests that this is not the case. The loess curve is essentially flat with an even slightly negative trend, clearly indicating that there is no positive association between changes in popular demand for social policies and changes in welfare spending in the sample of European countries we observe. Panel B corroborates this finding for changes in public spending.[8]

We argue above that one reason for this lack of social policy responsiveness is European integration and the contradictory ways in which it affects both social policy demand and supply. We now look at the second step of the analysis, employing a series of TSCS models to identify the determinants of policy output on the macro level. We first examine the evidence for a direct relationship between political integration and social spending, then the link between political integration, public demand, and social spending.

[8]The outlier at the top of each panel reflects Ireland in 2008 (A) and 2010 (B). The sharp increase in social and public spending was caused by a steep decline in GDP rather than actual changes in spending.

Political integration. Table 2 presents unstandardized coefficients and panel-corrected standard errors from TSCS two-way fixed-effects models. The dependent variable is social spending. In a previously fitted training model (see Table A6 in the appendix), public debt and market inequality were not systematically related to social spending. Thus, we exclude these variables from the subsequent analysis.

Looking at Model 1, we find that the estimated coefficient of political integration is negative and the confidence interval does not include zero. Simulating an increase of political integration from the lowest observed value—United Kingdom in 2006—to the highest—Estonia in 2012—is associated with a decrease in social spending as a percentage of GDP by about 1.2 percentage points from 26.3 to 25.1. This difference might sound modest, but in real value terms it is significant. For instance, taking the GDP of the United Kingdom in the last quarter of 2006, a decrease of 1.2 percentage points amounts to £4.327.492.195. An increase of one standard deviation from the mean value of political integration—roughly similar to an increase from the level of Portugal in 2007 to the level of Portugal in 2012—is accompanied by a decrease of approximately 0.26 percentage points in social spending. Taking the case of Portuguese GDP in the last quarter of 2012, this is equivalent to 112.866.452 €.

Model 2 decomposes our measure of political integration in its two subcategories, i.e., compliance with EU law and participation in steps of institutional integration. The results suggest that both dimensions of political integration contribute to its aggregate effect. However, the estimated upper bond of the confidence interval of the compliance variable gets very close to zero and its estimated coefficient is smaller in comparison. This suggests that institutional participation—especially EMU membership—is the more important driver of the negative relationship between political integration and social spending.[9] Economic integration exhibits no statistically significant association with social

[9]Our measure of political participation does not exhibit within-country changes for every country in the sample. We observe changes for Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia (see Figure A5). However, we dot not believe that our results are a statistical artifact of an unrepresentative group, since they align closely with previous research that has corroborated the same finding for earlier time periods and longstanding EU member countries (Bertola 2010; Busemeyer & Tober 2015; Herwartz & Theilen 2014).

Table 2: TSCS two-way fixed-effects estimation of impact of political integration on supply of social policy.

	Model 1	Model 2	Model 3	Model 4
Political integration	−0.02*			
	(0.01)			
Participation		−0.02*	−0.03*	−0.03*
		(0.00)	(0.01)	(0.01)
Compliance		−0.01*	−0.02	−0.02
		(0.01)	(0.02)	(0.02)
Economic integration	0.01	0.01	0.02	0.02
	(0.04)	(0.04)	(0.08)	(0.08)
GDP growth	−0.14*	−0.14*	−0.16*	−0.16*
	(0.02)	(0.02)	(0.04)	(0.04)
Unemployment	0.21*	0.19*	0.17*	0.16*
	(0.02)	(0.02)	(0.05)	(0.05)
Left government	0.10*	0.11*	0.31	0.33
	(0.04)	(0.04)	(0.17)	(0.18)
Popular support for social policy$_{t-1}$			−0.39	
			(1.66)	
Support, lower income groups$_{t-1}$				−1.58
				(1.72)
Support, higher income groups$_{t-1}$				1.17
				(2.06)
Constant	27.33*	27.41*	30.05*	30.99*
	(1.96)	(1.99)	(7.42)	(7.70)
Observations	213	213	77	76
Countries	24	24	22	22

* Zero outside the confidence interval. Models 3 and 4 use robust standard errors. Since it is not clear what the R^2 actually measures in the context of a Prais-Winsten transformation, we abstain from reporting it (Wooldridge 2015, 384).

spending in either of these two models (nor do its two underlying subcategories; not shown). The interpretation of this finding is straightforward. Although both dimensions of European integration are systematically related to demand for social policy, only political integration and in particular the budgetary constraints of the SGP affect government spending. Thus, this finding underscores that economic and political integration are two intertwined but independent empirical phenomena.

Policy responsiveness. Figure 3 above provides indicative evidence that social policy preferences may play an insignificant role in determining levels of social spending. We confirm this finding in more sophisticated statistical models. When we include the aggregated social policy preferences[10] (see Models 3 and 4), estimates are not distinguishable from zero. This result holds regardless of whether we look at all respondents or individual income groups.

Furthermore, our second hypothesis also predicts that this lack of responsiveness is due to political participation and, in particular, follows from EMU membership and the fiscal constraints of the SGP. Table 3 tests this argument explicitly. Beside the average preferences of all respondents, we also look at support for redistributive policies among lower (value of 0 on our income perception variable), higher (value of 1 on our income perception variable), and top income groups (those respondents who claim to live "well" on their current income). Additionally, we include the same set of control variables as in the previous analysis.

The table produces two remarkable results. First, it shows the constraining effect of political participation in the EU on policy responsiveness. The interaction term between the participation index and public preferences in each model is negative and statistically significantly different from zero. This suggests that—for countries with higher levels of integration—an increase in demand for social policy is associated with lower levels of social spending compared to what social spending would have been in response to changes

[10]The aggregated social policy preferences enter the models lagged by one year, accounting for the fact that preferences should not turn immediately into policy.

Table 3: Political participation and policy responsiveness.

	Model 5	Model 6	Model 7	Model 8
Participation	0.25*	0.28*	0.18*	0.05
	(0.11)	(0.12)	(0.09)	(0.03)
Popular support for social policy$_{t-1}$	5.25			
	(2.65)			
Interaction (all)	−0.07*			
	(0.03)			
Support, lower income groups$_{t-1}$		4.26		
		(2.67)		
Interaction (lower)		−0.07*		
		(0.03)		
Support, higher income groups$_{t-1}$			4.19	
			(2.19)	
Interaction (higher)			−0.05*	
			(0.02)	
Support, top income groups$_{t-1}$				2.74
				(1.39)
Interaction (top)				−0.03*
				(0.01)
Constant	6.71	10.25	11.56	20.98*
	(10.77)	(11.36)	(8.60)	(3.86)
Controls	✓	✓	✓	✓
Observations	77	76	76	76
Countries	22	22	22	22

* Zero outside the confidence interval.

in preferences without institutional integration. Second, we find that this relationship is not equally distributed across income groups. As income increases, the estimated coefficients of the interaction terms become smaller. Thus, while it appears to be the case that institutional integration reduces policy responsiveness towards all income groups, it seems to do less so with regard to the wealthier strata of the population.

The general bias in favor of high-income groups is also reflected by the constitutive term of the preference variable in each model. Generally speaking, these estimates tell us how the relationship between support for social policy and social spending would

look like if there was no institutional integration (equivalent to the United Kingdom and Hungary in the early years of the observation period). Although all of the estimated confidence intervals include zero, the positive association of demand for social policy with social spending seems to become more clear-cut as income increases ($p_{\text{support,lower}} = 0.117$, $p_{\text{support,higher}} = 0.062$, $p_{\text{support,top}} = 0.056$).

We acknowledge that including the aggregated preferences into our models leads to a significant decrease in the number of observations. Yet, we take the fact that—particularly in the context of country- and time-fixed effects—the remaining variation in the data still bears out the theorized relationship between political integration and policy responsiveness as strong suggestive evidence for our argument. In the appendix, we estimate the same interaction models using the total political integration indicator and the compliance indicator instead of the participation variable (see Table A7). With these modifications the results of Table 3 cannot be replicated, which suggests that institutional participation is the main driver behind the decrease in government responsiveness. Furthermore, in order to single out the impact of EMU more directly, we repeat the same statistical exercise with a dummy for EMU membership instead of our measure of political participation (see Table A8). Finally, we employ a flexible Kernel smoothing estimator (see Figure A10). Our findings remain valid under both alternative specifications.

In short: Institutional participation—especially membership of the EMU—is negatively associated with social policy output in terms of social spending. This result corroborates the confining effect of European political integration on the fiscal leeway of member states. Furthermore, there is no systematic association between public preferences and policy output. Our analysis suggests that the constraints at the EU level are related to this lack of government responsiveness to public demands for more compensatory policies.

Conclusion

In this paper, we have analyzed the contradictory implications of the process of European integration for welfare states and the legitimacy of democratic decision-making in the European Union. Based on large-scale analysis of survey and aggregate-level data, we found that European economic integration—reinforced by the legal framework of political integration—is positively associated with increased demand for compensation via social policies. However, our analysis also shows that European political integration confines the fiscal leeway of member states and therefore the degree of responsiveness to public demands for compensation.

This paper goes beyond existing work in three respects. First, while models on the political economy of welfare spending are numerous, European integration has not received much attention. To our knowledge, the explanatory approach in this study is the first that explicitly accounts for the multidimensional implications of European integration on social policy supply and demand. If at all, existing research has mainly used simple binary indicators as control variables without clearly specifying the underlying theoretical mechanisms or even considering the multidimensionality of European integration (e.g., Busemeyer 2009; Schmitt & Starke 2011).

Second, this paper provides several new perspectives for the literature on policy responsiveness. This literature has so far looked at responsiveness of domestic policy-makers to national audiences, neglecting the potential impact of external constraining forces on the ability of policy-makers to comply with public demands. In contrast to the 'pluralist perspective' (Brooks & Manza 2006*a*,*b*, 2007), we do not find support for an association between social policy preferences and policy output. However, in some sense going beyond Gilens (2005; 2012), we do not even find conclusive evidence that policy-makers are responsive to the concerns of the rich. Instead, in the context of the EU, the actions of policy-makers seem to be disconnected from public opinion to a significant extent.

Third, while there are some studies on the consequences of economic globalization for

individual-level demand for social policy (for instance Walter 2010, 2017), this perspective has not been applied to European integration yet. Furthermore, our approach is more comprehensive compared to others as we have also investigated the linkage between public preferences and actual policy output.

Finally, this study has important implications for current political debates. In the wake of the European sovereign debt crisis, various austerity measures have been taken aimed at reducing government budget deficits. These measures can be understood as a stricter continuation of the fiscal rules of the EMU. At the same time, the economic crisis of 2008 and following years together with a continuous lack of economic growth have led to escalating levels of unemployment and a significant reduction in wages in some of the member states (Scharpf 2014). These developments suggest that the contradictory implications of European integration will persist and potentially intensify in the future, resulting in an even larger divergence between social policy demand and supply. This mismatch may contribute to low levels of trust between Europe's citizens and the project of European integration, in particular if the social dimension of the European integration process continues to be neglected.

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Online Appendix

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This online appendix provides supporting information for the paper "*Breaking the Link? How European Integration Shapes Social Policy Demand and Supply*".

1 Descriptive statistics

This section provides more details on the data. Tables A1 and A2 report summary statistics for the standardized data used in the mixed-effects models (A1) and the unstandardized data used in the time-series cross-section (TCSC) models (A2). Table A3 summarizes the indicators and weights used to construct the index of European integration. Figures A1–A9 show trends for the theoretically most relevant variables both across time and space.

Table A1: Standardized data in mixed-effects models.

Variable	Minimum	Median	Mean	Maximum	SD
Support for social policy (1=strong support)	0	0	0.29	1	0.45
Economic integration (W)	−2.08	−0.05	0	1.79	0.50
Economic integration (B)	−0.86	−0.19	0	1.79	0.50
Political integration (W)	−1.27	0.04	0	1.48	0.50
Political integration (B)	−1.23	0.06	0	0.69	0.50
Age	−0.94	−0.01	0	2.06	0.50
Gender	0	1	0.52	1	0.50
Years in education	−1.53	−0.06	0	5.33	0.50
In education	0	0	0.09	1	0.29
In paid work	0	1	0.53	1	0.50
Unemployed	0	0	0.06	1	0.24
Religiosity	−0.78	0.06	0	0.89	0.50
Union membership	0	0	0.44	1	0.50
Left-Right scale	−1.18	−0.02	0	1.13	0.50
Income	0	1	0.76	1	0.43
Social Spending (W)	−1.36	−0.04	0	0.96	0.50
Social Spending (B)	−1.02	0.27	0	0.68	0.50
GDP per capita (W)	−3.74	0.01	0	3	0.50
GDP per capita (B)	−0.17	−0.15	0	2.30	0.50
Market inequality (W)	−1.34	0.01	0	1.16	0.50
Market inequality (B)	−1.26	0.02	0	0.87	0.50

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Table A2: Unstandardized data in TSCS models.

Variable	Minimum	Median	Mean	Maximum	SD
Social spending	10.30	22.40	22.45	31.70	5.21
Political integration	46.79	77.62	77.27	97.96	11.55
Compliance	23.51	86.34	81.45	98.48	14.76
Participation	0	68.22	68.77	100	35.12
Economic integration	21.68	38.02	41.10	75.89	10.42
GDP growth	−14.80	2.25	1.72	11.60	4.12
Unemployment	3.10	7.80	8.65	24.80	3.95
Left government	1	2	2.45	5	1.42
Debt	3.70	53.45	57.64	172.10	30.25
Market inequality	27.30	34.65	35.28	46.80	3.72
Preferences (all)	2.99	3.93	3.88	4.43	0.33
Preferences (lower)	3.14	4.16	4.11	4.54	0.26
Preferences (higher)	2.98	3.87	3.82	4.42	0.33
Preferences (top)	2.77	3.63	3.62	4.38	0.38

Table A3: Index of European integration (König and Ohr 2013): Weights of indices and indicators.

Indices	**Indicators**	**Weights in the indices (%)**
Economic Integration		
Openness		*(56)*
	Goods	(33)
	Services	(16)
	Capital	(27)
	Labor	(25)
Importance		*(44)*
	Goods	(29)
	Services	(31)
	Capital	(11)
	Labor	(28)
Political Integration		
Participation		*(33)*
	EMU membership	(64)
	Schengen participation	(36)
Compliance		*(67)*
	Infringement proceedings	(20)
	ECJ verdict: Single Market	(38)
	ECJ verdict: Environment and consumer	(19)
	ECJ verdict: Other sectors	(23)

Figure A1: Economic integration across countries and time.

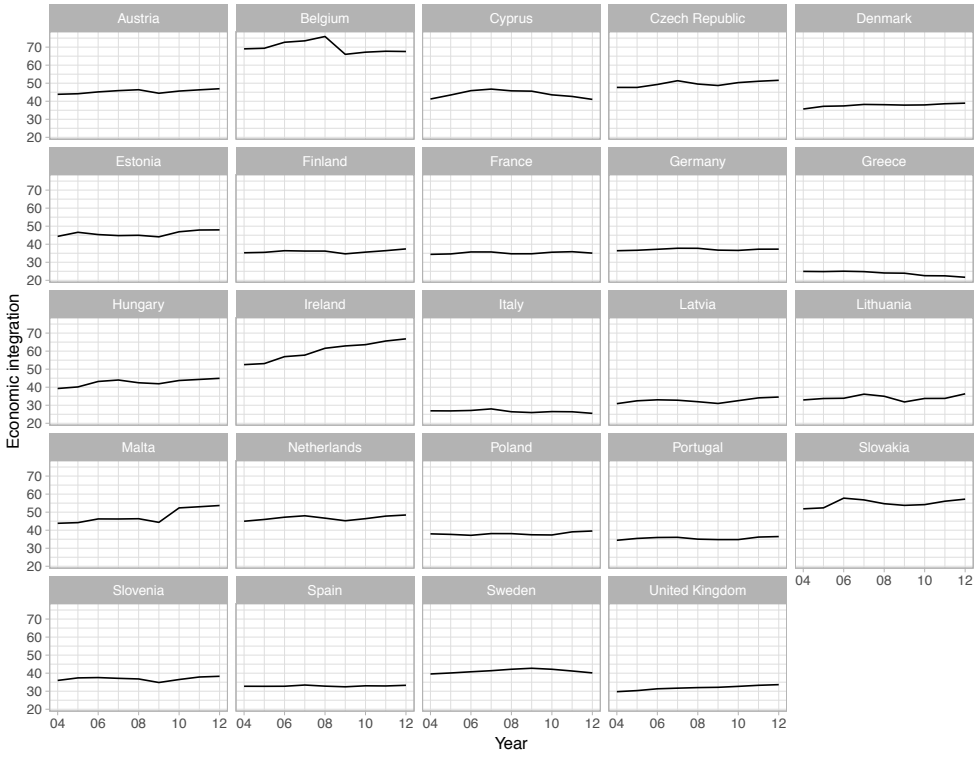


Figure A2: Political integration across countries and time.

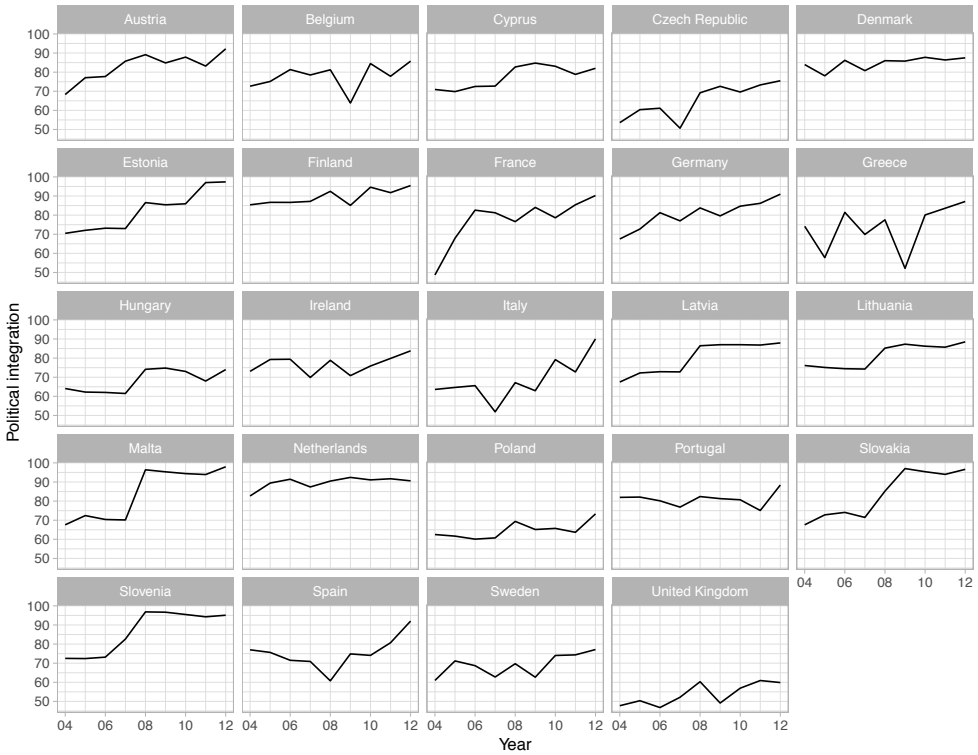


Figure A3: Openness to EU trade across countries and time.

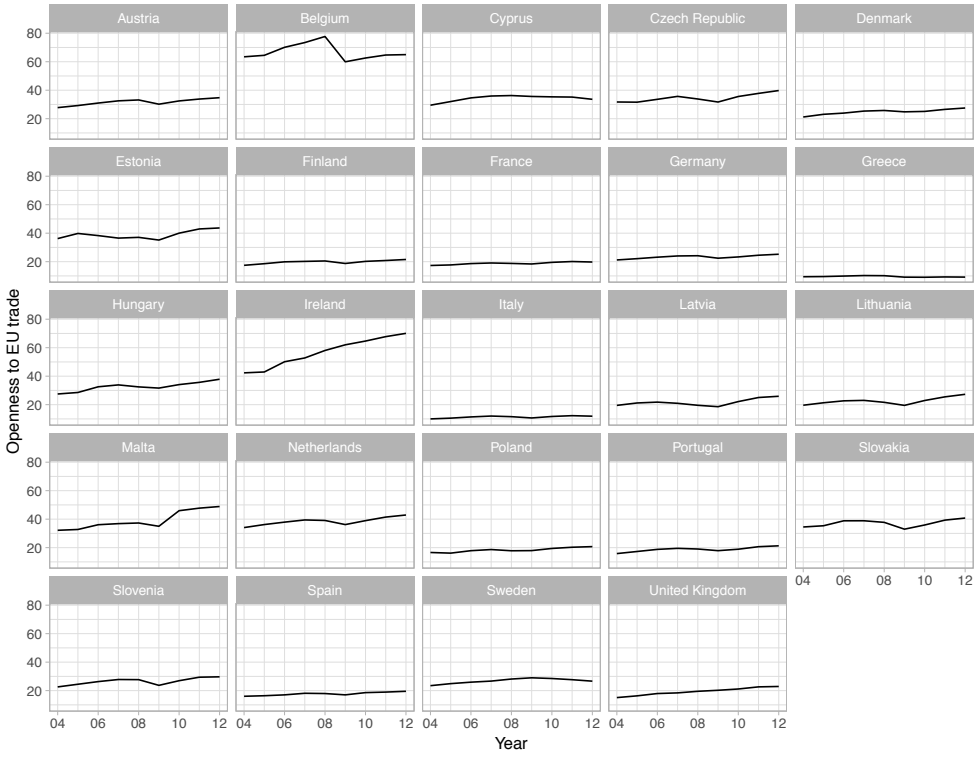


Figure A4: Importance of EU trade across countries and time.

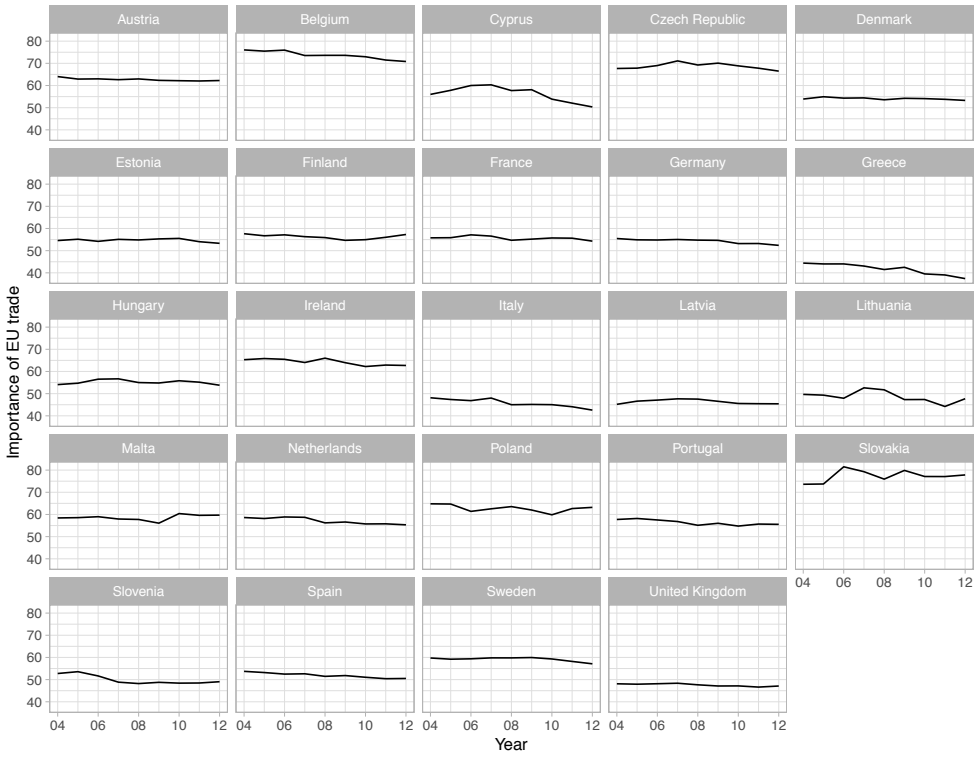


Figure A5: Political participation across countries and time.

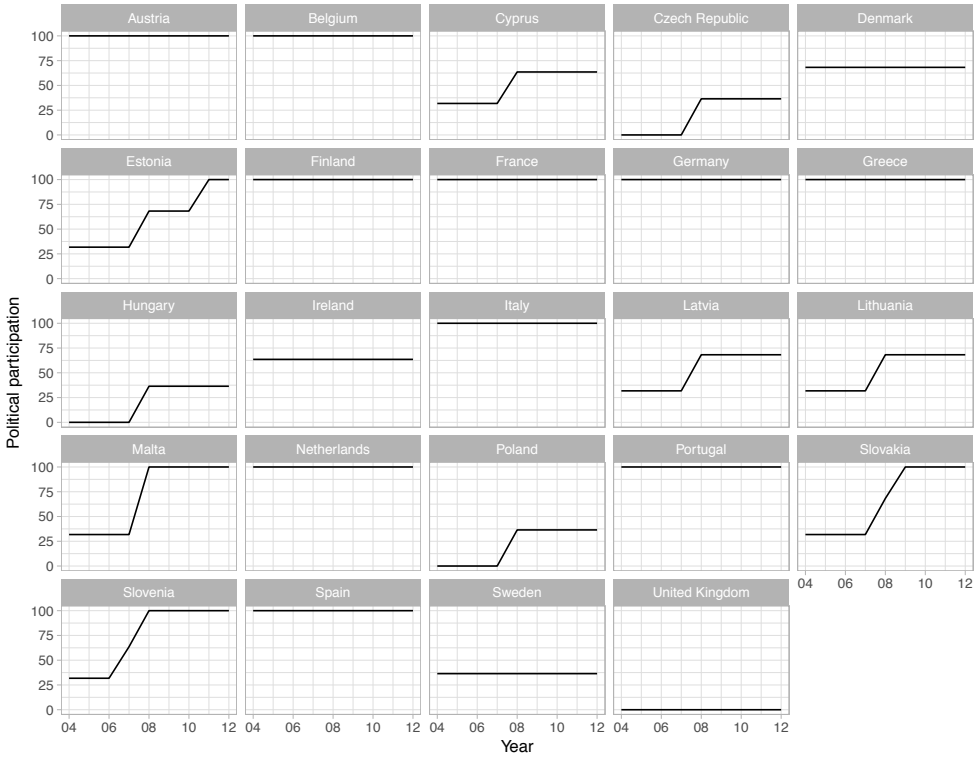


Figure A6: Political compliance across countries and time.

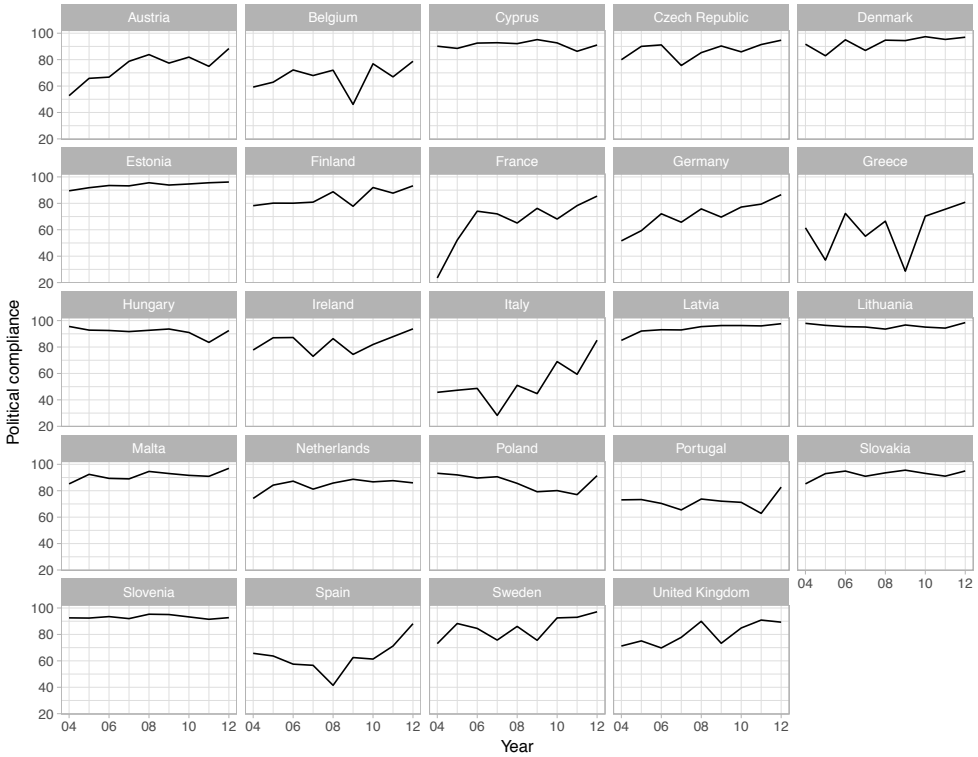


Figure A7: Density of social policy preferences across countries.

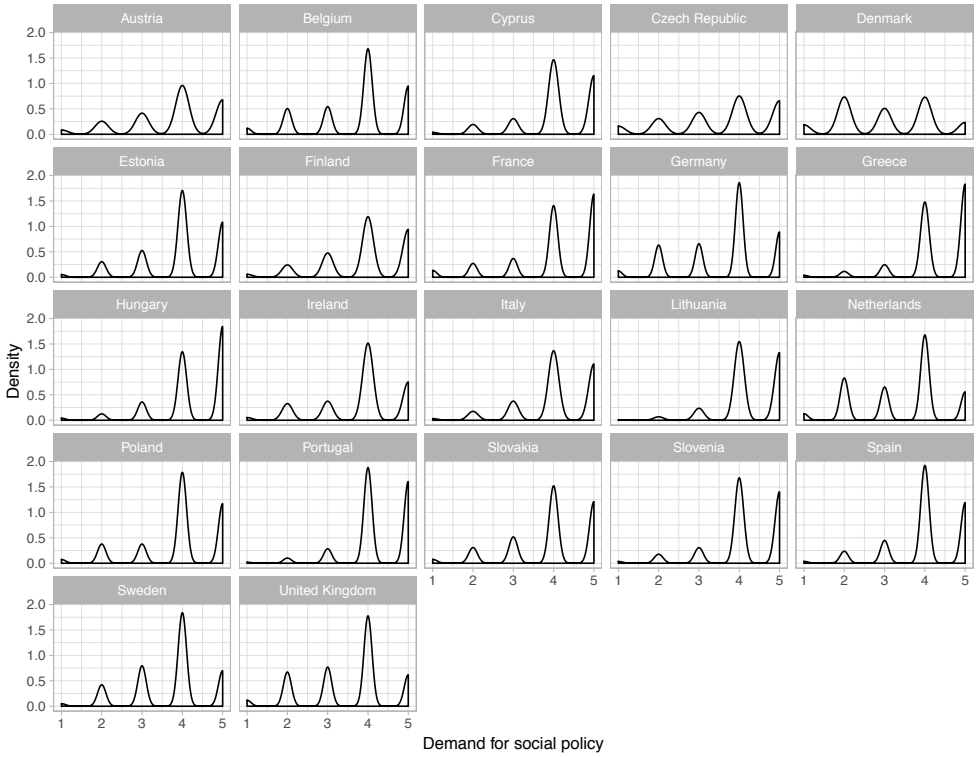


Figure A8: Average demand for social policy across countries and time.

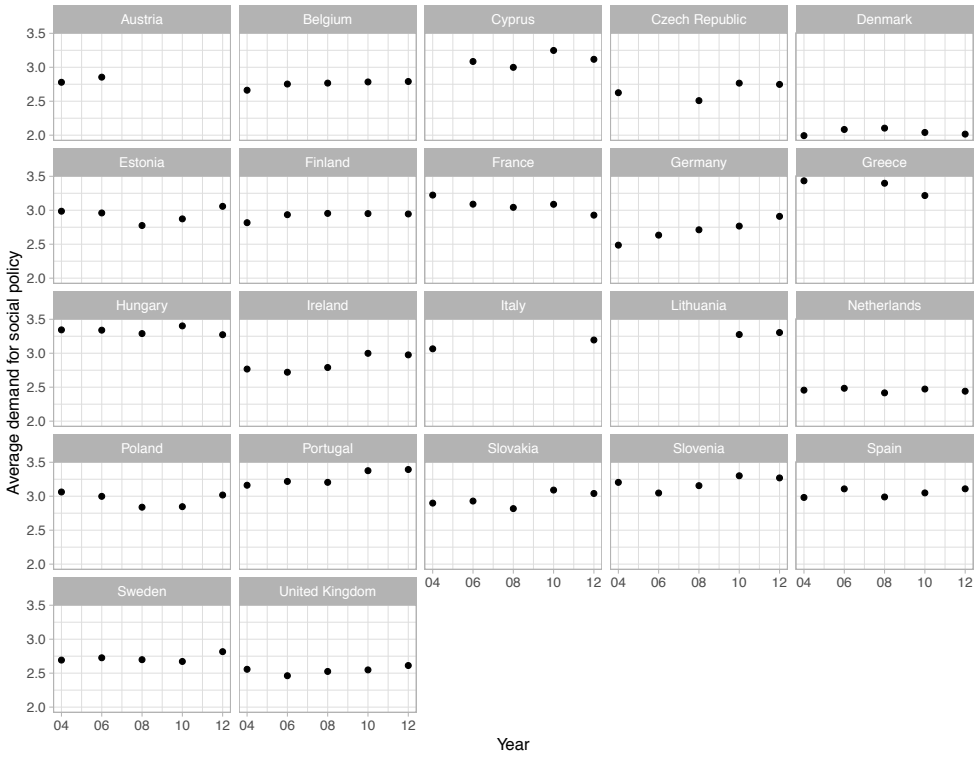
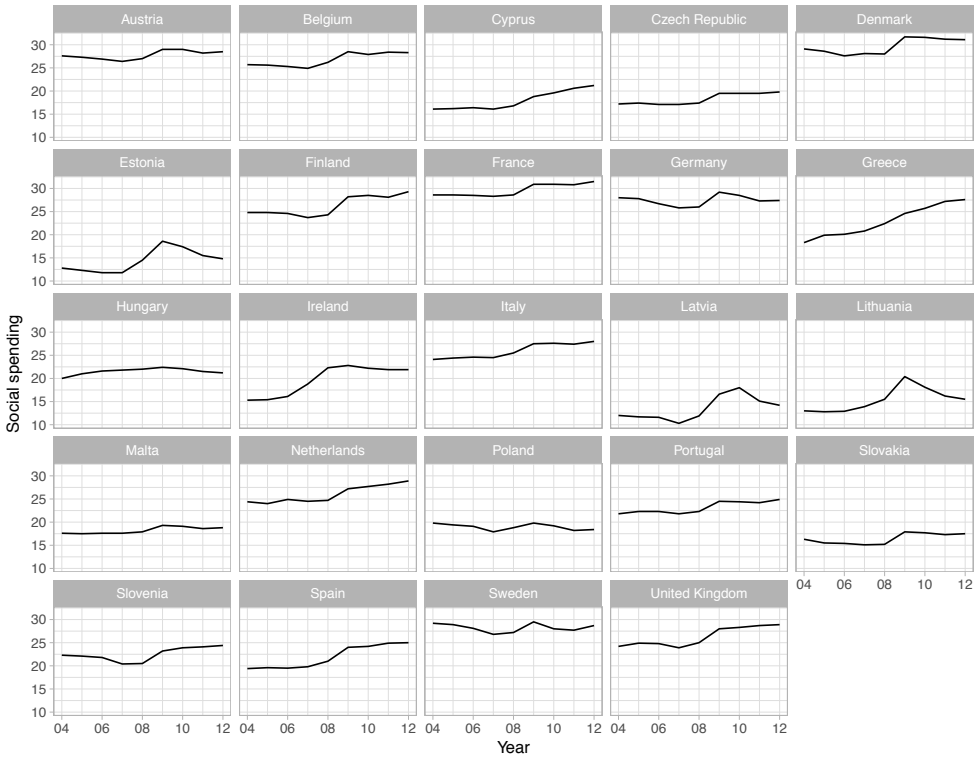


Figure A9: Social spending across countries and time.



2 Full Model Results, Diagnostics, and Sensitivity

2.1 Mixed-effects models

Full model results of Table 1 in the main text. In order to save space, Table 1 in the main text does not present intercepts and control variables. Table A4 contains information on these estimates for each of the four model specifications.

Table A4: Bayesian logistic mixed-effects estimation of the impact of European integration on demand for social policy. Intercepts and individual-level control variables.

	Model 1	Model 2	Model 3	Model 4	Model 5
Constant	−0.63*	−0.67*	−0.65*	−0.67*	−0.64*
	(0.13)	(0.13)	(0.13)	(0.14)	(0.14)
Age	0.16*	0.16*	0.16*	0.16*	0.16*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Gender	0.09*	0.09*	0.09*	0.10*	0.09*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Years in education	−0.22*	−0.22*	−0.22*	−0.21*	−0.22*
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
In education	−0.36*	−0.36*	−0.36*	−0.34*	−0.36*
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
In paid work	−0.07*	−0.07*	−0.07*	−0.06*	−0.07*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Unemployed	0.17*	0.17*	0.17*	0.18*	0.18*
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Religiosity	−0.04*	−0.05*	−0.04*	−0.05*	−0.05*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Union membership	0.23*	0.23*	0.23*	0.23*	0.23*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Left-right scale	−0.57*	−0.57*	−0.57*	−0.58*	−0.57*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Subjective income	−0.49*	−0.49*	−0.49*	−0.49*	−0.49*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Social spending (B)		−0.35			
		(0.22)			
Social spending (W)		−0.01			
		(0.06)			
GDP per capita (B)			0.30		
			(0.23)		
GDP per capita (W)			0.00		
			(0.04)		
Market inequality (B)				−0.15	
				(0.24)	
Market inequality (W)				0.05	
				(0.04)	

* Zero outside the credible interval. Estimates (posterior means) with standard errors (posterior standard deviations) in parentheses. Based on two chains run for 3000 iterations after a burn-in of 1000.

Table A5: Bayesian logistic mixed-effects estimation of the impact of European integration on demand for social policy. Sensitivity tests.

	t-priors on betas	ordered logit
Economic integration (B)	−0.28	−0.32
	(0.24)	(0.25)
Economic integration (W)	0.11*	0.08*
	(0.04)	(0.04)
Political integration (B)	0.04	0.02
	(0.26)	(0.27)
Political integration (W)	0.14*	0.12*
	(0.05)	(0.05)
Controls	✓	✓

* Zero outside the credible interval. Estimates (posterior means) with standard errors (posterior standard deviations) in parentheses. Based on two chains run for 3000 iterations after a burn-in of 1000.

Results are not sensitive to prior choice and coding of dependent variable. Table A5 performs two sensitivity tests. First, Gelman et al. (2008) suggest to put independent t-priors on the coefficients of logistic regressions in order to prevent potential problems associated with complete separation[1]. Hence, we place t-prior distributions, $t(4, 0, 1)$, on the regression-type parameters (see the first column of Table A5). The resulting coefficients do not differ from the estimates in the main text.

Second, we test whether the main findings depend on our coding of the dependent variable by estimating a Bayesian mixed-effects ordered logit model with flexible thresholds (see the second column of Table A5). The findings remain substantially unchanged. The within effects of both economic and political integration continue to be positive and statistically different from zero.

[1]We speak of complete separation when the dependent variable separates an explanatory variable or a combination of explanatory variables completely.

2.2 Time-series cross-section models

Training model. As briefly mentioned in the article, the TSCS analysis (see Tables 1 and 2 in the paper) was preceded by the estimation of a training model, which contains a number of potentially relevant explanatory factors. Table A6 shows the results of this training model. Since the levels of debt and market inequality seem not to exhibit a statistically detectable relationship with social spending, these variables were excluded from the subsequent analysis.

Table A6: TSCS training model.

	Social spending
Political integration	−0.02*
	(0.01)
Economic integration	−0.03
	(0.04)
GDP growth	−0.14*
	(0.02)
Unemployment	0.16*
	(0.02)
Left government	0.11*
	(0.04)
Debt	0.02
	(0.01)
Market inequality	0.05
	(0.05)
Constant	26.06*
	(2.46)
Two-way FEs	✓
Observations	202
Countries	24

* Zero outside the confidence interval

Political integration and policy responsiveness. Table 2 of the article provides evidence for a responsiveness-depressing effect of political participation. Table A7 repeats the same statistical exercise for our overall measure of political integration as well as the the compliance dimension of political integration. In both cases the interaction coefficients are indistinguishable from zero. This corroborates our argument that institutional integration is the main reason for the lack of policy responsiveness and not other aspects of the integration process.

Table A7: Political integration, compliance, and policy responsiveness.

	Political integration	Compliance
All_{t-1}	2.19	−1.96
	(4.69)	(2.96)
Political integration	0.10	
	(0.24)	
$\text{All}_{t-1}\times$Political integration	−0.04	
	(0.06)	
Compliance		−0.15
		(0.16)
$\text{All}_{t-1}\times$Compliance		0.04
		(0.04)
Constant	20.70	33.87*
	(19.25)	(12.38)
Two-way FEs	✓	✓
Controls	✓	✓
Observations	77	77
Countries	22	22

* Zero outside the confidence interval

Negative association between political participation and policy responsiveness robust to alternative indicator. The article's measure of political participation does not only capture membership of the EMU, but also counts whether a country is in the Schengen area or enters the European Exchange Rate Mechanism (ERM). We consider this feature useful because it reflects other institutional manifestations of negative integration besides EMU membership, which—as we argue in the paper—may also affect social spending. Nevertheless, our main argument centers on the depressing effect of EMU on social policy. Thus, Table A8 uses a simple dummy indicator for EMU membership instead in order to single out the fiscal implications of EMU as well as to check the robustness of the initial results. Since this indicator is not limited across time (as compared to the original measure of political participation), it allows us to take advantage of the full range of social policy preferences—including the 2002 ESS wave. Following the practice for slow moving or time-invariant institutional covariates in interactions pioneered by Blanchard and Wolfers (2000), we omit the constitutive term of EMU from the right hand side of the regression equation, as the effect of this term is already captured by the fixed effects.

The results corroborate our previous findings. The interaction term is consistently negative and statistically significantly different from zero. Different from the initial results

Table A8: EMU membership and policy responsiveness.

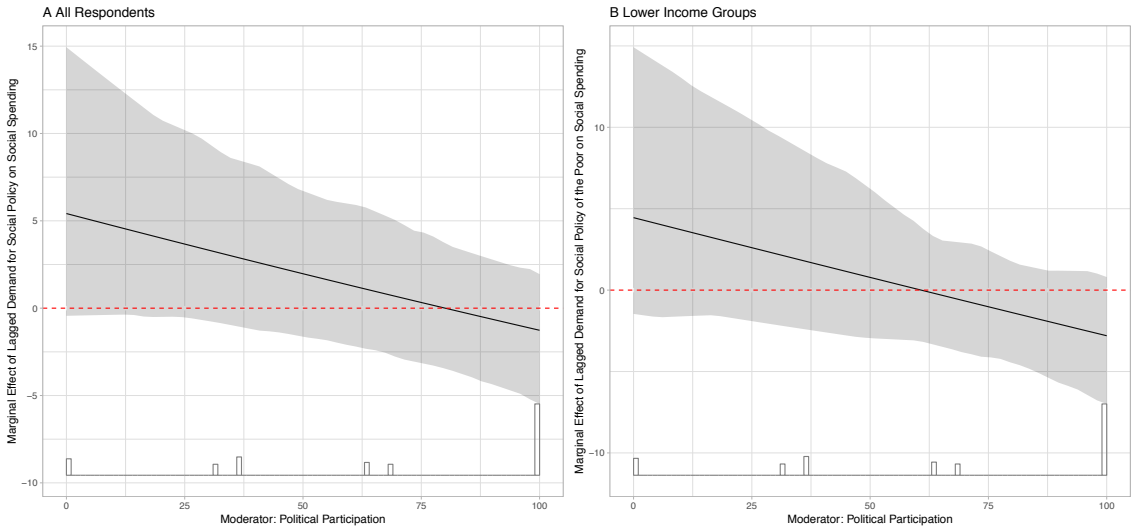
	All	Lower	Higher	Top
All_{t-1}	0.48			
	(1.55)			
$\text{All}_{t-1}\times\text{EMU}$	−0.42*			
	(0.16)			
Lower_{t-1}		−0.44		
		(0.96)		
$\text{Lower}_{t-1}\times\text{EMU}$		−0.32*		
		(0.10)		
Higher_{t-1}			0.54	
			(1.20)	
$\text{Higher}_{t-1}\times\text{EMU}$			−0.35*	
			(0.10)	
Top_{t-1}				1.16
				(0.93)
$\text{Top}_{t-1}\times\text{EMU}$				−0.40*
				(0.12)
Constant	27.00*	28.03*	25.16*	23.68*
	(4.29)	(3.08)	(3.41)	(2.47)
Two-way FEs	✓	✓	✓	✓
Controls	✓	✓	✓	✓
Observations	115	113	113	113
Countries	22	22	22	22

* Zero outside the confidence interval.

in the article, we do not find noticeable differences between income groups. This could suggest that, while other steps of institutional integration mainly limit policy responsiveness towards lower income groups, membership of EMU hampers policy responsiveness across the board.

Kernel smoothing estimator corroborates mediating effect of political participation. Finally, we employ a kernel smoothing estimator that estimates a series of local effects with a kernel reweighing scheme. This estimation strategy allows to flexibly estimate the functional form of the marginal effect of demand for social policy on social spending across the range of political participation. Thus, by utilizing a more flexible estimator, the marginal effect can be closely approximated regardless of potential violations

Figure A10: Kernel smoothing estimator: Political participation and policy responsiveness.



of the linear interaction effect assumption (see Hainmueller, Mummolo, and Xu 2018). Figure A10 presents results from a kernel smoothing estimator with controls and two-way fixed effects both for preferences of all respondents (Panel A) as well as lower income groups (Panel B). A couple of interesting findings emerge. First of all, the marginal effect of demand for social policy on social spending linearly declines with increasing political participation. This not only corroborates the mediating effect of political participation, but also shows that a linear interaction model is a reasonable specification given the data. Second, as in other specifications, the marginal effect itself never becomes statistically significant. However, when political participation is low, the point estimates are clearly positive and the 95% confidence intervals narrowly include zero. Under EMU membership (political participation = 100), on the other hand, the point estimates are negative and, especially in the case of lower income groups, almost reach statistical significance.

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