Social Democracy Constrained: Indirect Taxation in Industrialized Democracies

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The determinants of the welfare state have received a great deal of attention in the comparative political economy literature. An analysis of the role that indirect taxation plays in the politics of advanced industrial societies is, however, missing. This article demonstrates that a full understanding of the links between redistribution, social democracy and corporatism is impossible without a closer look at indirect taxation. Conventional wisdom is questioned and it is shown that social democratic governments in corporatist environments find themselves in a paradoxical situation. They need to support the welfare state by relying upon a fundamentally regressive policy instrument: indirect taxation. It is also shown that social democratic governments can minimize the use of consumption taxes as part of their redistributive strategy only in non-corporatist settings. In exploring these issues, this article illuminates alternative routes for the pursuit of equality in a context of declining corporatist arrangements.

The demand for redistribution is fairly inelastic across industrialized democracies. Even when social expenditures become very expensive, the demand for them decreases with great difficulty.¹ A cursory examination of fiscal policy across OECD (Organization for Economic Co-operation Development) governments reveals a striking fact: the countries more often ruled by social democratic parties are also characterized by the highest tax burden on consumption income and the highest levels of welfare state effort throughout the 1965–95 period. If taxes on consumption are seen as a regressive fiscal device applied to general consumption goods (rather than luxury goods), this pattern poses a puzzle for partisanship theory. Social democratic parties are assumed to protect the interests of citizens in the bottom half of the income distribution,² and yet they seem to make ample use of a tool that clearly undermines this goal. How can we explain the coexistence of large redistributive efforts on the expenditure side with the use of regressive tools on the revenue side?

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¹ There are a number of reasons why this is the case. The analysis in Geoffrey Garrett, *Partisan Politics in the Global Economy* (New York: Cambridge University Press, 1998) explains the resilience of the welfare state in spite of momentous international challenges. More recently, Paul Pierson and John Myles, 'The Comparative Political Economy of Pension Reform', in Paul Pierson, ed., *The New Politics of the Welfare State* (New York: Oxford University Press, 2001), pp. 305–34, have emphasized the path-dependent nature of pension levels (the existence of previous policies acts as an important constraint on change).

² Douglas Hibbs, 'Partisan Theory after Fifteen Years', *European Journal of Political Economy*, 8 (1992), 361–73.

Comparative political economy has devoted a great deal of effort to understanding the determinants of both social expenditures and public revenues.³ But within this body of literature, the analysis of indirect taxation appears largely as a residual category. For instance, in recent and rather comprehensive analyses of the policy trade-offs faced by OECD countries, Ganghof, Bretschger and Hettich, and Basinger and Hallerberg do not seem to consider indirect taxation as a potentially important dimension in the strategies of adjustment by OECD governments.⁴ Kato constitutes an important exception in showing that regressive taxation and welfare effort go hand in hand.⁵ However, although Kato emphasizes that mature welfare states rely on high taxation, her argument ignores the institutional context within which social democratic parties operate.

The main thrust of this article is that an analysis of redistribution in industrialized democracies must emphasize the institutionalized constraints placed on social democratic governments by corporatism. Trying to promote redistribution through the welfare state (as required by their corporatist commitments) leaves social democratic governments in

³ A growing body of literature has highlighted different aspects of the strategies pursued by OECD governments in order to balance the efficiency required by the working of the economy and the array of compensation policies demanded by domestic constituencies. On the determinants of income transfers, see Torben Iversen and Thomas R. Cusack, 'The Causes of Welfare State Expansion: Deindustrialization or Globalization?' World Politics, 52 (2000), 313-49; and Evelyne Huber and John Stephens, Development and Crisis of the Welfare State (Chicago: The University of Chicago Press, 2001). On the redistributive impact of the welfare state, see Pablo Beramendi, 'The Politics of Income Inequality in the OECD: The Role of Second Order Effects' (Luxembourg Income Study Working Papers, No. 284, 2001); Jonas Pontusson and Lane Kenworthy, 'Rising Inequality and the Politics of Redistribution in Affluent Countries', Perspectives on Politics, 3 (2005), 449-71; and Torben Iversen and David Soskice, 'Electoral Systems and the Politics of Coalitions: Why Some Democracies Redistribute More than Others', American Political Science Review, 100 (2006), 65-181. On the link between globalization and capital taxation, see Michael Wallerstein and Adam Przeworski, 'Capital Taxation with Open Borders', Review of International Political Economy, 2 (1995), 425-45; Philipp Genschel, 'Globalization, Tax Competition and the Welfare State', Politics and Society, 30 (1999), 245-75; Scott Basinger and Mark Hallerberg, 'Competing for Capital', American Political Science Review, 98 (2004), 261-76; Sven Steinmo, 'Globalization and Taxation: Challenges to the Swedish Welfare State', Comparative Political Studies, 35 (2002), 839-62; and Duane Swank and Sven Steinmo, 'The New Political Economy of Taxation in Advanced Capitalist Democracies', American Journal of Political Science, 46 (2002), 642-55.

On the role of partisan politics, Carles Boix, *Political Parties, Growth and Equality* (New York: Cambridge University Press, 1998); Thomas R. Cusack, 'Partisan Politics and Public Finance: Changes in Public Spending in the Industrialized Democracies, 1955–1989', *Public Choice*, 91 (1997), 375–95; Thomas R. Cusack, 'Partisan Politics and Fiscal Policy', *Comparative Political Studies*, 32 (1999), 464–86; Desmond King, *Actively Seeking Work*? (Chicago: The University of Chicago Press, 1995); David Rueda, *Social Democracy Inside Out* (Oxford: Oxford University Press, 2007); David Rueda, 'Insider–Outsider Politics in Industrialized Democracies', *American Political Science Review*, 99 (2005), 61–74; and David Rueda, 'Social Democracy and Active Labour Market Policies: Insiders, Outsiders, and the Politics of Employment Promotion', *British Journal of Political Science*, 36 (2006), 385–406. Finally, on the effects of political institutions and veto players, see Mark Hallerberg and Scott Basinger, 'Internationalization and Changes in Tax Policy in OECD Countries', *Comparative Political Studies*, 31 (1998), 321–53; Sven Steinmo and Caroline Tolbert, 'Do Institutions Really Matter? Taxation in Industrialized Democracies', *Comparative Political Studies*, 31 (1998), 165–87; and Andrew Gould, 'Party Size and Policy Outcomes: An Empirical Analysis of Taxation in Democracies', *Studies in Comparative International Development*, 36 (2001), 3–26.

⁴ Stephen Ganghof, 'Global Markets, National Tax Systems, and Domestic Politics: Rebalancing Efficiency and Equity in Open States' Income Taxation' (Cologne: Max Planck Institut für Gesellschaftsforschung, Discussion Paper, August 2001); Lucas Bretschger and Frank Hettich, 'Globalisation, Capital Mobility and Tax Competition: Theory and Evidence for OECD Countries', *European Journal of Political Economy*, 18 (2002), 695–716; and Basinger and Hallerberg, 'Competing for Capital'.

⁵ Junko Kato, *Regressive Taxation and the Welfare State* (New York: Cambridge University Press, 2003).

a paradoxical situation. If they pursue redistribution on the revenue side by decreasing regressive taxes on consumption, they will find it impossible to balance budgets strained by the demands of a generous welfare state. But if they try to extract revenue from any other source, the commitments underpinning the corporatist deal would be violated. The only option open to these governments is to try to promote redistribution through spending while actively working against redistribution through their increasing reliance on indirect taxation.

The article is structured as follows. First, the puzzle motivating the article is illustrated by discussing the evolution of consumption taxes across OECD countries. Then, we develop our argument about the determinants of consumption taxes. The methodological approach adopted and the empirical findings are presented. Finally, we conclude by elaborating the major implications of the analysis.

INDIRECT TAXATION AND REDISTRIBUTION IN INDUSTRIALIZED DEMOCRACIES

Taxes on consumption have significant redistributive effects. Table 1 is an admittedly rough illustration of the redistributive impact of different levels of consumption taxes.⁶ The figures present a comparison of the median disposable income for a working household before and after consumption taxes are taken into account. Consumption taxes are measured as the average effective tax rate on consumption income.⁷ Compare two countries with very different welfare state and taxation profiles, Canada and Norway. Median households in Norway and Canada have similar levels of disposable income (20,169 and 22,893 respectively, in 2000 US dollars) before indirect taxes are considered. The gap between the two is only \$2,724. Assuming that all goods are taxed at the average rate in both countries, the effect of consumption taxes is important in two respects. First, consumption taxes significantly decrease the levels of disposable income in both countries by a percentage equal to the effective tax rate in the table (12 per cent in Canada and an extremely high 30 per cent in Norway). Secondly, consumption taxes widen the gap between the Canadian and Norwegian median household to \$5,962. This increase (namely \$3,238) can be understood as an additional differential (induced by consumption taxes) in the disposable income of the Canadian median households compared to the Norwegian median household. Clearly, cross-national differences in the reliance on consumption taxes generate important redistributive effects.

A potential drawback of the figures presented in Table 1 is that they are built on the assumption that all households consume the same bundle of goods. This is clearly not the case. Poor households concentrate their expenditure on basic needs, whereas richer households can afford more luxury goods. This, in turn, implies that the redistributive effects of consumption taxes are themselves contingent upon the types of goods subject

⁶ The data reported in Table 1 were generously provided by Lane Kenworthy, and are based on his own calculations using the Luxembourg Income Study dataset. These data are limited to twelve countries. The data we use in our econometric models come from an array of different sources (see details in Table 3). In these analyses, the sample will be extended to sixteen countries.

⁷ Average effective tax rates (AETRs) reflect government taxation on average household consumption (for details, see Table 3). There is an advantage to these tax rates relative to more traditional indicators. AETRs are better indicators of tax policy because they are measured with respect to the income source, unlike other variables that compute the ratio of indirect taxes to gross domestic product.

	Disposable income before consumption taxes (US\$2000)		Average effective tax rate on	Disposable income after consumption taxes (US\$2000)			
	Bottom	Median	Тор	consumption (1995)	Bottom	Median	Тор
Norway	10,084.5	20,169.0	80,676.0	29.9	7,069.2	14,138.5	56,553.9
Denmark	9,921.5	19,843.0	79,372.0	32.9	6,657.3	13,314.7	53,258.6
Finland	8,107.0	16,214.0	64,856.0	26.7	5,942.4	11,884.9	47,539.4
Sweden	7,872.0	15,744.0	62,976.0	23.0	6,061.4	12,122.9	48,491.5
Germany	8,208.5	16,417.0	65,668.0	16.7	6,837.7	13,675.4	54,701.4
Netherlands	7,887.5	15,775.0	63,100.0	18.2	6,451.2	12,902.4	51,609.5
France	7,418.0	14,836.0	59,344.0	19.9	5,941.8	11,883.6	47,534.5
Italy	6,537.5	13,075.0	52,300.0	15.7	5,510.5	11,020.9	44,083.7
USĂ	11,644.5	23,289.0	93,156.0	5.6	10,995.9	21,991.8	87,967.2
Canada	11,446.5	22,893.0	91,572.0	12.2	10,050.0	20,100.1	80,400.2
Australia	8,576.0	17,152.0	68,608.0	8.8	7,822.2	15,644.3	62,577.4
UK	8,107.5	16,215.0	64,860.0	16.9	6,737.3	13,474.7	53,898.7

 TABLE 1
 Consumption Taxes and Disposable Income in the OECD

Source: Lane Kenworthy, *Egalitarian Capitalism* (New York: Russell Sage Foundation, 2004), Fig. 7.6. The household income distribution is calculated using data from the Luxembourg Income Study (LIS). The LIS data are constructed from surveys conducted in these countries. They are harmonized so they are truly comparable across nations. Figures represent median household income per equivalent adult after taxes and transfers in US\$2000. Figures refer only to working age households and have been adjusted by inflation and purchasing power parities. Bottom households are defined as those having half median income. Top households are defined as those having four times the median income level.

to taxation. If most consumption taxes were levied on luxury goods, it would be necessary to conclude that they are fundamentally redistributive. Alternatively, if consumption taxes are concentrated on basic goods (goods that are a greater percentage of bottom household consumption than of top household consumption), we would conclude that consumption taxes are essentially regressive.

According to the detailed country tables included in the OECD Revenue Statistics (1965–96), the latter seems to be the dominant pattern.⁸ Generally, taxation on items that can unequivocally be considered 'luxury goods' (for example, imported cars) accounts for a very small proportion of total indirect taxation. Although the OECD raw data on taxes on goods and services are not completely straightforward, a few figures can be presented to support this point. In the United States, taxes on luxury goods accounted for 2 per cent of total indirect taxation in 1970 and 12 per cent in 1995. In Germany, they represented 6 per cent and 4 per cent respectively, and in the case of Sweden, they were around 6 per cent and 2 per cent. These figures support the argument that the vast majority of the taxation on goods and services in industrialized democracies is concentrated on products that are consumed by the general population. Hence, taxes on consumption can be taken to be essentially regressive across OECD countries.

Table 1 also shows some of the empirical regularities we want to explain in our analysis. By the mid 1990s, Scandinavian countries had clearly made much more use of indirect

⁸ OECD, *Economic Outlook* (Paris: OECD, various years); and OECD, *Labor Force Statistics* (Paris: OECD, various years).



Fig. 1. Average effective tax rates on consumption in the OECD

taxes as a revenue source than continental European nations. In turn, the tax burden on consumption income is much larger in the latter than it is in any of the Anglo-Saxon countries. This is further illustrated in Figure 1.⁹

Figure 1 confirms the existence of very different patterns regarding indirect taxation in the OECD. It is also important, however, to consider the budgetary importance of indirect taxation. Figure 2 presents the levels of indirect taxation collected by OECD governments as a proportion of gross domestic product (GDP) in 1965 and 1995. Perhaps the most remarkable characteristic of the graph is the generally high level of indirect taxation in all OECD countries. Even in the United States, Japan and Australia, where levels are the lowest in our sample of countries, consumption taxes had reached between 8 per cent and 10 per cent of GDP by 1995. In Norway, Denmark and France the levels of indirect taxation had reached a whopping 18 per cent of GDP by 1995. Equally remarkable is the fact that the levels of indirect taxation in corporatist countries known to have a predominance of social democratic governments are consistently above the average. We have already mentioned Norway and Denmark, but the levels in Sweden and Finland, around 14 per cent, are just as noteworthy.

The importance of this regressive source of taxation in those countries we know to have been dominated by social democracy poses a puzzle for partisan approaches to political economy. Social democratic governments are commonly expected to be associated with policies that promote the interests of low income groups. If this is the case, however, what explains the fact that those countries where social democracy has been hegemonic are also the countries where governments have relied most heavily on regressive taxation?¹⁰ Can the empirical patterns identified in Figure 1 be reconciled with the fundamental claims of

⁹ The Anglo-Saxon countries include the United States, Canada, the United Kingdom, Ireland and Australia; the Continental countries include The Netherlands, Belgium, Germany and Austria; the Scandinavian group is Finland, Sweden, Norway and Denmark; and the others are France, Italy and Japan.

¹⁰ Iversen and Soskice, 'Electoral Systems and the Politics of Coalitions'.



Fig. 2. Indirect taxation as a percentage of GDP

partisan theory or do they prove them wrong? In the next section we lay out an argument that addresses these questions.

THE ARGUMENT: SOCIAL DEMOCRACY CONSTRAINED

Governments pursue redistribution through a combination of expenditure and tax policies. In theory, social democratic governments could promote redistribution through each and every one of the policy instruments available to them. In reality, the options open to governments are constrained by the way market actors (capital and labour) will react to them. Before we move on to elaborate the specifics of the argument, however, a conceptual clarification is in order as the comparative political economy literature is not unanimous in the way social democracy is defined. The literature splits into two broadly defined approaches. The first one considers social democracy as a political economy regime, inclusive not only of left-wing parties in office but also of highly co-ordinated and centralized labour market and wage-setting institutions. Left government, then, is understood as a constitutive element of the social democracy essentially defines the Scandinavian experience, with long-term hegemony of left parties within a model of state-centred corporatism.¹¹

¹¹ Peter Katzenstein, *Small States in World Markets Industrial Policy in Europe* (Ithaca, N.Y.: Cornell University Press, 1985); John Stephens, *The Transition to Socialism* (London: Macmillan, 1979); Walter Korpi, *The Democratic Class Struggle* (London: Routledge, 1983); Garrett, *Partisan Politics in the Global Economy*; Karl O. Moene and Michael Wallerstein, 'Social Democratic Labor Market Institutions', in Herbert Kitschelt, Peter Lange, Gary Marks and John Stephens, eds, *Continuity and Change in Contemporary Capitalism* (New York: Cambridge University Press, 1999), pp. 231–61; and Harold Wilensky, *Rich Democracies Political Economy*, *Public Policy, and Performance* (Berkeley: University of California Press, 2002).

While this approach has proved very useful in highlighting the complementarities at work in Scandinavian political economies, in what follows we adopt a more restrictive view. In line with a number of previous contributions, we define social democracy exclusively in terms of government partisanship and corporatism exclusively in terms of the organization of economic institutions.¹² Identifying governments of the Left and the Right with particular policies and economic outcomes could be referred to as the traditional partisanship approach to comparative political economy. Scholars adopting this framework – Hibbs and Alt being the most cited examples – argue that social democratic parties will promote the interests of labour while conservative ones will satisfy the demands of 'upscale groups'.¹³ These differences should in turn be reflected on public policy choices. Social democratic governments are expected to be associated with policies, both on the expenditure and the revenue side, intended to promote the interests of low-income groups. We adopt this vision of partisanship for our conceptualization of social democratic government merely as the percentage of cabinet seats held by Left parties.¹⁴

At the same time, however, we want to emphasize the influence of institutions. As we make clear below, our analysis is based on the distinction between political agency (represented by government partisanship) and institutional constraints (represented by corporatism). Corporatism has been defined in many ways. Conceptually, our take on corporatism is quite similar to that of Traxler and Kenworthy.¹⁵ In the words of Kenworthy, 'corporatism consists of various types of institutional arrangements whereby important political-economic decisions are reached via negotiation between or in consultation with peak-level representatives of employees and employers (and/or other interest groups and the state)'.¹⁶ We therefore use a measure of corporatism that is a composite institutional index comprising business centralization, wage setting co-ordination, co-operation

¹² Douglas Hibbs, 'Political Parties and Macroeconomic Theory', *American Political Science Review*, 71 (1977), 1467–87; Alexander Hicks and Lane Kenworthy, 'Cooperation and Political Economic Performance in Affluent Democratic Capitalism', *American Journal of Sociology*, 103 (1998), 1631–72; Peter Lange and Geoffrey Garrett, 'The Politics of Growth: Strategic Interaction and Economic Performance in Advanced Industrial Democracies, 1974–1980', *Journal of Politics*, 47 (1985), 792–827; Michael Alvarez, Geoffrey Garrett and Peter Lange, 'Government Partisanship, Labor Organization and Macro-Economic Performance', *American Political Science Review*, 85 (1991), 539–56; Torben Iversen, 'Wage Bargaining, Central Bank Independence, and the Real Effects of Money', *International Organization*, 52 (1998), 469–504; James Alt, 'Political Parties, World Demand, and Unemployment', *American Political Science Review*, 79 (1985), 1016–40; David Rueda and Jonas Pontusson, 'Wage Inequality and Varieties of Capitalism', *World Politics*, 52 (2000), 350–84; Lane Kenworthy, 'Quantitative Indicators of Corporatism', *International Journal of Sociology*, 33 (2003), 10–44; and Pablo Beramendi and Thomas R. Cusack, 'Diverse Disparities: The Politics and Economics of Wage, Market and Disposable Income Inequalities' (Wissenschaftszentrum Berlin für Sozialforschung, Discussion Paper, SP II 2004–08, 2004).

¹³ Hibbs, 'Political Parties and Macroeconomic Theory'; and Alt, 'Political Parties, World Demand, and Unemployment'.

¹⁴ The definition of what constitutes a 'Left' party is taken from Manfred Schmidt, 'When Parties Matter', *European Journal of Political Research*, 30 (1996), 155–83; and Klaus Armigeon, Michelle Beyeler and Sarah Menegale, *Comparative Political Dataset 1960–2001* (Institute of Political Science, University of Bern, 2002). This means that the 'Left' denotes social democratic parties and political parties to the left of social democracy. For example, while in Germany both the SPD and Bündnis 90/Die Grünen would count as Left parties (if in government), in the United States no party is defined as Left (and the percentage of cabinet seats is, therefore, always 0).

¹⁵ Franz Traxler, 'The State in Industrial Relations', *European Journal of Political Research*, 36 (1999), 55–85; and Kenworthy, 'Quantitative Indicators of Corporatism'.

¹⁶ Kenworthy, 'Quantitative Indicators of Corporatism', p. 11.

	Social democratic government (average 1965–95)	Corporatism (average 1965–95)
United States	0	0.06
Canada	0	0.08
United Kingdom	34	0.12
Ireland	12	0.11
Netherlands	20	0.62
Belgium	28	0.71
France	26	0.41
Germany	36	0.80
Austria	64	0.96
Italy	25	0.42
Finland	40	0.87
Sweden	71	0.94
Norway	61	0.96
Denmark	46	0.73
Japan	2	0.77
Australia	51	0.19

TABLE 2Social Democratic Government and Corporatism

Note: See Table 3 for definitions and sources.

between government and interest groups, tripartism, co-operation between investors and firms, and co-operation between labour and management.¹⁷

This measure defines a continuum within corporatism and it reflects both a significant degree of variation across countries and through time. There are two additional advantages to the corporatism measure we use. First, it is not a dichotomous variable and it allows for a great degree of variation between countries. Secondly, while other measures of corporatism are country-specific, ours does vary through time. This within-country temporal variation is optimal for our analysis, since we are interested in how the changing characteristics of corporatism constrain the actions of social democratic government. We provide some descriptive statistics for our measure of corporatism, as well as for that of social democracy, below.

Table 2 provides an illustration of the values for both social democratic government and corporatism. The columns reflect the average values for the period between 1965 and 1995 for all the countries included in our sample. This table makes clear the great degree of cross-national variation both in terms of social democratic governments and of corporatism. Two countries, the United States and Canada, have not had any social democratic government (an average of 0 per cent of cabinet seats). In other countries social democratic government has been very significant in this period (the averages are 71 per cent of cabinet seats for Sweden, 64 per cent for Austria, 61 per cent for Norway, and 51 per cent for Australia). Corporatism has been equally variable. While countries like Norway, Sweden, Finland, Germany and Japan have very high levels, countries like the United States, Canada, Ireland, the United Kingdom and Australia display almost no corporatist traits. More importantly, the table also makes clear that these two variables

¹⁷ Hicks and Kenworthy, 'Cooperation and Political Economic Performance in Affluent Democratic Capitalism'.

are quite distinct and not always correlated with each other. While Sweden and Norway are countries in which high levels of social democratic government and corporatism coincide with each other, Japan and Germany have very high corporatism but very low social democratic government. In contrast, Australia has high social democratic government but very low corporatism.

On the basis of this clear distinction between partisanship and economic institutions, we turn now to our main argument. We focus on the policy options of social democratic governments in two hypothetical scenarios. In the first scenario, *low corporatism*, capital and labour do not co-ordinate with each other or with the government. In the second one, *high corporatism*, capital and labour are able to co-ordinate their actions with the government.

In a context of low corporatism, neither governments nor market actors are constrained by any collective commitment. Firms maximize benefits and unions maximize real wages while trying to pressure governments into promoting a generous welfare state. In the absence of agreements with capital and labour, the government's hands are untied and there is institutional freedom for policy to reflect the incumbent's preferences. Given the regressive nature of consumption taxes, we should observe that left-wing governments tax consumption significantly less than right-wing governments in a world unconstrained by institutionalized commitments to the social partners.

In contrast, democratic government, capital and labour develop a rather different set of relationships in contexts characterized by high corporatism.¹⁸ Unions enter into an agreement with social democratic government through which they commit to wage moderation and social peace in return for a generous welfare state that insures labour income in the long term. Capital accepts the development of a large public insurance system in exchange for the unions' moderation and the availability of a well-qualified labour force. Capital also commits to stable investment and long-term growth in return for the social democratic government's promise not to tax their benefits to finance the welfare state. Because of capital's mobility and the credibility of its exit threats, the state is structurally dependent on it and unions must accept bearing the lion's share of the cost of the welfare state.¹⁹ In this context, the capacity of social democratic governments to pursue their policy preferences regarding consumption taxes is very limited. If left-wing governments tried to promote redistribution on the revenue side by decreasing regressive taxes on consumption, they would find it very hard to balance a budget strained by the demands of a generous welfare state. But if they tried to extract revenues from any other source, the commitments underpinning the corporatist deal would be violated. Thus, to ensure that redistribution is promoted through generous expenditure policies, social democratic parties in highly co-ordinated environments find themselves in a paradoxical situation. They need to support the welfare state by taxing labour more than capital and, more to the point of this article's analysis, by relying on regressive indirect taxation.

¹⁸ David Cameron, 'Social Democracy, Corporatism, Labor Quiescence, and the Representation of Economic Interests in Advanced Capitalist Societies', in John Goldthorpe, ed., *Order and Conflict in Contemporary Capitalism* (New York: Oxford University Press, 1984), 147–78; and Wilensky, *Rich Democracies Political Economy, Public Policy, and Performance.*

¹⁹ Adam Przeworski and Michael Wallerstein, 'Structural Dependence of the State on Capital', *American Political Science Review*, 82 (1998), 11–29; and Thomas R. Cusack and Pablo Beramendi, 'Taxing Work', *European Journal of Political Research*, 45 (2006), 43–75.

The paragraph above makes clear the differences between our approach and the one put forward by Kato.²⁰ She argues that there is a direct link between taxes on consumption and the welfare state. Kato coincides with us in arguing that social democratic governments may be more likely than conservative governments to use regressive taxation. However, while Kato believes that this results from a general need by all social democratic governments to finance high public expenditure, our argument is of a more institutionalist nature. We argue that the driving force behind the evolution of indirect taxes lies in the relationship between government partisanship and the organization of economic institutions. Our argument rests on the proposition that both consumption taxes and welfare state efforts are jointly determined by the interaction between corporatism and social democratic government.

Let us formalize the nature of the relationships explained above. Let PT, CT, SSC and IT represent, respectively, revenues obtained from personal income tax, taxes on income from capital, social security contributions and taxes on consumption/indirect taxation. Let DT represent the sum of PT, CT and SSC, normally considered to be direct taxation. Let DF denote deficits and, finally, let X represent total government expenditures. X, in turn, can be broken into two major components XW and XR. XW is defined as expenditure by governments on redistributive transfers, publicly provided services and regulatory interventions in the labour market. XR is a residual category containing any other form of government spenditure. For any given period of time, it is generally recognized that governments face a fundamental budget constraint that can be represented as follows:

$$XW + XR = PT + CT + SSC + IT + DF$$
(1)

$$XW = PT + CT + SSC + IT + DF - XR.$$
 (2)

The idea of a budget constraint implies that any change in the levels of redistribution (XW) would be automatically balanced by a change on the other side of Equation 2. Quite simply, the resources necessary to redistribute on the expenditure side (XW) depend on taxation (direct or indirect), on expenditure cuts in other policy areas (XR) and on running deficits and eventually accumulating debt (DF).

The trade-offs highlighted by Equation 2 work differently in corporatist and non-corporatist economic environments, particularly in the context of two parallel structural transformations that have affected advanced economies since the 1960s: the de-industrialization of the labour force and the internationalization of the economy. The former increases the demand for social protection and redistribution.²¹ The latter increases the bargaining power of mobile capital.²²

The main implication of our argument is that the survival of corporatist arrangements requires a high level of welfare provision, especially in the context of demand increases driven by deindustrialization and population ageing. Under these circumstances, the left-hand side of Equation 2 could be described as politically fixed. But what about the right-hand side of the equation? Is there any room for social democratic governments to manœuvre?

²⁰ Kato, Regressive Taxation and the Welfare State.

²¹ Iversen and Cusack, 'The Causes of Welfare State Expansion: Deindustrialization or Globalization?'

²² See, for example, Fritz Scharpf, *Crisis and Choice in European Social Democracy* (Ithaca, N.Y.: Cornell University Press, 1991).

One possible course of action would be to follow an orthodox Keynesian strategy of running and sustaining large public deficits (DF). Indeed, social democratic governments have used this strategy more often than their conservative counterparts between 1960 and 1991. Cusack provides convincing evidence that, other things being equal, left-wing governments are more likely to engage in deficit-generating Keynesian counter-cyclical fiscal policies if the economy is experiencing a downturn.²³ Conversely, when the economy grows, social democratic governments respond by developing more restrictive fiscal strategies. However, 'the partisan based difference has narrowed in recent decades ... Although the left still continues to take a more conservative stance under conditions of full or near full employment, its response when faced with moderate to high levels of unemployment has diminished relative to its historical standards'.²⁴ This seems to suggest that highly redistributive governments would find it increasingly difficult to resort to large budget deficits as a way to finance the welfare state in the long run. Thus, in terms of Equation 2, expanding DF does not seem like a viable long-run strategy for social democratic governments in corporatist nations.²⁵

A similar case can be made about capital taxation (*CT*).²⁶ In an open economy, owners of mobile assets can move to markets that provide the highest returns.²⁷ In other words, the internationalization of the economy reinforces the constraints on a government's capacity to tax capital.²⁸ By way of illustration, it is widely acknowledged in the comparative political economy literature that the 1986 tax reform in the United States triggered a reduction of statutory tax rates on corporate income across the OECD.²⁹ Ganghof shows that open economies suffer from downward pressures on statutory corporate income tax rates, arguing convincingly that it is no longer viable in the long run to tie them to highly progressive labour income tax schedules. These developments have important implications for the political factors at work in countries characterized by high levels of corporatism.³⁰

Should left-wing governments try to balance the budget by increasing the burden on capital, employers would have strong incentives to go forward with their threat to move. An increasingly open economy simply makes the exit option easier, thereby increasing employers' leverage on the government. As a result, even the highly redistributive Scandinavian nations have developed systems in which capital is generally taxed at a lower

²³ Thomas R. Cusack, 'Partisan Politics and Fiscal Policy', *Comparative Political Studies*, 32 (1999), 464–86.

²⁴ Cusack, 'Partisan Politics and Fiscal Policy', p. 484.

²⁵ Admittedly, our theoretical argument does not leave room for extraordinary circumstances such as revenues emerging from recently found natural resources (e.g., Norwegian oil). While we believe that these circumstances are important in accounting for particular historical experiences, they do not affect the empirical regularities with which this article is concerned.

²⁶ This is, however, a contentious point. For evidence that opposes this argument, see, for example, Duane Swank, *Global Capital, Political Institutions, and Policy Change in Developed Welfare States* (New York: Cambridge University Press, 2002); Swank and Steinmo, 'The New Political Economy of Taxation in Advanced Capitalist Democracies'; and John M. Hobson, 'Disappearing Taxes or the "Race to the Middle"? Fiscal Policy in the OECD', in Linda Weiss, ed., *States in the Global Economy* (New York: Cambridge University Press, 2003), pp. 37–57.

²⁷ Genschel, 'Globalization, Tax Competition and the Welfare State'; and Basinger and Hallerberg, 'Competing for Capital'.

²⁸ For instance, Wallerstein and Przeworski (in 'Capital Taxation with Open Borders') show that capital can only be efficiently taxed in an open economy through a stable tax rate on un-invested profits (provided that investment costs are fully deductible).

²⁹ Hallerberg and Basinger, 'Internationalization and Changes in Tax Policy in OECD Countries'.

³⁰ Ganghof, 'Global Markets, National Tax Systems, and Domestic Politics'.



Fig. 3. Taxation and the redistribution possibility frontier

flat rate than labour.³¹ In this context, higher levels of capital taxation are an unlikely solution to the social democratic dilemma. What is left then? The remaining alternatives can be illustrated using the Redistribution Possibility Frontier depicted in Figure 3.

Lines 1 and 2 represent the remaining government options to affect the level of redistributive social expenditures. *DT* and *IT* stand, respectively, for direct (labour income) and indirect (consumption) taxes. Recall that other forms of expenditure are assumed to be constant, and that we have established that neither deficits nor taxing capital are politically viable long-term solutions if corporatist arrangements are to be kept in place. Different positions along one line represent possible combinations of the relative proportions of taxes on labour and taxes on consumption.

Point *A* in Figure 3 would represent the ideal preference of social democracy given the limitations explained above. At this point, large levels of redistribution on the expenditure side are financed through progressive, direct income tax schemes on labour income. As argued recently by Lindert and by Cusack and Beramendi, redistribution would take place

³¹ For example, Ganghof (in 'Global Markets, National Tax Systems, and Domestic Politics') shows that starting in the 1990s, the Danish government has tended to tax the income generated by mobile capital assets much less than both labour and immobile capital income. Note, however, that the empirical evidence on this issue is rather inconclusive. While Swank and Steinmo (in 'The New Political Economy of Taxation in Advanced Capitalist Democracies') find no negative impact of liberalization on effective average tax rates on capital income, Bretschger and Hettich (in 'Globalisation, Capital Mobility and Tax Competition Theory and Evidence for OECD Countries') do find a significant negative impact of openness on effective average corporate taxes that is consistent across different specifications and samples.

mainly within one class (labour), but the principle of tax progressiveness would guarantee that income is redistributed through both spending and revenue policies.³² Yet there are several reasons why relying exclusively on taxes on labour may not be a viable strategy in corporatist, highly co-ordinated economies. First, deindustrialization and population ageing guarantee that the demand for redistribution (both intra-classes, and intergenerational) increases steadily. Secondly, labour earnings can only be taxed up to a point, and there are reasons to believe that co-ordinated market economies have reached this limit.

Taxes on labour in corporatist economies have steadily increased between 1965 and the late 1990s.³³ By the end of the twentieth century, average effective tax rates (AETRs) on labour in corporatist countries ranged between 42.7 per cent in Germany and 52.5 per cent in Sweden. There are two reasons why social democracy cannot continue to increase the burden on labour to finance a generous welfare state. The first one is economic: if AETRs increase, work incentives will diminish for a larger share of the population. A decrease in the working population would then worsen the budget constraint problem by shrinking the economy and the tax base. The second one is political: after a certain tax threshold is reached, the position of unions becomes a difficult one to justify to members and the incentives for unions to revisit their commitment to wage moderation increases. The very foundations of the corporatist agreement are therefore in danger.

The question of what to do still remains for social democracy. Going back to Figure 3, incumbents have two alternatives: a reduction of social spending represented by the move from point *A* to point *B*; or an increase in fiscal revenues via indirect taxation, as depicted by the move from *A* to *C*. The first strategy is hardly a sustainable political position for a government that uses the welfare state to forge electoral coalitions,³⁴ particularly in the context of increasing demands for redistribution.³⁵ Thus, the only remaining alternative is to move downwards (from *A* to *C*) along the second frontier in Figure 3. In other words, social democratic governments in corporatist settings develop tax regimes in which taxes on consumption become an increasingly important element of revenue collection.³⁶ Given the constraints identified in all other components of Equation 2, a straightforward conclusion follows: the higher the redistributive efforts on the expenditure side (*XW*), the higher the need to resort to indirect taxes as a revenue source (the larger the move towards *C*).

³⁵ Such a policy would entail a decrease in total revenues in a context of growing demands. Population ageing and skilled-biased technological change have led to a steady increase in the dependency ratio (defined as the ratio between the sum of unemployed and retired people over the total population) across OECD nations. In response to these trends, policies can be marginally adjusted, see Paul Pierson and John Myles, 'The Comparative Political Economy of Pension Reform', in Paul Pierson, ed., *The New Politics of the Welfare State* (New York: Oxford University Press, 2001), pp. 305–34. But the overall combination of large numbers of new recipients and moderately adjusted levels of generosity leads to a likely increase in the demand for tax revenues. There are also many built-in mechanisms in advanced welfare states that lead to endogenously generated needs for more expenditure (e.g., administrative costs).

³⁶ Note that both axes in Figure 1 represent the relative weight of two different sources of revenues (labour and consumption) for a given degree of redistribution. A movement from A to C does not imply that labour income taxation is reduced. Rather it implies that the labour share of total taxation is lower due to an increase in revenue collection via indirect taxes.

³² Peter Lindert, *Growing Public* (New York: Cambridge: University Press, 2004); Cusack and Beramendi, 'Taxing Work'; and see also Garrett, *Partisan Politics in the Global Economy*.

³³ Cusack and Beramendi, 'Taxing Work'.

³⁴ Gøsta Esping-Andersen, *Politics against Markets: The Social-democratic Road to Power* (Princeton, N.J.: Princeton: University Press, 1985).

The analysis above sheds light on the puzzle motivating this article. Partisan theory may be right in highlighting the redistributive character of social democratic governments. But to achieve redistribution while honouring their institutional commitments, these governments need to combine a number of not always coherent policy instruments in corporatist countries. Taxes on consumption are one of these instruments and our analysis makes clear that the level of indirect taxation is primarily the result of the combination of two factors: the ideological nature of governments and the degree of corporatism. More specifically, the following testable propositions emerge from our argument:

- —In non-corporatist environments, governments are not limited by agreements with either capital or labour. As a result, their ideological preferences are less constrained. We therefore should observe that social democratic governments are less likely to promote regressive forms of taxation. Thus, a negative and significant association between left-wing partisanship and indirect taxation is expected.
- —In corporatist environments, the policy choices of social democratic governments are limited by commitments with both labour and capital. As we have explained in detail above, social democracy offers labour a generous welfare system that ensures long-term income in return for wage moderation; at the same time, it offers capital a promise to limit redistribution to one class in return for continuing investments. The nature of these agreements forces social democracy to concentrate the bulk of their redistributive efforts on the expenditure side. Yet to sustain a generous welfare state while upholding corporatist agreements, social democratic governments must sacrifice their aversion to regressive forms of taxation on the revenue side. We therefore expect high levels of corporatism to mute the negative relationship between government partisanship and consumption taxes (since social democratic governments become as unlikely as conservative ones to promote low levels of regressive taxation).

EMPIRICAL ANALYSIS: THE DETERMINANTS OF INDIRECT TAXATION IN THE OECD

The Variables

We test our hypotheses with data for sixteen OECD countries between 1965 and 1995. The countries included in the sample are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, Norway, Sweden, the United Kingdom and the United States.

The previous section has made clear our expectations regarding the effects of social democratic government and corporatism on the average effective tax rates on consumption. There are, however, a number of additional variables that we want to control for in our analysis. These are factors that we do not have explicit theoretical expectations about, but that a number of authors in the comparative political economy literature have suggested should affect taxation. Table 3 presents the definitions and sources for all the variables used in this article's analysis while Table 4 presents summary statistics for all variables.

Welfare spending. The analysis we have presented in the previous pages makes it necessary to control for the degree of welfare state development. We have argued that social democratic governments in corporatist countries try to promote redistribution through welfare spending. Paradoxically, this commitment to a generous welfare state forces them to rely more heavily on indirect taxation. In non-corporatist states, however, the absence

TABLE 3Definition and Sources for All Variables

Variables	
Indirect Taxes	Average effective tax rates (AETR) on average household consumption are measured with respect to the income source, unlike other variables that compute the ratio of indirect taxes to gross domestic product. The data on AETR on consumption were compiled by Thomas R. Cusack using variants from Enrique Mendoza, Assaf Razin and Linda Tesar, 'Effective Tax Rates in Macroeconomics', <i>Journal of Monetary Economics</i> , 34 (1994), 297–323, and the OECD (National Accounts, Detailed Tables, various years). We thank Thomas R. Cusack for generously providing us with the data.
Social Democratic Government	Percentage of cabinet seats held by social democratic parties. For a detailed account of the sources, see Armigeon, Beyeler and Menegale, <i>Comparative Political Dataset 1960–2001</i> .
Corporatism	Hicks–Kenworthy composite corporatism measure. It measures the following types of economic co-operation: business centralization, wage setting co-ordination, co-operation between government and interest groups, tripartite neocorporatism, co-operation between investors and firms, and co-operation between labour and management. <i>Source</i> : Hicks and Kenworthy, 'Cooperation and Political Economic Performance in Affluent Democratic Capitalism', pp. 1631–72. For a more detailed analysis of corporatism and alternative ways or measuring it, see Lane Kenworthy, 'Quantitative Indicators of Corporatism'.
Welfare Spending	Social security transfers as a percentage of GDP. <i>Source: Comparative Welfare States Data Set</i> assembled by Evelyne Huber, Charles Ragin and John D. Stephens (December 1997) and updated by David Brady, Jason Beckfield and John Stephens (April 2004).
Institutional Veto Points	Augmented index of constitutional structure. This is an additive index composed of five indicators: federalism, parliamentary government versus presidentialism, proportional versus majoritarian representation, bicameralism and frequent referendums. <i>Source</i> : Armigeon, Beyeler and Menegale, <i>Comparative Political Dataset 1960–2001</i> . See Huber and Stephens, <i>Development and Crisis of the Welfare State</i> for details.
Deficits	General government deficit in million national currency units. <i>Source:</i> <i>Comparative Welfare States Data Set</i> assembled by Evelyne Huber, Charles Ragin and John D. Stephens (December 1997) and updated by David Brady, Jason Beckfield and John Stephens (April 2004).
Financial Openness	Financial openness is measured as the sum of several indexes capturing openness in terms of restrictions on payments and receipts of goods and invisibles, restrictions on payments and receipts of capital, and legal international agreements constraining exchange and capital flows. For details, see Armigeon, Beyeler and Menegale, <i>Comparative Political Dataset 1960–2001</i> ; and Dennis Quinn and Carla Inclan, 'The Origins of Financial Openness: A Study of Current and Capital Account Liberalization', <i>American Journal of Political Science</i> , 41 (1997), 771–813.
Total Tax Revenue	Revenue from all taxes as percentage of GDP. <i>Source</i> : OECD <i>Statistical Compendium 2004</i> .
Economic Growth	Economic growth adjusted for purchasing power parity and inflation. <i>Source: Comparative Welfare States Data Set</i> assembled by Evelyne Huber, Charles Ragin and John D. Stephens (December 1997) and updated by David Brady, Jason Beckfield and John Stephens (April 2004).

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	Mean	Standard deviation	Minimum	Maximum
Indirect Taxes	17.63	7.78	4.60	36.24
Social Democratic Government	32.26	32.27	0	100
Corporatism	0.55	0.34	0.01	0.99
Welfare Spending	13.43	4.73	4.37	27.81
Institutional Veto Points	2.0	1.8	0	7
Deficits	- 637.1	2,987.1	- 20,853.6	26.9
Financial Openness	11.0	2.1	6.8	14
Total Tax Revenue	35.8	7.3	18.3	51.7
Economic Growth	3.68	2.27	- 0.46	12.4

TABLE 4Summary Statistics for All Variables

of institutional commitments to the social partners allows social democratic governments to use indirect taxation as a tool to promote equality. To demonstrate this point, it is imperative that we control for the levels of welfare spending. We introduce a variable into our analysis measuring social security transfers as a percentage of GDP.³⁷

Institutional veto points. In his landmark analysis of taxation, Sven Steinmo convincingly argues that institutional structure matters to taxation outcomes. 'In the United States,' he explains, 'constitution makers, fearing *both* an autonomous and an overly responsive elite, constructed a system of multiple checks and balances and intentionally fragmented political authority. The peculiar character of the American tax system – its complexity, its inefficiency, and its low revenue yield – is a product of this institutional structure'.³⁸ The character of the Swedish tax system (stability, efficiency, high revenue yield and surprising generosity to capital) stems from the country's institutional nature: proportional representation for the Lower Chamber, conservative and complicated election system for the Upper Chamber and corporatism. In turn, the instability, inefficiency and changing distribution of tax burdens that characterize the British fiscal system are caused by the existence of strong party government.

Concentrating on the top personal income tax rate and the corporate income tax rate, Hallerberg and Basinger also argue that the institutional structure of a country contributes to the nature of taxation. They find that 'countries that had only one veto player, or only one institution or party whose approval was necessary for a bill to become law, enacted more sweeping reform than states that had more than one veto player'.³⁹ In our analysis, we take these institutional arguments into consideration by introducing a variable measuring constitutional structure.

³⁷ This is the most conventionally used measure of welfare effort in the extensive literature on comparative welfare states. See, for example, Huber and Stephens, *Development and Crisis of the Welfare State*. We have replicated our analyses with alternative measures of welfare effort (such as government civilian consumption as a percentage of GDP) and they do not affect our results.

³⁸ Sven Steinmo, *Taxation and Democracy* (New Haven, Conn.: Yale University Press, 1993), p. 8.

³⁹ Hallerberg and Basinger, 'Internationalization and Changes in Tax Policy in OECD Countries', p. 322.

Deficits. General government deficits are introduced into the analysis as a measure of the possible limitations affecting a government's choice of taxation policy. As we mentioned in the previous section, budget constraints imply that any changes in the levels of redistribution are affected by a government's ability to run deficits and accumulate debt. One widely accepted interpretation of the policy changes of the early 1980s, for example, is that many governments had reached unsustainable levels of public debt.⁴⁰

Financial openness. There are two contradictory accounts of the effects of internationalization on partisan politics. First, there is a large literature suggesting that growing levels of international openness result in a blurring of partisan differences caused by the inability of social democratic parties to produce policies that do not conform to market forces.⁴¹ Then there are some authors who argue either that international forces do not affect some partisan differences⁴² or that they actually have strengthened the influence of partisanship on policies and economic outcomes.⁴³ To control for these effects, we introduce a measure of financial openness into our model.

Total tax revenue. The rationale for including a variable measuring total tax revenues is straightforward. Our argument is concerned with the politics of indirect taxation. We understand that there are a number of factors that will affect a state's needs to collect more revenues from all possible sources. To the extent that these factors are not directly related to the politics of indirect taxation emphasized above, they are not relevant to our analysis. We control for these general taxation effects by including total tax revenue as one of our explanatory variables.

Economic growth. Most analyses of the effects of government partisanship on policy include a measure of economic growth. For the purposes of this article, this is particularly important because of our need to insulate our conclusions from the general effects of GDP changes.

Methodology

Instead of using annual data, the analysis we develop below is performed on five-year averages. There are two main reasons for this. First, it is well known that the use of this kind of average is a good way to smooth noisy data. The existence of measurement error in our indirect taxation variable can be seen, for instance, in the variance in yearly observations reflected in different updates of the OECD raw data.⁴⁴ Secondly, exploratory analyses of the data revealed significant autocorrelation problems that were resolved by the use of averages. We therefore created averages for all the variables for six time periods: 1965–69, 1970–74, 1975–79, 1980–84, 1985–89 and 1990–95. Naturally, the use of

⁴⁰ Herman Schwartz, 'Small States in Big Trouble', World Politics, 46 (1994), 527–55.

⁴¹ Paulette Kurzer, *Business and Banking* (Ithaca, N.Y.: Cornell University Press, 1993); and Scharpf, *Crisis and Choice in European Social Democracy*.

⁴² Carles Boix, *Political Parties, Growth and Equality* (New York: Cambridge University Press, 1998); and Geoffrey Garrett and Peter Lange, 'Political Responses to Interdependence: What's 'Left' for the Left?' *International Organization*, 45 (1991), 539–64.

⁴³ Garrett, Partisan Politics in the Global Economy.

⁴⁴ For an explanation of a similar procedure, see Michael Wallerstein, 'Wage-Setting Institutions and Pay Inequality', *American Journal of Political Science*, 43 (1999), 649–80, at p. 662.

averages reduces the number of observations we can employ in the analysis (there are now sixteen countries and only six time periods).⁴⁵

We also include a lag of the dependent variable among the regressors. Because the levels of indirect taxation (as seen in Figure 1) exhibit noticeable time stability, the introduction of a lagged dependent variable provides a better dynamic model. This method allows us to assess the influence of the previous period's values explicitly. The use of the lagged dependent variable, however, further reduces the number of observations (since we lose the first observation for each of our sixteen countries).

The specification adopted in the empirical analysis is as follows:

$$Y_{it} = \beta_0 + \beta_1 Y_{it-1} + \beta_2 X_{1it} + \ldots + \beta_n X_{nit} + \varepsilon_{it}$$

where β_0 represents a general intercept, X_1 to X_n are the explanatory variables, β_1 to β_n are the slopes of the explanatory variables, and ε_{it} denotes the errors.

We present results for two models. First, we report estimates using feasible generalized least squares (FGLS) and specifying no autocorrelation or panel-specific heteroscedasticity. To check that there is in fact no autocorrelation we perform the test derived by Wooldridge for panel data models.⁴⁶ We also performed a modified Wald test for panel-specific heteroscedasticity. This test, however, revealed a significant amount of heteroscedasticity. We therefore present a second set of results with panel-corrected standard errors (PCSEs). Beck and Katz show that, in the absence of autocorrelation, PCSEs are consistent when there is panel-specific heteroscedasticity.⁴⁷

Findings

Results of both the FGLS and the PCSE analyses are presented in Table 5. As explained above, the dependent variable is the average effective tax rate on consumption income. We present the estimates of the period lag for the dependent variable and of the main variables of interest in the first rows of the table. Then we reproduce the estimates for the rest of the explanatory variables. The relationship between social democratic government and corporatism is captured by these variables themselves and by their interaction.

Table 5 makes clear that our two methods to estimate the effects of social democratic government and corporatism produce very similar results. The two columns in Table 5 display similar levels of significance for these three variables (social democratic government, corporatism and their interaction). Because of the results of the modified Wald test for panel-specific heteroscedasticity mentioned above, we will refer to the PCSE results in the paragraphs below.

Although we do not have specific claims about them, let us begin by briefly analysing the estimates for our control variables. In contrast to our variables of interest (both social democratic government and the interaction are statistically significant), few of the control variables seem to be a significant determinant of consumption taxes at the conventional 95 per cent level of confidence. Only total taxation, and that only in the FGLS regression, is significant at this level, but two of them are significant at the 90 per cent confidence level. Table 5 shows that increasing total taxation and economic growth promotes higher

⁴⁵ Data is missing for the earliest period in three countries: Ireland, the Netherlands and Belgium.

⁴⁶ Jeffrey Wooldridge, Econometric Analysis of Cross Section and Panel Data (Cambridge: MIT Press, 2002).

⁴⁷ Nathaniel Beck and Jonathan Katz, 'What to Do and Not to Do with Time Series Cross-Section Data', *American Political Science Review*, 89 (1995), 634–47. The results of all tests are available from the authors.

	FGLS	PCSEs
Period Lag of Indirect Taxation	0.933 (0.042) <i>0.000</i>	0.933 (0.073) <i>0.000</i>
Social Democratic Government	- 0.028 (0.012) <i>0.017</i>	-0.028 (0.009) 0.002
Corporatism	- 1.428 (0.936) <i>0.127</i>	- 1.428 (0.737) 0.053
Social Democratic Government* Corporatism	0.042 (0.018) <i>0.019</i>	0.042 (0.017) <i>0.013</i>
Welfare Spending	- 0.056 (0.071) 0.428	- 0.056 (0.050) 0.258
Institutional Veto Points	- 0.207 (0.172) 0.229	- 0.208 (0.110) 0.059
Deficits	0.000 (0.000) 0.343	0.009 (0.000) (0.118
Financial Openness	- 0.240 (0.148) 0.105	- 0.240 (0.193) 0.214
Total Tax Revenue	0.103 (0.052) 0.044	0.104 (0.056) 0.065
Economic Growth	0.224 (0.124) 0.072	0.224 (0.167) <i>0.065</i>
<i>R</i> ² <i>N</i>	0.96 77	0.96 77

table 5	The Determinants of Indirect	Taxation

Note: The estimates in the first column are from Feasible Generalized Least Squares estimation. The estimates in the second column contain panel-corrected standard errors. Numbers in bold are estimated coefficients; numbers in parentheses are their standard errors; numbers in italics are *p*-values from two-sided *t*-tests.

levels of indirect taxation. This seems an intuitive result. A higher number of institutional veto points seem to be associated with declining indirect taxation, but this relationship is only significant at the 90 per cent confidence level in the PCSE regression. More veto players make increases in indirect taxation more difficult.

Turning to the article's main argument, we capture the relationship between social democratic government and corporatism by including not only these two variables into our analysis but also their interaction. Table 5 makes clear that social democratic government



Fig. 4. Effects of social democratic government conditional on levels of corporatism

and the interaction are significant at more than the 95 per cent level of confidence (corporatism is only significant at the 90 per cent level in the PCSE regression). However, the results in the table are not easy to interpret. Testing this article's hypotheses requires assessing the effects of social democratic government at different levels of corporatism. As discussed in the previous sections, we expect social democratic government to be associated with less regressive taxation when corporatism is low and to turn to indirect taxation as a way to support the welfare state only in a context dominated by corporatist commitments. We can use the results in Table 5 to calculate the conditional effects of social democracy given different levels of corporatism. In Table 4 (containing the summary statistics for all the variables in the analysis), we showed that corporatism ranges from 0.01to 0.99 in the countries in our sample. To illustrate the relationship between these two variables, we can calculate the effects of social democracy for five different values of corporatism: 0.01, 0.25, 0.50, 0.75, and 0.99. Figure 4 presents the coefficients and the upper and lower bounds of 95 per cent confidence intervals for the effects of social democratic government conditional on these different levels of corporatism (ceteris paribus).

Figure 4 presents a good amount of support for our claims. The figure makes clear that social democratic government is strongly progressive when corporatism is low. Regarding our first hypothesis, the coefficient for social democracy is negative and significant (as indicated by the fact that the bounds of the 95 per cent confidence interval are both below zero) when corporatism is between 0.01 and almost 0.50. Consistent with our theoretical expectations, higher levels of social democratic government are associated with lower levels of indirect taxation and, in this article's framework, more progressiveness and redistribution when corporatist commitments do not exist. Also as hypothesized, the results in Figure 4 indicate that when corporatism is greater than 0.50, social democratic

governments become as unlikely to promote lower indirect taxation as conservative ones. The coefficient becomes positive but the bounds of the 95 per cent confidence interval indicate that the relationship is no longer statistically significant. As suggested by our argument, the existence of corporatist commitments limits the room to manœuvre that social democratic governments enjoy. Committed to the welfare state and limited by their agreements with the social partners, social democratic governments cannot afford to reduce the levels of indirect taxation. Paradoxically, then, social democracy, when combined with high levels of corporatism, ends up using a regressive form of taxation more than we would expect. Corporatism appears to limit the set of policy tools available for social democracy to promote redistribution.

It is important to emphasize at this point that our results are compatible with those found in Kato.⁴⁸ Like us, she finds that government partisanship significantly affects indirect taxation. Our argument, however, represents an important improvement on Kato's analysis. Kato ignores the relationship between corporatism and social democratic government. Our results show that understanding the institutional constraints imposed on social democracy in corporatist states is essential to an accurate assessment of the political determinants of indirect taxation.

Although the results in Figure 4 prove the significance of our findings, a substantive interpretation of the effects of social democratic government is not completely straightforward. We can use the calculations reflected in Figure 4 to produce estimates of noticeable substantive effects. Figure 4 suggests that, all else being equal, an electoral victory by the social democratic party that would result in a gain of 50 per cent of cabinet seats would be associated with a range of different changes in indirect taxation. Let us first make clear that this kind of electoral victory by the social democratic party is not an unreasonable scenario to use for our illustration. Many countries in our sample experience similar victories and there are a large number of social democratic victories that are even more significant (Finland in 1994 and 1995, Sweden in 1982 and Norway in 1970, to mention but a very few).

Going back to Figure 4, a gain of 50 per cent of cabinet seats by the social democratic party in a country with a level of corporatism equal to 0.25 (similar to that of the United Kingdom or Australia from 1965 to 1974) would result in an immediate decrease in indirect taxation equal to 0.87 per cent of average household consumption. In contrast, a gain of 50 per cent of cabinet seats by the social democratic party in a country that has a level of corporatism equal to 0.50 (similar to that of Italy in the late 1970s or France in the early 1970s) would result in a decrease in indirect taxation equal to 0.30 per cent of average household consumption. These numbers are all the more meaningful when we consider that the average effective tax rate for all the countries in our sample is 17.63 per cent of average household consumption.

CONCLUSION

To achieve equality, a social democratic government needs to promote redistribution on the expenditure and the revenue sides of policy. In this article, we have argued that it is in the context of corporatism, paradoxically, that social democratic governments have most difficulties promoting redistribution on the revenue side. The reason for this is simple;

⁴⁸ Kato, Regressive Taxation and the Welfare State.

corporatist commitments make it impossible for social democratic governments to be associated with lower levels of regressive indirect taxation.

We have shown that indirect taxation, although underemphasized in the comparative political economy literature, is an increasingly important policy instrument in industrialized democracies. We hope that this article will begin a debate on the politics of indirect taxation and, to do so, we would like to try to pre-empt a number of criticisms that may arise. Making indirect taxation the focus of our analysis could be vulnerable to two kinds of criticism. It could be argued that our results are not important enough because either a supranational institution (namely the European Union) or sub-central levels of government determines the levels of taxes on goods and services. Concerning the first issue, it is clear that European integration has been an important factor contributing to the spread of value added taxation. In the 1960s, valued added taxes only existed in France, but by 1991 they had become the general consumption tax in twenty-one out of twenty-four OECD countries.⁴⁹ Part of the reason for this development was that for countries wishing to join the European Community, the adoption of value added taxation was mandatory. But European integration has allowed a great degree of diversity in terms of indirect taxation and it would not be accurate to assume that belonging to the European Community has meant the abandonment of taxation autonomy. Although the European Commission has considered the harmonization of value added tax rates a goal, any attempt to approximate these rates has proven 'unacceptable for budgetary reasons to EC countries whose standard rates varied from 12 to 24 per cent'.⁵⁰ In practice, the influence of European integration has meant the emergence in recent times of a minimum standard rate (around 15 per cent). There is therefore plenty of room for national differences and for the influence of partisan governments hypothesized in this article.

Regarding the effects of sub-central levels of government, the OECD countries that are the focus of our analysis exhibit a remarkable range of fiscal arrangements. In federal systems, some fiscal autonomy exists at the state and local level. For the goals of this article, the fiscal autonomy of sub-central governments depends on the amount of control they enjoy over indirect taxation. There are different ways of measuring this control. It is possible, for example, to assess the revenue from state and local taxes as a percentage of total indirect taxation revenues. But even if we looked at most OECD federations (Belgium, Canada, Germany, Spain and Switzerland), indirect taxes at the state level are much less significant than those at the central level. The clear exception is the United States, where indirect taxes at the state level are three times as important as those at the central level. In all other cases, central governments account for the lion's share of indirect taxation.

Comparing the amount of indirect taxation at the sub-central and central levels, however, is an essentially incomplete way of measuring the influence of state and local governments. This is the case because it does not take into account the power provided to sub-central government over their tax base and rates.⁵¹ The fiscal autonomy of sub-central governments is greatest when they can determine taxable bases and rates without any interference from central governments. Conversely, this autonomy is at its lowest when the central government decides about the bases and rates of the taxes that sub-central governments collect. We try to address these complications in two ways. First, our measure of indirect taxation is one picking up general government taxation. This means that it

⁴⁹ Ken Messere, *Tax Policy in OECD Countries* (Amsterdam: IBFD Publications BV, 1993), p. 368.

⁵⁰ Messere, Tax Policy in OECD Countries, p. 372.

⁵¹ OECD, Taxing Powers of State and Local Government (Paris: OECD, 1999), p. 10.

includes both central government and non-central government indirect taxation. According to the OECD, there is limited autonomy for sub-central governments even in the most federal of the OECD systems included in our analysis.⁵² The central government is sufficiently involved in the decisions regarding tax bases and rates to justify this article's focus on government partisanship at the national level. Secondly, it is also important to point out that we attempt to control (at least partially) for the influence of fiscal decentralization in our analysis by including a measure of constitutional structure.

Let us conclude by exploring one of the implications of our main argument. What do our findings tell us about redistribution in the future? Many analysts have observed that developments in the industrialized democracies since the mid 1980s are reducing social democracy's degrees of freedom.⁵³ In this context, it is often argued that the decentralization of wage bargaining structures and the weakening of corporatism are unfavourable developments for social democratic governments. Corporatist arrangements are identified as key institutional preconditions for the promotion of a social democratic egalitarian agenda.⁵⁴ Our argument emphasizes the ability of social democratic governments to promote equality through tax choices and, in doing so, it emphasizes that the cloud of weakening corporatism comes with a silver lining. If our findings about the relationship between regressive indirect taxation, social democracy and corporatism are correct, the transformation of economic institutions in advanced industrial democracies opens up new avenues for social democratic governments to become a force for redistribution. Free of their corporatist commitments, social democratic governments have been found to limit the use of regressive indirect taxation in order to promote egalitarian outcomes. We believe that understanding the nature of corporatist ties and the increasing importance of taxes on consumption is essential to an accurate assessment of the consequences of social democracy.

⁵² See OECD, Taxing Powers of State and Local Government, p. 10, for details.

⁵³ Torben Iversen and Anne Wren, 'Equality, Employment and Budgetary Restraint: The Trilemma of the Service Economy', *World Politics*, 50 (1998), 507–46; and Andrew Glyn, 'Aspirations, Constraints, and Outcomes', in Andrew Glyn, ed., *Social Democracy in Neoliberal Times* (Oxford: Oxford University Press, 2001), pp. 1–21.

⁵⁴ Lange and Garrett, 'The Politics of Growth: Strategic Interaction and Economic Performance in Advanced Industrial Democracies, 1974–1980'; Garrett, *Partisan Politics in the Global Economy*; and Torben Iversen, The Choices for Scandinavian Social Democracy', in Glyn, ed., *Social Democracy in Neoliberal Times*, pp. 253–76.