Guns and Butter?

Regime Competition and the Welfare State during the Cold War

By

Herbert Obinger & Carina Schmitt[*]

A final version of this paper has been published in

World Politics 63, no. 2 (April 2011), 246–70

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Abstract

Scholars from a number of disciplines have argued that the massive expansion of the welfare state in the post-war period was at least in some part a by-product of the Cold War and the associated political competition between two rival regime blocs. However, the question of whether regime competition fuelled welfare state growth has never been subject to systematic examination. Applying spatial econometrics, this paper offers the first empirical test of this argument. Our findings support the notion that regime competition stimulated the expansion of the welfare state on both sides of the Iron Curtain in the post-war period.

"Especially in the Cold War it is welfare state generosity that marshals the

biggest battalions"

Ludwig Preller (1953)

I. Introduction

"War is the father of all things". This famous statement by Heraclitus arguably holds true for the welfare state as well. For example, concerns on the part of national militaries regarding the wellbeing of young men were among the reasons for the introduction of health insurance and worker protection legislation in the late 19th century. In a similar vein, war was also considered 'good for babies and other young children'[1], as testified by the actions of British policymakers at the turn of the 20th century. Confronted by a decline in fertility and high infant mortality, they initiated various measures to improve the health of children with a view to maintaining Britain's Imperial status. Moreover, the devastating social repercussions of two world wars in the same century led to a significant increase in social spending in most of the combating nations.[2] Even in alleged welfare state laggards such as the U.S., Civil War paved the way for the social protection of soldiers and mothers.[3]

The strong historical relationship between warfare and welfare is uncontested. More interesting for contemporary scholarship on the post-war development of the welfare state is the proposition emanating from a variety of disciplines that similar effects were also apparent during the Cold

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[1] Dwork 1987.

[2] There are a variety of reasons for the positive impact of war on the provision of public welfare. Wars not only create objective social needs, they also change the subjective risk structure in a way that makes public welfare programs more popular. In addition, the volatility of financial markets in wartime makes private forms of social provision less attractive (Overbye 1995, 328). In fact, it is well documented that national solidarity increases during wars.

[3] Skocpol 1992.

War era.[4] More specifically, it has been argued that rivalry between the capitalist West and the communist Soviet Bloc was one of the factors stimulating the historically unprecedented expansion of the welfare state on both sides of the Iron Curtain in the post-war period. From a Western point of view, the expansion of the welfare state is seen as a by-product of the Cold War, a response on the part of the West to the challenge laid down by communism as an alternative social order.[5] Amongst the most impressive iterations of this hypothesis is to be found in the work of historian Eric Hobsbawm:

> "All that made Western democracy worth living for its people – social security, the welfare state, a high and rising income for its wage earners […] – is the result of fear. Fear of the poor, and the largest and best organized block of citizens – the workers; fear of an alternative that really existed and that could really spread, notably in the form of Soviet communism. Fear of the system's own instability. […]. Whatever Stalin did to the Russians, he was good for the common people in the West. It is no accident that the Keynes-Roosevelt way of saving capitalism concentrated on welfare and social security, on giving the poor money to spend, and on the central tenet of post-war Western policies – and one specifically targeted to the workers – full employment."[6]

There is, indeed, no question that the immediate post-war decades witnessed a significant rise of 'big government' in the West.[7] The legacy of World War II, notably the wartime expansion of state machinery[8], played an important role in this respect. Based on the so-called Keynesian post-war compromise, state intrusion into economic and social affairs gained in importance practically

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[4] e.g. Mishra 1993, 35; Goodman, Gordon and Kwon 1998, 15; Matzner 1998, 161, 175; Berend 2003, 19; Inglot 2008, 312; Hockerts 2009; Boyer 2009, 41.
[5] Mishra 1993, 35.
[6] Hobsbawm 1990, 21.
[7] Lindert 2004; Castles 2006.
[8] Klausen 1998.

everywhere, and Western welfare states thus entered their 'golden age'. Both the coverage and the scope of benefits offered by Western welfare states were massively expanded. As a consequence, total public social expenditure in 18 long-term members of the OECD increased from 10.6 per cent of GDP in 1960 to 21.5 per cent in 1990.[9]

But is regime competition really a causal factor behind the massive post-war growth of the welfare state, as Hobsbawm so eloquently argues? More generally, did the vice of a Cold War arms race and the associated political rivalry between the opposing blocs of East and West really turn into the virtue of a 'welfare race'?

Figure 1 displays average social spending levels as a percentage of GDP[10] for 16 West European and five Eastern Bloc countries between 1961 and 1989, while Figure 2 displays the annual change in social expenditure[11]. Overall, these figures support the notion that there was a welfare race between the Western democracies and the Eastern Bloc countries, since expenditure levels as well as the annual change in social spending show strong parallel development. In terms of spending levels, the Eastern Bloc was marginally ahead in the early 1960s, but the West outpaced the communist countries from the 1970s onwards. Social expenditure peaked in the early 1980s and declined thereafter until the collapse of 'real socialism' in 1989.

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[9] Castles 2006, 17.

[10] For the communist countries social expenditure is expressed as a percentage of the Net Material Product (NMP).

[11] Data is taken from the International Labour Office. The following nine spending items are included under the rubric of social expenditure: medical care, sickness, unemployment, old-age, employment injury, family, maternity, invalidity, and survivor's benefits, see ILO: The Cost of Social Security. Fourteenth International Inquiry, 1987-1989, Geneva 1996, p. 4.
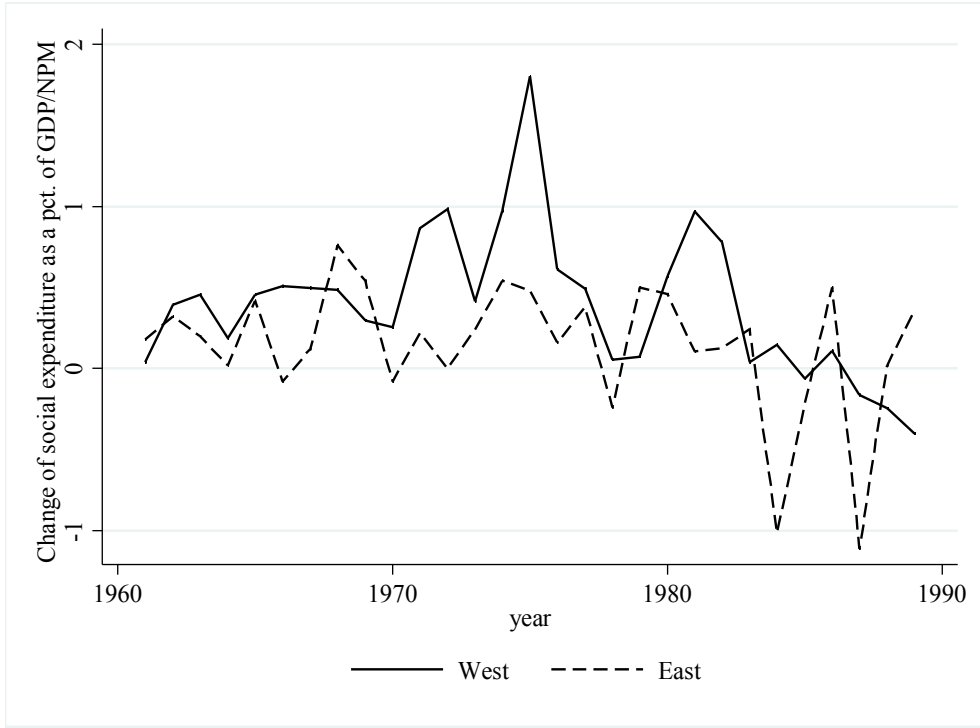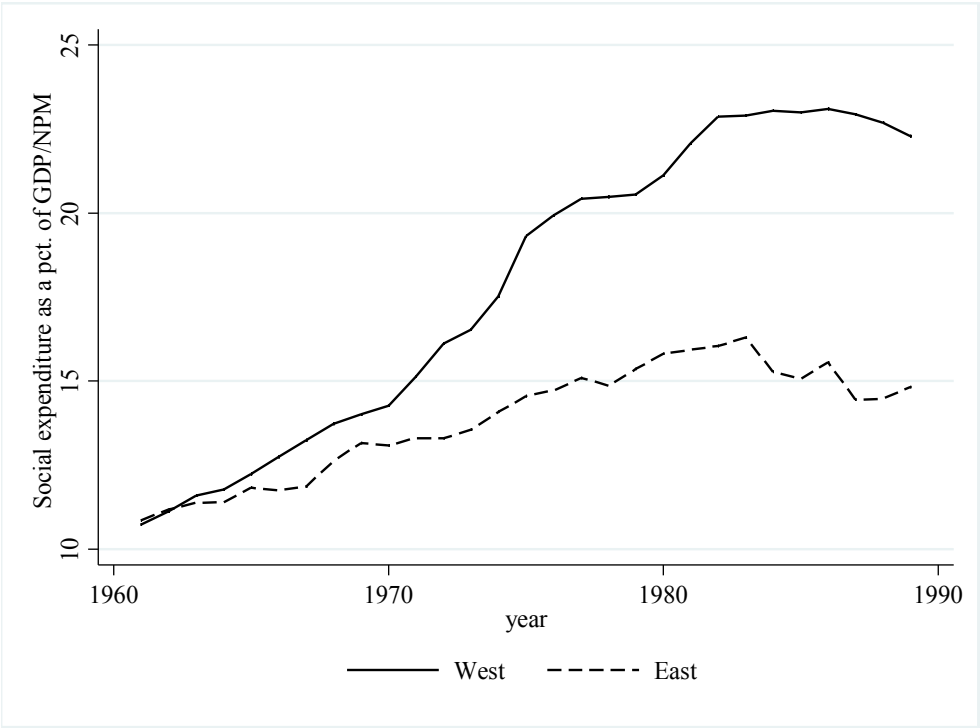
Interestingly, however, the question of whether regime competition fuelled welfare state growth has never been subject to systematic examination. Applying spatial econometrics, this paper offers the first empirical test of this argument. Our sample of countries includes five COMECON countries and 16 Western European nations, with the analysis covering the period between 1961 and 1989. The focus on Europe is based on the assumption that Europe was the main battleground of inter-regime competition during the Cold War. Our empirical findings lend support to the thesis that regime competition had a positive impact on welfare state growth. To demonstrate this we shall proceed as follows: In the next section we will discuss the basic arguments underlying the hypothesis that welfare state expansion in both blocs was driven in part by regime competition and we will shed light on the respective causal mechanisms. The data and the method employed are presented in section III, and the empirical analysis is outlined in section IV. This is then followed by our conclusions.

II. Regime competition and the welfare state: arguments and hypotheses

At its core, the idea of warfare-induced welfare state expansion assumes that the rivalry between the West and the Soviet Bloc during the Cold War was not solely rooted in military tensions and conflicting political ideologies. From this perspective, the Cold War is interpreted as a far more comprehensive conflict also including fierce economic and social competition between the West and the East. The resulting ambitions to outcompete the rival bloc in terms of economic performance and welfare provision and to flaunt the achievements of one's own political and economic regime were strongly driven by the vested interests of the political elites. Since domestic political stability was a prerequisite for succeeding in this conflict, governments of all

kinds were reliant on achieving mass compliance amongst their populations and gaining political legitimacy.

To this end, governments could either rely on strategies aimed at increasing input legitimacy, i.e. governance by the people, or they could formulate policies with a view to enhancing output legitimacy. The latter strategy is one premised on the idea of governance for the people, for example by embarking on a performance-oriented strategy to secure mass loyalty. In democratic political systems, of course, the adoption of a mixed strategy was also feasible. One classic instrument to enhance output legitimacy is the public provision of welfare benefits. Comparative welfare state research has convincingly demonstrated that the lack of political legitimacy in authoritarian regimes along with a growing working class were strong motivating factors in the welfare state formation of the late 19th century.[12] In Germany, for example, Bismarckian social insurance was enacted under a conservative autocratic elite in order to gain political loyalty in exchange for social privileges. German political elites considered a benevolent state to be an appropriate vehicle for the purposes of stabilizing the traditional political order and co-opting an increasingly radical working class.

In a similar vein, many scholars contend that a similar rationale was evident during the Cold War era. As Hobsbawm has argued above, fear was the crucial factor driving the welfare race between the two blocs. Its main impetus was rooted in the ambitions of the political elites to assure a stable and legitimate political order, which was a prerequisite for prevailing in the Cold War.

To date, however, comparative welfare state research has, if at all, been concerned with the impact of regime competition on Western welfare states. However, regime competition is by its very nature a mutual process. We therefore argue that we have to carefully distinguish between impacts running from East to West and influences running in the opposite direction. Moreover, it

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[12] Rimlinger 1971; Flora and Alber 1981.

is plausible that the pressures resulting from regime competition differed on each side of the Iron Curtain. It is therefore important to examine the causal mechanisms which may have triggered an international welfare race in more detail.

East-West influences

During the Cold War the West was confronted by communist regimes which claimed to have established a workers' paradise on earth. Socialist propaganda branded unemployment as an intrinsic property of capitalism and equated the nationalization of the means of production with the end of the exploitation of labor. Thus, under communism, the 'social question' was solved by way of definition: the class system was considered to vanish in the wake of a socialist revolution. However, in contrast to the official doctrine that socialism did not need a genuine social policy[13], the reality was very different. Many Soviet Bloc countries inherited Bismarckian social insurance systems, which were later remodeled and supplemented by social service provision under communist leadership.[14] While the replacement rates of cash benefits were, as a rule, lower than in the advanced Western nations, several communist countries made remarkable progress in terms of the cost-free provision of social services, notably in the realm of health care, child care, education and housing. As a result, social spending as a percentage of NMP was relatively high in communist countries, given their comparatively low level of economic development.[15] Moreover, convenience goods were heavily subsidized in the Soviet Bloc countries.[16] The overall

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[13] cf. Lampert 1989.

[14] Inglot 2008.

[15] Castles 1986. We want to emphasize that problems of validity exist associated with the use of GDP statistics for COMECON countries. The data used in this paper were compiled by Angus Maddison. For a critical discussion on potential pitfalls see the book review by Paul W. Rhode (*Journal of Economic History* 65, no. 1: 283-84) and the Economist's obituary on Angus Maddison (The Economist, 29th April, 2010). At this point social scientists are facing a dilemma. One may either abstain from empirical analysis at all, or opt for pragmatism and make these problems explicit. We chose the latter strategy and encourage readers to interpret the empirical findings carefully.

[16] In the German Democratic Republic, for example, about a quarter of total public expenditure in 1989 was devoted to the subsidization of convenience goods (Hockerts 1994, 795). Unfortunately, however, no cross-national data is

strength of the socialist welfare state was in its broad coverage of basic needs.[17] Arguably the strongest assets of the socialist regimes were their life-long job guarantee and their absence of visible unemployment. In the immediate post-war period in particular, when the traumatic experience of mass unemployment during the Great Depression still lingered in the minds of the people in the West, socialism represented a credible alternative to capitalism. The existence of a real social alternative abroad put Western governments under strain at home. This pressure was reinforced by Communist parties which gained considerable electoral support in a number of European countries such as France, Spain and Italy. One possible response to these challenges was to expand benefit levels and the personal coverage of the Western welfare state. This is exactly what German Social Democrat Ludwig Preller had in mind when he claimed in 1953 that the 'battalions' mobilized by welfare state generosity would play a decisive role in the outcome of the Cold War. A contemporary variant of this argument can be found in an entry of the 'Encyclopedia of the Cold War':

> "This prospect [i.e. the threat of a revolutionary transformation of social relations, *the authors*] spurred many governments in capitalist countries to adopt programs of social policy reform to address, in limited fashion, some concerns of the poor and working classes rather than see those concerns grow into fully blooming revolutionary demands. […] As a result, Western governments were compelled in some way to compete with the Soviet Union ideologically and socially rather than solely in military and political terms. A butter and guns policy saw social concessions at home accompany wars abroad"[18].

A corollary of this proposition is the assumption that the end of regime competition since the break-down of the socialist regimes has weakened the political status of the Western welfare

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available to measure this type of social policy intervention.
[17] Cook 2010, 673.
[18] Shantz 2008, 798.

state. While representing a kind of third way between state socialism and unrestrained capitalism during the Cold War, the welfare state is now the only alternative to unrestrained capitalism and therefore much more vulnerable to retrenchment.[19] In other words, the collapse of 'real socialism' has removed an important impetus for Western welfare state growth which existed in the aftermath of World War II.

West-East influences

With regard to communist countries it is arguable that the need to enhance output legitimacy and to co-opt the people was even more compelling.[20] Pressure to enhance social protection also resulted from other challenges related to regime rivalry which were of much less importance in the Western democratic setting.

The capitalist economies of the West significantly outperformed the planned economies in terms of productivity and output growth.[21] The resulting much higher standard of living in the West was, however, an important point of reference for the people in the socialist countries which they used to compare with their own economic situation: "The prosperity of the West became known and envied. The comparison was humiliating, and it seemed to be out of reach".[22] Economic scarcity and the fear of falling further behind in economic terms thus constituted a potential source of political and social unrest. This threat to the communist regimes was real, as the uprisings in the German Democratic Republic (1953), Hungary (1956), and Czechoslovakia (1968) clearly illustrated. Since communist leaders lacked democratic input legitimacy, they faced particularly strong pressure to generate mass loyalty through the provision of benefits and

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[19] Nullmeier and Kaufmann 2010, 86.
[20] Hockerts 1994, 795ff; Inglot 2008, chap. 3.
[21] Maddison 1995.
[22] Berend 2009, 39.

social services. Indeed, the 1970s were characterized by an expansion of social policy in Eastern Europe and witnessed increased efforts to enhance these regimes' consumer orientation.[23] At that time, the initial hope to outpace the West in economic terms increasingly turned out to be an illusion, since the gap in economic affluence widened considerably. As a consequence, social policy was discovered as an important strategy for stabilizing the political system. In the wake of the XXIV party conference of the Soviet Communist Party held in 1971, the Soviet Union pressured the COMECON countries to enhance social security provision.[24] Poland is a clear case in point. In the wake of several months of social unrest in 1971, the Polish communist regime strengthened efforts to expand the 'socialist welfare state'. Leonid Brezhnev himself urged the Polish leaders "to learn from the example of other 'socialist' countries and generate support for the regime by modernizing its social policies".[25] Similar effects can be observed in the German Democratic Republic where Walter Ulbricht was replaced by Erich Honecker – an intimate of Brezhnev. Whereas social policy was clearly subordinate to the imperatives of economic development during the Ulbricht era, the Honecker regime promoted mass consumption and social policy under the slogan "unity of social and economic policy", which was coined in 1976.[26] A further motive for expanding social protection is likely to have been the need to prevent labor force migration to the West. Labor shortages were a frequent and widespread problem in the COMECON countries. The phenomenon of people voting with their feet therefore raised serious economic as well as demographic problems in the Eastern Bloc. For example, about 3.6 million mostly younger and highly-skilled people left the GDR and relocated to West Germany before the Berlin Wall was built in 1961. While the Berlin Wall was a radical step to halt migration to

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[23] Inglot 2008, 207; Schmidt 2004.
[24] Boyer 2005, 159.
[25] Inglot 2008, 165.
[26] Lampert 1989; Hockerts 1994.

the West, welfare provision was a far less totalitarian option for increasing the bonds between the people and the regime.

Finally, social provision empowered the state and the Communist Party to exercise social control through the benefit structure and the day-to-day administration of social programs. Whereas the local administration of social benefits provided an excellent instrument for increasing contact between the party and the laboring masses[27], the benefit structure was designed in a way to strengthen the loyalty of the security forces and the supporters of the regime. It is well known that members of the armed forces, police, and secret service as well as the nomenklatura benefited from numerous social privileges such as higher pensions.[28]

Hypotheses

While issues of legitimacy and system stabilization connected to regime competition seem to be relevant in the West and East alike, we assume that the impact of regime competition on the provision of social welfare may depend on the geographical position of a country. We postulate that regime rivalry was likely to be of greater intensity in countries located in close proximity to the rival bloc due to higher levels of cross-border communication. For example, many people in the East were able to watch Western TV programs from neighboring countries. Social regime competition was arguably of greater relevance in countries such as Austria, Finland or West Germany, which shared a physical border with COMECON countries. Moreover, we argue that big economies should have exerted a stronger influence on the rival bloc's welfare activities than smaller economies. For example, the Soviet Union's social policy commitment was arguably the main point of reference for the West.

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[27] Rimlinger 1971, 340.
[28] von Beyme 1977, 60; Schmidt 2004; Inglot 2008.

In sum, we can derive three hypotheses from our previous considerations. The main hypothesis states that social regime competition during the Cold War stimulated a welfare race in which the nations affiliated to one bloc attempted to outcompete their counterparts (H1). This impact, if it is present, ought to be stronger in countries which are located in close geographical proximity to the rival bloc (H2). Our third hypothesis (H3) postulates that the impact a country has on welfare activities in the rival bloc depends on the extent of its national economic power.

III. Data and method

As mentioned above, we are not aware of any econometric study which has analyzed the impact of regime competition on welfare state expansion. Even the best econometric studies on the determinants of post-war welfare state growth in advanced democracies do not account for the possible effects of regime competition.[29]

However, regime competition is, if anything, just one determinant among a broad set of causal factors driving welfare state expansion. Multiple regression analysis enables us to discern the partial effect of regime competition on the welfare state expansion since we can account for a battery of domestic determinants of welfare state expansion.

Our dependent variable is the annual change in social expenditure as a percentage of GDP. The sample includes 16 Western European and five COMECON countries which are examined over the period between 1961 and the end of the Cold War in 1989.[30]

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[29] Note that the studies by Huber, Ragin and Stephens 1993 and Hicks and Misra 1993 control for military expenditure. However, in their studies, this is theoretically not linked to system competition but rather framed with the guns-butter trade-off, i.e. the rivalry for fiscal resources (Huber, Ragin and Stephens 1993, 723; Hicks and Misra 1993, 677; Pampel and Williamson 1988; Hicks and Swank 1992; Huber and Stephens 2001).

[30] The 16 West European countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom. The five COMECON countries include Bulgaria, Czechoslovakia, the USSR, Hungary and Poland. Since social expenditure data for the 1950s are lacking for most communist countries, we have to restrict ourselves to the period from 1960 onwards. Unfortunately, no data is available for the German Democratic Republic and Romania for the 1960s. Hence these countries were excluded from the sample. Since case study evidence for divided Germany strongly supports that

According to our main hypothesis, social policy development on both sides of the Iron Curtain is driven by the welfare efforts of the rival bloc. Spatial econometrics offers an appropriate set of techniques to model such interdependences.[31] In general, spatial interdependences can be modeled in two ways. First, spatial error models treat spherical interdependence as a nuisance and relegate it to the stochastic component of the regression model. Standard error estimates are corrected to account for non-spherical disturbances. Second, spatial interdependences can be modeled by including a spatial term as a regressor (spatial lag model).[32] In our paper, we explicitly focus on the interdependences between Western and Eastern countries. Hence, we use spatial lag models.[33] Our model can be expressed as follows

(1) $\Delta Y = \rho Wy + X\beta + \varepsilon$

where ΔY denotes the annual change in social spending, ρ is a spatial autoregressive coefficient and Wy the weighted average of the dependent variable (spatial lag). The spatial weight matrix W (NxNxT) reflects the relative connectivity of each country i to every other country j at time t. X is a set of exogenous right-hand side variables. In the empirical analyses, we specify three different spatial weight matrices. The first matrix weights the welfare efforts of the rival bloc equally. Since we have argued that the impact of regime competition on social provision depends on the geographical position of a country (H2), the second matrix weights the social spending of the rival bloc by the inverse distance between the countries' capitals. According to our third

hypothesis, the impact of a country on the welfare efforts in the countries of the rival bloc increases with the size of the national economy. Thus, social expenditure is weighted by the level of GDP in the third matrix. In all matrices the national welfare efforts are weighted in such a way that the weight is zero if two countries belong to the same regime type. Following the spatial econometrics literature, we row standardize both weight matrices to sum one for each row.

In the empirical analysis we proceed as follows. In a first step, we estimate the impact of regime competition on welfare provision for the sample including the 16 Western countries plus five COMECON countries. Since we do not know whether the welfare race took place simultaneously or with a time lag, we test for instantaneous (models I - III) and temporally lagged spatial interdependence (models IV - VI). The findings are presented in Table 1.

In a second step, we estimate several models to check the sensitivity and the robustness of our results (cf. Table 2). Model I provides an estimation for a more comprehensive sample that also includes non-European OECD democracies.[34] To control for the possibility of internal diffusion processes within each bloc, model II includes a spatial lag which only weights the welfare activities of the countries belonging to the same bloc. In addition, we also test for temporal slope heterogeneity, i.e. whether the relevance of regime competition varies over time (model III). We therefore estimate interaction effects between ten-year time periods and the regime competition variable. Since data availability with respect to the control variables is highly limited for the Eastern countries, models IV to VI analyze the influence of the Soviet Bloc countries on the 16 Western nations by using a more comprehensive set of controls. Finally, model VI examines whether regime competition was reinforced by the presence of a strong Communist Party in Western countries.

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[34] Australia, Canada, Japan, New Zealand and the United States of America.

The estimation of instantaneous spatial interdependences causes several methodological problems. Since the spatial lag on the right-hand side of the equation is a weighted average of the left-hand side variable, spatial OLS estimations are inconsistent and affected by simultaneity bias. This is because the spatial lags are endogenous and co-vary with the residuals. To deal with this problem, we follow Hays (2009) and Franzese and Hays (2007, 2008) by estimating spatial maximum likelihood models. Spatial maximum likelihood estimation provides consistent and asymptotically efficient parameter estimates in case of instantaneous interdependences.[35] Since it is plausible that the policies influence each other with a time lag, we also run regressions using a one year lagged spatial lag. The models with a temporally lagged spatial lag are not affected by simultaneity bias and can therefore be estimated by spatial OLS regressions.

In all models examining the influence of regime competition in both directions, we include the following control variables: We test for beta convergence and catch-up effects by integrating a first order temporally lagged level of social expenditure. This variable maps different degrees of welfare state maturation which, in turn, results from cross-national differences in the timing of welfare state consolidation. To capture the level of economic development we use GDP per capita expressed in international dollars. This variable was emphasized by an earlier generation of functionalist accounts suggesting that social expenditure is a reflection of a country's level of economic development.[36] The theoretical assumption is that rising economic wealth should lead to higher expenditure. Since social spending is sensitive to the business cycle, we also use the annual rate of economic growth as a control. We expect that social spending declines in periods of economic booms and vice versa. The demographic situation of a country, likewise a variable

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[35] Franzese and Hays 2007, 2008.
[36] Wilensky 1975; Zöllner 1963.

emphasized by functionalist accounts, is measured by the elderly population (65+) as a percentage of the total population. We assume this to have a positive impact on spending since the graying of society affects the largest components of social security expenditure. Moreover, we include the level and the change of the economically active population relative to the total population of a country. Theoretically, we expect a negative coefficient both for high levels as well as for an increase of employment since the need for social provision is reduced.

The more comprehensive models examining the impact of communist welfare provision on spending in Western countries are estimated by spatial OLS and include a broader set of control variables. The change in the level of unemployment as a percentage of the civilian labor force is a measure of social needs. We thus expect a positive impact on spending. 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 that a negative coefficient is expected. The influence of leftist and Christian-democratic parties – both party families with a strong pro-welfare state orientation – is measured by the percentage of cabinet seats held by these parties. Finally, we take account of the trade openness of the economy. In accordance with Cameron's compensation argument[37], we expect this to have a positive impact on social spending. The measurement of all variables is described in detail in Table A1.

Since the models applying spatial OLS regression are likely to be afflicted with several pitfalls, some diagnostic tests are in order. To rule out autocorrelation, the residuals were regressed with an auxiliary OLS regression on all independent variables including the lagged residuals. Since the

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[37] Cameron 1978.

coefficients remain insignificant, the null hypothesis of independent residuals cannot be rejected. In addition, we performed an augmented Dickey-Fuller test to check for stationarity. The null hypothesis of non-stationarity can be rejected for the change of social expenditure. Multicollinearity was checked with pairwise correlations of the independent variables which indicate only a strong correlation between for the size of the elderly population and the GDP per capita. Since we do not aim to interpret the coefficients of these variables, both of them are included. To test for heteroscedasticity, we performed the White test. We deal with heteroscedasticity by estimating the models with robust standard errors. To cope with unobserved heterogeneity, we estimate country fixed-effects models. Finally, jacknifing indicates no severe outliers or influential cases.

IV. Empirical findings

Table 1 shows the empirical results for the whole sample including 21 countries from the West and from the COMECON. The empirical results support our main hypothesis (H1). With the exception of model II, the coefficients of the regime competition variable are significant at least at the five per cent level. Regime competition therefore does indeed seem to have been one of the main driving forces behind welfare state expansion on both sides of the Iron Curtain during the Cold War period. Besides this general finding, a closer look at the empirical results reveals even more interesting details. Our theoretical assumption that the importance of regime competition varies with the geographical distance between the countries of the respective rival blocs is not backed up by the empirical evidence. Even though the coefficients show the correct sign, the models including a spatial lag weighted by the distances between Eastern and Western countries perform worse compared to the basic model, which weights the welfare activities of the rival

blocs equally. As the figures show, regime rivalry is not of greater relevance in countries located in close physical proximity to the rival bloc than in those which are located far away. This holds especially true for model II, which analyzes the instantaneous effect. The results for the third hypothesis are somewhat ambiguous. The estimated coefficient is significant but less substantive compared to the models with equally weighted spatial lags.

Moreover, the results suggest that the two blocs influenced each other with a temporal lag. The coefficients in models III and IV, which include a one year spatial lag, indicate a more substantial effect for the regime competition variable than the spatial maximum likelihood estimations which assume a simultaneous effect.[38] This is very plausible from a theoretical point of view as it takes time until social policy measures materialize in social spending (with social spending representing the most visible benchmark of a nation's welfare activities).

The findings for the control variables are in line with the conventional wisdom of comparative welfare state research as most coefficients show the theoretically expected sign. The estimated effect for the lagged level of social expenditure is indicative of a catch-up of spending laggards. Furthermore, a low level of economic growth appears to increase the need for the provision of social welfare, while economic wealth provides the resources required for this. The coefficients for the size of the elderly population[39] and the employment variables, however, remain statistically insignificant.

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[38] Due to different estimation techniques the results cannot be strictly compared. They can only indicate tendencies about the relative importance of particular effects.

[39] This is likely a consequence of multicollinearity. As already mentioned, the variable is strongly correlated with the level of economic development.

In a second step, we estimate several model specifications to check the robustness of our results (cf. Table 2). For reasons of space, we shall only report on the models including the lagged regime competition variable that also give equal weight to the influence of the countries in the rival bloc. Model I corroborates H1 for a bigger sample that also includes the non-European democracies. The results are in line with the findings reported in Table 1. Model II includes the spatial lag that captures possible internal diffusion processes within a given bloc. The coefficient of this diffusion variable turns out to be statistically significant. However, regime competition remains significant even if diffusion mechanisms between countries of the same bloc are controlled for. It is worth noting that the correlation between the two spatial lags which capture regime competition and internal diffusion processes within each bloc is relatively low (r = .26). This suggests that regime competition has to be set apart from other general diffusion processes. Model III tests the relevance of regime competition over time by estimating interaction effects between ten-year period dummies and the spatial lag variable. According to our findings, system competition fuelled welfare state growth in the 1970s in particular. The coefficient is significant at the 1% level. In the 1980s, by contrast, the substantive effect and the efficiency of the coefficient is lower. Surprisingly, a negative but insignificant effect can be detected for the 1960s. The empirical evidence suggests that the welfare state was not a battleground of regime competition in this decade. One explanation might be that regime competition was mainly driven by military concerns in the 1960s, while the policy of détente spurred regime competition by other means in the 1970s.

Models IV to VI analyze the impact that the five COMECON countries had on welfare activities in Western Europe. Given the much better data availability for the Western nations, the models include a broader set of control variables and therefore allow for a further test of robustness.

Model IV suggests that regime competition does not play a crucial role for Western countries. However, if the period-specific effects are considered, regime competition again turns out to be highly relevant, even if the effects of the most important explanatory factors discussed in comparative welfare state research are accounted for. As the data reveals, the impact on Western social welfare activities which was triggered by a change in social spending in the Eastern Bloc was once again strong in the 1970s and negative in the 1960s. Furthermore, the evidence shows that regime competition was not reinforced by the presence of a strong Communist Party in Western nations (cf. model VI).

Most of the coefficients of the control variables show the theoretically expected signs. Having many institutional veto points leads to low annual changes in social expenditure, while social spending increases with increasing unemployment and industrial employment. Somewhat surprisingly, the partisan complexion of government does not appear to exert a significant influence.

We also checked for parameter instability and heterogeneity across space, as it can be argued that regime competition is less relevant in particular regions, such as in Southern Europe. However, our results do not indicate the existence of group specific slopes. Furthermore, several trend variables were included to test whether the results for the regime competition variable are generated by a common trend. On the basis of our findings this assumption can be rejected.

We also controlled for the repercussions of the 1970s oil crises on social expenditure. However, the effect of the regime competition variable remains stable if we include dummies for the period following the two oil crises (not reported).

In sum, the empirical results reported in Table 2 lend support to the idea that regime competition was relevant for welfare state development on both sides of the Iron Curtain. Three empirical

findings stand out. First, the existence of an alternative to socialism or capitalism seems to be an important determinant of the expansion of the welfare state in the two blocs. Second, the effects of geographical proximity and the size of the economy are not in line with our theoretical expectations. Finally, the welfare race was most pronounced in the 1970s.

V. Conclusion

Scholars from a number of disciplines have argued that the massive expansion of the welfare state in the post-war period was at least in some part a by-product of the Cold War and the associated political competition between two rival regime blocs. Though this argument has often been noted in the literature, it has never been subject to empirical inquiry. This paper offered the first systematic empirical test of this hypothesis. We have discussed the causal mechanisms underlying social regime competition and used spatial econometrics to examine the notion of a welfare race for a broader set of countries. The macro-quantitative evidence is supportive of this argument. Hence, the Cold War and the concomitant nuclear deterrence had a positive 'fall-out', at least for supporters of the welfare state. Stalin was, it would seem, not only good for the common people in the West, as Eric Hobsbawm has claimed; those who embrace common liberal democratic norms can also argue that regime competition in its broadest sense was also good for the common people in communist countries, at least in the long-run. Regime competition and the resulting pressure to expand welfare provision in the Eastern Bloc countries put a heavy burden on the already malfunctioning socialist economies with far-reaching long-term consequences. The 1970s in particular witnessed a significant expansion of social policy in the Eastern Bloc and it was, in fact, this decade when social regime competition was most pronounced according to our empirical findings. However, these welfare efforts led to 'premature welfare states' which were

out of all proportion to the given country's resources and the fiscal capacity of the state.[40] In fact, many historians[41] argue that the socialist economies were running into serious economic troubles as a consequence of intense military *and* social regime competition, which eventually contributed to the breakdown of the socialist regimes and the rise of liberal democracy.

[40] Kornai 1997.
[41] For the GDR see Hockerts 2009.

References

Anselin, Luc. 1988. *Spatial Econometrics. Methods and Models.* Dordrecht: Kluwer Academic.

---. 2003. "Spatial Externalities, Spatial Multipliers, and Spatial Econometrics." *International Regional Science Review* 26, no. 2: 153-66.

Anselin, Luc, Anil K. Bera, Raymond Florax, and Mann J. Yoon. 1996. "Simple Diagnostic Tests for Spatial Dependence." *Regional Science and Urban Economics* 26, no. 1: 77-104.

Armingeon, Klaus, Philipp Leimgruber, Michelle Beyeler, and Sarah Menegale. 2008. *Comparative Political Data Set 1960-2006.* Institute of Political Science, University of Bern.

Berend, Iván T. 2003. "The Welfare State: Crisis and Solutions," *Begegnungen. Schriftenreihe des Europa Instituts Budapest* 19: 17-23.

Berend, Iván T. 2009. *From the Soviet Bloc to the European Union. The Economic and Social Transformation of Central and Eastern Europe Since 1973.* Cambridge: Cambridge University Press.

Beyme, Klaus von. 1977. *Sozialismus oder Wohlfahrtsstaat?* [Socialism or Welfare State?]. Munich: Piper.

Boyer, Christoph. 2005. „Verflechtung und Abgrenzung: Sozial- und konsumpolitische Beziehungen im RGW", In Dierk Hoffmann, and Michael Schwartz, eds., *Sozialstaatlichkeit in der DDR. Sozialpolitische Entwicklungen im Spannungsfeld von Diktatur und Gesellschaft 1945/49-1989*. Munich: Oldenburg: 151-174.

---. 2009. „Lange Entwicklungslinien europäischer Sozialpolitik im 20. Jahrhundert. Eine Annäherung." *Archiv für Sozialgeschichte* 49: 25-62.

Cameron, David. 1978. "The Expansion of the Public Economy: A Comparative Analysis." *American Political Science Review* 72, no. 4: 1243-61.

Castles, Francis G. 1986. "Whatever Happened to the Communist Welfare State?" *Studies in Comparative Communism* 19, no. 3-4: 213-226.

---. 2006: "The Growth of the Post-war Public Expenditure State. Long-Term Trajectories and Recent Trends". *Transtate Working Paper No 35*. University of Bremen.

Cook, Linda J. 2010. "Eastern Europe and Russia". In Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, and Christopher Pierson, eds., *Oxford Handbook of the Welfare State.* Oxford: Oxford University Press: 728-743.

Dwork, Deborah. 1987. *War is Good for Babies and other Young Children: A History of the Infant and Child Welfare Movement in England, 1898-1918*. London: Tavistock.

Fingleton, Bernard. 2009. "Prediction Using Panel Data Regression with Spatial Random Effects." *International Regional Science Review* 32, no. 2: 195-220.

Fingleton, Bernard, and Julie Le Gallo. 2008. "Estimating Spatial Models with Endogenous Variables, a Spatial Lag and Spatially Dependent Disturbances: Finite Sample Properties." *Papers in Regional Science* 87, no. 3: 319-39.

Flora, Peter, and Jens Alber. 1981. "Modernization, Democratization, and the Development of Welfare States in Western Europe." In Peter Flora, and Arnold Heidenheimer, eds., *The Development of Welfare States in Europe and America.* New Brunswick: Transaction Books: 37-80.

Franzese, Robert J., and Jude C. Hays. 2007. "Spatial Econometric Models of Cross-Sectional Interdependence in Political Science Panel Data and Time-Series-Cross-Section Data." *Political Analysis* 15, no. 2: 140-64.

---. 2008. "Interdependence in Comparative Politics: Substance, Theory, Empirics, Substance." *Comparative Political Studies* 41, no. 4-5: 724-79.

Goodman, Roger, Gordon White, and Huck-ju Kwon. 1998. *The East Asian Welfare Model. Welfare Orientalism and the State.* London: Routledge.

Hays, Jude C. 2009: *Globalization and the New Politics of Embedded Liberalism*. Oxford: Oxford University Press.

Henisz, Witold J. 2002. "The Institutional Environment for Infrastructure Investment." *Industrial and Corporate Change* 11, no. 2: 355-389.

Henisz, Witold J. 2010. *The Political Constraint Index (POLCON) Dataset*. http://www-management.wharton.upenn.edu/henisz/

Heston, Alan, Robert Summers, and Bettina Aten. 2006. *Penn World Table Version 6.2*. Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania.

---. 2009. *Penn World Table Version 6.3*. Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania.

Hicks, Alexander M., and Duane H. Swank. 1992. "Politics, Institutions, and Welfare Spending in Industrialized Democracies, 1960-82." *American Political Science Review* 86, no. 3: 658-674.

Hicks, Alexander, and Joya Misra. 1993. "Political Resources and the Growth of Welfare in Affluent Capitalist Democracies, 1960-1982." *American Journal of Sociology* 99, no. 3: 668-710.

Hobsbawm, Eric. 1990. "Goodbye To All That." *Marxism Today* (October): 18-23.

Hockerts, Hans Günter. 1994. "Soziale Errungenschaften? Zum sozialpolitischen Legitimitätsanspruch der zweiten deutschen Diktatur." In Jürgen Kocka, Hans-Jürgen Puhle, and Klaus Tenfelde, eds., *Von der Arbeiterbewegung zum modernen Sozialstaat* [From the Labour Movement to the Modern Welfare State]. Munich: Saur, 790-804.

---. 2009. "West und Ost – Vergleich der Sozialpolitik in den beiden deutschen Staaten." *Zeitschrift für Sozialreform* 55, no. 1: 41-56.

Huber, Evelyne, Charles Ragin, and John D. Stephens. 1993. "Social Democracy, Christian Democracy, Constitutional Structure, and the Welfare State." *American Journal of Sociology* 99, no. 3: 711-749.

Huber, Evelyne, and John D. Stephens. 2001. *Development and Crisis of the Welfare State*. *Parties and Policies in Global Markets*. Chicago: The University of Chicago Press.

ILO (International Labour Organisation). *Yearbook of Labour Statistics*. Various issues. Geneva: ILO.

---. *The Cost of Social Security.* Various issues. Geneva: ILO.

Klausen, Jytte. 1998. *War and Welfare: Europe and the United States, 1945 to the Present*. Houndmills: Macmillan.

Kornai, János. 1997. "Reforming the Welfare State in Postsocialist Societies." *World Development* 25, no. 8: 1183-86.

Lampert, Heinz. 1989. "Theorie und Praxis der Sozialpolitik der DDR." *Arbeitsberichte zum Systemvergleich Nr. 13*, Forschungsstelle zum Vergleich wirtschaftlicher Lenkungssysteme, University of Marburg.

Lindert, Peter H. 2004. *Growing Public. Social Spending and Economic Growth since the Eighteenth Century.* Cambridge: Cambridge University Press, 2 vols.

Mackie, Thomas T. and Richard Rose. 1991. *The International Almanach of Electoral History,* 3rd Edition, Houndsmill: Macmillan.

Maddison, Angus. 1995. *Monitoring the World Economy. 1820-1992*. Paris: OECD.

Matzner, Egon. 1998. "The Crisis of the Welfare State: a Game-theoretic Interpretation." In Henri Cavanna, ed., *Challenges to the Welfare State: Internal and External Dynamics for Change.* Cheltenham: E. Elgar: 154-187.

Mishra, Ramesh. 1993. "Social Policy in the Postmodern World. The Welfare State in Europe by Comparison with North America." In Catherine Jones, ed., *Perspectives on the Welfare State in Europe.* London: Routledge, 18-42.

Mitchell, Brian R. 2007. *International Historical Statistics. Europe 1750-2005,* 6th edition. Houndmills: Palgrave.

Nullmeier, Frank, and Franz-Xaver Kaufmann. 2010. "Post-war Welfare State Development". In Francis G. Castles, Stephan Leibfried, Jane Lewis, Herbert Obinger, and Christopher Pierson, eds., *Oxford Handbook of the Welfare State.* Oxford: Oxford University Press: 83-104.

Overbye, Einar. 1995. "Explaining Welfare Spending." *Public Choice* 83, no. 3-4: 313-35.

Pampel, Fred, and John B. Williamson. 1988. "Welfare Spending in Advanced Industrial Democracies, 1950-80." *American Journal of Sociology* 93, no. 6: 1424-56.

Rimlinger, Gaston V. 1971. *Welfare Policy and Industrialization in Europe, America, and Russia*. New York: John Wiley & Sons.

Schmidt, Manfred G. 2004. *Sozialpolitik der DDR* [Social Policy in the GDR]. Wiesbaden: Verlag für Sozialwissenschaften.

Shantz, Jeff. 2008. "Social Policy." In Ruud van Dijk, ed., *Encyclopedia of the Cold War*. New York: Routledge, vol. 2, 797-799.

Skocpol, Theda. 1992. *Protecting Soldiers and Mothers. The Political Origins of Social Policy in the United States.* Cambridge: Harvard University Press.

United Nations. *Demographic Yearbook*, various issues. New York: UN.

Wilensky, Harold. 1975. *The Welfare State and Equality.* Berkeley: University of California Press.

Zöllner, Detlev. 1963. *Öffentliche Sozialleistungen und wirtschaftliche Entwicklung. Ein zeitlicher und internationaler Vergleich* [Public Welfare and Economic Development. A Chronological and International Comparison]. Berlin: Duncker & Humblot.

Table A1: Measurement of the variables

Variable	Description	Source
Δ Social Expenditure	Annual change of social expenditures as a percentage of GDP/NMP	ILO: The Cost of Social Security, various issues
Social Expenditure$_{t-1}$	Level of social expenditure as a percentage of GDP/NMP at t-1	ILO: The Cost of Social Security, various issues
GDP per capita	GDP per capita in 1990 Geary-Khamis Dollars	Maddison 1995
GDP growth	Growth rate of GDP per capita in 1990 Geary-Khamis Dollars	Maddison 1995
Employment rate	Ratio of civilian employment as a percentage of the total population	*Data on civilian employment:* Western countries: Armingeon et al. 2008 Eastern countries: ILO: Yearbook of Labour Statistics, various issues; Mitchell 2007 *Data on population:* Western countries: Heston et al. 2006 West Germany and Eastern countries: Maddison 1995
Elderly population (65+)	Elderly population aged 65 and over as a percentage of the total population	*Data on elderly*: Western countries: Armingeon et al. 2008 Eastern countries: Poland, Hungary, Bulgaria: World Population Prospects 2008 http://esa.un.org/unpp; CSSR: Mitchell 2007 USSR: United Nations Demographic Yearbook, various issues *Data on population*: see employment rate
Industrial employment	Civilian employment in industry as a percentage of the civilian labor force	Armingeon et al. 2008
Unemployment rate	Rrate of unemployment as a percentage of the civilian labor force	Armingeon et al. 2008
Openness	Sum of exports and imports as a percentage of the GDP	Heston et al. 2009
Welfare parties	Cabinet seats of centrist and leftist parties as a percentage of total cabinet posts (weighted by days)	Armingeon et al. 2008
Communist Party	Percentage of votes for Communist parties	Mackie and Rose 1991
Institutions	POLCONIII: Index of political constraints which estimates the feasibility of policy change. For details see Henisz 2002	Henisz 2010

Note: For the annual change of social expenditure in percentage of the GDP/NMP, the following values are missing: Belgium 1987-1989, Bulgaria 1960, Hungary 1960 and 1987-1989, Italy 1978/79 and 1984-1986, Norway 1987, Poland 1981-1983, Portugal 1977, Spain 1967-1974, Greece 1960, 1986, 1989. Regarding the rate of employment, the missings are Poland 1962-1969, USSR 1961-1963 and Bulgaria 1987. With respect to the number of persons 65+, for Poland, Bulgaria and Hungary only data in five year periods, for the CSSR, values for 1961, 1970, 1980 and 1990 and for USSR values for 1961, 1970, 1973, and 1987 are available. All missing values were estimated by assuming a linear trend.

Table 1: Regime competition between Eastern and Western countries – Basic Results

Dependent variable: Δ Social expenditure

	(I) S-ML	(II) S-ML	(III) S-ML	(IV) S-OLS	(V) S-OLS	(VI) S-OLS
Social Expenditure$_{t-1}$	-.108(.017)***	-.109(.018)***	-.109(.017)***	-.110(.018)***	-.111(.018)***	-.112(.018)***
GDP per capita	8.45e-05(4.22e-05)*	8.38e-05(4.23e-05)*	8.82e-05(4.22e-05)*	.0001(4.36e-05)*	9.83e-05(4.35e-05)*	9.53(4.36)*
GDP growth	-9.34(1.53)***	-9.37(1.53)***	-9.21(1.53)***	-9.21(1.57)***	-9.15(1.57)***	-9.47(1.57)***
Employment rate	-2.53(1.48)	-2.55(1.48)	-2.47(1.48)	-2.64(1.51)	-2.62(1.51)	-2.57(1.52)
Δ Employment rate	.166(5.73)	.124(5.75)	1.38(5.74)	-.450(5.86)	-.465(5.86)	.0006(5.87)
Elderly population (65+)	4.78(5.91)	4.89(5.93)	4.84(5.90)	4.01(6.05)	4.30(6.05)	4.51(6.06)
Regime competition						
Equal weigthed	.162(.074)*					
Distance weighted		.108(.071)				
GDP weighted			.126(.047)**			
Regime competition$_{t-1}$						
Equal weighted				.281(.095)**		
Distance weighted					.256(.091)**	
GDP weighted						.118(.051)**
N	588	588	588	588	588	588
F				4.50***	4.46***	4.34***
Wald Chi2	111.14***	111.83***	109.63***			

Note: The fixed effects are suppressed to conserve space. Robust standard errors are in parentheses: *** p, z < .001, ** p, z < .01, * p, z < .05

Table 2: Regime competition between Eastern and Western countries – Robustness Checks

Dependent variable: Δ Social expenditure

	(I) S-ML LARGE SAMPLE	(II) S-ML INTERNAL DIFFUSION	(III) S-OLS PERIOD EFFECTS	(V) S-OLS EAST-WEST INFLUENCE	(V) S-OLS EAST-WEST INFLUENCE	(VI) S-OLS EAST-WEST INFLUENCE
Social Expenditure$_{t-1}$	-.084(.015)***	.108(.017)***	-.116(.019)***	-.093(.018)***	-.110(.024)***	-.100(.024)***
GDP per capita	-5.79e-06(1.58e-05)	.0001(4.23e-05)*	.0001(4.56e-05)*	1.44e-05(2.05e-05)	6.31e-05(5.02e-05)	5.76e-05(5.43e-05)
GDP growth	-8.20(1.61)***	-8.62(1.54)***	-8.94(1.64)***	-5.99(1.65)***	-5.45(2.01)**	-6.39(2.03)**
Employment rate	-1.91(1.32)	-2.40(1.47)	-2.35(1.63)	-	-	-
Δ Employment rate	-2.73(5.03)	.261(5.70)	.868(5.96)	-	-	-
Industrial employment	-	-	-	1.03(1.09)	.974(1.27)	.802(1.30)
Δ Unemployment rate	-	-	-	-.030(.021)	.246(.063)***	.278(.063)***
Unemployment rate	-	-	-	.263(.053)***	-.017(.024)	-.028(.024)
Elderly population (65+)	13.78(4.05)***	4.27(5.87)	.683(6.61)	11.53(5.06)*	6.03(7.43)	8.34(7.69)
Openness	-	-	-	.013(.006)*	.006(.007)	.009(.007)
Welfare parties	-	-	-	.0002(.001)	-.0003(.002)	2.02e-06(.002)
Institutions	-	-	-	-.148(.466)	-.018(.498)	-.076(.575)
Bloc Internal Diffusion	-	.160(.071)*	-			-
Communist Party						-.003(.018)
Regime competition$_{t-1}$ x Communist Party						-.001(.012)
Regime competition$_{t-1}$	.187(.074)**	.231(.662)**		.062(.061)		.154(.118)
1962-1969			-.154(.245)		-.307(.272)	
1970-1979			.483(.150)***		.760(.252)**	
1980-1989			.221(.129)		.102(.141)	
N	728	588	567	424	424	424
F	5.76***		4.63***	4.69***	4.81***	4.32***
Wald chi		99.78***				

Note: The fixed effects are suppressed to conserve space. Robust standard errors are in parentheses: *** p, z < .001, ** p, z < .01, * p, z < .05