

GUNS AND BUTTER?

Regime Competition and the Welfare State during the Cold War

By HERBERT OBINGER and CARINA SCHMITT*

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, the concern of national militaries regarding the well-being of young men was among the reasons for the introduction of health insurance and worker-protection legislation in the late nineteenth century. In a similar vein, the actions of British policymakers at the turn of the twentieth century attest that war was also considered “good for babies and other young children.”¹ Confronted by both a decline in fertility and high infant mortality, they initiated various measures to improve the health of children with a view toward 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

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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 war.

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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 postwar development of the welfare state is the proposition emanating from a variety of disciplines that similar effects were also apparent during the cold war era.⁴ More specifically, it has been argued that the postwar 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. 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 Among the most impressive iterations of this hypothesis is 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 postwar Western policies—and one specifically targeted to the workers—full employment.”⁶

There is, indeed, no question that the immediate postwar 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 postwar compromise, state intrusion into economic and social affairs gained in importance practically 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 eighteen long-term members of the Organization for Economic Cooperation and Devel-

³ Skocpol 1992.

⁴ E.g., Mishra 1993, 35; Goodman, White, 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.

opment (OECD) increased from 10.6 percent of gross domestic product (GDP) in 1960 to 21.5 percent in 1990.⁹

But is regime competition really a causal factor behind the massive postwar growth of the welfare state, as Hobsbawm so eloquently argues? More generally, did the vice of the cold war arms race and the associated political rivalry between the opposing Eastern and Western blocs really turn into the virtue of a welfare race?

Figure 1 (a) displays average social spending levels as a percentage of GDP¹⁰ for sixteen West European and five Eastern bloc countries between 1961 and 1989, while Figure 1 (b) displays the annual change in social expenditure.¹¹ 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 onward. Social expenditure peaked in the early 1980s and declined thereafter until the collapse of “real socialism” in 1989.

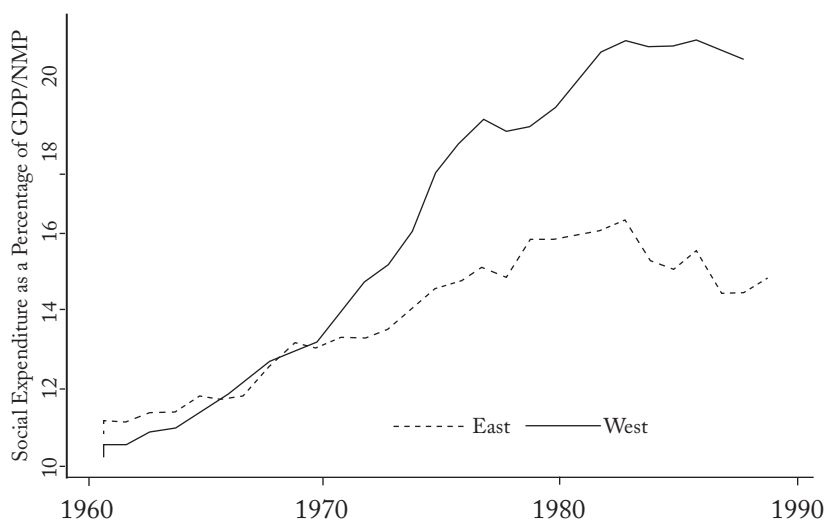
Interestingly, the question of whether regime competition fuelled welfare state growth has never been subject to systematic examination. Applying spatial econometrics, this article offers a groundbreaking empirical test of this argument. Our sample includes five Council for Mutual Economic Assistance (COMECON) countries and sixteen Western European nations;¹² the analysis covers the period between 1961 and 1989. The focus on Europe is based on the assumption that Europe was the main battleground of interregime 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, section II discusses the basic arguments underlying

⁹ Castles 2006, 17.

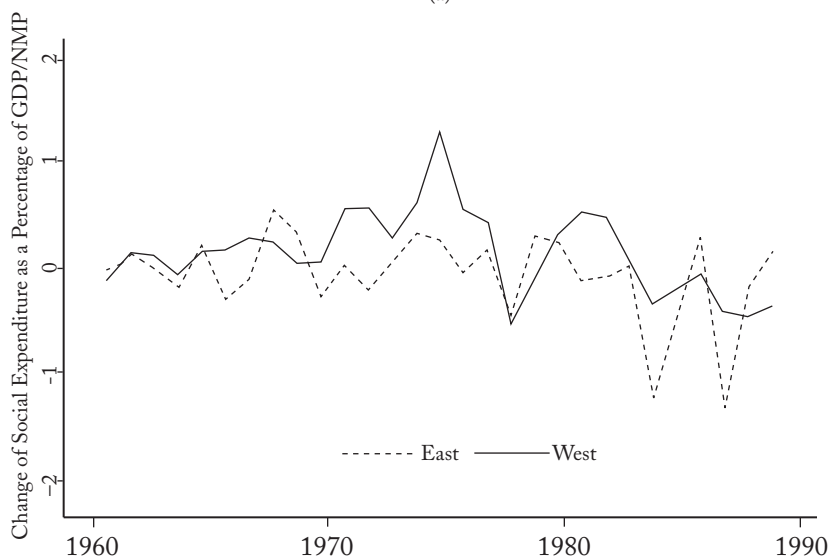
¹⁰ For the communist countries social expenditure is expressed as a percentage of the net material product (NMP).

¹¹ Data from the International Labor 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 International Labor Organization. *The Cost of Social Security*. Fourteenth International Inquiry, 1987–1989. Geneva 1996, 4.

¹² The sixteen West European countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the U.K.. The five COMECON countries include Bulgaria, Czechoslovakia, Hungary, Poland, and the USSR. Since social expenditure data for the 1950s are lacking for most communist countries, we have to restrict ourselves to the period from 1960 onward. Unfortunately, no data is available for the German Democratic Republic (GDR) and Romania for the 1960s. Hence these countries were excluded from the sample. Since case-study evidence for divided Germany strongly supports the notion that regime competition matters for welfare-state expansion in the postwar period (Hockerts 1994; 2009), the exclusion of the GDR should not alter our findings.



(a)



(b)

FIGURE 1
A COMPARISON OF SIXTEEN WEST EUROPEAN AND FIVE
COMMUNIST COUNTRIES^a (1961–89)

^aThe sixteen West European countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the U.K. The five COMECON countries include Bulgaria, Czechoslovakia, Hungary, Poland, and the USSR.

the hypothesis that welfare state expansion in both blocs was driven in part by regime competition and sheds light on the respective causal mechanisms; section III presents the data and the method employed; section IV outlines the empirical analysis; and section V presents 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 that also included fierce economic and social competition between the West and the East. The resulting ambition 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 was 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 sought to achieve mass compliance among their populations and gain political legitimacy.

To this end, governments either rely on strategies aimed at increasing input legitimacy (governance by the people), or they formulate policies with a view toward enhancing output legitimacy (governance for the people). An example of the latter would be to embark on a performance-oriented strategy to secure mass loyalty. In democratic political systems, of course, the adoption of a mixed strategy is also feasible. A 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 nineteenth century.¹³ In Germany, for example, Bismarckian social insurance was enacted by the conservative autocratic elite in order to gain political loyalty in exchange for social privileges. German political elites considered a benevolent state to be the appropriate vehicle for stabilizing the traditional political order and co-opting an increasingly radical working class.

¹³ Rimlinger 1971; Flora and Alber 1981.

Many scholars contend that a comparable rationale was evident during the cold war. As Hobsbawm argues, fear was the crucial factor driving the welfare race between the two blocs. Its main impetus was rooted in the ambition of the political elites to assure a stable and legitimate political order, which was a prerequisite for prevailing in that era.

To date, comparative welfare state research has 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 impacts running from East to West must be carefully distinguished from influences running in the opposite direction. Moreover, it is plausible that the pressures resulting from regime competition differed on each side of the Iron Curtain. It is therefore important to examine in more detail the causal mechanisms that may have triggered an international welfare race.

EAST-WEST INFLUENCES

During the cold war the West was confronted by communist regimes that claimed to have established a workers' paradise on earth. Socialist propaganda branded unemployment as an intrinsic property of capitalism and equated 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 would vanish in the wake of a socialist revolution. However, in contrast to the official doctrine that socialism did not need a genuine social policy,¹⁴ the reality was very different. Many Soviet bloc countries inherited Bismarckian social insurance systems that were later remodeled and supplemented by social service provision under communist leadership.¹⁵ 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 net material product (NMP) was relatively high in those communist countries, given their comparatively low level of economic development.¹⁶ Moreover, convenience goods were

¹⁴ Cf. Lampert 1989.

¹⁵ Inglot 2008.

¹⁶ Castles 1986. We want to emphasize that problems of validity associated with the use of GDP statistics for COMECON countries exist. The data used in this paper were compiled by Angus Maddison. For a critical discussion on potential pitfalls, see Rhode 2005. At this point social scientists are facing a dilemma. One may either abstain from empirical analysis or opt for pragmatism and make these problems explicit. We chose the latter strategy and encourage readers to interpret the empirical findings carefully.

heavily subsidized in the Soviet bloc countries.¹⁷ The overall strength of the socialist welfare state was in its broad coverage of basic needs.¹⁸ Arguably the strongest assets of the socialist regimes were their life-long job guarantee and their absence of visible unemployment. In the immediate postwar 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 that 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 is found in an entry of the *Encyclopedia of the Cold War*:

“This prospect [i.e., the threat of a revolutionary transformation of social relations] 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.”¹⁹

A corollary to this proposition is the assumption that the end of regime competition that accompanied the breakdown of the socialist blocs weakened the political status of the Western welfare 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.²⁰ In other words, the collapse of socialism removed an important impetus for Western welfare state growth that existed in the aftermath of World War II.

¹⁷ In the German Democratic Republic (GDR), 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 available to measure this type of social policy intervention.

¹⁸ Cook 2010, 673.

¹⁹ Shantz 2008, 798.

²⁰ Nullmeier and Kaufmann 2010, 86.

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 than in the West.²¹ Pressure to enhance social protection was also an outgrowth of other challenges related to regime rivalry that were of much less importance in the Western democratic setting.

The capitalist economies of the West significantly outperformed the planned economies of the East in terms of productivity and output growth.²² The resulting much higher standard of living in the West was an important point of reference that people in socialist countries used to compare their own economic situation. As Iván Berend points out, "The prosperity of the West became known and envied. The comparison was humiliating, and it seemed to be out of reach."²³ 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 uprisings in the German Democratic Republic (GDR) (1953), Hungary (1956), and Czechoslovakia (1968) clearly illustrate. Since communist leaders lacked democratic input legitimacy, they faced particularly strong pressure to generate mass loyalty through the provision of benefits and social services. Indeed, the 1970s were characterized by an expansion of social policy in Eastern Europe and increased efforts by those regimes to enhance their consumer orientation.²⁴ 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 over the decade. As a consequence, social policy was discovered as an important strategy for stabilizing the political system. In the wake of the XXIV party congress of the Soviet Communist Party held in 1971, the Soviet Union pressured the COMECON countries to enhance social security provision.²⁵ Poland is a clear case in point. Following several months of social unrest that year, 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."²⁶ Similar effects can be observed in the GDR where Walter Ulbricht was re-

²¹ Hockerts 1994, 795–96; Inglot 2008, chap. 3.

²² Maddison 1995.

²³ Berend 2009, 39.

²⁴ Inglot 2008, 207; Schmidt 2004.

²⁵ Boyer 2005, 159.

²⁶ Inglot 2008, 165.

placed 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 1976.²⁷

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 way to halt migration to 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 benefits 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,²⁸ the benefits structure was designed to strengthen the loyalty of security forces and supporters of the regime. It is well known that members of the armed forces, police, secret service, and the nomenklatura benefited from numerous social privileges—including higher pensions.²⁹

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. In terms of social welfare, regime competition was arguably of greater relevance in countries such as Austria, Finland, or West Germany, which shared physical borders with COMECON countries. Moreover, we argue

²⁷ Lampert 1989; Hockerts 1994.

²⁸ Rimlinger 1971, 340.

²⁹ von Beyme 1977, 60; Schmidt 2004; Inglot 2008.

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.

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

III. DATA AND METHOD

As mentioned above, we are not aware of any econometric study that 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.³⁰

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

Our dependent variable is the annual change in social expenditure as a percentage of GDP. The sample includes sixteen Western European and five COMECON countries examined between 1961 and the end of the cold war in 1989.

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 compo-

³⁰ Note that the studies by Evelyn Huber, Charles Ragin, and John D. Stephens and Alexander Hicks and Joya Misra control for military expenditure. In their studies, however, this is not linked theoretically 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).

³¹ Anselin 1988; 2003.

ment of the regression model. Standard error estimates are corrected to account for nonspherical disturbances. Second, spatial interdependences can be modeled by including a spatial term as a regressor (spatial lag model).³² This article explicitly focuses on the interdependences between Western and Eastern countries, hence, we use spatial lag models.³³ Our model can be expressed as

$$\Delta Y = \rho W y + X\beta + \varepsilon$$

where ΔY denotes the annual change in social spending, ρ is a spatial autoregressive coefficient, and $W y$ is the weighted average of the dependent variable (spatial lag). The spatial weight matrix $W (N \times N \times T)$ 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 argue that the impact of regime competition on social provision depends on the geographic 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 of rival bloc countries increases with the size of its national economy. Thus, in the third matrix social expenditure is weighted by the level of GDP. In all matrices 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 all weight matrices to sum one for each row.

The empirical analysis proceeds as follows. First, we estimate the impact of regime competition on welfare provision for the sample that includes the sixteen Western countries plus the 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 1–3) and temporally lagged spatial interdependence (models 4–6). The findings are presented in Table 1.

Second, in Table 2, we estimate several models to check the sensitivity and the robustness of our results. Model 1 provides an estimation for a more comprehensive sample that also includes non-European

³² Fingleton and Le Gallo 2008.

³³ We checked spatial interdependences with several diagnostic tests on restricted nonspatial-OLS residuals. Moran's I indicates global spatial autocorrelation in the error term. In addition, the standard and the robust Lagrange multiplier tests (Anselin et al. 1996) for spatial error and spatial lag suggest employing spatial lag models rather than spatial error models.

TABLE 1
REGIME COMPETITION BETWEEN EASTERN AND
WESTERN COUNTRIES—BASIC RESULTS^a

<i>Variables</i>	<i>Model 1</i> <i>S-ML</i> ^b	<i>Model 2</i> <i>S-ML</i>	<i>Model 3</i> <i>S-ML</i>	<i>Model 4</i> <i>S-OLS</i> ^c	<i>Model 5</i> <i>S-OLS</i>	<i>Model 6</i> <i>S-OLS</i>
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 weighted	.162(.074)*	.108(.071)				
Distance weighted			.126(.047)**			
GDP weighted						
Regime competition _{t-1}				.281(.095)**	.256(.091)**	.118(.051)**
Equal weighted						
Distance weighted						
GDP weighted						
N	588	588	588	588	588	588
F				4.50***	4.46***	4.34***
Wald chi2	111.14***	111.83***	109.63***			

*** p, z < .001, ** p, z < .01, * p, z < .05

^a The twenty-one country sample includes sixteen West European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the U.K.) and five COMECON countries (Bulgaria, Czechoslovakia, Hungary, Poland, and the USSR). The fixed effects are suppressed to conserve space. Robust standard errors are in parentheses. Dependent variable: Δ social expenditure.

^b Spatial maximum likelihood.

^c Spatial ordinary least squares.

TABLE 2
REGIME COMPETITION BETWEEN EASTERN AND WESTERN COUNTRIES—ROBUSTNESS CHECK^a

<i>Variables</i>	<i>Model 1</i> <i>S-ML</i> ^b <i>Large Sample</i>	<i>Model 2</i> <i>S-ML</i> <i>Internal Diffusion</i>	<i>Model 3</i> <i>S-OLS</i> ^c <i>Period Effects</i>	<i>Model 4</i> <i>S-OLS</i> <i>East-West Influence</i>	<i>Model 5</i> <i>S-OLS</i> <i>East-West Influence</i>	<i>Model 6</i> <i>S-OLS</i> <i>East-West Influence</i>
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				.263(.053)***	.246(.063)***	.278(.063)***
Unemployment rate				-.030(.021)	-.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)

OECD democracies.³⁴ To control for the possibility of internal diffusion processes within each bloc, model 2 includes, in addition to the regime competition variable, a spatial lag that only weights the welfare activities of the countries belonging to the same bloc. Moreover, we test for temporal slope heterogeneity, i.e., whether the relevance of regime competition varies over time (model 3). 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 4, 5, and 6 analyze the influence of the Soviet bloc countries on the sixteen Western nations by using a more comprehensive set of controls. In addition, model 6 examines whether regime competition was reinforced by the presence of a strong Communist Party in Western countries.

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 ordinary least squares (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 Jude Hays and Robert Franzese and Hays³⁵ by estimating spatial maximum likelihood models. Spatial maximum likelihood estimation provides consistent and asymptotically efficient parameter estimates in cases of instantaneous interdependences.³⁶ 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 in the absence of temporally autocorrelated residuals and can therefore be estimated by spatial OLS regressions.

In all models that examine 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 the different degrees of welfare state maturation that result 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 is emphasized in an earlier generation of functionalist accounts that suggest social expenditure is a reflection of a

³⁴ Australia, Canada, Japan, New Zealand, and the U.S.

³⁵ Hays 2009; Franzese and Hays 2007, 2008.

³⁶ Franzese and Hays 2007, 2008.

country's level of economic development.³⁷ 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. A country's demographic profile, likewise a variable emphasized in functionalist accounts, is measured by the elderly population (65+) as a percentage of the total population. We assume a high share 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 of and change in the economically active population relative to the total population of a country. Theoretically, we expect a negative coefficient both for high levels and for an increase of employment since in those situations 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. Witold Henisz's index of constitutional structures measures institutional impacts on welfare state development.³⁸ 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 they hold. Finally, we look at the trade openness of the economy. In accordance with David Cameron's compensation argument,³⁹ we expect higher levels of trade openness to have a positive impact on social spending. The measurement of all variables is described in detail in Appendix 1.

Since there are likely to be problems in the models applying spatial OLS regression, some diagnostic tests are in order. To rule out autocorrelation, the residuals are regressed with an auxiliary OLS regression on all independent variables including the lagged residuals. Since the coefficients of the lagged residuals remain insignificant, the residuals are not serially correlated. To check for stationarity, we performed an augmented Dickey-Fuller test. The null hypothesis of nonstationarity

³⁷ Wilensky 1975; Zöllner 1963.

³⁸ Henisz 2010.

³⁹ Cameron 1978.

can be rejected for the change of social expenditure. We check multicollinearity with pairwise correlations of the independent variables that indicate only a strong correlation between the size of the elderly population and the GDP per capita. Since we do not aim to interpret the coefficients of these variables, both are included. To test for heteroskedasticity we perform the White test. We deal with heteroskedasticity by estimating the models with robust standard errors. To cope with unobserved heterogeneity we estimate country fixed-effects models. Finally, a jackknife analysis indicates no severe outliers or influential cases.

IV. EMPIRICAL FINDINGS

Table 1 shows the empirical results for the whole sample (a total of twenty-one countries). The empirical results support our main hypothesis (H1). With the exception of model 2, the coefficients of the regime competition variable are significant at least at the five-percent level. Regime competition therefore does indeed seem to have been one of the driving forces behind welfare state expansion on both sides of the Iron Curtain during the cold war period. In addition to 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 (H2) is not backed up by the empirical evidence. Even though the coefficients show the correct sign, the models that include 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 it is in those located far away. This holds especially true for model 2, which analyzes the instantaneous effect. The results for H3 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 influence each other with a temporal lag. The coefficients in models 3 and 4, which include a one-year spatial lag, indicate a more substantial effect for the regime competition variable than the spatial maximum likelihood estimations that assume a simultaneous effect.⁴⁰ This is very plausible from a theo-

⁴⁰ Due to different estimation techniques the results cannot be strictly compared. They can only indicate tendencies about the relative importance of particular effects.

retical point of view because it takes time for social-policy measures to 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 to pay for it. The coefficients for the size of the elderly population⁴¹ and the employment variables, however, remain statistically insignificant.

Table 2 estimates several model specifications to check the robustness of our results. For reasons of space, we report here only the models that include the lagged regime competition variable and that give equal weight to the influence of the countries in the rival bloc. Model 1 corroborates H1 for a large sample that includes the non-European democracies. The results are in line with the findings reported in Table 1. Model 2 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 that 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 3 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 percent level. In the 1980s, by contrast, the substantive effect and the efficiency of the coefficient are 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 that 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.

⁴¹ This is likely a consequence of multicollinearity. As already mentioned, the variable is strongly correlated with the level of economic development.

Models 4, 5, and 6 analyze the impact that the five COMECON countries had on welfare activities in Western Europe. Given that data availability is much better for the Western nations, the models include a broader set of control variables and therefore allow for a further test of robustness. Model 4 suggests that regime competition does not play a crucial role for Western countries. However, if period-specific effects are considered, regime competition again turns out to be highly relevant—even when the effects of the most important explanatory factors discussed in comparative welfare state research are accounted for. As the data reveals, the impact of changes in social spending in the Eastern block on Western social welfare activities is once again strong in the 1970s and negative in the 1960s (model 5). Furthermore, the evidence shows that regime competition was not reinforced by the presence of a strong Communist Party in Western nations (model 6).

Most of the control variables' coefficients 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.

In addition, we 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, the 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. 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 respective 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 postwar 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 article offers the first systematic empirical test of this hypothesis. We discuss the causal mechanisms underlying social regime competition and use spatial econometrics to examine the notion of a welfare race for a broad set of countries. The macroquantitative evidence supports this argument. Hence, at least for supporters of the welfare state, the fallout of the cold war and the concomitant nuclear deterrence was positive. Stalin, it seems, was good for the common people in the West, as Hobsbawm claims, and regime competition in its broadest sense was, at least in the long-run, also good for the common people in communist countries, as argued by those who embrace common liberal democratic norms. 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 and had far-reaching long-term consequences. The 1970s in particular witnessed a significant expansion of social policy in the Eastern bloc and it was, according to our empirical findings, the decade when social regime competition was most pronounced. However, these welfare efforts led to “premature welfare states” that were out of all proportion to the given country’s resources and the fiscal capacity of the state.⁴² In fact, many historians⁴³ 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.

⁴² Kornai 1997.

⁴³ For the GDR, see Hockerts 2009.

APPENDIX 1

<i>Variable^a</i>	<i>Description</i>	<i>Source</i>
Δ Social expenditure	Annual change of social expenditures as a percentage of GDP/NMP	International Labor Organization. <i>The Cost of Social Security</i> , various issues
Social expenditure _{t-1}	Level of social expenditure as a percentage of GDP/NMP at t-1	International Labor Organization. <i>The Cost of Social Security</i> , 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	<hr/> <i>Data on Civilian Employment</i> <hr/> Western countries: Armingeon et al. 2008 Eastern countries: International Labor Organization. <i>Yearbook of Labor Statistics</i> , various issues; Mitchell 2007 <hr/> <i>Data on Population</i> <hr/> Western countries: Heston, Summers, and Aten 2006 West Germany and Eastern countries: Maddison 1995
Elderly population (65+)	Elderly population age 65 and over as a percentage of the total population	<hr/> <i>Data on Elderly</i> <hr/> Western countries: Armingeon et al. 2008 Eastern countries: (Poland, Hungary, Bulgaria) World Population Prospects 2008 at http://esa.un.org/unpp ; (CSSR) Mitchell 2007; (USSR) <i>United Nations Demographic Yearbook</i> , various issues <hr/> <i>Data on Population</i> <hr/> See employment rate
Industrial employment	Civilian employment in industry as a percentage of the civilian labor force	Armingeon et al. 2008
Unemployment rate	Rate of unemployment as a percentage of the civilian labor force	Armingeon et al. 2008

APPENDIX 1, *cont.*

<i>Variable^a</i>	<i>Description</i>	<i>Source</i>
Openness	Sum of exports and imports as a percentage of GDP	Heston, Summers, and Aten 2006
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 that estimates the feasibility of policy change (for details see Henisz 2002)	Henisz 2010

^a For the annual change of social expenditure in percentage of the GDP/NMP, the following values are missing: Belgium 1987–89, Bulgaria 1960, Greece 1960, 1986, 1989, Hungary 1960 and 1987–89, Italy 1978–79 and 1984–86, Norway 1987, Poland 1981–83, Portugal 1977, and Spain 1967–74. The missing rate-of-employment data are Bulgaria 1987, Poland 1962–69, and USSR 1961–63. With respect to the number of persons 65+, for Bulgaria, Hungary, and Poland, only data in five-year periods for the CSSR values for 1961, 1970, 1980, and 1990, and for the USSR values for 1961, 1970, 1973, and 1987, are available. All missing values were estimated by assuming a linear trend.

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