

# New contexts, different patterns? A comparative analysis of social spending and government health expenditure in Latin America and the OECD

International Journal of  
Comparative Sociology

52(3) 215–244

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DOI: 10.1177/0020715211408760

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**Shiri Noy**

Indiana University, USA

## Abstract

Much of our knowledge of the development of the welfare state centers on historical contingencies that characterized the industrial, political, and demographic context of Western Europe and North America. However, young welfare states in developing countries are emerging in response to different pressures than those faced by early welfare state; while globalization influences both young and established welfare states. Using newly released data for Latin America, this article provides a systematic comparison of social spending, spending on welfare and social security and government health spending in the OECD and Latin America and the Caribbean in the 1980s and 1990s. Results from cross-section time-series models indicate that the logic of industrialism welfare state approach is useful for examining social spending in Latin America. Namely, unemployment is associated with higher levels of social spending and spending on welfare and social security in both regions while a larger proportion of elderly population is associated with higher spending in Latin America. Globalization in the form of trade openness is associated with lower spending in the OECD across outcomes. In Latin America and the Caribbean the presence of international financial institutions powerfully pattern health and social spending: decreasing spending on welfare and social security and increasing health spending.

## Keywords

globalization, health spending, Latin America and the Caribbean, social spending, welfare states

Much of our knowledge of the development of the welfare state centers on historical contingencies that characterized the industrial, political, and demographic context of Western Europe and North America. However, welfare states in developing countries are emerging in response to different pressures than those faced by early welfare states in developed countries. Social scientists are increasingly turning their attention to the dynamics of welfare state development in other regions. In addition, welfare state research has recently focused on particular domains

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## Corresponding author:

Shiri Noy, Department of Sociology, Indiana University, Ballantine Hall 744, Bloomington, IN 47405, USA.

Email: [snoy@indiana.edu](mailto:snoy@indiana.edu)

(unemployment, pension, health, education) of welfare states' provision. This new focus follows evidence that the dynamics and determinants of sectoral spending may be different than overall social spending.

The current welfare state literature has little explored the determinants of social spending in developing welfare states, first, largely because the welfare state canon, and indeed the term 'welfare state' itself, is associated with developed democracies and second, because of the limited data availability. In the vast literature on developed welfare states little attention has been paid to health insurance as early welfare states focused on labor policies such as workplace insurance and sickness benefits. Only recently has health insurance become an essential component of middle life chances, and therefore addressed in the context of welfare state theories and social provision.

I begin by reviewing conventional theoretical frameworks and empirical findings from mature welfare states in the OECD. I then extend these approaches in two ways: first, by incorporating the globalized environment in which new welfare states have developed and second, by considering the determinants and implications of government health spending as an outcome in the context of welfare states. I then consider the factors that will distinctly apply to new welfare states in Latin America, namely pressures from international financial institutions and trajectories of democratization. Empirically, I first examine trends in spending between 1980 and 2000 in Latin America and the OECD, I then turn to multivariate analysis and compare conventional (national, demographic) determinants of social spending and introducing new (globalization) measures that may influence spending in both the OECD and Latin America. Finally, I test the effects of both conventional and globalization approaches as predictors of government health expenditures in mature and emerging welfare states. In the final part of the article, I explore how legacies of democracy and international financial institutions, discussed as diffusing neo-liberal ideologies, affect spending in Latin America. Data recently released by Huber and Stephens provide an important opportunity to introduce Latin America and the Caribbean as a comparative region, significant as globalization is influencing welfare state development in all developing countries, including Latin America. In addition, Latin American welfare states have a particular regional character: influenced by pressures from international financial institutions in the aftermath of deep recession and political instability for many of its countries in the 1980s.

## **Welfare state research in the OECD context: Early research and the current state of the art**

A rich tradition of research in political sociology and political science, dating back to Moore (1993 [1966]), has examined the origins, development and more recent changes in welfare states in Western Europe, North America, and Japan. This literature outlines three main theoretical approaches to the welfare state development: 1) the 'logic of industrialism' approach which posits that differences in welfare state efforts and welfare state development are by-products of economic development and its demographic and social organizational consequences; 2) the 'power resources' approach which identifies the distribution of organizational power between labor organizations and left parties on the one hand and center and right-wing political forces on the other hand as primary determinants of differences in the size and distributive impact of the welfare state; and finally, 3) the 'state-centric' approach which is focused on the policy-making role of bureaucrats (Amenta et al., 2001; Huber and Stephens, 2001; Ragin, 1994). Of these, the logic of industrialism arguments and the power resources approach have been found to be most

successful in explaining changes in welfare state expenditure, while the state-centric approach is better suited to examining changes in specific policies.

The literature on welfare states in the OECD has been strongly influenced by the typologies developed by Esping-Andersen (1990, 1999). Traditional welfare state research before and after Esping-Andersen focused on 'welfare effort' (Janoski and Hicks, 1994) or social spending as a percentage of GDP. Instead of conceptualizing the welfare state as linear (the amount of spending), Esping-Anderson develops a typology of welfare states (see also Korpi and Palme's, 1998, five-type classification). Welfare effort remains a popular choice of outcome measure as it captures in a general sense the magnitude of the welfare state and social spending (Amenta, 1993). This effort has been shown to ameliorate poverty and inequality and thus matters in meaningful ways (Goodin et al., 1999; Huber et al., 2006). However, welfare state scholars are now increasingly turning their focus towards particular domains of social spending (see for example, Arnesen and Lundahl, 2006, on education; Ruggie, 1996, on health) in an effort to capture the nuance of state-sponsored programs across sectors. This has been especially true of research on retrenchment where many argue that though there have been cuts in some programs others have been expanding (Kautto et al., 1999).

Current scholarship on welfare states in Europe has turned towards debates about retrenchment, that is, significant curtailment in social spending, in light of globalization, recession, and neo-liberal pressures. Overall, the welfare state scholarship is ambivalent about the presence of a crisis and retrenchment (Brooks and Manza, 2007; Kautto et al., 1999; though see Amenta et al., 2001; Huber and Stephens, 2001; Korpi and Palme, 2003). Retrenchment, at least in the Nordic states, was overstated (Kautto et al., 1999). As Kautto et al. (1999) argue, worsening economic circumstances and non-social democratic governance seemed to create an almost optimal situation for changes in policies in a more fundamental and systemic way, however, these changes did not materialize for the most part. Huber and Stephens (2001) argue that partisanship matters less with time (because of globalization there are fewer options). But constitutional arrangements which were found to be so important during the Golden Age continue to have a strong effect in the retrenchment period as illustrated by a lack of veto points facilitating retrenchment. These debates have given rise to new theoretical approaches. Pierson (1996) proposes that a 'new politics' approach is in order as the context in which welfare states operate has shifted, because taking away benefits once given is fundamentally different than giving them. In addition, there has been a shift in welfare state emphasis from the male breadwinner model, with its emphasis on work insurance, to an expanded model of family security, which considered family and child benefits, health care, etc. Finally, the welfare state itself has created new interest groups, such as beneficiaries, state employees, etc. Despite the new 'threats' to the welfare state, namely globalization, global competition, and the continuing change in family and demographic structure (see Esping-Andersen, 1999; see also Huber and Stephens, 2001) there seems to be little conclusive evidence that the welfare state is experiencing any large-scale decline in Europe and North America.

These 'threats' to the welfare state (globalization, global competition, and the continuing change in family and demographic structure) are global in their reach rather than exclusive to the OECD context. States are seemingly adapting their policies in response to these new conditions, and welfare programs are increasingly being pursued by developing countries (Mesa-Lago, 2006; Pierson, 2005). In sum, many of the existing theories developed based on the OECD context merit testing in different contexts: the logic of industrialism approach which highlights the importance of GDP and the power-resources approach which suggests that left party power is

important to social spending. In addition, new discussions of globalization and global pressures merit comparative attention: are they truly global in their influence on social spending dynamics cross-regionally?

### **Welfare states in Latin America: New contexts, new approaches?**

Though the geographical focus of welfare state literature has traditionally been Western Europe, North America, and Japan, recent work has begun exploring welfare state development in Latin America and other developing regions (Garret and Nickerson, 2005; Pierson, 2005; Rudra, 2007). This work is important in its own right as it enriches our information about other regions and contexts, but may also serve to shed light on the universality (or particularity) of existing welfare state theories developed based on the OECD experience. There are reasons to believe that the process of building welfare states in developing countries may be markedly different than that of European countries. For one, welfare states in less developed countries (LDCs) have developed in an era of globalization and economic openness, with domestic policy being heavily influenced by International Financial Institutions (IFIs, namely the World Bank, WB and the International Monetary Fund, IMF). Latin American welfare states are also developing amidst national political instability in many Latin American countries (democratization and erosion of the Third Wave) (de Mesa and Mesa-Lago, 2006).

I now consider what role factors that have been shown to be important for welfare state development in OECD countries play in developing countries' welfare effort and whether existing theories bear extension to these different contexts. In extending theories of welfare state development it is important to explore why and how welfare states would develop in LDCs in light of inhospitable conditions: much of the population is not yet commodified, globalization is focused on free markets and many governments in developing nations are unstable or weak, all of which conspire against welfare state development. Rudra (2007) points to several reasons why we should expect welfare states to develop in less developed countries: 1) risk and uncertainty are present in all countries and LDCs are in a position of 'maximum uncertainty' which welfare states can address; 2) social reactions to the market occur in both MDCs (more developed countries) and LDCs further prompting pressures and incentives for welfare state development; 3) the recent spread of democracy may facilitate public demand for welfare state. In addition, the lack of commodified status, she argues, is not necessarily a barrier to welfare state development. This is because the precedent set by MDCs has put pressure on all governments to decommodify and labor in LDCs is perhaps even more reliant on the state to decommodify as labor is weakly organized in these countries and there is rarely minimum income.<sup>1</sup>

While only six Latin American countries and three Caribbean countries can claim to have built a system of social protection vaguely resembling a welfare state, covering more than 60 percent of the economically active population with some form of social security as of 1980 (Argentina, Brazil, Chile, Costa Rica, Cuba and Uruguay and the Bahamas, Barbados and Jamaica in the Caribbean; Huber, 2005)<sup>2</sup> the current state of public social spending and welfare state reform in Latin America provides an exciting new arena for welfare state research. Despite not having large welfare states many Latin American countries 'have long had occupational based welfare systems modeled along European lines, with defined-benefit pension plans, health services, and family allowances' (Kaufman and Segura-Ubiergo, 2001). In Latin America welfare state building began in the 1920s (in Argentina, Chile, and Uruguay), with a second wave in the 1930s and 1940s (including Brazil, Costa Rica, Mexico, Venezuela, Panama, and Colombia).

In terms of extending classic theories of welfare state development to developing country contexts the 'logic of industrialism' approach is seemingly appropriate, since it relates to processes of economic development and the subsequent demographic changes. It proposes that we witness convergence between countries as they industrialize, as evidenced by lower fertility rates, higher divorce rates, and more opportunities for minority groups. This in turn increases demand for welfare states and the likelihood states will supply them. Glatzer and Rueschemeyer (2005) take a similar evolutionary, structurally contingent approach. With the preponderance of 'democratic capitalism' they argue we can expect a third transformation: the addition of social welfare to this economic liberalization and political democratization. There are three broad reasons why this might be likely: first, social welfare policies are correlated with economic growth (as posited by the 'logic of industrialism' welfare state argument); second, the classic welfare states in Europe flourished in countries that were economically open; and third, welfare state policies have historically been associated with the trajectory of democratization. Additional research has attempted to create typologies of Latin American countries, extending Esping-Anderson's work on the three worlds of welfare in Europe by considering the interaction of markets and states (Filgueira, 1998) and more recently expanded to consider the ways in which families and gender dynamics interact with market and public sector dynamics in welfare provision (Martínez Franzoni, 2008). In addition, the power resources approach, with its focus on the importance of left parties may be applicable, though it was developed in the context of stable democracies. The dynamics of democratization and authoritarian-democratic oscillations in Latin America in the 1980s and 1990s have hampered the establishment of long-term left-party influence and traditions in many countries.

Scholars have already begun the theoretical work to develop a model of welfare expenditures in Latin America. Existing analyses of public spending in Latin America highlight the importance of political factors such as legacies of democracy and left party involvement (Avelino et al., 2005; Huber and Stephens, 2001; Segura-Ubiergo, 2007). Case-study analyses have largely highlighted global pressures by international organizations and the neo-liberal model (de Mesa and Mesa-Lago, 2006; Homedes and Ugalde, 2005; Mesa-Lago, 2002, 2006; Mesa-Lago and Müller, 2002). On the other hand, much of the theoretical literature based on the OECD context points to the importance of demographic and domestic economic pressures and, more recently, globalization for welfare states (Esping-Andersen, 1999; Glatzer and Rueschemeyer, 2005). However, even in the OECD context while the power resources and logic of industrialism approaches have traditionally been successful in explaining different spending levels they have a harder time explaining retrenchment in these OECD countries (Amenta et al., 2001) making it particularly important to introduce globalization indicators.

Systematic quantitative analyses of social spending in Latin America will serve to complement existing case study research, allowing social scientists and welfare state scholars to better examine the applicability of theories developed based on OECD data for other regions. This is particularly important insofar as they may shed light about how globalization similarly and differentially affects general and health social spending in the 1980s and 1990s in these two regions. While developing welfare states, such as those in Latin America are coming of age during a time of globalization this may not necessarily translate to globalization having a stronger impact on their levels of spending than in mature welfare states; especially as globalization has been hypothesized to be associated with retrenchment in the OECD, but not so in Latin America, where spending levels are higher post-recession in the 1980s.

Taken together, previous considerations of social spending and welfare states in Latin America suggest that there are important demographic, political, economic, and global factors

that systematically influence spending. Particularly, integration into global markets, international financial institutions pressures, left party influence, level of economic development and trajectories of democratization have been identified by different theoretical, case-study and quantitative analyses as being important influences on social spending. Latin America offers a unique opportunity to examine welfare state development and the determinants of government social spending given deep recession in the 1980s, political instability in the form of democratic-authoritarian transitions in the context of third wave democratization, and neo-liberal pressures from international financial institutions. While socio-demographic factors and globalization may be expected to influence spending in both the OECD and Latin America, extent of democratization, a constant in mature welfare states, may be expected to influence social spending in developing countries. Finally, international financial institutions may exert a strong influence on social policy in developing countries, and particularly Latin America in the aftermath of recession in the 1980s and the subsequent loans and poverty reduction programs.

### **Further extending welfare state research: Particular domains, different patterns? Government health spending in a comparative perspective**

In addition to providing the comparative leverage of another region by conducting comparable analyses in Europe and Latin America on overall welfare effort, this article focuses on a particular domain of the welfare state: government health spending. Though welfare states in Europe have their origins in specific worker protections, namely pensions and sickness and unemployment benefits, welfare states have since expanded from their focus on worker protections and poverty amelioration to include health and education systems. Health has since become a sizeable component of welfare spending (Street, 2008). Though healthcare and education are comparatively recent benefits to be included under welfare state protections, they have become integral components of state sponsored social protection. It stands to reason, therefore, that government spending on healthcare may have different determinants, both economic and political, than general social spending. Indeed, recent research in OECD countries supports this contention (Bambra, 2005). In addition health care, like pensions, has been one of the main targets of recent reforms in the OECD and one in which the private sector is already developed. Furthermore, it is a particularly interesting arena in which to examine public expenditure because unlike other areas of social protection (e.g. education) it is not seen as integral to the 'nation-building project' and is not viewed a priori as the responsibility of the state. For developing countries however, improving education and health levels are increasingly viewed as imperative for economic growth and development.

For several reasons, health care reform, both in OECD countries with established welfare states and newer welfare states in Latin America, is a more complex field than other sorts of reform, which may lead us to expect less variability in government health spending over time. Health care affects a greater number of people, benefits are immediate rather than deferred, markets are complex and imperfect, often involving public goods, and spending on health (unlike pensions) does not generate national savings (Mesa-Lago, 2008).

Overall, health and healthcare have been understudied by welfare state researchers who more often focus on wealth, inequality, and earnings (Olafsdottir, 2007). Even within the varied and rich research on welfare state development in OECD countries health care has largely been bracketed: 'health care, although it has been subject to separate comparative analysis, has been a significant

and notable omission from the broader welfare state literature and particularly the regimes debate' (Bambra, 2005: 32; see also Béland and Gran, 2008; Ruggie, 1996). The field of health care is more complex than other fields that are more financial or straightforward in nature (e.g. pensions, unemployment), and these complexities are only compounded in the Latin American and Caribbean context where international agencies and NGOs sometimes make up a large proportion of health care provision (Mesa-Lago, 2008).

Due to this, reform efforts in health care have tended to be piecemeal in Latin America (Weyland, 2006). An examination of public expenditure on health allows us to explore whether there is a decline in a government's funding of health care, indicating increased privatization as suggested by much of the literature, and furthermore, whether the determinants of public spending on health are uniform across regions, related to global versus domestic pressures. Finally, examining government health spending allows us to verify how this domain is similar or different than general social spending.

Therefore, despite the complexity inherent in health care provision and health care reform, an analysis of the determinants of public health expenditure is informative insofar as health care remains a major spending arena of the welfare state and as it allows us to examine the differences between regions in spending on health, as well as the possible determinants of spending levels.

## Analytic approach

In order to explore social spending and health spending cross-regionally I analyze an unbalanced panel data set for 23 countries in Latin America and the Caribbean and 18 OECD countries<sup>3</sup> from 1980 to 2000.<sup>4</sup> The unit of analysis is the country-year (where each variable is measured for a particular country in a given year, between 1980 and 2000) and the research design a cross-section time-series analysis. Data for the Latin American and Caribbean sample were extracted from the Social Policy in Latin America and the Caribbean Dataset, 1960–2006 and the Latin America and the Caribbean Political Dataset, 1945–2001 (Huber et al., 2008b, 2008c). Data for the OECD sample was taken from the Comparative Welfare States Data Set (December 1997, updated April 2004; Huber et al, 2004). Health spending among the OECD countries comes from the OECD Health Dataset 2008 (OECD, 2009).

## Dependent variables

I have three main dependent variables: social spending as a percent of GDP,<sup>5</sup> spending on welfare and social security as a percent of GDP<sup>6</sup> and government spending on health as a percent of GDP.<sup>7</sup>

I use social spending as a percent of GDP as this measure captures general 'welfare effort' and is widely used in the literature on OECD countries (Brooks and Manza, 2007; Esping-Andersen, 1990, 1999). I also examine spending on welfare and social security as a percent of GDP because the variable capturing total welfare effort in Latin America only includes data from 1980 to 1995 (limiting the analysis by a further five years), have data for fewer countries and fewer time points for the countries that are included in the analysis (less than five for some).<sup>8</sup> These two measures of overall spending are correlated at 0.62. Whereas government health spending is a subset of overall social spending it is not in fact a subset of spending on welfare and social security, which captures, more particularly benefits for sickness, old-age, family allowances, and welfare.

Table 1 shows the descriptive statistics for the variables included in the models, by region.

**Table 1.** Descriptive Statistics for the Variables Included in the Sample

Description	OECD				Latin America & the Caribbean			
	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum
<b>Dependent variables</b>								
Social spending as a Percent of GDP <sup>a</sup>	22.38	5.99	10.12	36.66	12.13	5.53	1.80	23.90
Government spending on welfare and social security as a Percent of GDP pending as a percent of GDP <sup>b</sup>	15.21	4.35	6.47	28.91	4.74	4.21	0.14	19.74
Government health spending as a percent of GDP <sup>c</sup>	5.62	0.95	3.5	8.4	2.72	1.71	0.24	10.6
<b>Independent variables</b>								
Population, in tens of millions <sup>d</sup>	4.10	6.08	0.31	28.21	1.91	3.36	0.02	16.82
Real GDP per capita in thousands of constant dollars <sup>d</sup>	19.94	3.67	9.96	33.29	6.01	2.94	0.87	16.42
Unemployment as a percent of the total labor force <sup>d</sup>	7.32	3.56	0.46	16.98	10.13	5.45	1.4	35.5
Percent of the population 65 years or older <sup>d</sup>	13.78	2.12	9.1	18.11	5.59	2.52	2.64	13.01
Percentage of total seats in parliament for left parties <sup>d</sup>	36.7	15.86	0	68.4	0.04	0.07	0	0.37
Trade openness (imports plus exports over GDP) <sup>d</sup>	59.12	30.42	13.33	186	65.31	38.13	11.55	280.36



**Table 1.** (Continued)

Description	OECD				Latin America & the Caribbean			
	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum
Foreign direct investment, in billions <sup>d</sup>	12.01	32.59	-2.12	321.27	24.72	70.31	-10.23	616.47
Cumulative democracy score since 1945, from Huber et al. (2008c) <sup>d</sup>					13.07	10.09	0	51.5
Neo-liberal IMF senior staff members <sup>e</sup>					2.42	1.36	0	4.00
World Bank adjustment programs <sup>f</sup>					0.53	0.84	0	6.00
IMF program <sup>g</sup>					0.54	0.50	0	1.00
Repurchasing obligations to the IMF, in hundreds of millions of dollars <sup>h</sup>					8.6	19.13	0	158.28

Notes: <sup>a</sup> These descriptive statistics are based on a sample size of 328 in the OECD (1980–1998) and 155 in LAC (1980–1995).

<sup>b</sup> These descriptive statistics are based on a sample size of 350 in the OECD and 232 in LAC (1980–2000 for both regions).

<sup>c</sup> These descriptive statistics are based on a sample size of 360 in the OECD and 312 in LAC (1980–2000 for both regions).

<sup>d</sup> These descriptive statistics for these independent variables are based on the full sample of observations on the independent variables: 374 for the OECD and 355 for LAC.

<sup>e</sup> Based on a sample size of 294.

<sup>f</sup> Based on a sample size of 306.

<sup>g</sup> Based on sample size of 336.

<sup>h</sup> Based on a sample size of 302.

### *Independent variables*

I include explanatory variables that are theoretically linked to social spending and which have been empirically found to matter for social spending drawing from the logic of industrialism approach, power resources theory, and theorizing on globalization and social spending. The country's population is included as a control for country size.

*The logic of industrialism.* In the logic of industrialism approach national economic and demographic conditions drive changes in spending: changes in the demographic composition, namely a dependent elderly population and higher levels of unemployment are associated with higher levels of spending, as is country wealth. GDP, a measure of the country's wealth is predicted to be positively associated with social spending, as implied by the logic of industrialism argument. The percent aged population – those 65 years or older – taps into an important demographic factor driving public social spending, and is also predicted to be positively associated with health spending. Unemployment is also predicted to be positively related to public social spending, as it creates a demand for benefits.

*Power resources.* The power resources approach focuses on how left parties' power influence social spending, where stronger left parties and the balance between left and right parties are associated with differential spending levels. Left parties have been identified in the literature as being important to the establishment and maintenance of welfare states in case studies, to capture this I include the percentage of left cabinet seats.

*Globalization.* Foreign direct investment (FDI) net flows have commonly been regarded as a measure of financial globalization, and are predicted to have a negative effect on social spending because of the 'race to the bottom' arguments. But FDI may have a positive effect on health spending because of arguments about the importance of human capital for potential employers, though this is probably more true for education spending than health, these effects are especially expected in the Latin American and Caribbean countries. Trade openness, a proxy for economic integration into the global system is predicted to be negatively associated with social spending, however, this is not a strong expectation given contradictory previous findings (see Avelino et al., 2005; Segura-Ubiergo, 2007).

*Democratization and international financial institutions.* A cumulative measure of years of democracy since 1945 (from Huber et al., 2008c) for the Latin American and Caribbean provides an indication of legacies of democracy and is predicted to be positively associated with social and health spending. Finally, because much of the globalization literature has highlighted the strong influence of IFIs, and particularly the IMF and World Bank, on social spending in Latin America I model the effects of these influences using four separate available measures: the number of neo-liberal IMF senior staff members<sup>9</sup> (from Chwioroth, 2007), the number of World Bank adjustment programs active for more than five months in a given country-year (from Boockmann and Dreher, 2003), a binary variable indicating the presence or absence of an IMF program in a given country-year (from Chwioroth, 2007) and repurchasing obligations to the IMF in hundreds of thousands of dollars (from Huber et al., 2008b).

### *Analytic strategy*

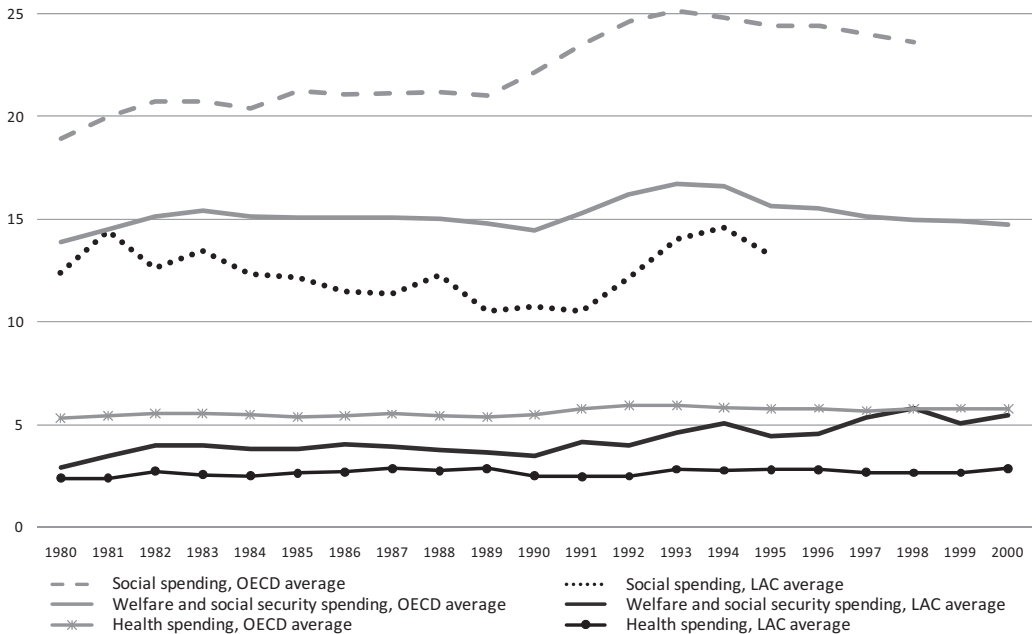
The estimation of cross-section time-series data requires us to account for complex correlation patterns between and across panels (Beck and Katz, 1995). Since the data are unbalanced in that

some countries do not have data for all 20 years of the analysis the standard version of the Panel Corrected Standard Errors (PCSE) cannot be used. I use a Hausman test or the Sargan-Hansen statistic when the Hausman test yields a non-positive definite matrix to select the preferred model between fixed and random effects models across the dependent variables though for the sake of comparability across regions I include all models in the table, shading the preferred model (for more information on the Sargan-Hansen statistic, see Arellano, 1993; Schaffer and Stillman, 2010).<sup>10</sup>

## Results

### Trends in spending

Figure 1 provides an overview of the trends in social spending, spending on welfare and social security and government health spending for the OECD and Latin American and Caribbean between 1980 and 2000. Coupled with the descriptive statistics provided in Table 1, Figure 1 indicates that, as expected, the amount total social spending, spending on welfare and social security and government spending on health as a percent of GDP are lower in Latin American and Caribbean (LAC) countries than in OECD nations. As Figure 1 indicates, and bivariate analyses confirm, there is a slight positive time trend for welfare and social security spending in LAC and both social spending and public health spending in the OECD between 1980 and 2000.



**Figure 1.** Social spending, spending on welfare and social security and government health spending as a percent of GDP in the OECD and Latin America and the Caribbean

Social spending as a percent of GDP in the OECD countries, is on average, the highest (compared with the other measures in both regions), ranging from approximately 10 to 37 percent. Figure 1 shows a decline in social spending between 1997 and 1999 for the OECD, while in Latin America patterns are slightly more erratic, though the effects of the economic crisis of the 1980s are apparent, with social spending and spending on welfare and social security recovering in the early 1990s. Unfortunately the time-series is limited for Latin America, and we have no data on social spending after 1995. Therefore, in order to get a better sense for over time changes in a general spending measure I examine spending on welfare and social security. In addition, many countries in Latin America have only several observations for this measure, and some countries have no data at all (as discussed in the data section, and apparent in Table A1 in Appendix A). I include this measure because it best captures broadly conceived welfare effort – a measure often used in OECD analyses – however, I also include a measure of spending on welfare and social security which has more complete data for the Latin American sample, which is highly correlated (0.62) with total social spending.

Most countries cluster in the range of 10–20 percent of GDP going towards public spending on welfare and social security in the OECD and there has been a slight positive trend in spending. The data show a decrease in spending in almost all countries in the late 1980s, and again in the mid-1990s. Figure 1 therefore, does not demonstrate any major retrenchment in the OECD, though the effects of recession in the mid-1990s are clearly felt in social spending. In addition, most countries included in the sample demonstrate positive trending in the early 1990s following decreases in the mid to late 1980s.

In the Latin American and Caribbean countries, the overall trend seems to be slightly positive. Almost all countries show lower than 8 percent spending on welfare and social security, with the most notable exception Uruguay, which consistently displays spending levels of about 10 percent. It is also important to note that the coefficient of variation (the standard deviation divided by the mean), which gives us a sense of the spread of the data indicates that the dispersion of the LAC region over this time period is much higher than that of the OECD (17% and 4%, respectively, for spending on welfare and social security whereas for social spending it is 9% for the OECD and 11% for the LAC sample).

These trends are consonant with our expectation that there would be increased variability in the Latin American and Caribbean region in terms of welfare effort. In addition, several countries allocate less than 1 percent of GDP to social security and welfare spending during this time period: El Salvador, Ecuador, Guatemala, Jamaica, and the Dominican Republic (after 1984) for much of this period.

Government health expenditure shows more clear (albeit slight) positive trending than overall spending, though the overall level of spending is much lower, with most countries' spending falling in the range of 4 percent and 7 percent of GDP. Though the variation in health spending is, in absolute terms, much smaller than that for total spending because of the lower levels of absolute spending, the patterns in public health spending are slightly more erratic. There are less uniform period effects, that is, signs of a recession as there was in welfare and social security spending, intimating that the dynamics of health spending are different than overall welfare effort.

For most countries in LAC, spending on health care has remained fairly stable (within a percentage point of variation) between 1980 and 2000. Once again, however, the variation for health spending in Latin America during this time period is much higher than for the OECD countries (the coefficient of variation for LAC during this time is 6% and 3% for the OECD). Most countries in LAC show levels of spending between 0.5 percent and 4.5 percent. Argentina, Costa Rica, Panama, and Nicaragua also show fairly consistent spending levels above 4 percent – a high

number for this region (this is also true of Barbados, for which, however we only have data until the early 1980s).

### *Multivariate analysis*

Classic welfare state theories posit that domestic conditions such as higher unemployment and demographic transitions in the form of a larger proportion of elderly people in the population along with overall economic development is associated with citizens demanding increased state protections – the logic of industrialism approach. As many Latin America and Caribbean welfare states are still in the early stages of development it is particularly important to explore the applicability of welfare state theories explaining the experience of young European welfare states in this new context. I begin my analysis by *first* including predictors that have been previously identified in the classic welfare state development literature, namely, demographic and economic national conditions: GDP, unemployment, and elderly population. I examine the effect of these determinants on social spending and spending on social security and welfare and government health spending in turn. *Second*, I move towards examining how left party dominance, suggested to be important by the power resources approach, influences spending and *third*, I examine how globalization, in the form of foreign direct investment and trade openness, affect social security and welfare and government health spending. *Fourth*, I explore how legacies of democracy and international financial institutions, namely the World Bank and IMF, are impacting social spending in Latin America and the Caribbean.<sup>11</sup>

### *Revisiting the classic theories of welfare state expenditures: Traditional models*

The logic of industrialism approach finds support in both the OECD and Latin America. Regression models for the OECD countries indicate that higher unemployment is associated with both higher social spending and social security and welfare spending (Models 1A and 7A in Tables 2 and 3). Also, the positive time trend seen in Figure 1 remains significant for social security and welfare spending when controlling for the other variables.

In Latin American and Caribbean countries, like in the OECD increased unemployment is associated with higher total social and welfare and social security spending. In addition, a percent increase in the population 65 years and older associated with a 1 and 1.9 percent increase in social and social security and welfare spending, respectively, in Latin America, all else equal (Models 4B and 10A in Tables 2 and 3).

While the logic of industrialism approach finds much support in both regions, and in particular unemployment is consistently associated with higher spending, the power resources contention of the importance of left parties finds little support net of these economic and demographic factors (Models 2A, 5B, 8A and 11B in Tables 2 and 3). This lack of effect of left parties is not inconsistent with previous analyses: previous quantitative analyses in the OECD have not always found significant effects (see Brooks and Manza, 2006a, 2006b). In addition, the literature in Latin America indicates that left party rule in the area was not necessarily associated with more social spending (compare Huber et al., 2008a on Latin America; Wibbels, 2006 on developing countries), but rather, different views on the allocation of government social spending: ‘policy differences between left and right concerned the allocation of social security expenditures more so than their magnitude’ (Huber et al., 2008a: 423). This determinant then may be especially important on sectoral – that is, health – spending over time rather than overall social spending.

In Latin America and the Caribbean unemployment well as GDP are associated with higher health spending (Model 16B in Table 4). Though the time trend coefficient is negative and significant (Model 16B in Table 4) a bivariate analysis does not indicate significant trending.

**Table 2.** Cross-section time-series regression of social spending as a percent of GDP, 1980–1995 (LAC)/1998 (OECD) on demographic and economic, ‘traditional’ welfare state spending predictors and political and globalization indicators

	OECD						Latin America and the Caribbean					
	Logic of industrialism		Power resources		Globalization		Logic of industrialism		Power resources		Globalization	
	Model 1A Fixed effects	Model 1B Random effects	Model 2A Fixed effects	Model 2B Random effects	Model 3A Fixed effects	Model 3B Random effects	Model 4A Fixed effects	Model 4B Random effects	Model 5A Fixed effects	Model 5B Random effects	Model 6A Fixed effects	Model 6B Random effects
Year	0.398*** (0.056)	0.360*** (0.057)	0.398*** (0.056)	0.360*** (0.057)	0.553*** (0.055)	0.494*** (0.056)	0.008 (0.064)	-0.012 (0.049)	0.001 (0.065)	-0.008 (0.049)	0.095 (0.075)	0.028 (0.055)
Population	0.674*** (0.220)	-0.091 (0.121)	0.677*** (0.220)	-0.054 (0.125)	0.153 (0.257)	-0.430** (0.137)	0.321 (0.660)	0.031 (0.275)	0.429 (0.678)	0.033 (0.268)	0.156 (0.678)	-0.031 (0.276)
GDP	-0.531*** (0.132)	-0.413** (0.132)	-0.533*** (0.133)	-0.425** (0.132)	-0.306* (0.125)	-0.271* (0.126)	0.352 (0.325)	0.388 (0.303)	0.402 (0.333)	0.436 (0.306)	0.394 (0.336)	0.479 (0.313)
Unemployment	0.434*** (0.060)	0.433*** (0.061)	0.434*** (0.060)	0.437*** (0.061)	0.420*** (0.055)	0.437*** (0.057)	0.211*** (0.063)	0.223*** (0.061)	0.202** (0.064)	0.213*** (0.062)	0.219*** (0.064)	0.225*** (0.063)
Elderly population	0.066 (0.154)	0.265+ (0.152)	0.074 (0.164)	0.303+ (0.158)	-0.206 (0.154)	0.091 (0.152)	0.454 (0.890)	1.095* (0.460)	0.634 (0.926)	1.182** (0.457)	-0.161 (0.990)	1.058* (0.464)
Left seats			0.002 (0.014)	0.017 (0.014)	0.016 (0.013)	0.025+ (0.013)			-3.7 (5.116)	-4.771 (4.598)	-3.183 (5.091)	-5.367 (4.635)

Table 2. (Continued)

	OECD						Latin America and the Caribbean					
	Logic of industrialism		Power resources		Globalization		Logic of industrialism		Power resources		Globalization	
	Model 1A Fixed effects	Model 1B Random effects	Model 2A Fixed effects	Model 2B Random effects	Model 3A Fixed effects	Model 3B Random effects	Model 4A Fixed effects	Model 4B Random effects	Model 5A Fixed effects	Model 5B Random effects	Model 6A Fixed effects	Model 6B Random effects
Trade openness					-0.113*** (0.015)	-0.099*** (0.014)					-0.036* (0.015)	-0.018 (0.014)
FDI					-0.010 (0.006)	0.001 (0.006)					-0.001 (0.012)	-0.005 (0.011)
N	328	328	328	328	328	328	155	155	155	155	155	155
Hausman test/ Sargan-Hansen statistic <sup>a</sup>	37.02 (p < 0.001)		33.76 (p < 0.001)		33.69 (p < 0.001)		1.77 (p > 0.77)		2.66 (p > 0.75)		8.38 (p > 0.30)	

Source: Data for Latin American and the Caribbean come from the Social Policy in Latin America and the Caribbean Dataset, 1960–2006 and the Latin America and the Caribbean Political Dataset, 1945–2001. Data for the OECD sample were taken from the Comparative Welfare States Data Set (December 1997, updated April 2004). Health spending among the OECD countries comes from the OECD Health Dataset 2008. Sources for the explanatory variables are detailed in Table 1.

Notes: \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ , + $p < 0.10$  (two-tailed tests). All models were estimated in Stata 10. Each cell reports the unstandardized coefficient, with the standard error in parentheses. Constants calculated but not reported. All models were estimated in Stata 10.

<sup>a</sup>When deciding between a fixed and random-effects model the traditional Hausman test yielded a non-positive definite matrix for the OECD models and for those models I employed the Sargan-Hansen statistic using the *xtoverid* routine in Stata (Schaffer and Stillman, 2010). Like the Hausman test, a significant test statistic indicates that the fixed effects model is preferred. To ensure comparability across regions I include both models, the model preferred by the Hausman test is shaded in grey.

**Table 3.** Cross-section time-series regression of spending on welfare and social security as a percent of GDP, 1980–2000 on demographic and economic, ‘traditional’ welfare state spending predictors and political and globalization indicators

	OECD						Latin America and the Caribbean					
	Logic of industrialism		Power resources		Globalization		Logic of industrialism		Power resources		Globalization	
	Model 7A Fixed effects	Model 7B Random effects	Model 8A Fixed effects	Model 8B Random effects	Model 9A Fixed effects	Model 9B Random effects	Model 10A Fixed effects	Model 10B Random effects	Model 11A Fixed effects	Model 11B Random effects	Model 12A Fixed effects	Model 12B Random effects
Year	0.081 (0.062)	0.094 (0.060)	0.076 (0.063)	0.081 (0.061)	0.154* (0.063)	0.148* (0.062)	-0.05 (0.032)	-0.018 (0.023)	-0.048 (0.032)	-0.02 (0.023)	-0.033 (0.037)	-0.005 (0.025)
Population	0.738** (0.261)	0.041 (0.124)	0.740** (0.261)	0.073 (0.128)	0.226 (0.281)	-0.187 (0.135)	0.163 (0.271)	0.375* (0.155)	0.139 (0.274)	0.365* (0.154)	0.08 (0.342)	0.300+ (0.180)
GDP	-0.233+ (0.134)	-0.246+ (0.131)	-0.228+ (0.135)	-0.230+ (0.132)	-0.005 (0.139)	-0.06 (0.134)	-0.143 (0.123)	-0.11 (0.115)	-0.139 (0.123)	-0.106 (0.115)	-0.144 (0.125)	-0.118 (0.116)
Unemployment	0.577*** (0.065)	0.549*** (0.064)	0.581*** (0.065)	0.562*** (0.065)	0.561*** (0.064)	0.546*** (0.064)	0.238*** (0.032)	0.231*** (0.031)	0.244*** (0.033)	0.238*** (0.032)	0.243*** (0.034)	0.238*** (0.032)
Elderly population	-0.121 (0.142)	0.004 (0.138)	-0.099 (0.153)	0.047 (0.145)	-0.234 (0.150)	-0.064 (0.143)	1.945*** (0.440)	1.289*** (0.246)	1.875*** (0.454)	1.239*** (0.248)	1.724*** (0.489)	1.199*** (0.260)
Left seats			0.006 (0.016)	0.018 (0.015)	0.022 (0.016)	0.028+ (0.015)			1.117 (1.751)	1.761 (1.707)	1.312 (1.774)	1.825 (1.699)



**Table 3.** (Continued)

	OECD						Latin America and the Caribbean					
	Logic of industrialism		Power resources		Globalization		Logic of industrialism		Power resources		Globalization	
	Model 7A Fixed effects	Model 7B Random effects	Model 8A Fixed effects	Model 8B Random effects	Model 9A Fixed effects	Model 9B Random effects	Model 10A Fixed effects	Model 10B Random effects	Model 11A Fixed effects	Model 11B Random effects	Model 12A Fixed effects	Model 12B Random effects
Trade openness					-0.076*** (0.015)	-0.064*** (0.014)					-0.007 (0.008)	-0.012+ (0.007)
FDI					0.004 (0.005)	0.003 (0.006)					<0.001 (0.002)	<0.001 (0.002)
N	350	350	350	350	350	350	232	232	232	232	232	232
Hausman test/ Sargan-Hansen statistic <sup>a</sup>	20.15 ( $p < 0.001$ )		17.48 ( $p < 0.01$ )		24.89 ( $p < 0.001$ )		12.40 ( $p < 0.05$ )		8.72 ( $p > 0.12$ )		5.69 ( $p > 0.57$ )	

Source: Data for Latin American and the Caribbean come from the Social Policy in Latin America and the Caribbean Dataset, 1960–2006 and the Latin America and the Caribbean Political Dataset, 1945–2001. Data for the OECD sample were taken from the Comparative Welfare States Data Set (December 1997, updated April 2004). Health spending among the OECD countries comes from the OECD Health Dataset 2008. Sources for the explanatory variables are detailed in Table 1.

Notes: \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ ; + $p < 0.10$  (two-tailed tests). All models were estimated in Stata10. Each cell reports the unstandardized coefficient, with the standard error in parentheses. Constants calculated but not reported. All models were estimated in Stata10.

<sup>a</sup>When deciding between a fixed and random-effects model the traditional Hausman test yielded a non-positive definite matrix for the OECD models and for those models I employed the Sargan-Hansen statistic using the *xtoverid* routine in Stata (Schaffer and Stillman, 2010). Like the Hausman test, a significant test statistic indicates that the fixed effects model is preferred. To ensure comparability across regions I include both models, the model preferred by the Hausman test is shaded in grey.

**Table 4.** Cross-section time-series regression of government health spending as a percent of GDP, 1980–2000 on demographic and economic, ‘traditional’ welfare state spending predictors and political and globalization indicators

	OECD						Latin America and the Caribbean					
	Logic of industrialism		Power resources		Globalization		Logic of industrialism		Power resources		Globalization	
	Model 13A	Model 13B	Model 14A	Model 14B	Model 15A	Model 15B	Model 16A	Model 16B	Model 17A	Model 17B	Model 18A	Model 18B
	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects
Year	0.068*** (0.013)	0.073*** (0.014)	0.073*** (0.013)	0.077*** (0.014)	0.091*** (0.014)	0.095*** (0.014)	-0.041** (0.016)	-0.025* (0.011)	-0.038* (0.016)	-0.024* (0.011)	-0.044* (0.019)	-0.031* (0.013)
Population	0.601*** (0.054)	0.157*** (0.029)	0.596*** (0.053)	0.159*** (0.031)	0.505*** (0.066)	0.076* (0.037)	0.589*** (0.159)	0.181* (0.080)	0.557*** (0.162)	0.162* (0.078)	0.652** (0.204)	0.141+ (0.083)
GDP	-0.187*** (0.030)	-0.156*** (0.032)	-0.190*** (0.030)	-0.160*** (0.032)	-0.136*** (0.031)	-0.107*** (0.032)	0.181* (0.075)	0.128+ (0.068)	0.172* (0.076)	0.117+ (0.068)	0.180* (0.077)	0.112+ (0.068)
Unemployment	-0.055*** (0.015)	-0.049** (0.016)	-0.060*** (0.015)	-0.054** (0.017)	-0.062*** (0.015)	-0.052*** (0.016)	0.088*** (0.017)	0.095*** (0.017)	0.092*** (0.018)	0.099*** (0.017)	0.093*** (0.018)	0.096*** (0.017)
Elderly population	0.133*** (0.034)	0.118** (0.036)	0.099** (0.036)	0.099** (0.038)	0.059 (0.036)	0.054 (0.037)	0.044 (0.237)	0.108 (0.126)	0.006 (0.240)	0.087 (0.123)	0.074 (0.263)	0.095 (0.119)

Table 4. (Continued)

	OECD						Latin America and the Caribbean					
	Logic of industrialism		Power resources		Globalization		Logic of industrialism		Power resources		Globalization	
	Model 13A Fixed effects	Model 13B Random effects	Model 14A Fixed effects	Model 14B Random effects	Model 15A Fixed effects	Model 15B Random effects	Model 16A Fixed effects	Model 16B Random effects	Model 17A Fixed effects	Model 17B Random effects	Model 18A Fixed effects	Model 18B Random effects
Left seats			-0.010** (0.004)	-0.007+ (0.004)	-0.007* (0.003)	-0.007+ (0.004)			0.995 (1.004)	1.348 (0.968)	0.885 (1.017)	1.286 (0.971)
Trade openness					-0.016*** (0.004)	-0.021*** (0.004)					0.002 (0.004)	0.004 (0.004)
FDI					-0.001 (0.001)	0.002* (0.001)					0.001 (0.001)	0.001 (0.001)
N	360	360	360	360	360	360	312	312	312	312	312	312
Hausman test/ Sargan-Hansen statistic <sup>a</sup>	92.22 ( $p < 0.001$ )		93.88 ( $p < 0.001$ )		74.83 ( $p < 0.001$ )		8.12 ( $p > 0.08$ )		20.55 ( $p < 0.01$ )		17.82 ( $p < 0.05$ )	

Source: Data for Latin American and the Caribbean come from the Social Policy in Latin America and the Caribbean Dataset, 1960–2006 and the Latin America and the Caribbean Political Dataset, 1945–2001. Data for the OECD sample were taken from the Comparative Welfare States Data Set (December 1997, updated April 2004). Health spending among the OECD countries comes from the OECD Health Dataset 2008. Sources for the explanatory variables are detailed in Table 1.

Notes: \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ ; + $p < 0.10$  (two-tailed tests). All models were estimated in Stata10. Each cell reports the unstandardized coefficient, with the standard error in parentheses. Constants calculated but not reported. All models were estimated in Stata10.

<sup>a</sup>When deciding between a fixed and random-effects model the traditional Hausman test yielded a non-positive definite matrix for the OECD models and for those models I employed the Sargan-Hansen statistic using the *xtoverid* routine in Stata (Schaffer and Stillman, 2010). Like the Hausman test, a significant test statistic indicates that the fixed effects model is preferred. To ensure comparability across regions I include both models, the model preferred by the Hausman test is shaded in grey.

In the OECD nations, higher unemployment, left party strength and GDP are all associated with lower government health spending while more populous countries exhibit higher health spending (Model 13A in Table 4). Some of these results are unexpected; however, because of the dearth of previous quantitative time-series research on health spending it is unclear whether they are atypical. Furthermore, many of these patterns are not present at the bivariate level; bivariate analyses indicate that higher GDP is positively and significantly associated with higher health spending, however, the inclusion of the time trend reverses the effect. Left cabinet does not have a significant effect on health spending among OECD countries in bivariate analyses, however, once the percent of the population that is 65 years or older is included into the model, the coefficient moves into significance. Finally, unemployment does not have a significant effect on government health spending at the bivariate level; it becomes negative and significant when the time trend, in conjunction with GDP, is included in the model. That is, unemployment has a significantly negative effect on public health spending only net of wealth or openness (and both together).

### *New times, different predictors? Globalization and social and health spending*

Of particular interest to this study is the way in which globalization impacts social and health spending in the OECD and Latin America. Increased integration into the world economy (operationalized as trade openness) is associated with lower social spending, for both social spending and spending on welfare and social security in the OECD (Models 3A and 9A in Tables 2 and 3). For the Latin American and Caribbean sample this effect is marginally significant for overall social spending and the random effects model for welfare and social security spending, which is preferred by the alternative Hausman test (Model 12B in Table 3) but not for social spending (Model 6B in Table 2).

These associations indicate that globalization is patterning social spending in important ways, especially in established welfare states but there are also hints that it is dampening spending in the Latin American context (though this is only marginally statistically significant, Model 12B in Table 3). In the OECD nations, trade openness is also associated with lower spending on health (Model 15A in Table 4).

### *Welfare state development in Latin America: Democratization and IFIs*

Much has been made in the literature about the negative effects of globalization on welfare spending and social support in developing countries but I find that neither foreign direct investment nor trade openness have a significant effect on either outcome in Latin America. However, some of the literature (compare Huber, 2005) emphasizes the *institutional* component of globalization, that is, not so much 'the race to the bottom' but rather IFI pressures to downscale state spending. In order to further interrogate the possible role of global factors I include four different variables that capture World Bank and IMF presence in the Latin American and Caribbean countries. In addition while the power resources approach did not find much support in Tables 2 and 3 some suggest that it is trajectories of democratization in LAC that matter for social spending levels, rather than left party dominance. It is important to note, as is mentioned in the table, that each of these indicators was added separately and that models in Table 5 include controls for population, GDP, unemployment, elderly population, trade openness, foreign direct investment, left sets, and legacy of democracy. These coefficients are not reported and the inclusion of the globalization measures does not alter the conclusions reached from Tables 2, 3 and 4 about the effects of the other explanatory variables. Table 5 indicates that more World Bank adjustment programs and the presence of an IMF program are associated with lower levels of social spending in Latin America.

**Table 5.** Social spending, spending on welfare and social security and government health spending models for Latin American and Caribbean Countries, 1980–1995/2000, with legacy of democracy and select globalization measures

	Social spending		Spending on welfare and social security		Government health spending	
	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects
Legacy of democracy	0.015 (0.02)	0.016 (0.02)	0.016 (0.01)	0.017 (0.01)	-0.004 (0.01)	-0.004 (0.01)
Neoliberal IMF staff	-0.671 (0.37)	-0.613+ (0.37)	-0.829*** (0.21)	-0.839*** (0.20)	0.073 (0.12)	0.095 (0.12)
N	155	155	198	198	270	270
Hausman test/Sargan–Hansen statistic <sup>a</sup>	13.34 ( $p > 0.14$ )		10.15 ( $p > 0.33$ )		19.14 ( $p < 0.05$ )	
Legacy of democracy	0.008 (0.03)	0.008 (0.03)	0.012 (0.01)	0.011 (0.01)	-0.004 (0.01)	-0.003 (0.01)
Number of World Bank adjustment programs	-0.068 (0.29)	-0.071 (0.28)	-0.095 (0.17)	-0.09 (0.17)	0.102 (0.07)	0.097 (0.07)
N	139	139	196	196	277	277
Hausman test/Sargan–Hansen statistic <sup>a</sup>	18.42 ( $p < 0.05$ )		4.08 ( $p > 0.90$ )		35.83 ( $p < 0.001$ )	
Legacy of democracy	0.027 (0.03)	0.026 (0.02)	0.005 (0.01)	0.005 (0.01)	0.001 (0.01)	0.001 (0.01)
Repurchasing obligations to the IMF	-0.028+ (0.02)	-0.030+ (0.02)	-0.016* (0.01)	-0.014* (0.01)	0.011* (0.01)	0.010* (0.01)
N	145	145	193	193	269	269
Hausman test/Sargan–Hansen statistic <sup>a</sup>	9.19 ( $p > 0.41$ )		11.69 ( $p > 0.23$ )		15.99 ( $p > 0.06$ )	
Legacy of democracy	0.015 (0.02)	0.016 (0.02)	0.013 (0.01)	0.013 (0.01)	-0.005 (0.01)	-0.005 (0.01)
IMF program	-0.115 (0.46)	-0.051 (0.46)	-0.01 (0.25)	0.013 (0.24)	0.258* (0.13)	0.263* (0.13)
N	155	155	221	221	303	303
Hausman test/Sargan–Hansen statistic <sup>a</sup>	17.63 ( $p < 0.05$ )		3.76 ( $p > 0.93$ )		26.72 ( $p < 0.01$ )	

Source: Data for Latin American and the Caribbean come from the Social Policy in Latin America and the Caribbean Dataset, 1960–2006 and the Latin America and the Caribbean Political Dataset, 1945–2001. Sources for the explanatory variables are detailed in Table 1.

Notes: \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ ; + $p < 0.10$  (two-tailed tests). All models were estimated in Stata 10. Each cell reports the unstandardized coefficient, with the standard error in parentheses.

<sup>a</sup>The reported coefficients for neoliberal IMF staff, number of World Bank adjustment programs, the presence of an IMF program and repurchasing obligations to the IMF were each included in a separate model (that is, were not all simultaneously included in a single model), legacy of democracy was included in each model. All models in Table 5 include all the predictors in Models 6, 12 and 18, that is, population, GDP, unemployment, elderly population, trade openness, foreign direct investment, left sets and legacy of democracy. These coefficients are not reported but are available from the author upon request. The inclusion of the globalization measures does not alter the conclusions reached from Tables 2, 3 and 4 about the effects of the other covariates.

<sup>b</sup>When deciding between a fixed and random-effects model the traditional Hausman often test yielded a non-positive definite matrix and in those cases I employed the Sargan–Hansen statistic using the *xtoverid* routine in Stata (Schaffer and Stillman, 2010). To ensure comparability across regions I include both models, the model preferred by the Hausman test is shaded in grey.

Turning to welfare and social security spending, Table 5 indicates that having a higher number of senior neo-liberal IMF staff members (that is, those that were trained in neo-liberal economics departments, see Chwiroth, 2007, for a detailed explanation of the construction of this measure) is associated with lower spending by 0.8 of a percentage point. In addition, having higher repurchasing obligations to the IMF is associated with lower social spending, though this effect is only marginally significant. Overall therefore, most indicators of international financial institution presence in Latin America are associated with lower social and welfare and social security spending (though these effects are not always statistically significant).

For government health spending the trend is reversed: international financial institutions are associated with higher health spending in Latin America. The presence of an IMF program in a given year and higher repurchasing obligations to the IMF are both statistically significantly associated with higher government health spending. It is difficult to parse out the meaning of these effects, and they might seem counterintuitive at face value given the neo-liberal orientation of IFIs. However, the IMF and World Bank have actually pushed Latin American countries to reform their health sectors, in the interest of efficient spending and investment in human capital, particularly health and education (compare Hunter and Brown, 2000). In addition, in the 1990s the IMF shifted from Structural Adjustment Programs to Poverty Reduction Strategy Papers in which countries explicitly address poverty alleviation, emphasizing, among them health inequalities and possible remedies (Weyland, 2006). Overall, while theory addressing health sectors in Latin America and their relationships to neo-liberal models focus on health sector reform (HSR) rather than spending per se existing analyses do not negate the positive effect of IFI involvement on health spending.

## Conclusion

Systematic, over-time comparisons of the determinants of social spending and public health spending across macro-regions have the benefit of allowing us to explore the power of established influences in explaining welfare spending across regional contexts. This study has, capitalizing on newly available data for Latin America and the Caribbean, extended our understanding of the determinants of welfare spending by comparing trends and exploring the predictors of spending across macro-regions.

Spending on welfare and social security in Latin America over the 1980–2000 period is seemingly being driven by domestic demographic and economic, rather than political and global factors – with elderly population and unemployment significantly affecting spending (Tables 2 and 3). Classic theories of the welfare state and particularly the logic of industrialism approach, therefore, holds even in this new context: in young welfare states demographic factors are strongly associated with social spending. In the OECD on the other hand, trade openness, in addition to unemployment, are driving changes in spending, net of other variables (Tables 2 and 3). This presence of a negative effect of increased openness to the world economy indicates, as previous literature has noted, that richer nations are not immune to global dynamics. The power resources approach finds little support in these models, in both regions, which is not inconsistent with previous empirical analyses of social spending though nonetheless important to note.

While globalization in the form of trade openness and foreign direct investment are not driving down social spending in Latin America, I find evidence that global *institutions* may be negatively influencing spending as repurchasing obligations to the IMF are associated with lower levels of spending as are more neoliberal IMF staff members (Table 5). The latter result, however, is not so much a commentary on the IMF as an institution, but more an affirmation of the idea that

neoliberal training and ideology are associated with pressures for less social spending – that is, only to the extent that senior staff are neoliberal will this association exist. Results further indicate that the important influences as established by the literature fare better in predicting spending on welfare and social security than on health in both regions.

While democratization has been identified as an important dimension of welfare state development in Latin America models reveal that neither left party strength nor legacies of democratization in the Latin American and Caribbean countries in the sample influence welfare effort and health spending. Future research should examine whether the results for Latin America apply to other developing welfare states, namely Asia. There is some reason to expect that in East Asian welfare states welfare effort, like in the OECD and Latin America, may be strongly influenced by unemployment rates because in East Asia a preoccupation with economic development has resulted in welfare states that have largely targeted industrial workers (Aspalter, 2006; Kwon, 2005). With their strong emphasis on a developmental state, however, it is unclear whether, like in the OECD integration into the world economy might be associated with lower social spending or, whether similarly to Latin America, international financial institutions influence social policy in important ways.

The literature indicates that the recent dynamics of reform in health care systems, and public spending over the last couple of decades in Latin American and Caribbean countries are a function of interactions between the private and non-profit sectors and neo-liberal pressures from international organizations, which are ill-captured by regression models. This highlights a need for increased country-level analyses of Latin American social spending and particularly public health spending in order to further explore the role that global pressures may play in government spending. More generally, it speaks to the need for more analyses of different domains of social spending, as these may have different determinants, political, demographic and economic, domestic and global, than overall social spending.

**Acknowledgments**

The author would like to thank Patricia McManus, Clem Brooks, Brian Powell, and Oren Pizmony-Levy for helpful comments on previous versions of this paper. An earlier version of this article was presented at the 2009 meeting of the International Sociological Association’s Research Committee on Poverty, Social Welfare and Social Policy (RC19).

**Appendix A**

**Table A1.** Country-years in the sample

	Latin America and the Caribbean		
	Social spending	Spending on welfare and social security	Government spending on health
Argentina	1980–1995	1980–2000	1980–1999
Barbados	–	1980–1989	1980–1989
Belize	–	1993–1997	1993–1997
Bolivia	–	1989–2000	1989–2000
Brazil	1981–1993	1981–1998	1981–1999
Chile	1980–1994	1980–2000	1980–2000

(Continued)

Table A1. (Continued)

Latin America and the Caribbean			
	Social spending	Spending on welfare and social security	Government spending on health
Colombia	–	1982–1999	1980–1996
Costa Rica	1980–1994	1980–2000	1980–2000
Dominican Republic	–	1991–2000	1991–2000
Ecuador	1987–1995	1987–1990	1987–2000
El Salvador	1980, 1985–1994	1980, 1985–2000	1980, 1985–2000
Guatemala	1987, 1989–1991	1987, 1989	1987, 1989–1991, 1998
Haiti	–	–	1982–1983, 1988, 1990
Honduras	1986–1987, 1990–1995	–	1982, 1986–1987, 1990–1999
Jamaica	–	1992–2000	1982–1984, 1986–1989, 1992–2000
Mexico	1988, 1991–1995	1988, 1991–2000	1988, 1991–1998
Nicaragua	1985–1995	1990–1992	1985–1992, 1995–2000
Panama	1982–1989, 1991–1994	1982–1989, 1991–2000	1982–1989, 1991–2000
Paraguay	1980, 1982–1987, 1989–1993	1980, 1982–1987, 1989–1993	1980, 1982–1994, 1996–1999
Peru	1984, 1986–1987, 1989, 1991	–	1984, 1986–1987, 1989, 1991–1999
Trinidad and Tobago	–	1980–1981, 1993–1995	1980–1987
Uruguay	1984, 1986–1995	1984, 1986–2000	1984, 1986–1999
Venezuela	1980–1990	1980–1986, 1999–2000	1980–1999
OECD			
	Social spending	Spending on welfare and social security	Government spending on health
Australia	1980–1999	1980–2000	1980–2000
Austria	1980, 1985, 1990–1998	1980–2000	1980, 1985, 1990–2000
Belgium	1980–1998	1980–2000	1980–2000
Canada	1980–1999	1980–1998	1980–2000
Denmark	1981–1998	1981–2000	1981–2000
Finland	1980–1998	1980–2000	1980–2000
France	1980–1998	1980–2000	1980–2000
Germany	1980–1998	1980–2000	1980–2000
Ireland	1980–1998	1980–2000	1980–2000
Italy	1980–1998	1980–2000	1980–2000
Japan	1980–1998	1980–2000	1980–2000
Netherlands	1980–1998	1980–2000	1980–2000
New Zealand	1980–1999	1980–1982	1980–2000
Norway	1980, 1985, 1988–1998	1980–2000	1980, 1985, 1988–1998
Sweden	1980–1998	1980–2000	1980–2000
Switzerland	1983–1998	1983–1999	1983–2000
United Kingdom	1980–1998	1980–2000	1980–2000
United States	1980–1999	1980–1997	1980–2000

Source: Data for Latin American and the Caribbean come from the Social Policy in Latin America and the Caribbean Dataset, 1960–2006 and the Latin America and the Caribbean Political Dataset, 1945–2001. Data for the OECD sample were taken from the Comparative Welfare States Data Set (December 1997, updated April 2004). Health spending among the OECD countries comes from the OECD Health Dataset 2008.



**Table A2.** Correlations between variables used in the analysis for the OECD

	Social spending	Spending on welfare and social security	Government health spending	Population	Foreign direct investment	Elderly population	Unemployment	Trade openness	Left seats	GDP	Year
Spending on welfare and social security	0.81	1.00									
Government health spending	0.41	0.36	1.00								
Population	-0.50	-0.30	-0.11	1.00							
Foreign direct investment inflows	-0.16	-0.13	0.00	0.62	1.00						
Elderly population	0.69	0.43	0.31	-0.17	0.02	1.00					
Unemployment	0.22	0.26	0.18	-0.14	0.00	-0.12	1.00				
Trade openness	0.44	0.40	0.08	-0.57	-0.14	0.17	0.35	1.00			
Left seats	0.49	0.30	0.19	-0.51	-0.34	0.43	-0.15	-0.02	1.00		
GDP	-0.03	-0.20	-0.13	0.35	0.46	0.24	-0.38	-0.12	-0.17	1.00	
Year	0.29	0.07	0.13	-0.01	0.30	0.38	0.11	0.30	0.00	0.63	1.00

**Table A3.** Correlations between variables used in the analysis for Latin America and the Caribbean

	Social spending	Spending on welfare and social security	Government health spending	Population	Foreign direct investment	Elderly population	Unemployment	Trade openness	Left seats	GDP	Year	Legacy of democracy	Neoliberal IMF staff	Number of World Bank adjustment programs	IMF program
Spending on welfare and social security	0.62	1.00													
Government health spending	0.67	0.03	1.00												
Population	-0.21	0.11	-0.06	1.00											
Foreign direct investment inflows	-0.11	-0.05	0.03	0.50	1.00										
Elderly population	0.56	0.79	0.08	-0.22	-0.14	1.00									
Unemployment	0.38	0.27	0.10	-0.44	-0.32	0.18	1.00								
Trade openness	0.31	-0.22	0.41	-0.47	-0.21	-0.12	0.52	1.00							
Left seats	0.36	0.55	0.10	-0.10	-0.15	0.79	-0.01	-0.23	1.00						
GDP	0.42	0.63	0.14	0.33	0.40	0.65	-0.22	-0.15	0.48	1.00					
Year	0.06	0.05	0.06	0.02	0.26	0.17	-0.16	0.10	0.24	0.28	1.00				
Legacy of democracy	0.50	0.48	0.27	-0.09	-0.18	0.53	0.03	-0.15	0.35	0.32	-0.08	1.00			
Neoliberal IMF staff	-0.01	-0.01	0.04	0.01	0.20	0.14	-0.18	0.06	0.26	0.19	0.92	-0.09	1.00		
Number of World Bank adjustment programs	-0.13	-0.11	0.06	0.41	0.38	-0.12	-0.32	-0.17	-0.01	0.20	0.17	-0.26	0.16	1.00	
IMF program	0.30	0.00	0.41	0.12	0.01	0.02	-0.06	0.10	0.07	0.01	0.05	0.17	0.04	0.28	1.00
Repurchasing obligations to the IMF	-0.15	-0.02	0.01	0.58	0.76	-0.15	-0.32	-0.23	-0.15	0.36	0.18	-0.18	0.17	0.51	0.20

## Notes

1. Rudra's (2007) argument about developing countries echoes Orloff's (1993) gendered critique that welfare states can and did develop before a large segment of the population (women) was commodified in developed nations. Similarly, the logic bears extension to LDCs: welfare states can exist in developing nations despite the non-commodified status (largely because of partial industrialization) of much of the population and arguments to the contrary are therefore theoretically misguided.
2. With the exception of Costa Rica, these pioneer countries introduced their first social security schemes in the 1920s and 1930s (Huber, 2005; Pierson, 2005). Information on the country-years included in the analysis are available in Table A1 in Appendix A.
3. Information on the country-years included in the analysis are available in Table A1 in Appendix A.
4. There are no data on unemployment for the Latin American and Caribbean countries between 1970 and 1980 which prevents the analysis of a longer time series comparatively. Models excluding unemployment as an explanatory variable for both the OECD and Latin American samples yield comparable results for the other independent variables, however, since unemployment is both a theoretically relevant and a statistically significant predictor of total social spending, spending on welfare and social security and government health spending I use the full data, available for the time period between 1980 and 2000.
5. This is the *socx* variable for the OECD and the *totgdp* variable for Latin America.
6. For the OECD this is the *sstran* variable from the Comparative Welfare State Dataset and the *sswgdg* measure for the Latin American sample, which captures spending on welfare and social security.
7. For the OECD this is the public expenditure on health as percent of GDP from the OECD Health Data 2008 dataset. For Latin America and the Caribbean this is the *cshlth* variable, taken from the Huber et al. (2008b) dataset. The OECD Health Data 2008 also contain data for public expenditure on health in Mexico as a percent of GDP after 1990, though the amounts are lower (between .9 and 1.4%), the trend is very similar (correlation of .88) which increases my confidence in the data, and especially in the results for the *relationship* between the independent and outcome variable as the trends are similar.
8. Therefore, for total social spending, there are no data for: Barbados, Belize, Bolivia, the Dominican Republic, Haiti, Jamaica, and Trinidad and Tobago, further restricting the sample. Information on the country-years included in the analysis are available in Table A1 in Appendix A.
9. It is important to note that this measure is time-variant but region-specific since it looks at senior managing staff, therefore, all countries in Latin America and all countries in the Caribbean receive the same score. For a detailed discussion of the measure, see Chwiero (2007).
10. While inclusion of country fixed effects is recommended because the coefficients of unit dummies are interpreted as measures of unobserved time invariant variables and the results are unbiased even when the unit effects are correlated (Plümper et al., 2005) I also estimated the models using random effects because we have reason to believe that some exogenous variables levels' (rather than simply changes) have an effect on the dependent variable (Plümper et al., 2005), this is particularly true for level of democracy and left party strength. Some previous analyses of social spending in Latin America have used a lagged dependent variable (compare Avelino et al., 2005; Kaufman and Segura-Ubiergo, 2001; Segura-Ubiergo, 2007; Wibbels, 2006), however I avoid this as 'lagged dependent variable's coefficient measures the weighted average of the right-hand side variables' (Plümper et al., 2005: 335) and therefore models the dynamics of the independent variables, rather than the dependent variable (Cochrane and Orcutt, 1949, in Plümper et al., 2005).
11. Upon the request of a reviewer I conducted supplementary analysis on the effects of military spending and education on social spending. Analyses including military expenditure as a percent of GDP for a subset of the years in my analysis, 1988–2000 (due to limited data availability) indicate that the substantive conclusions presented in the paper hold. I also conducted supplementary analyses using gross secondary enrollment rates (with limited data for Latin America) and found that, again, the substantive conclusions based on the results presented in the article remain unchanged.

## References

- Amenta E (1993) The state of the art in welfare state research on social spending efforts in capitalist democracies since 1960. *American Journal of Sociology* 99(3): 750–763.
- Amenta E, Bonastia C and Caren N (2001) US social policy in comparative and historical perspective: Concepts, images, arguments, and research strategies. *Annual Review of Sociology* 27: 213–234.
- Arellano M (1993) On the testing of correlated effects with panel data. *Journal of Econometrics* 59(1–3): 87–97.
- Arnesen A-L and Lundahl L (2006) Still social and democratic? Inclusive education policies in the Nordic welfare states. *Scandinavian Journal of Educational Research* 50 (3): 285–300.
- Aspalter C (2006) The East Asian welfare model. *International Journal of Social Welfare* 15: 290–301.
- Avelino G, Brown DS and Hunter W (2005) The effects of capital mobility, trade openness, and democracy on social spending in Latin America, 1980–1999. *American Journal of Political Science* 49(3): 625–641.
- Bambra C (2005) Worlds of welfare and the health care discrepancy. *Social Policy & Society* 4(1): 31–41.
- Beck N and Katz JN (1995) What to do (and not to do) with time-series cross-section data. *American Political Science Review* 89: 634–647.
- Béland D and Gran B (eds) (2008) *Public and Private Social Policy: Health and Pension Policies in a New Era*. Basingstoke: Palgrave Macmillan.
- Boockmann B and Dreher A (2003) The contribution of the IMF and the World Bank to economic freedom. *European Journal of Political Economy* 19(3): 633–649.
- Brooks C and Manza J (2006a) Social policy responsiveness in developed democracies. *American Sociological Review* 71(3): 474–494.
- Brooks C and Manza J (2006b) Why do welfare states persist? *Journal of Politics* 68: 816–827.
- Brooks C and Manza J (2007) *Why Welfare States Persist: The Importance of Mass Opinion in Democracies*. Chicago, IL: University of Chicago Press.
- Chwieroth JM (2007) Testing and measuring the role of ideas: The case of neoliberalism in the International Monetary Fund. *International Studies Quarterly* 51: 5–30.
- de Mesa AA and Mesa-Lago C (2006) The structural pensions reform in Chile: Effects, comparisons with other Latin American reforms and lessons. *Oxford Review of Economic Policy* 22(1): 149–167.
- Esping-Andersen G (1990) *The Three Worlds of Welfare Capitalism*. Princeton, NJ: Princeton University Press.
- Esping-Andersen G (1999) *Social Foundations of Postindustrial Economies*. Oxford: Oxford University Press.
- Filgueira F (1998) El nuevo modelo de prestaciones sociales en América Latina: residualismo y ciudadanía estratificada. In: Roberts B (ed.) *Ciudadanía y política social*. San José: FLACSO/SSRC, 71–116.
- Garrett J and Nickerson D (2005) Globalization, democratization and government spending in middle income countries. In: Glatzer M and Rueschemeyer D (eds) *Globalization and the Future of the Welfare State*. Pittsburgh, PA: University of Pittsburgh Press, 75–105.
- Glatzer M and Rueschemeyer D (eds) (2005) *Globalization and the Future of the Welfare State*. Pittsburgh, PA: University of Pittsburgh Press.
- Goodin RE, Headey B, Muffels R and Dirven H-J (1999) *The Real Worlds of Welfare Capitalism*. Cambridge: Cambridge University Press.
- Homedes N and Ugalde A (2005) Why neoliberal health reforms have failed in Latin America. *Health Policy* 71(1): 83–96.
- Huber E (2005) Globalization and social policy developments in Latin America. In: Glatzer M and Rueschemeyer D (eds) *Globalization and the Future of the Welfare State*. Pittsburgh, PA: University of Pittsburgh Press, 75–105.
- Huber E, Nielsen F, Pribble J and Stephens JD (2006) Politics and Inequality in Latin America and the Caribbean. *American Sociological Review* 71(6): 943–963.
- Huber E and Stephens JD (2001) *Development and Crisis of the Welfare State: Parties and Policies in Global Markets*. Chicago, IL: The University of Chicago Press.
- Huber E, Mustillo T and Stephens JD (2008a) Politics and social spending in Latin America. *The Journal of Politics* 70(2): 420–436.

- Huber E, Stephens JD, Mustillo T and Pribble J (2008b) Social policy in Latin America and the Caribbean dataset, 1960–2006. University of North Carolina, Chapel Hill.
- Huber E, Stephens JD, Mustillo T and Pribble J (2008c) Latin America and the Caribbean political dataset, 1945–2001. University of North Carolina, Chapel Hill.
- Huber E, Ragin C, Stephens JD, Brady D and Beckfield J (2004) Comparative welfare states data set. Northwestern University, University of North Carolina, Duke University and Indiana University.
- Hunter W and Brown DS (2000) World Bank directives, domestic interests, and the politics of human capital investment in Latin America. *Comparative Political Studies* 33: 113–143.
- Janoski T and Hicks A (1994) *The Comparative Political Economy of the Welfare State*. Cambridge: Cambridge University Press.
- Kautto M, Heikkilä M and Hvinden B (eds) (1999) *Nordic Social Policy: Changing Welfare States*. New York: Routledge.
- Kaufman RR and Segura-Ubiergo A (2001) Globalization, domestic politics, and social spending in Latin America. *World Politics* 53(4): 553–588.
- Korpi W and Palme J (1998) The paradox of redistribution and strategies of equality: Welfare state institutions, inequality, and poverty in the Western countries. *American Sociological Review* 63(5): 661–687.
- Korpi W and Palme J (2003) New politics and class politics in the context of austerity and globalization: Welfare state regress in 18 countries, 1975–95. *American Political Science Review* 97(3): 425–446.
- Kwon H-j (2005) Transforming the developmental welfare state in East Asia. *Development and Change* 36(3): 477–497.
- Martínez Franzoni J (2008) Welfare regimes in Latin America: Capturing constellations of markets, families, and policies. *Latin American Politics and Society* 50(2): 67–100.
- Mesa-Lago C (2002) Myth and reality of pension reform: The Latin American evidence. *World Development* 30(8): 1309–1321.
- Mesa-Lago C (2006) Private and public pension systems compared: An evaluation of the Latin American experience. *Review of Political Economy* 18(3): 317–334.
- Mesa-Lago C (2008) *Reassembling Social Security: A Survey of Pensions and Health Care Reforms in Latin America*. Oxford: Oxford University Press.
- Mesa-Lago C and Müller K (2002) The politics of pension reform in Latin America. *Journal of Latin American Studies* 34: 687–715.
- Moore B (1993[1966]) *Social Origins of Dictatorship and Democracy*. Boston, MA: Beacon Press.
- OECD (Organization for Economic Co-Operation and Development) (2009) *OECD Health Data 2008*. Accessed 22 January 2008.
- Olafsdottir S (2007) Fundamental causes of health disparities: Stratification, the welfare state, and health in the United States and Iceland. *Journal of Health and Social Behavior* 48: 239–253.
- Orloff A (1993) Gender and the social rights of citizenship: The comparative analysis of gender relations and welfare states. *American Sociological Review* 58(3): 303–328.
- Pierson C (2005) Late industrializers and the development of welfare regimes. *Acta Politica* 40(4): 395–418.
- Pierson P (1996) The new politics of the welfare state. *World Politics* 48(2): 143–179.
- Plümpert T, Manow P and Tröger V (2005) Pooled data analysis in the comparative political economy of the welfare state: A note on methodology and theory. *European Journal of Political Research* 44: 327–354.
- Ragin C (1994) A qualitative comparative analysis of pension systems. In: Janoski T and Hicks A (eds) *The Comparative Political Economy of the Welfare State*. Cambridge: Cambridge University Press.
- Ruggie M (1996) *Realignments in the Welfare State: Health Policy in the United States, Britain, and Canada*. New York: Columbia University Press.
- Rudra N (2007) Welfare States in developing countries: Unique or universal? *The Journal of Politics* 69(2): 378–396.
- Schaffer ME and Stillman S (2010) *xtoverid: Stata module to calculate tests of overidentifying restrictions after xtreg, xtivreg, xtivreg2 and xthtaylor*. Available at <http://ideas.repec.org/c/boc/bocode/s456779.html>.

- Segura-Ubiergo A (2007) *The Political Economy of the Welfare State in Latin America: Globalization, Democracy, and Development*. Cambridge: Cambridge University Press.
- Street D (2008) Balancing acts: Trends in the public-private mix in health care. In: Béland D and Gran B (eds) *Public and Private Social Policy: Health and Pension Policies in a New Era*. Basingstoke: Palgrave Macmillan, 15–44.
- Weyland K (2006) *Bounded Rationality and Policy Diffusion: Social Sector Reform in Latin America*. Princeton, NJ: Princeton University Press.
- Wibbels E (2006) Dependency revisited: International markets, business cycles, and social spending in the developing world. *International Organization* 60: 433–468.