Endogenous Preferences: The Political Consequences of Economic Institutions

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Abstract

This paper attempts to explain cross-national voting behavior in 18 Western democracies over 1960-2003. First, it introduces a new data set for the median voter that corrects for stochastic error in the underlying statistics from the Comparative Manifesto Project. Next, the paper finds that electoral behavior is closely related to the salience of particular economic institutions. Labour organization, skill specificity, and public sector employment are found to influence individual voting behavior. At the country level, this paper suggests that coordinated market economies move the median voter to the left, whereas liberal market economies move the median voter to the right. The empirical analysis employs cross-sectional and panel data that is instrumented with the level of economic structure circa 1900 to estimate the net effect of economic institutions on the median voter. Significant results show that revealed voter preferences are endogenous to the economic institutions of the political economy. This places Political Economy at the heart of voting behavior and implies the existence of institutional advantages to partisan politics.

Keywords: Political Economy, Median Voter, Voting Behavior, Panel Data, Instrumental Variables

JEL Classification Numbers: C23, D72, H5, J24, J51, O57, P51

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Introduction.

Why is it that over time certain societies have voted significantly more left, and others significantly more right on the standard political spectrum? Indeed, a simple look at countries’ voting records reveals striking left-right patterns. This is the question that animates this paper. In fact, Downs’ seminal *An Economic Theory of Democracy* (1957: 140) already left us this question as a research agenda:

What forces shape this important parameter [the aggregate distribution of preferences]? At the beginning of our study, we assumed that voters’ tastes are fixed, which means that the voter distribution is given. Thus we dodged the question just posed and have been evading it ever since.

Downs’ observation could not have been more prophetic. Despite pioneering attempts (Lipset and Rokkan, 1967), it would appear that there still is no account in economics or political science that provides a satisfactory explanation for the cross-national variety in political preferences. Slow progress on this question, however, is probably less a sign of stagnant scholarship than it is an indication of the richness of this question.

Many studies have consistently taken voter preferences as the dependent variable. The literatures on economic voting (Lewis-Beck and Paldam, 2000), the electoral gender gap (Inglehart and Norris, 2000), and genopolitics (Alford et al, 2005; Settle et al, 2008) continue to uncover important insights. Yet by the sheer nature of their key explanatory variable they cannot provide explanatory power for cross-national variation. This is to say that there are no countries that have a markedly female or male biased population; nor are their countries where the fluctuations in economic success could be considered structurally different from any other country. Similarly, it is not yet known whether particular genes such as the dopamine receptor D4 gene (DRD4-7R), that is associated with a liberal political ideology, is more widespread in some countries than others in light of genetic ancestry.¹ As it turns out, the economic voting and electoral gender gap literatures may not sufficiently consider the potential impact that the accumulated institutions of the political economy may have on their

¹To illustrate, Oswald and Powdthavee (forthcoming) look at the impact of having one or more daughters on individuals’ voting behavior. Their finding is that having daughters moves people to vote Left. Sadly enough for Left parties there are an approximately equal number of girls and boys being born. Unless there are many more girls being born in Scandinavia, such studies do not help explain cross-national differences in voting behavior.
individual subjects’ voting behavior. Given the results discussed later this could be an important source of omitted variable bias.\(^2\) Needless to say that there is also a lot of work that discusses electoral behavior within individual countries (Campbell et al, 1960; Gelman et al, 2008; Caplan, 2008). But these country specific accounts do not have the ambition to provide explanatory power for a larger set of countries.

A large number of studies use left-right partisanship as an explanatory variable when looking at a variety of phenomena including macroeconomic performance (Alvarez et al, 1991; Kenworthy, 2006), redistribution (Persson and Tabellini, 2000, 2003; Alesina and Glaeser, 2004; Allan and Scruggs, 2004; Persson et al, 2007; Iversen and Soskice, 2006) and wage setting (Johansen et al, 2007). When the more recent studies observed the prevalence of either left or right politics they pointed to the importance of electoral systems and coalition dynamics (Iversen and Soskice, 2006; Iversen and Huber, 2008) or the strength and centralization of labour unions (Alesina and Glaeser, 2004). But then these authors used such observations as a means to explaining levels of redistribution and social spending.

This brief review of the literature indicates that there is little research that directly engages the cross-national trajectories in voting behavior. A general model for voting behavior ought to be a central topic in comparative political economy. As Campbell et al (1960: 397) observed, when the data is available then “political behavior” is “the ultimate dependent variable in our theoretical scheme.”

This paper starts by introducing a new data set for the ideological position of the electoral center—the median voter—that corrects for stochastic error in the underlying and widely used statistics from the Comparative Manifesto Project. These aggregated political preferences serve as the dependent variable. Next, attention turns to how political economies vary across countries and whether this explains the variety in voting records. Those economic institutions are considered whose salience is important in differentiating among political economies. Labour organization, skill specificity, and public sector employment are such key economic institutions that allow for distinguishing between the more coordinated and liberal market economies. It will be argued that these particular institutions also influence the political prefer-

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\(^2\)One of few notable exceptions is Edlund and Pande (2002). They show that women in the US vote more for the Democratic Party than men do. Their argument rests on the interaction between a decline in marriage and the provision of social security and they include a battery of economic control variables for robustness. While their analysis is restricted to the US, it may provide insights into cross-national differences in voting behavior if marriage declines and social security are substantially different across countries.
ences of the individuals that they touch. Of course, over time economic institutions are created or changed by a society of people with a set of preferences, but the empirical analysis deals with reverse causality and shows that at least since 1960 voter preferences have been endogenous to the economic institutions of their political economy. The discussion of the empirical results also sheds light on some recent findings in Political Economy and incorporates a short case study of the UK. The logical implications that flow from the analysis are stated when the paper concludes.

Voter preferences.

Ever since the seminal works by Black (1948) and Downs (1957) introduced the median voter, or the ideological position of the electoral center, the concept has figured widely across literatures. While conceptually prominent, few median voter arguments have been supported with robust data. This paper introduces a new, updated, and improved data set for revealed voter preferences. The data set employs the statistics provided by the Comparative Manifesto Project (Budge et al, 2001; Klingemann et al, 2006) but corrects for stochastic error as done by Benoit et al (2009).

The Comparative Manifesto Project (CMP) codified all sentences of every election manifesto to place parties on a left-right scale. The data is collected such that each statement is assigned to either a pro-left or a pro-right category. The scaling consists in subtracting the sum of percentage references to categories grouped as left from the sum of percentage references to categories grouped as right. Consequently, negative scores represent a generally left position, whereas positive scores are reflective of a right position. While use of the CMP data set is widespread, it is not without its critics. Most criticism centers on errors in CMP measurement because of the stochastic features of text generation and text coding processes. Recent contributions on the limits of the CMP include Benoit and Laver (2006), Edwards (2006), Hans and Hönnige (2008), Mikhaylov et al (2008), and Benoit et al (2009). Treating words as data with error, Benoit et al (2009) proceed by bootstrapping the analysis of every coded manifesto. By way of these simulations they reconstruct the stochastic processes that generated these political texts. The alternative estimate for party policy position then becomes the mean estimator of the 1,000 bootstrap simulations that were performed for each manifesto.
Next, these “corrected” party policy positions are linked to electoral results using the Kim-Fording methodology (Kim and Fording, 1998, 2003). In essence, the position of the median voter is computed from vote shares for the ideologically ranked parties. This is done by first ranking the parties by ideological score for every election in each country. Then for each party the interval where its supporters are located is tabulated by locating the midpoints between the ideologically neighboring parties. Assuming that voters choose the candidate or party that is ideologically closest to them, a party will attract the votes of those that are part of the interval that surrounds that party. Finally, the electoral results for each party at every election are matched to produce the percentage of the electorate that is grouped into each ideological interval. As Kim and Fording (2003: 96) point out, their method requires us “to conceive of elections as large-scale opinion polls.” Where the ballot acts as a survey in which the subject chooses the party that is ideologically closest on the partisan left-right spectrum. As such, it is possible to treat election results as a grouped frequency distribution and tabulate a median statistic. The results range between -100 (extreme left) and +100 (extreme right) and non-election values are interpolated linearly. An accompanying research note goes into more detail on the precise tabulations and assumptions that were involved to build these new median voter statistics. The research note and the data set are available from the author. Figure 1 shows the resulting left-right positions of 18 Western democracies averaged over 1960-2003.

It is important to highlight that this methodology produces revealed voter preferences because they are derived indirectly via party policy positions and their success at the election polls, rather than direct evidence of voter opinions. Still, these statistics are precious given the lack of robust time series for partisan opinion polling data and, as noted by Pontusson and Rueda (2008: 13), “it seems quite accurate to think of the position of the median voter as being constructed by parties in competition with each other.”

As a robustness check—and because standardized measures of voter preferences tend to inspire controversy—this paper uses as a second measure the Electoral Center of Gravity as devised by Cusack (1997). The CMP-based measures have most clout

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3 The electoral center of political gravity measures are developed by Cusack (1997) who, in turn, used the Gross and Sigelman (1984) index on electoral results, legislative seat distribution, and cabinet seat distribution, as well as data on the ideological position of parties based on expert survey data by Castles and Meir (1984).
Figure 1: The Median Voter (1960-2003)

Sources: CMP (Klingemann et al, 2006); Kim and Fording (2003); Benoit et al. (2009); De Neve (2009)
because of their detail and comprehensiveness but the Cusack indicator also provides time series from 1960. The underlying data sets have been widely used and evaluated in the literature (e.g. Powel, 2000; Gabel and Huber, 2000; Bakker et al, 2005; Hix, Noury, and Roland, 2006; Edwards, 2006; Pontusson and Rueda, 2008).

**Economic institutions and voter preferences.**

Could the economic institutions of a political economy be a key to understanding the position of their median voter or the electoral center of gravity? As Frey (1990: 446) noted: “[T]he comparative analysis of institutions is able to solve long-standing theoretical problems which so far have not been treated in a satisfactory way.” By now, economists and political scientists have realized the importance of institutions in shaping economic performance (North, 1990, Platteau, 2000, Acemoglu et al, 2001), the level of redistribution (Alesina and Glaeser, 2005; Persson and Tabellini, 2004; Iversen and Soskice, 2006; McCarty and Pontusson, 2009), and cultural behavior (Bowles, 1998). An institutional analysis of voting behavior could produce equally important insights.4

This paper uses the cooperative institution index (Hicks and Kenworthy, 1998; Kenworthy, 2006) and the coordination index (Hall and Gingerich, 2004, 2009) as metrics for the accumulated economic institutions in a political economy. These measures also allow for a more sophisticated way of distinguishing between coordinated market economies (CMEs) and liberal market economies (LMEs) as described by Hall and Soskice in *Varieties of Capitalism* (2001). They proposed a distinction between two clusters of capitalist economies on the basis of the means that firms and other actors use to coordinate their actions across the political economy. CMEs have firms primarily employ more strategic means of interacting with labor organizations, financial institutions, and other actors across the domestic political economy. LMEs

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4Economic and democratic institutions have their origins. Understanding the development of the institutions in the political economy is important scholarship and key references would include Acemoglu and Robinson (2001, 2006), Alesina and Glaeser (2005), Cusack et al (2007), Robinson and Torvik (2008). This paper does not dwell on the development of institutions, but presumes institutional inertia. Most of the aforementioned accounts trace back the origins of institutions to the end of the 19th and start of the 20th century. The fact that the indicator for economic structure and organization circa 1900 (Cusack, Iversen, and Soskice, 2007) strongly correlates with the more current index for coordination (Hall and Gingerich, 2004, 2009) and the cooperative institution index (Hicks and Kenworthy, 1998; Kenworthy, 2006) would lend credence to the notion of institutional path dependency (North, 1990; Pierson, 2004) and, hence, institutional inertia. See Table 1 for a correlations table of the key variables used in this paper.
rely more heavily on competitive markets to coordinate relations between firms and other actors. Hall and Soskice (2001: 20) describe and list CMEs (e.g. Sweden, Austria, Germany) and LMEs (e.g. USA, UK, Australia).

Making parallel use of the coordination and cooperation indices allows for two proxies for CMEs and LMEs as well as a robustness check. Hall and Gingerich constructed the coordination index specifically to assess the degree to which countries rely on market or strategic coordination across the different spheres of their political economy. The index incorporates data from the 1990-1995 period on corporate governance (shareholder power, dispersion of control, size of stock market) and labor relations (level of wage coordination, degree of wage coordination, labor turnover). These measures for corporate governance and labor relations are then loaded in the coordination index. The Hicks-Kenworthy cooperative institution index made a scoring of the degree of cooperation in nine spheres: (a) relations among firms across industries; (b) relations among unions; (c) relations between the state and interest groups; (d) relations among firms and investors; (e) relations among firms and suppliers; (f) relations among competing firms; (g) relations between labour and management; (h) relations among workers; and (i) relations among functional departments within firms. Unlike the coordination index, Hicks and Kenworthy looked at a longer time frame when developing their cooperative institution index (1960-1994). Their effort will allow for a longitudinal analysis later on.

Figure 2 presents scatter plots with linear fits for the coordination and cooperation indices on the two aforementioned voting measures: the median voter and the electoral center of gravity. In musical terms, the result shows four variations on a theme. The theme being the close association between left-right voting behavior and the level of coordination across the economic institutions of the political economy.
Next the paper considers three economic institutions that can be linked more directly to individual voting behavior and that are part and parcel in distinguishing CMEs from LMEs. The salience of labour organization, skill specificity, and public sector employment typify political economies and are all strongly correlated (positively) with the overall level of coordination as reported in Table 1. The arguments that follow aim to show how these specific economic institutions influence individual interests and lock in electoral preferences. Aggregating these politically aligned micromotives results in the macrobehavior that explains the left-right voting patterns that developed over time across the 18 OECD nations considered.
Table 1: Correlations Table

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<tbody>
<tr>
<td>(1) Median Voter 1960-2003</td>
<td>1.00</td>
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<td>(2) Electoral Center of Gravity 1960-97</td>
<td>0.62</td>
<td>1.00</td>
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<td>(3) Coordinated/Liberal Market Economy</td>
<td>-0.55</td>
<td>-0.63</td>
<td>1.00</td>
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<td>(4) Coordination 1990s (Hall-Gingerich)</td>
<td>-0.46</td>
<td>-0.67</td>
<td>0.86</td>
<td>1.00</td>
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<td>(5) Cooperation 1960-1989 (Hicks-Kenworthy)</td>
<td>-0.64</td>
<td>-0.70</td>
<td>0.93</td>
<td>0.91</td>
<td>1.00</td>
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<tr>
<td>(6) Coordination circa 1900</td>
<td>-0.46</td>
<td>-0.61</td>
<td>0.93</td>
<td>0.78</td>
<td>0.80</td>
<td>1.00</td>
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<td>(7) Skill specificity</td>
<td>-0.60</td>
<td>-0.48</td>
<td>0.82</td>
<td>0.74</td>
<td>0.78</td>
<td>0.78</td>
<td>1.00</td>
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<td>(8) Wage setting score 1960-94</td>
<td>-0.46</td>
<td>-0.77</td>
<td>0.87</td>
<td>0.95</td>
<td>0.88</td>
<td>0.83</td>
<td>0.71</td>
<td>1.00</td>
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<td>(9) Government employment</td>
<td>-0.46</td>
<td>-0.48</td>
<td>0.08</td>
<td>-0.01</td>
<td>0.19</td>
<td>0.19</td>
<td>0.01</td>
<td>0.08</td>
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Skill specificity

In an important contribution to our understanding of the political economy, Estevez-Abe et al (2001) show that CMEs depend more on industry- and firm-specific skills than LMEs. The workforce of the latter type of political economies, however, is characterized by more generalist skills. Empirically, the levels of skill specificity can be shown by looking at the importance of vocational training and the degree of labor turnover at firms. More vocational training systems and longer levels of firm tenure are indicative of greater skill specificity. When a worker invests in more specific skills he or she must have some reassurance that the lessened transferability of those labour skills will not lead to an expected revenue stream with increased risk and volatility. To insure against the possibility of longer periods of unemployment and, in effect, smooth out the expected revenue stream it would be in the worker’s interest to have reasonable unemployment benefit packages in place if needed. Such policy preferences are precisely what Iversen and Soskice (2001) and Iversen (2005) find when producing estimates that show, controlling for income, that the demand for social spending is strongly associated with skill specificity for all OECD countries.\(^5\)

\(^5\)An important clarification is warranted. This paper does not intend to confuse coordination across the economic institutions with the welfare state and redistributive policies. The recent work by Persson and Tabellini (2000), Allan and Scruggs (2004), Alesina and Glaeser (2005), Cusack et al (2007) indicates that electoral institutions are at the origins of the welfare state. Because the salient institutions of the political economy predate the welfare state, this paper considers the variety in accumulated institutions as being inclusive of the variety in welfare policies. The empirical analysis in this paper includes electoral institutions (electoral district magnitudes) and economic institutions (by way of the coordination and cooperation indices), hence it is not warranted to include a control...
The same argument is further developed in Kitschelt and Rehm (2005), Cusack et al (2006), McCarty and Pontusson (2009), Anderson and Pontusson (2007), and Iversen and Stephens (2008). Because the higher levels of skill specificity in CMEs are associated with the demand for robust unemployment policies across the social strata, this paper suggests that such preferences should translate into over-proportional support for leftist politics. Figure 3 shows the scatter plots for skill specificity on the median voter and the electoral center of gravity. The linear fits indicate a negative correlation between skill specificity and right partisan preferences.

Figure 3: Skill Specificity and Voter Preferences

Labour organization

The empirical literatures in economics and political science come together on the fact that strong labour organization and coordinated wage bargaining leads to wage compression and less inequality (Krugman, 1994; Acemoglu, Aghion, and Violante, 2001; Acemoglu 2002; Aghion and Durlauf, 2005; Iversen and Stephens, 2008; Scheve and Stasavage, 2009). Acemoglu et al suggest that sweeping skill-biased technological change has substantially reduced the incentives for skilled workers to remain in a coalition of union workers. The result of this dynamic is general deunionization and a serious increase in inequality. This logic is intuitively appealing and widely applicable but they seem to disregard, however, the fact that labour organization variable for the welfare state. The fact that there would be collinearity between these variables is an indication that they would be measuring overlapping effects.
in some CMEs has not declined. Kwon and Pontusson (2008) find that a number of countries have kept a relatively stable level of unionization (Belgium, Denmark, Finland, Norway, and Sweden). This would imply then that there are a vast number of skilled workers that opt to remain in a situation of coordinated wage bargaining. This raises the obvious question: which skilled workers would be willing to remain in a heterogenous coalition of unionized workers and accept a paycut? Iversen and Stephens (2008) point towards the protection of skill investments and the possibility to be rehired elsewhere at the same wage. But they, nor any other authors, have adequately dealt with the proposition by Acemoglu et al that the increased returns to skills have substantially lowered the incentives for skilled workers to be part of a larger union. It would appear that neither discipline is able to formulate a truly satisfying answer to the question just posed.

Combining the key insights from the aforementioned arguments, this paper offers a slightly different account. Given its cross-national salience, it is important to consider the level of skill specificity of the individual as he or she enters a (hypothetical) wage bargaining situation with a potential employer. Having gone through multiple years of specialized or vocational training this individual has a reduced set of employment possibilities and greater risk exposure to market volatility. The result of being less flexible on the job market is that the individual with a high degree of skill specificity is more likely to be in a disadvantaged bargaining position as compared to the generalist. In order to offset this bargaining disadvantage—and the insecurity that comes with it—there is a clear interest in being part of a larger countervailing power notwithstanding the wage compression that this entails (Galbraith, 1956). In effect, Bender and Sloane (1999) showed that unionized workers feel more secure in their jobs and Anderson and Pontusson (2007) find that the social protection measures that unions fight for effectively reduce employment insecurity. It is also important to note that Acemoglu and Pischke (1999) found that unionization and wage coordination are associated with higher levels of training. This reinforces the situational lock-in of skill-specific workers and their associated set of interests. In contrast, the more flexible generally skilled person is less likely to face a disadvantaged wage bargaining position when negotiating at the individual or firm level. Moreover, because standardized wages would disable the pursuit of more lucrative opportunities elsewhere this person has no interest whatsoever in coordinated wage
bargaining.\footnote{It remains to say that, in general, low-skilled and unskilled workers across the different political economies continue to have a strong stake in coordinated wage bargaining as it would raise the wage level for those that are employed.}

The partisan agenda that best serves the demands for unionization and wage coordination would presumably be the politics of the left. Johansen et al (2007) show that government colour matters in the coordination of wage bargaining. For the case of Norway, they show empirically that coordinated wage bargaining will only produce its effects if left partisanship is part of the equation. Returning to the larger theme of this paper, given all the above arguments it is conjectured that for political economies that maintain encompassing labour organization there will be an over-proportional number of individuals with interests aligned to left partisanship. Figure 4 shows scatter plots for the wage setting score (Hicks and Kenworthy, 1998) on the median voter and the electoral center of gravity. Linear fits show clear negative correlations. A high (low) degree of coordinated wage bargaining is associated with left (right) voting behavior.

Figure 4: Labour Organization and Voter Preferences

![Figure 4](image.png)

Public sector employment

Individuals employed in the public sector have an economic self-interest in larger public budgets and are known to be more supportive of expansionary government than private sector employees (Blais, Blake, and Dion, 1993a, 1993b, 1997; Knutsen, 2005; Cusack, Iversen, and Rehm, 2006; Kwon and Pontusson, 2008). Knutsen (2005: 594) explains that “[t]he extent to which one’s own economic interests are di-
rectly linked to political decisions is perhaps the most noticeable difference between working in the public or private sector. Indeed, to a public servant a relatively large public sector means more career opportunities and economic rewards. Private sector employees and independents may also have an important stake in expansionary social policies when it benefits their economic situation, as discussed previously. However, the immediate economic fates of all private sector workers are largely contingent on the market and the ability of their organization to profit from it. The brunt of the costs associated with an expansionary government and market intervention is stom-ached by all individuals in the private sector. The more liberal market economies are well-known to be associated with lower tax rates, smaller government, and less interventionist policies. CMEs, on the other had, support a larger public sector. Intuitively, there would seem to be an obvious link between the political preferences of public servants and left partisanship. Kwon and Pontusson (2008) note that over the 1970s and 1980s the left parties in many OECD countries saw the unionized public servants emerge as a core constituency. Moreover, Blais et al (1993a) tested the hypothesis that leftist government, as compared to a right-wing government, is more generous when granting wage increases to public sector employees. Their empirical study concludes that, ceteris paribus, wage increases are 10% higher under leftist governments. Figure 5 plots government employment as a percentage of the total labour force on the median voter and the electoral center of gravity. The linear fits show a negative relationship between government employment and right-wing voting. CMEs typically support a larger public sector, hence gathering more left partisan support. Special attention is drawn to the Scandinavian countries of Sweden, Denmark, and Norway as they would appear in a world apart when considering the public sector and left-wing voting. Indeed, their high levels of government employment could perhaps solely explain their distinct left voting behavior, without even having to consider other complementary economic institutions.\footnote{Iversen and Rosenbluth (2006) and Iversen and Stephens (2008) note that in the Scandinavian countries an over-proportional share of the public sector draws on women. The gender equalizing policies instigated in the early 1970s (e.g. public day care centers) would partially explain the current size of the public sector, as well as female labor force participation more generally.}

Having looked at skill specificity, labour organization, and public sector employment it would appear that there are good reasons to believe that these—and perhaps other—economic institutions jointly influence individual voting behavior. As institutions lock in individual interests, these aligned micromotives turn into the
macrobehavior that results in distinct cross-national voting records. It is worthwhile observing that when these institutions are combined they may represent more than the mere sum of their parts. Hall and Soskice (2001) and Hall and Gingerich (2004, 2009) make a strong case for institutional complementarities when the presence of certain institutions in the political economy allows for general efficiencies when other particular institutions are also present. This fundamental observation lies at the basis for taking the level of market or strategic coordination across institutions as the proxy that best allows for distinguishing between political economies and their set of economic institutions.\(^8\)

**Reverse causality**

Not unlike the proverbial chicken and egg problem\(^9\), is there a serious risk to attribute partisan voter preferences to differences in the institutional set-up, if, in fact, partisanship has helped to produce the institutional differences across political economies in the first place. This problem of reverse causality needs to be adequately

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\(^8\)Future research will look at how the ability of partisanship to boost economic performance may be partially contingent on the variety of capitalism in which it operates. Preliminary results suggest that the more productive marriage between a CME (LME) and left governance (right governance) is expected to generate greater synergies from institutional complementarities across the political economy. In turn, this would lead to better macro-economic performance and, consequently, left (right) partisanship can expect an increased likelihood of political success by way of sociotropic economic voting.

\(^9\)Interestingly, the chicken and egg problem was recently “solved.” John Brookfield, Professor of Genetics at the University of Nottingham, posited that because genetic material cannot evolve throughout the life of an organism, the egg necessarily came first with the embryo of a chicken inside. The egg was laid by a species closely related to—but not quite like—a chicken...
controlled for. An instrumental variable in a two-stage least squares (2SLS) regression allows for the estimation of causal relationships in the presence of endogenous explanatory variables. The instrument cannot be directly correlated with the dependent variable but should be highly correlated with the endogenous explanatory variable for which it instruments. If so, than a 2SLS regression allows for consistent estimation (Acemoglu et al, 2001; Heckman, 2008).

This paper proposes as instrument the measure of coordination circa the year 1900 as tabulated by Cusack, Iversen, and Soskice (2007) for an identical set of eighteen OECD countries. This measure incorporates five indicators of economic structure and organization circa 1900. Consequently, this paper posits that the levels of coordination circa 1900 in spheres of the political economy such as guild tradition and rural cooperatives have no direct effect on voting behavior in the period 1960-2003 (the exclusion restriction). However, this analysis supposes an indirect effect by way of the more recent levels of economic coordination. As is required, the instrument is highly correlated with the endogenous explanatory variable. A simple OLS regression on the coordination and cooperation indices, as well as a dummy for coordinated/liberal market economies, produces significant coefficients at the 1-percent level.

**Empirical analysis.**

The median voter and electoral center of gravity serve as the dependent variables. The key explanatory variables that will be used successively are a dummy for Coordinated/Liberal Market Economy, and its more sophisticated proxies that are the coordination index and the cooperative institution index.

The regressions that follow include a battery of control variables that are not economic institutions but that could play a role in shaping voting behavior. As many studies have pointed to the importance of electoral institutions, a control variable is included for Electoral District Magnitude. This more refined measure improves on the often used but very crude dummy for majoritarianism versus proportional representation. While majoritarian systems will always have but one electoral district, to lump together the variety of district magnitudes in proportional representation

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10Equally weighted, the following five indicators are incorporated into the Cusack-Iversen-Soskice measure of coordination circa 1900: (i) guild tradition and strong local economies (source: Crouch, 1985); (ii) widespread rural cooperatives (sources: Crouch, 1985; Katzenstein, 1985); (iii) high employer coordination (sources: Thelen, 2004; Swenson, 2002; Mares, 2002); (iv) industry unions (not craft); (v) large skill-based export sector (source: Katzenstein, 1985).
is tantamount to oversimplification. In line with the literature on the subject, it is expected that more electoral district magnitudes will be associated with more leftist voter preferences.\textsuperscript{11} Tertiary education represents the part of the population with tertiary attainment for age group 25-64.\textsuperscript{12} Religiosity is the part of the population that identifies themselves as being a religious person. From a number of recent studies that observed the importance of religiosity in shaping policy preferences, it would be expected that higher levels of religiosity are associated with more rightist voter preferences (Benabou and Tirole, 2006; Scheve and Stasavage, 2006; Huber and Stanig, 2007; McCarty and Pontusson, 2009).\textsuperscript{13} The absolute size of the countries is accounted for by way of the logarithm of Population.\textsuperscript{14} GDP per capita represents a measure to control for the cross-national differences in wealth.\textsuperscript{15} The Gini coefficient controls for within country wealth disparities. The Meltzer-Richard (1981) model would predict that societies with greater wealth disparities are likely to shape more leftist voter preferences in order to claim more redistribution. More recent studies, however, have found little empirical evidence to support the intuitively appealing Meltzer-Richard model (Barnes, 2007; Iversen and Soskice, 2007).\textsuperscript{16} It has been argued that ethnic fractionalization acts as a catalyst against policy preferences that favour redistribution (Luttmer, 2001; Alesina and Glaeser, 2004). Hence, it would be expected that higher levels of ethnic fractionalization imply more rightist voter preferences.\textsuperscript{17} The proportion of the population that lives in rural areas is also controlled for.\textsuperscript{18} A control variable is included for the level of economic openness tabulated as the sum of exports and imports as a percentage of GDP.\textsuperscript{19} Finally, a two-year lagged dependent variable is introduced to account for dynamics in the panel data analysis (Beck and Katz, 1996; Bartels, 2008).

Table 2 presents the instrumented cross-sectional regressions. Table 3 reports on the instrumented panel data models using time series random effects. The choice of random effects over fixed effects is reflective of the research question that considers

\textsuperscript{11} Source: Carey and Hix (2008).
\textsuperscript{12} Source: OECD Country Statistical Profiles.
\textsuperscript{13} Source: the Association of Religion Data Archives.
\textsuperscript{14} Source: OECD Statistics, Population and Vital Statistics.
\textsuperscript{15} Source: Ameco, European Commission Economic and Financial Indicators.
\textsuperscript{16} Source: World Institute for Development Economics Research and the World Bank Development Indicators.
\textsuperscript{17} Source: Fearon (2003).
\textsuperscript{18} Source: OECD Country Statistical Profiles.
\textsuperscript{19} Source: the Comparative Welfare States Data Set.
cross-national differences (not within country dynamics). Moreover, random effects is preferred because it deals with omitted variable bias that may be both time variant and time invariant; and also because random effects is a more efficient estimator (Stock and Watson, 2003).

Table 2: Cross-sectional data: two-stage least squares models

<table>
<thead>
<tr>
<th></th>
<th>Median Voter 1960-2003</th>
<th>Electoral Center of Gravity 1960-97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinated/Liberal Market Economy</td>
<td>-8.506* (5.09)</td>
<td>-0.686*** (0.22)</td>
</tr>
<tr>
<td>Coordination 1990s (Hall-Gingerich)</td>
<td>-17.690* (10.88)</td>
<td>-1.136*** (0.39)</td>
</tr>
<tr>
<td>Cooperation 1960-1989 (Hicks-Kenworthy)</td>
<td>-16.460* (9.19)</td>
<td>-1.080*** (0.23)</td>
</tr>
<tr>
<td><strong>Controls:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electoral district magnitude</td>
<td>-0.051 (0.05)</td>
<td>-0.001 (0.002)</td>
</tr>
<tr>
<td></td>
<td>-0.056 (0.06)</td>
<td>-0.002 (0.002)</td>
</tr>
<tr>
<td></td>
<td>-0.066 (0.05)</td>
<td>-0.003*** (0.001)</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>-0.892*** (0.25)</td>
<td>0.004 (0.011)</td>
</tr>
<tr>
<td></td>
<td>-0.564** (0.32)</td>
<td>-0.009 (0.005)</td>
</tr>
<tr>
<td></td>
<td>-0.273 (0.23)</td>
<td>0.009* (0.005)</td>
</tr>
<tr>
<td>Religiosity</td>
<td>22.78*** (8.51)</td>
<td>0.080 (0.34)</td>
</tr>
<tr>
<td></td>
<td>18.69** (8.98)</td>
<td>0.074 (0.32)</td>
</tr>
<tr>
<td></td>
<td>17.81** (8.24)</td>
<td>0.028 (0.20)</td>
</tr>
<tr>
<td>Log Population</td>
<td>4.508** (1.87)</td>
<td>0.235*** (0.34)</td>
</tr>
<tr>
<td></td>
<td>3.125 (2.11)</td>
<td>0.299*** (0.32)</td>
</tr>
<tr>
<td></td>
<td>2.161 (1.98)</td>
<td>0.243*** (0.20)</td>
</tr>
<tr>
<td>GDP p.c.</td>
<td>1.962*** (0.89)</td>
<td>0.094** (0.08)</td>
</tr>
<tr>
<td></td>
<td>1.510 (0.97)</td>
<td>0.063 (0.08)</td>
</tr>
<tr>
<td></td>
<td>1.540* (0.89)</td>
<td>0.069** (0.05)</td>
</tr>
<tr>
<td>Gini</td>
<td>1.142** (0.47)</td>
<td>-0.0036 (0.04)</td>
</tr>
<tr>
<td></td>
<td>0.528 (0.51)</td>
<td>0.0029 (0.04)</td>
</tr>
<tr>
<td></td>
<td>0.452 (0.46)</td>
<td>-0.0031 (0.03)</td>
</tr>
<tr>
<td>Ethnic fractionalization</td>
<td>1.676 (8.85)</td>
<td>-0.343 (0.39)</td>
</tr>
<tr>
<td></td>
<td>-5.70 (13.31)</td>
<td>-0.708 (0.51)</td>
</tr>
<tr>
<td></td>
<td>-4.314 (11.55)</td>
<td>-0.656** (0.31)</td>
</tr>
<tr>
<td>Rural</td>
<td>-0.016 (0.09)</td>
<td>0.0065* (0.09)</td>
</tr>
<tr>
<td></td>
<td>-0.014 (0.11)</td>
<td>0.0079*** (0.02)</td>
</tr>
<tr>
<td></td>
<td>-0.036 (0.10)</td>
<td>0.0066*** (0.01)</td>
</tr>
<tr>
<td>Economic openness</td>
<td>0.074 (0.08)</td>
<td>0.012*** (0.01)</td>
</tr>
<tr>
<td></td>
<td>0.066 (0.11)</td>
<td>0.012*** (0.01)</td>
</tr>
<tr>
<td></td>
<td>0.058 (0.09)</td>
<td>0.011*** (0.002)</td>
</tr>
<tr>
<td>Constant</td>
<td>-98.30*** (31.84)</td>
<td>-0.704 (1.31)</td>
</tr>
<tr>
<td></td>
<td>-58.92 (38.57)</td>
<td>-0.61 (1.41)</td>
</tr>
<tr>
<td></td>
<td>-54.8 (35.59)</td>
<td>-0.413 (0.89)</td>
</tr>
<tr>
<td></td>
<td>(31.84)</td>
<td>(1.31)</td>
</tr>
<tr>
<td></td>
<td>(38.57)</td>
<td>(1.41)</td>
</tr>
<tr>
<td></td>
<td>(35.59)</td>
<td>(0.89)</td>
</tr>
<tr>
<td><strong>Instrument:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordination circa 1900 (Cusack, Iversen, &amp; Soskice, 2007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cragg-Donald Wald F-statistic</td>
<td>14.6 6.9 21.6 9.9 5.3 15.9</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>16 18 18 15 17 17</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.76 0.54 0.62 0.73 0.62 0.85</td>
<td></td>
</tr>
</tbody>
</table>

*Notes: Standard errors in parentheses. Hall & Soskice (2001) do not categorize France and Italy as either a CME or LME. Cusack (2002) does not provide electoral data on New Zealand. These statistical tabulations make use of the ivreg2 command in Stata. Control variables are averaged over 1960-2000.*** p<0.01, ** p<0.05, * p<0.1
Table 3: Panel data: instrumented random effects models

<table>
<thead>
<tr>
<th></th>
<th>Median Voter</th>
<th>Electoral Center of Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperation (Hicks-Kenworthy)</td>
<td>-4.586***</td>
<td>-0.038**</td>
</tr>
<tr>
<td></td>
<td>(1.24)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Controls:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electoral district magnitude</td>
<td>-0.003</td>
<td>-0.0002</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Log Population</td>
<td>0.379</td>
<td>0.007*</td>
</tr>
<tr>
<td></td>
<td>(0.31)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>GDP p.c.</td>
<td>0.144***</td>
<td>0.001**</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Gini</td>
<td>-0.102**</td>
<td>-0.0004</td>
</tr>
<tr>
<td></td>
<td>-0.047</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Economic openness</td>
<td>-0.003</td>
<td>0.0003*</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Lagged dependent variable</td>
<td>0.746***</td>
<td>0.928***</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.481</td>
<td>0.153**</td>
</tr>
<tr>
<td></td>
<td>(4.31)</td>
<td>(0.07)</td>
</tr>
</tbody>
</table>

Instrument:
Cooperation 5-year lag
Cragg-Donald Wald F-statistic 35.7 28.9

Observations 535 503
Number of groups 18 17
R-squared within 0.48 0.28
R-squared between 0.97 0.99
R-squared overall 0.71 0.93

Notes: Standard errors in parentheses. The time series for the Hicks-Kenworthy cooperative institution index does not extend beyond 1994. Previously used controls that were time-invariant or for which no time series could be obtained are not included. Because the coordination index circa 1900 by Cusack, Iversen, & Soskice (2007) is time invariant it could not be used as an instrumental variable. A 5-year lag of the cooperative institution index is used instead. *** p<0.01, ** p<0.05, * p<0.1

Discussion.

The empirical results shown in Table 2 and Table 3 corroborate the key proposition of this paper: aggregated voter behavior is endogenous to the accumulated institutions of the political economy. The regressions on all measures of variety in the economic institutions return significant and material coefficients. This is the case for
the cross-sectional 2SLS models as well as the generalized 2SLS time series random effects models. The direction of the effects show that coordinated market economies, indicated by greater levels of strategic coordination and cooperative institutions, move the median voter or electoral center of gravity towards the left. Conversely, liberal market economies move the median voter or electoral center of gravity to the right on a standardized partisan spectrum.

No other variable returns consistently significant coefficients across all models. Still, it is worthwhile to touch briefly on a number of significant results. The coefficients on religiosity, when regressed on the median voter, turn out to be very significant and important. This empirical support for a strong positive correlation between religiosity and rightist voter preferences will sound like music to the ears of Benabou and Tirole (2006), Scheve and Stasavage (2006), and Huber and Stanig (2007). These authors found that there are psychological, normative, and economic reasons for why higher levels of religiosity weaken the demand for redistributive policies. Needless to say that rightist governance is typically associated with less redistributive policies than leftist governance. GDP per capita comes in significantly except in the case of the Hall-Gingerich coordination index. That higher levels of wealth is positively correlated with rightist voter preferences would seem to conform to general intuition. This is also the case for the level of population that shows a positive correlation with the electoral center of gravity. Bigger countries imply less social proximity that, in turn, would weaken the interest in social policies. As noted earlier, there is scant empirical evidence for the theoretic model by Meltzer and Richard (1981) that would find that democracies with higher levels of wealth inequality claim more redistribution. This study produces slightly mixed results for its measure of inequality: the Gini coefficient. Overall that would seem to lend support to the more recent findings that, in fact, societies with high levels of inequality do not necessarily mobilize its poorest to claim redistributive policies (Barnes, 2007; Iversen and Soskice, 2007). Ethnic fractionalization, while suggested to be of importance by Luttmer (2001) and Alesina and Glaeser (2005), shows mixed results in this empirical study.

While democratic institutions show the expected sign, that they do not come in significant may raise suspicion with the perceptive reader. The usage of a more sophisticated measure for democratic institutions—by way of the electoral district magnitude—and the inclusion of economic institutions, as well as the use of instrumented two-stage regressions may have weakened the effect that recent research would have
expected. In the time series, the lagged dependent variable comes in significantly, meaning that as past values for the median voter or electoral center increase, i.e. move to the right; more current values increase as well. This result is indicative of the general systemic shift to the right from approximately the second half of the 1960-2003 time frame onwards. This important development is documented elsewhere (Budge et al, 2001; Klingemann et al, 2006). The level of coordination circa 1900 in the case of the cross-sectional analyses, and the 5-year lag of the cooperation index for the time series analyses, turn out to be strong instruments as indicated by superior F-statistics (Stock and Yogo, 2005). The elevated R-squared values indicate good regression fits and encourage confidence in the econometric results.

Institutional path dependency is very strong in this sample of 18 countries. In fact, there is but one country that has undergone a major institutional shift. The transformation of the United Kingdom under Margaret Thatcher has no equal. Around the 1970s—prior to the Thatcher government that ruled from 1979 to 1990—the UK had the highest level of public sector employment in Europe (Knutsen, 2005). The period that followed saw a sharp reduction in its public sector (described in Dunleavy, 1991) and also the most significant decline in union density in Europe: a staggering 42.5% drop from 1980 to 2000 (Kwon and Pontusson, 2008). Following Hall (2007: 63), “The Thatcher government is the exception that defines the limits ... It took on the trade unions and dramatically reduced their power. However, Thatcher did so from a position of considerable strength. Facing a divided opposition, she was electorally secure, and the British trade union movement was not only divided but weakened by high levels of unemployment.” In effect, under Thatcher’s leadership the UK went from being a coordinated market economy to becoming classified as being a liberal market economy (Hall and Soskice, 2001).

As this paper would suggest, the median voter or electoral center also underwent a significant shift. For the period of 1960-1980 the median voter averages at -10; a strong left partisan preference in line with the arguments on labour organization and government employment. The subsequent period 1981-2001 sees the UK median voter move to a slightly rightist position averaging at +1. Of course, this begs the question on what came first: Was there a singular ideological shift among the British voters that translated into these dramatic institutional changes, or did the direction in causality originate from the long-lasting leadership by the Iron Lady and the powerful neo-liberal economic ideas that had captivated her Conservative governments at the time? The econometrics applied in the above analysis opt for the latter sense
of direction. The Thatcher era effectively turned around the original institutional advantages in the UK to now favor the political odds of the Conservative party. As a consequence, the Labour party had to re-invent itself into “New” Labour as led by Tony Blair and universally understood to have adopted a more liberal agenda than any other European social democratic party. Given the changed institutional landscape, New Labour chased the re-orientation of the median voter to being more rightist. While reneging on its blue-collar roots, Tony Blair’s opportunistic leadership ensured the political survival of the Labour party.

From the data, it appears that the UK provides the only test case where the politically aligned set of institutions underwent a quantum change. All other countries in the sample have retained the institutional advantages to partisan politics that came along with the original development of institutions. The structure of their political economies generated political feedback effects that sustained distinctive trajectories. The logic that results from this analysis is that parties can shape voter preferences only by way of altering institutions. Equally, the institutions of the political economy influence the positions that parties take by way of shaping the median voter over which parties compete. 20

Conclusion.

Cross-national voting behavior was yet to be directly engaged by economists and political scientists alike. The results of this paper go against notions of all-pervasive ideologies that would be exogenous and at the origin of different voting behavior. Instead, this paper aligns with the notion that “men are everywhere so alike” as the philosopher David Hume would have it; or de gustibus non est disputandum as Stigler and Becker (1977) titled their essay on the proposition that variation in market conditions explains differences in behavior. Similarly, this paper showed that

20If voter preferences are to some degree endogenous to their political economy, then all accounts taking voter preferences (or the left-right position of government) as exogenous are open to questioning. This admittedly sweeping critique of a large chunk of the literature is, of course, not novel. For example, Dunleavy (1991) already made a strong swipe against taking voter preferences as exogenously fixed and unaffected by their participation in a variety of processes. Dunleavy, however, argues that voter preferences are to an extent endogenous to the exercise of state power by parties. Combining Dunleavy’s insights—and those that have made similar arguments, e.g. Evans and Andersen (2005); Sanders et al (2008)—with the empirical results of this paper, one can make a strong case that voter preferences are being shaped from multiple angles and should not be considered as exogenously given.
variation in the institutional set-up of a political economy explains variation in voter behavior. Hence, instead of relying on a sociological explanation for cross-national partisanship, this paper suggests that it is a process where individuals adapt their political preferences to their economic environment that leads to sustained cross-national differences in voting behavior.

References


