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Culture, Closeness, or Commerce? Policy Diffusion and Social Spending Dynamics

Abstract

In a globalized world where trans- and supranational networks, communication and the exchange of information gain in importance, national political decision making processes do not occur independently from each other. Policy diffusion is assumed to become more and more relevant also for welfare state development. This paper explicitly focuses on the policy diffusion among 21 OECD countries in the period between 1980 and 2007 looking at social spending dynamics. The empirical findings of the spatial regressions clearly indicate that spatial patterns in social spending dynamics are driven by policy diffusion processes. In fact, economic interdependencies define the pathways of diffusion. Trading partners move in the same direction regarding social policy behavior. Surprisingly, cultural and geographical proximity are less relevant for the diffusion processes, at least in terms of social spending dynamics.

Keywords: Policy Diffusion, Social Policy, Social Spending, OECD, Spatial Interdependencies

Introduction

The financial crisis has shown that countries in a globalized world are highly interrelated and that the policy choice of one country is influenced by the strategies and decisions of other governments. In an era of economic interconnectedness, dense transnational networks, high speed communication and transportation, policy diffusion is assumed to become more and more relevant for policy making (Elkins and Simmons 2005). Cultural, economic and political interdependencies between countries are assumed to be important for social policy decision making. Some scholars argued for the relevance of policy diffusion in welfare state development quite early (Kuhnle 1982; Collier and Messick 1975). The imitation of initial social security legislation among nations and the establishment of the International Labour Organization (ILO) in 1919 with the goal of promoting the diffusion, expansion and consolidation of social insurance schemes are both examples used in early discussions of diffusion processes within comparative welfare state research (Kuhnle 1982). However, due to methodological restrictions in the past, policy diffusion and cross national spatial interdependencies have only gradually been addressed in recent years.

While many scholars would meanwhile agree that social policies are not adopted in isolation, the nature of the interdependencies relevant to social policy and the pathways of diffusion remain largely unclear: Governments might follow the peer pressure of their cultural reference group, proactively search for promising external models in the geographical proximity, or be attracted to certain foreign experiences in economically related countries.

When explaining the timing and the extent of social policy, quantitative comparative research on social policy has for a long time focused on the influence of domestic factors such as party differences or budget constraints (Huber and Stephens 2001; Kittel and Obinger 2003). (← p. 123) Empirical studies emphasizing international influences and globalization have tended to

use indicators such as trade openness or foreign direct investment, while interrelationships and interconnectedness among countries as a central aspect of globalization have only been addressed quite recently.

This paper explicitly focuses on the interdependencies among 21 OECD countries¹ in the period between 1980 and 2007. It addresses the questions whether social policy has diffused across the OECD-world and what kinds of interdependencies are relevant to the diffusion processes. These questions are answered looking at social expenditure. The use of social expenditure data has been criticized by many researchers (e.g. Esping-Andersen 1990). One downside, for example, is that expenditure data is influenced by other factors such as economic growth. This disadvantage can be minimized by including appropriate control variables. Furthermore, social expenditure is the outcome of several policies such as old age, employment and health policies. Aggregate expenditure data as the classic measure of the welfare state can serve as a useful starting point for the analysis of spatial interdependencies. Patterns of policy diffusion at such a high level of aggregation would suggest that major policies determining social expenditure are at least partly driven by spatial interdependencies. Diffusion in social spending would reflect the diffusion of specific policies, for example, active labor market policies, the cutback of unemployment benefits or early exit policies. Analyzing social expenditure could be seen as a conservative strategy to test the argument that policy diffusion matters for welfare state development. Additionally, expenditure data is easily available in comparison to more program specific data on eligibility rules or program characteristics (Castles 2002). Social spending figures are available on an annual basis and for a relatively long time span. This study draws on such figures between 1980 and 2007. The diffusion of social policy in terms of social expenditure is modeled using spatial econometrics.

¹ Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and the United States.

The article is organized as follows: I commence with a brief literature review on the determinants and diffusion processes of social policy. In the next section, the theoretical orientation and hypotheses are presented. Afterwards, the data and specific methods applied are described. The empirical findings are then presented. The final section summarizes the main findings of the paper.

Brief Literature Review

For a long time, international comparative studies have emphasized national factors as being relevant to national welfare efforts (Kerr et al. 1960; Wilensky 1975; Flora and Heidenheimer 1981). Path dependency, institutional context, domestic politics, and pressures from socio-economic problems were seen as crucial to explaining social policy variation in the comparative research (Huber and Stephens 2001; Swank 2002; Kittel and Obinger 2003). In the last decade, studies have highlighted the importance of international factors such as globalization for the explanation of social expenditure dynamics. According to the efficiency hypothesis, the pressure of globalization leads to a cutback of social expenditure in order to reduce costs and to keep up with international economic competition (Garrett and Mitchell 2001). In contrast, the compensation hypothesis assumes an increase of social expenditure since globalization increases demand for social compensation for those (**← p. 124**) who are negatively affected by market pressures (Katzenstein 1984; Hays 2009). The most common way of analyzing the impact of globalization has been to use measurements of foreign direct investment and trade openness (the sum of imports and exports) as a percentage of the GDP in the regression models (Swank 2002; Kittel and Obinger 2003; Garrett and Mitchell 2001). Other studies focus on convergence processes with respect to the welfare state (Adelantado and Calderón 2006; Starke et al. 2008; Alber and Standing 2000; Bouget 2003). However, detecting convergence does not

answer the question of what drives the process similarly across countries, and which channels convergence takes place through.

In addition to these mainstream developments in comparative social policy research, some studies examined social policy diffusion quite early. Collier and Messick (1975) emphasized the importance of Galton's problem (1975: 1300) in comparative welfare state research and conducted an (exploratory) empirical analysis of program diffusion in 59 countries. They found evidence of hierarchical diffusion in the sense that late adopters introduced their first welfare program at lower levels of modernization by imitating the social security programs of pioneer countries. A few years later, Jens Alber (1982: 134ff) examined the spread of Bismarckian social insurance across Western European countries and concluded that German social insurance legislation was hardly a successful export article (Alber, 1982, p. 143). Stein Kuhnle (1982) analyzed the impact of German social insurance legislation on welfare state formation in the Nordic countries with similar findings, since only Norway had emulated Bismarckian social insurance principles.

In recent years scholars have begun to quantitatively analyze diffusion mechanisms by applying new methods of spatial econometrics. Jahn (2006), for example, examines the impact of economic interdependencies on social spending in 16 OECD countries. He shows that diffusion has gained more relevance over time. Looking at the adoption of hospital financing reforms in the OECD world, Gilardi et al. (2009) demonstrate that policy change is more likely when the existing policy is ineffective and when the experience of other countries suggests that the reform leads to the desired results. Gilardi (2010) analyzes diffusion processes with regard to unemployment benefits retrenchment in OECD countries. According to his results, policy makers do not learn equally. Left parties imitate unemployment policy if it leads to lower unemployment rates and right parties if it is associated with electoral success. Brooks (2007) shows that for 71 developing and industrialized countries that policy diffusion in pensions

reforms is mediated through the characteristics of a policy innovation and country attributes, such as wealth. Franzese and Hays (2006) found that for EU countries, higher labor market spending creates an incentive for neighboring countries to free ride. Kemmerling (2007) obtained similar findings for labor market spending. In rich democracies, countries sharing a common border are negatively interrelated. When a country increases its labor market spending, neighboring countries move in the reverse direction.²

When summarizing the literature review, the following shortcomings can be identified. First, the vast majority of the studies emphasize domestic and external factors as driving and structuring welfare efforts, and they assume that governments implement policies independently from one another. International factors, such as globalization, are often measured at the individual national level. The analysis of interrelationships between countries or groups of countries is still at the beginning. Second, the majority of the studies on policy diffusion have focused on tax policy or liberalization and privatization (Swank 2008; Basinger and Hallerberg 2004; Meseguer 2009, Elkins and Simmons 2005). Social policy as (**← p. 125**) a field of policy diffusion research has been found later and to a less extent. Thirdly, only a few studies on the diffusion of social policies have an international comparative perspective (Jahn 2006, Gilardi 2010). The only international comparative study that analyzes social spending does not differentiate between various types of interdependencies such as geographical or cultural relationships (Jahn 2006).

² Furthermore, there have been several studies on social policy diffusion among the U.S. federal states (Volden and Cohen 2008) and a few qualitative studies (Weyland 2006).

Policy Diffusion and Social Spending Dynamics: Theory and Hypotheses

The basic assumption of spatial interdependencies is that political actors do not implement policies independently from each other, since their policy decisions are influenced by the choices made by others (Dolowitz and Marsh 2000; Franzese and Hays 2007). Arguably, experts and government officials commonly consider foreign models, principles, or experiences when preparing their own decisions. Interdependencies among countries may lead to the diffusion of policy strategies. In this context, diffusion means a process in which the adoption of a certain policy in one or more countries leads to policy changes in other countries (Strang 1991).³ Regarding social policy, governments might, for example, take the pension reforms in other countries into account or learn from successful labour market policies. The mutual influence would lead to the diffusion of specific social policies that should be reflected in interdependent social spending dynamics.

What kinds of mutual influences do exist? The diffusion of social policies might be caused by *learning* mechanisms. Policy learning implies that political actors are aware of the impact of certain policies (May 1992: 333). Governments scan the available information and evidence on the failure and success of certain policy strategies, and then follow those countries in which policy decisions appear to produce the intended results (Lee and Strang 2006). A “foreign model may (...) offer a ready-made answer to ill-defined domestic pressure for ‘change’ and ‘innovation’” (Simmons and Elkins 2004: 174) and therefore provides information about the costs and the benefits of a certain policy strategy. In the case of *emulation*, governments imitate the dominant policy fashion within a group of similar and closely related countries (Elkins and Simmons 2005: 45; Simmons and Elkins 2004). Linked together through intense

³ In this paper, diffusion is treated as a process and not as an outcome (Elkins and Simmons 2005; Holzinger and Knill 2005).

communication networks, governments follow the policy mainstream of the relevant reference group in order to protect their reputation, win favour within this group, and “avoid the stigma of backwardness” (Meseguer 2009: 27; Simmons and Elkins 2004). The application of a certain policy by many others might serve “as information that this might be the best thing to do” (Holzinger and Knill 2005: 784). Furthermore, governments might follow related countries due to *competitive* reasons. This mechanism emphasizes the strategic behavior of governments to gain an economic advantage or not to fall behind in the international market. Countries might also look at those nations with which they compete and adjust their strategy to the competitor’s (Lee and Strang 2006: 890; Pacheco 2012: 188).⁴

But which countries compete with, emulate or learn from each other? The probability that governments will learn from each other or emulate the policy of related countries should both vary with the intensity of communication and therefore with the availability of (← p. 126) information. The intensity of communication between governments on social policies could not be measured directly. However, it can be assumed that the availability of information and the intensity of communication depend on cultural and geographical proximity.

Cultural propinquity in the form of a common language, religion or heritage is a “highly plausible explanation for policy emulation” (Simmons and Elkins 2004: 175). It facilitates communication and enhances the possibilities for information sharing. It is likely that political actors mimic the policy trend within their cultural reference group encompassing countries with the same cultural roots (Lenschow et al. 2005; Lee and Strang 2006: 889). Countries of one ‘Family of Nations’ sharing specific patterns of linguistic or cultural attributes are likely to

⁴ A further mechanism of policy diffusion emphasised in the literature is *coercion*. It occurs “whenever an external political forces a government to adopt a certain policy” (Holzinger and Knill, 2005, p. 781). However, coercion is rather unlikely to occur in advanced democracies as it presupposes asymmetric power relations. Even though contemporary EU conditionality vis-à-vis Greece is a major exception, coercion did not play a great role in the period of observation from 1980 to 2007.

influence each other (Castles 1993). For example, the ‘English speaking Family’ has background characteristics and historical similarities different from the ‘Continental Family’ or the ‘Scandinavian Family’ (Obinger and Wagschal 2001; Castles 1993). Cultural proximity can give salience to a new foreign model and policymakers will tend to study it closely. The diffusion of social policies should occur to a greater extent within a particular family of nations.

Moreover, *geographical proximity* might shape the intensity of communication and can define the connectivity of countries (Weyland 2006; Simmons and Elkins 2004). Countries located in the same neighborhood typically exchange a large amount of information, as they are directly accessible to each other. Policy change enacted next door has particular immediacy and therefore availability. Hence, neighbors are assumed to influence each other more strongly than countries located on the other side of the globe (Simmons et al. 2008; Weyland 2006).

A reference group can also be economically defined. It might be rational to follow *economically related* countries due to competitive reasons to gain an economic advantage over proximate states (Pacheco, 2012, p. 188). Economic relations not only increase the likelihood of competitive driven diffusion but also the intensity of information flows. Private and business actors may channel communication and establish intense communication networks. “Business people may transmit ideas about the appropriate economic policy by looking to the experiences of the countries with which they have especially intense trading contacts” (Simmons and Elkins 2004: 175). A government will especially take the policies of trading partners into account “because of the close communication (learning through communication) and dependency (control through resource dependence) between those countries” (Jahn 2006, p. 408).

Against this background, the following hypotheses can be derived:

H1) Countries adopt the social policy fashions dominant within their family of nations.

H2) Countries adopt social policies of countries in close geographical proximity.

H3) Governments follow the social policies of their most important trading partners.⁵

Method and Data

In order to test the theoretical hypotheses about the diffusion of social policies, the dependent variable is measured by social expenditure as a percentage of GDP for 21 OECD countries⁶ for the period from 1980 to 2007 (OECD 2010). The use of social expenditure has been criticized by researchers (e.g. Esping-Andersen 1990). It is often claimed that (← p. 127) replacement rate data is a better indicator than social expenditure, because the latter may be driven by demand factors such as unemployment and economic growth. When these factors are empirically controlled for, however, this disadvantage of spending data can be minimized. Moreover, replacement rate data suffers from its own specific problems. For example, replacement rates set average benefit rates in relation to average net wages, meaning that tax reforms as well as changes in wage levels can impact the value of the indicator. As mentioned earlier, aggregate expenditure data subsume a variety of different policies, for example, old age, employment and health policies. Even though analyzing social expenditure cannot provide a concluding picture of social policy diffusion, it serves as a helpful starting point to identify central interdependencies between countries. When the empirical evidence supports the notion of diffusion at such a highly aggregated level, the identified interdependencies should be of particular relevance for the diffusion of major social policies that drive social spending.

⁵ A macro-quantitative test only allows the channels of diffusion to be tested, but not the rationales on which decisions are based. However, the patterns identified can contribute to a comprehensive micro foundation for the particular underlying motivations in the decision-making processes which can be helpful in refining the subsequent macro level analysis.

The basic assumption of this paper is that social policies diffuse across space. Spatial interdependencies can be modeled by including a spatial term as a regressor (spatial lag model) (Anselin 2003). The general spatio-temporal autoregressive model (STAR) can be expressed as follows:

$$(1) \quad y = \rho \cdot Wy + \phi \cdot My + X\beta + \varepsilon$$

where y is the social expenditure, ρ is a spatial autoregressive coefficient and Wy the weighted average of the dependent variable (spatial lag). The spatial weight matrix W ($NT \times NT$) reflects the relative connectivity of each country i to every other country at time t . The effect on a focal country is then a weighted sum of outcomes across countries (Lee and Strang 2006). ϕ is the temporal autoregressive coefficient and M is an $NT \times NT$ matrix to create the first order temporal lag (on the minor diagonal). X is a set of exogenous right hand side variables.

Before analyzing the different diffusion mechanisms, whether there is a spatial association in the dependent variable must be checked. Moran's I as well as Geary's C indicate spatial correlation for all estimated models. True spatial interdependence has to be carefully distinguished from other sources of spatial association in order to solve Galton's problem. Spatial patterns in the dependent variable might also be caused by common shocks or trends or unobserved spatial heterogeneity. The only possibility to disentangle spatial dependence from its alternatives is to model it and include appropriate right hand side variables (Plümper and Neumayer 2010: 215). A failure to account for such alternatives will bias the spatial lag coefficient. To control for common shocks, I added year dummies. Furthermore, a lagged dependent variable captures common trends and temporal dynamics. A lagged dependent

variable has the disadvantage of accounting for the largest part of the variance in the dependent variable and of absorbing the explanatory power of the other substantial right hand variables. However, the goal of this paper is to guarantee reliable results for the spatial lags, *not* to identify the substantive influence for the control variables. Therefore, the procedure can be seen as a conservative test strategy for the hypotheses on spatial interdependencies since “a statistically significant effect (...) under such a condition, (...) is valuable evidence of a causal effect” (Kittel 1999: 230). To cope with unobserved spatial heterogeneity, unit fixed effect models are estimated. The fixed effect estimator as a within estimator focuses on changes and not on levels. As policy diffusion theory predicts that a change in social policy in one country influences the policy strategy and therefore the change in another country, fixed effects models are the appropriate (**← p. 128**) strategy to model policy diffusion. Additionally, a spatial diagnostic test on the residuals of the non-spatial model using OLS gives further information about the nature of the spatial association. The Robust Lagrange Multiplier Test against the spatial lag or spatial error alternative might indicate whether the spatial association is caused by unobserved factors (Franzese and Hays 2007, 2008; Anselin et al. 1996).

In the empirical analysis, I analyze instantaneous spatial interdependencies and time-lagged spatial interdependence since we do not know whether policy diffusion occurs simultaneously or with a time lag. The estimation of instantaneous spatial interdependencies causes several methodological problems. The spatial lag on the right hand side of the equation is a weighted average of the left hand side variable. Therefore the spatial lags are endogenous and co-vary with the residuals, while spatial OLS estimations would be inconsistent and affected by simultaneity bias. To deal with this problem, I estimate spatial maximum likelihood models, providing consistent and efficient parameter estimates in the case of instantaneous interdependencies (Franzese and Hays 2007, 2008; Hays 2009). The models with a

temporally-lagged spatial lag are not affected by simultaneity bias (in the absence of temporally auto-correlated residuals) and can therefore be estimated by spatial OLS regressions. Since there is no theoretical assumption about the time lag structure, I use three year averages of the years $t-3$, $t-2$ and $t-1$ as temporally lagged spatial lags. In the spatial OLS models, I deal with heteroscedasticity by estimating the models with robust standard errors.

Weight Matrices and Control Variables: Measurement

When estimating spatial lag models the weighting matrices must be carefully specified. In order to test the hypotheses, I use several different weighting matrices to generate the theoretically informed spatial lags. The spatial lag indicating affiliation in the same family of nations is a binary variable which is expressed by the number one if two countries belong to the same family of nations (H1). The affiliation to a specific family of nations was assigned according to Castles (1993) and Castles and Obinger (2008). The ‘English Speaking Family’ includes Canada, the United Kingdom, USA, Australia, New Zealand and Japan, the ‘Continental Family’ (Austria, Germany, France, Belgium, Netherlands, Switzerland, Italy, Ireland), the ‘Scandinavian Family’ (Denmark, Sweden, Norway, Finland), and the ‘Peripheral Family’ (Spain, Portugal, Greece) (Obinger and Wagschal 2001; Castles 1993). Additionally, alternative spatial lags using linguistic families or the worlds of welfare capitalism (Esping-Andersen 1990) are specified. To test the hypothesis of policy diffusion among countries located in close geographical proximity, social spending is weighted by the inverse distance between the capitals (H2). Weighting social expenditure with the sum of bilateral exports and imports as a percentage of the total trade volume allows verifying whether trading partners adopt similar

policies (H3).⁷ Following the spatial econometrics literature, I row standardize all weighting matrices to sum one for each row.

Furthermore, all models include a comprehensive set of control variables that the literature identifies as be relevant for social policy making. To capture the level of economic development, GDP per capita is used. It is argued that wealthy countries also show (← p. 129) higher welfare efforts (Wilensky 1975). Since social spending is sensitive to the business cycle, I also use the annual rate of economic growth as a control. Social spending should be low in periods of economic booms and vice versa. The demographic situation of a country, likewise a variable emphasized by functionalist accounts, is measured by the elderly population (65+) as a percentage of the total population. I expect this to have a positive impact on spending since the greying of society accounts for the largest components of social security expenditure. The level of unemployment as a percentage of the civilian labor force is a measure of social needs. The index of constitutional structures compiled by (Henisz 2010) measures institutional impacts on welfare state development. High values of this indicator denote high institutional barriers for policy change, so a negative coefficient is expected. The influence of leftist parties which typically have a strong pro-welfare state orientation – is measured by the percentage of cabinet seats held by this party. In times of fiscal austerity in terms of a high level of debt, the possibilities for high social expenditure should be low. Finally, the trade openness of the economy is taken into account. According to the efficiency argument, a negative impact on social spending is expected. The measurement of all variables is described in detail in Table A1.

⁷ Furthermore, I provide several robustness checks in the appendix that include alternative spatial lags. I checked whether policy diffusion occurs among the European Union members states, among countries sharing ideological positions, and among competitors. All spatial lag coefficients are far from being significant. Details on measurement and results can be found in table A2 (Appendix).

Empirical Analysis

Table 1 presents the findings for the spatial maximum likelihood estimations (model I to III) and for the spatial OLS regressions (model IV to VI). All right hand side variables are lagged by one year to address potential problems of endogeneity.

Model I tests whether countries belonging to the same family of nations influence each other to a greater extent than others.⁸ The coefficient of the spatial lag is positive as assumed but quite low and far from being significant. There is little evidence that the diffusion of social policies among countries is driven along the line of a similar cultural background. This is a very interesting result since the literature on the ‘Family of Nations’ concept has clearly identified common patterns in the dependent variable. However, when diffusion does not account for this finding, the common patterns have to be caused by similar preconditions such as similar institutional arrangements or socio-economic background. Cultural patterns do not seem to define the central interdependencies relevant for the diffusion of social policies. However, the results do not imply that the cultural propinquity does not matter at all. The cultural background might have an effect when analyzing specific social policy programs or might depend on national characteristics. For example, it can be assumed that politicians only look at countries of their family of nations when the governments belong to the same party, and the ideological distance is thus low, or when the countries are in a comparable economic situation.

⁸ The results for the alternative spatial lags using the typology of Esping-Andersen (1990) or the affiliation to one linguistic family provide similar results.

Table 1. Spatial Interdependencies in Social Policy (← p. 131)

Dependent variable: Social Expenditure						
Independent variables	Spatial MLE			Spatial OLS		
	I FAMILIES	II DISTANCE	III TRADE	IV FAMILIES	V DISTANCE	VI TRADE
Social Expenditure _{t-1}	.922*** (.020)	.925*** (.020)	.924*** (.020)	.899*** (.024)	.904*** (.024)	.897*** (.024)
Trade Openness	-.013*** (.004)	-.012*** (.004)	-.010** (.004)	-.014** (.006)	-.013** (.005)	-.011* (.005)
Left Government	.0004 (.0008)	.0005 (.0008)	.001 (.001)	.0006 (.001)	.0009 (.001)	.001 (.001)
Institutions	-1.03* (.561)	-1.09** (.561)	-1.17** (.561)	-1.56*** (.612)	-1.67*** (.614)	-1.77*** (.613)
GDP growth	-.074*** (.015)	-.073*** (.015)	-.073*** (.014)	-.088*** (.024)	-.086*** (.024)	-.087*** (.023)
GDP per capita (log)	3.21e-05 (2.08e-05)	3.14e-05 (2.09e-05)	3.50e-05 (2.09e-05)	2.32e-05 (2.36e-05)	2.28e-05 (2.36e-05)	2.85e-05 (2.33e-05)
Debt	-.003 (.003)	-.003 (.003)	-.002 (.003)	-.0007* (.003)	-.0006 (.003)	.0002 (.003)
Unemployment rate	-.073*** (.020)	-.073*** (.020)	-.070*** (.020)	-.093*** (.026)	-.095*** (.027)	-.088*** (.025)
Elderly population (65+)	.114*** (.037)	.122*** (.037)	.111*** (.037)	.135*** (.037)	.135*** (.038)	.130*** (.037)
Spatial Lag	.034 (.026)	.036 (.070)	.113* (.063)	.046 (.036)	.106 (.101)	.159* (.092)
Wald Chi2	21210.16***	30543.93***	26302.77***	1163.71***	1159.97***	1150.24***
N	567	567	567	546	504	504

Notes: All regressions include year and country dummies; those coefficient estimates are suppressed to conserve space. *** Significant at the .01 level; ** at the .05 level; * at the .10 level

The central interdependencies for social policy diffusion are not defined by geographical proximity either. Even though the coefficient of the spatial lag is positive, it is substantively quite low and far from being statistically significant. As in the case of the cultural background, this does not exclude that distance has an indirect effect on social policy diffusion. Geographical proximity might enforce or slow down the impact of policy diffusion between trading partners for example. (← p. 130)

In contrast, model III demonstrates impressively that the most important interdependencies for social policy diffusion are of an economic nature. The coefficient is positive and statistically significant. Countries move in the same direction as their most important trading partners. Governments tend to follow the policy trend that is dominant among economically related countries. The empirical findings support the notion that the diffusion of social policies occur along the lines of economic relationships. Bilateral trade relationships bring countries closer to each other, create channels of communication, and make countries attentive to social policies of their economic partners. Governments might also learn from their trading partners due to competitive reasons and in order to compete in the international market. To check whether competing countries influence each other, I additionally estimated a model including a spatial lag weighting social expenditure with the degree of competition between two countries.⁹ In contrast to trade partners, competitors do not necessarily share direct economic relations. They have the same export portfolio and therefore compete for the same markets. However, the results do not support this notion. Social policy diffusion occurs between countries sharing direct economic linkages rather than between countries competing for the same markets.

⁹ The weighting matrix is created by using the correlation between the trade volumes of each pair of countries to all other trade partners. Two countries score high if they both have similar trading partners (i.e. compete for similar markets) and even if they do not trade much with each other

The results for the control variables are mainly in line with the theoretical expectations. A high level of unemployment is associated with low social expenditure. High social expenditure is difficult to maintain in times of high unemployment rates. The coefficient is negative and statistically significant in all models. Moreover, when the population contains a high percentage of elderly citizens, the need for welfare policy and therefore social expenditure level also is high. A restrictive institutional arrangement hampers the expansion of the welfare state. The results for the trade variable sustain the efficiency hypothesis. The statistically significant and negative coefficient indicates that an open economy in terms of import and exports is associated with a low level of social expenditure. With respect to socio-economic variables, GDP growth has a negative effect on social spending. A high level of public debt reduces the possibilities for extensive social spending. The partisan variable is far from being substantive and significant. These results are consistent with the findings of Huber and Stephens (2001) and Kittel and Obinger (2003)

Models IV to VI are estimated with time lagged diffusion variables. I use three year averages of the time lagged spatial lags (t-3, t-2 and t-1). As in the case of Spatial MLE, different spatial lags were specified by weighting social spending with the affiliation to a specific family of nations (model IV), geographical proximity (model V), as well as the intensity of bilateral trade (model VI). The results sustain the findings presented in table 1. The relationships important for the diffusion of social policy are mainly defined by economic interconnectivity and the channels of social policy diffusion are economic in nature. Trade partners seem to be a reliable source for foreign experiences. Overall, countries move in the same direction as their trade partners with respect to major social policies. Economic relationships are of particular relevance for national social policy making processes. It is very striking that all other spatial lags specified

do not show statistically significant results.¹⁰ Against the background of comparative social policy research, which emphasizes the importance of cultural propinquity, this is a highly relevant and very interesting finding. (← p. 132)

Conclusion

In this article, I argued that social policies are not purely the result of domestic political and socioeconomic driving factors. In a globalized world where trans- and supranational networks, communication and the exchange of information gain in importance, national political decision making processes do not occur independently from each other. International policy fashions, as well as the information about policy alternatives from the experiences of other countries, fuel global diffusion processes. Cross-national interdependencies become more and more relevant. Therefore, it is extremely important to take international diffusion processes into account when analysing social policy dynamics.

The literature on comparative social policy research has mainly treated governments as though they act independently from each other. International factors were often measured via common external shocks or variables at the national level, such as foreign direct investments or the sum of exports and imports in relation to GDP. Even though they are gaining in importance, only a few empirical studies consider spatial interdependencies from an international comparative perspective. I explicitly take spatial interdependencies into account by analyzing whether social policies have diffused among 21 OECD countries between 1980 and 2007 and if so, what the relevant interdependencies are.

¹⁰ This also refers to alternative models specified in table A2 providing several plausible robustness checks.

The empirical results show that policy diffusion processes turn out to be relevant even in an analysis at a high level of aggregation. Since social expenditure encompasses a great range of social policies, the diffusion patterns observed in social spending show that interdependencies are relevant for central social policies influencing social spending. Rather surprisingly, cultural and geographical proximity do not condition the main patterns of social policy diffusion, at least from the general perspective of social spending. In fact, economic interdependencies define the pathways of diffusion. Trading partners show similar patterns of social spending behavior and countries sharing strong economic ties move in the same direction. At least, when looking at general patterns of social policy diffusion, it is the economy that drives the diffusion process in the first place.

However, the results do not indicate that cultural propinquity or families of nations do not matter at all. A program specific analysis and the use of alternative social policy indicators can reveal a more subtle influence of these factors on policy diffusion processes. Furthermore, the relevance of cultural propinquity, for example, might depend on national characteristics such as party ideology. Governments with a similar cultural background might only look at each other's examples when they belong to the same party since party affiliation reduces the uncertainty about favored policy and electoral consequences. However, in general, social policy diffusion seems to be triggered by economic rather than by cultural or geographical factors.

(← p. 133)

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Table A1. Operationalization and data sources

Variable	Description	Source
Social Expenditure	Social expenditure as a percentage of GDP	OECD, Social Expenditure Database (2010)
Trade Openness	Sum of imports and exports as a percentage of GDP in constant prices (2005)	Heston et al., 2009 (PWT 6.3)
Left Government	Cabinet seats of social democratic and communist parties as a percentage of total cabinet posts	Armingeon et al. (2010), Comparative Political Data Set
Institutions	PolconIII: Index of political constraints that estimates the feasibility of policy change (for details see Henisz (2002))	Henisz, 2010
GDP growth	Growth of real GDP	OECD, Factbook (2009)
GDP per capita	Real GDP per capita	United Nations Statistics Division, National Accounts (2009)
Unemployment rate	Unemployed as a percentage of civilian labor force	Armingeon et al. (2010), Comparative Political Data Set
Elderly population 65+	Elderly population age 65 and over as a percentage of the total population	Armingeon et al. (2010), Comparative Political Data Set
Debt	Gross government debt (financial liabilities) as a percentage of GDP	OECD, Economic Outlook (2008)
Weighting matrix – Family of nations	Binary variable (1=affiliation to the same family of nations; 0=affiliation to different families of nations)	Castles, 1998; Wagschal & Obinger, 2001
Weighting matrix - distance	Inverse distance between the capitals in km	http://www.globetrotter.de/
Weighting matrix – Trade	Sum of exports and imports between two countries as a percentage of the total trade volume	IMF Direction of Trade Statistics (various years)
Weighting matrix – Equal	Equal weight for all countries	Own assessment
Weighting matrix – Parties	Distance between the ideological positions of two governments on a left-right scale. The ideological position of each party in government is weighted by the seats of that party in parliament in relation to the total number of parliament seats held by cabinet parties	Doering & Manow (2011)
Weighting matrix – Competition	Correlation between the trade volume of each pair of countries to all other trade partners is used to measure the extent of bilateral trade competition. Two countries score high if they both have similar trading partners (i.e. compete for similar markets) and even if they do not trade much with each other	IMF Direction of Trade Statistics (various years)
Weighting matrix – EU	Binary variable (1= both countries belong to the EU; 0= neither country belongs to the EU)	Own assessment

(← Table A1 p. 135-137)

Table A2. Spatial Interdependencies in Social Policy – Robustness Checks

Dependent variable: Social Expenditure				
Independent variables	I EQUAL	II PARTIES	III COMPETITION	IV EU
Social Expenditure _{t-1}	.918*** (.022)	.923*** (.022)	.922*** (.023)	.923*** (.023)
Trade Openness	-.013*** (.005)	-.013*** (.005)	-.013** (.005)	-.014*** (.005)
Left Government	.0007 (.001)	.0003 (.001)	.001 (.001)	.0007 (.001)
Institutions	-1.24** (.596)	-1.24** (.600)	-1.29** (.604)	-1.16* (.611)
GDP growth	-.078*** (.022)	-.079*** (.022)	-.079*** (.022)	-.078 (.022)
GDP per capita (log)	2.74e-05 (2.23e-05)	2.64e-05 (2.24e-05)	2.97e-05 (2.24e-05)	3.20e-05 (2.38e05)
Debt	-.003 (.003)	-.003 (.003)	-.003 (.003)	-.003 (.003)
Unemployment rate	-.080*** (.020)	-.081*** (.023)	-.082*** (.023)	-.078*** (.023)
Elderly population (65+)	.138*** (.032)	.141*** (.034)	.139*** (.033)	.142*** (.033)
Spatial Lag	-.093 (.062)	.019 (.032)	-.039 (.044)	.031 (.041)
Wald Chi2	1209.88***	1178.71***	1201.07***	1184.49***
N	546	546	546	546

Notes: All regressions include year and country dummies; those coefficient estimates are suppressed to conserve space. *** Significant at the .01 level; ** at the .05 level; * at the .10 level

(← Table A2 p. 137)