Students of the democratic politics have long held that institutional factors such as federalism, electoral systems, and parliamentary-executive relations profoundly affect political competition and political parties. Even if one excludes the polemical work of F. A. Hermens on one hand and Enid Lakeman and James Lambert on the other, Maurice Duverger, Douglas Rae, and Richard Katz have adduced ample evidence of the importance of electoral systems. In general, systems that use proportional representation (PR) have more parties than those that elect by plurality or majority. Their parties are more disciplined, more coherent, more ideological, and more secure against sudden shifts in voters’ sentiments. Moreover, as Klaus von Beyme has observed, regimes that use PR tend to have higher levels of electoral participation.

Powerful effects have also been ascribed to popular election of a strong chief executive. According to Gerald Pomper, the American presidency...
"probably has been the single most important institutional source of the American two-party system." As the "supreme prize of American politics," for which only two parties can effectively contend, the presidency "bring[s] consolidation of different factions in efforts to achieve a national majority." Pomper was hardly the first to advance that claim, but in a footnote he went on to predict, accurately, that the (then) recent creation of a similar office in France would push that country rapidly toward bipartism. Also, according to such authorities as Duverger, V. O. Key, Leon Epstein, and Robert Dahl, an independently elected chief executive undermines party discipline: where continued control of the nation's most powerful office does not depend on parliamentary majorities, parties can afford greater internal dissension.

Finally, and less prominently, it has frequently been alleged that the size of constituencies matters in at least three ways:

1. Large constituencies make PR more "exact," and so intensify all of that system's effects. Conversely, when PR is used in very small districts, as in Australia or Ireland, its effects become indistinguishable from those of plurality election.

2. Small constituencies invite gerrymandering and electoral fraud. The fewer the constituencies into which a country is divided (and the logical minimum of one is actually achieved in the Netherlands and Israel), the less any party can hope to gain, either from manipulation of the boundaries or from thievery in a few close districts.

3. Large constituencies afford representatives greater autonomy. In small districts, localistic "parish-pump" and "pork-barrel" orientations are likelier to dominate—as French reformers emphasized in advocating larger districts in the infant Fourth Republic, and as Americans have repeatedly admitted in expanding presidential power.

That institutions affect politics, then, is hardly disputed; but what in turn shapes the institutions? The widespread assumption that institutions are static is, as Arend Lijphart has recently observed of electoral systems, "plausible . . . [but] largely incorrect. . . . major changes . . . cannot be considered rare."12 The history of France from 1870 to the present, and of interwar Europe generally, suggests that the issue of independent executive authority is also far from settled. And, rather obviously, nations enlarge and contract their electoral districts often. What induces change, and what constrains nations' choices?

Since Duverger, most students of electoral systems have attributed much of their variation to parties' tactical considerations—a view which Rae's findings hardly contradict.13 Some, too, have linked PR to deep social or cultural divisions that a plurality system might insufficiently respect:14 witness the historical origins of the system in communal conflict in Switzerland and the Netherlands;15 or some accounts of the Spanish Civil War—allegedly catalyzed, if not caused, by a plurality system that gave a radically anti-clerical minority a solid majority of parliamentary seats.16

According to Samuel Huntington, executive independence—the presidency as "Tudor monarchy"—has survived in America because "the absence of significant social divisions" has permitted a continued division of power;17 yet Gaullists advocated a similar "elective monarchy" and a similar separation of powers precisely because French society was so divided.18

Constituency size, to the extent that its causes are considered at all, is usually linked to regional diversity: homogeneous societies require fewer electoral districts, highly diverse ones more, to guarantee representation of all major interests.19

All of these putative causes, it should be observed, are domestic. Without

13. Rae, Political Consequences, especially chap. 9.
attempting to deny the importance of any of them, I want here to suggest the possible significance of a seemingly improbable external factor, namely the given society's dependence on international trade. I propose to argue logically and empirically that, the more an economically advanced state relies on external trade, the more it will be drawn to the use of PR, a parliamentary system, and large districts, with (presumably) all that that combination entails.

The claim that trade may influence domestic politics should no longer be regarded as astonishing. David Cameron has already convincingly linked public-sector growth in advanced economies to their reliance on trade.20 Trade-dependent states, which are more vulnerable to fluctuations outside their borders, might be expected to intervene more, to cushion their subjects and to maintain economic competitiveness. The experience of the states of the Organization for Economic Cooperation and Development (OECD) between 1960 and 1975 appears to support the hypothesis. Even more directly, Peter Katzenstein has suggested a natural affinity between trade-dependence and PR, but he regards the adoption of PR in the smaller European states as a lucky historical accident motivated principally by domestic social conflicts.21

The connection between trade and forms of democratic governance is probably more general and direct. I shall first argue this case logically; then I shall examine the comparative data for today's advanced economies. Finally, as a helpful illustration, I shall describe the renewed British debate on PR since 1975.

The natural affinity between trade and PR

Imagine an economy that, by Albert Hirschman's definition,22 depends heavily on international trade: that is, its gains from trade for whatever reason (small size, prior specialization, relative backwardness, lack of crucial resources) are unusually great, and its costs from any restriction of trade commensurately high. Such an economy is constrained (but not required23) by its dependence to remain open to trade; to the extent that it does trade

23. A few quite small and objectively trade-dependent economies pursue protection, albeit at enormous cost. New Zealand is the example most frequently adduced. See, for example, Mancur Olson, The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities (New Haven and London: Yale University Press, 1982), pp. 132–136. As I shall suggest shortly, New Zealand's political structure may well be associated with its perversity of policy.
freely, it can prosper only by a ruthless pursuit of efficiency and comparative advantage. An open economy may be contrasted to an autarky as a competitive firm is contrasted to a monopoly: lacking a captive market, the trading society’s goods and services can sell only so long as they are priced at the cost of production—indeed, the world cost of production.

Before we lose ourselves in admiration of the open economy’s willingness to meet all comers, we should recall that competitive efficiency in backward trade-dependent economies often has seemed to require serfdom or slavery. It was no accident that the opponents of slavery in the United States also advocated high tariffs and the pursuit of autarky. In more advanced and complex economies, however, that degree of compulsion always seems to fail. Indeed, in developed economies that depend heavily on trade, any group’s extraction of significant rents appears to induce fatal inefficiencies. Again, it is instructive to observe that historically (at least since the Renaissance) the most aggressively trading societies of the developed “core” have characteristically lacked the parasitic aristocracies that often burdened their more autarkic contemporaries.

Keeping this in mind, we can begin to ask what kind of state would be optimal in an advanced and trade-dependent economy—that is, most likely to increase national income and wealth. Would it differ markedly from a developed autarky’s optimal regime? I contend that it would, in at least three ways.

First and most obviously, the trade-dependent state must resist protectionist pressures, that is, it must insulate its rulers from the demands of sectors or regions injured by changes in international markets. For a state with little to gain from trade, this is obviously not important.

Second, an advanced trade-dependent state needs to combat, more than

24. Exceptional departures are of course possible, when one country (or a few that collaborate) monopolizes some product for which there are no ready substitutes—for example, diamonds or, briefly, oil.

25. As Paul Samuelson demonstrated in a fundamental theorem, free trade even in commodities is usually enough to equalize factor prices. Hence the result I describe follows even if capital and labor do not, or cannot, migrate. Paul A. Samuelson, “International Trade and the Equalization of Factor Prices,” *The Economic Journal* 58 (1948), pp. 163–184.


29. “Rent” is of course meant here in its economic, not its everyday, sense, i.e. roughly as a return derived by market power or coercion (typically by a monopoly) rather than by competition. More technically, “Rent [is] . . . any income received by a factor over the amount necessary to keep that factor in its present employment.” John Lloyd Hanson, *A Dictionary of Economics and Commerce*, 5th ed. (Plymouth: Macdonald and Evans, 1977), p. 395.

one that enjoys greater self-sufficiency, the extraction of rents by particular firms, classes, or sectors—or indeed by the regime itself through "pork" and patronage. The monopolies, featherbedding, or corruption tolerated in a closed economy swiftly injure a developed economy that is more exposed to the rigors of world competition. To oppose these successfully also requires considerable state independence from powerful private interests.

Finally, a trade-dependent state is forced to pursue stability of policy far more than an autarky. Every risk is a cost, and a capricious or erratic government disadvantages an open economy against competitors who enjoy more predictable regimes. (Again, in a backward economy these risks can be offset by rents, such as wages suppressed by military rule; in economically more advanced circumstances such measures are far less possible.)

These three requirements—insulation, autonomy, and stability—probably can be fulfilled in a variety of regimes: colonial rule (Hong Kong); a patriciate (17th-century Netherlands or 18th-century Britain); perhaps even by the domination of a monolithic party (Hungary under János Kádár). Suppose, however, that pressure for democratic participation is strong—as is very often the case in economically advanced societies. What kind of democracy, or close facsimile, can best satisfy these three constraints?

To answer briefly: (1) insulation from regional and sectoral pressure in a democracy, I claim, is most easily achieved with large electoral districts; (2) autonomy, especially from private wealth, is best achieved by strong parties (which, as all concede, are furthered by list-system PR); and (3) stability is best realized with PR, large districts, and a parliamentary system (as opposed to a presidential one).

The first point is most easily defended, in part because institutional theorists have almost universally accepted it (as discussed earlier), but more because it is almost self-evident. When automakers or dairy farmers entirely dominate twenty small constituencies and are a powerful minority in fifty more, their voice will certainly be heard in the nation’s councils. Where they constitute but one or two percent of an enormous district’s electorate, representatives may defy them more freely. American free traders saw this early and sought, largely with success, to transfer tariff-making from Congress to the more broadly elected president.\(^{31}\)

That strong parties foster autonomy from economic pressure is also almost a commonplace. As we have been told since Woodrow Wilson’s pioneering work, the discipline of British parties precludes the lobbying and influence-buying prevalent in the U.S. Congress, and gives their political

Democratic institutions

leaders and civil servants greater power to "integrate" interests.32 Pressure
groups are restrained where campaign resources or the legal control of nomi-
nations are centralized in the hands of party leaders.33 Of course, such
control is achieved quite effectively by rigid list-system PR.34

Far more controversial is the assertion that a PR-parliamentary system
best guarantees the stability of democratic policy. Since Hermens, most
political scientists have believed that PR destabilizes policies and regimes;
Anthony Downs has buttressed this view with proof that both major parties
converge on the position of the median voter in a plurality system with a
unidimensional policy space.35 It is therefore important to recall the limita-
tions of both Hermens’s and Downs’s arguments. Hermens contends that
PR weakens democratic governments partly because it stabilizes, indeed
immobilizes, their choice of policy: in a crisis, voters find change so difficult
that they often repudiate the system rather than the incumbents.36 And we
now know that Downs’s proof depends entirely on his assumption of a single
ideological dimension: subsequent analysis has shown that, in any of the
common multidimensional cases (where, for example, a religious conflict
crosscuts one of social class), plurality election conduces instead to high
turnover and extreme instability of policy.37

Empirically, too, the supposed connection between plurality election and
stability rests on overgeneralization or faulty recall to a surprising degree.
Despite a widespread belief to the contrary, for example, the French Third
Republic never used PR;38 indeed, according to some eminent historians, the
regime’s shifting parliamentary majorities were artifacts of its two-ballot
majority system, reflecting only minuscule changes in popular sentiment.39
The ill-fated Spanish Republic, as I have already observed, also elected its
parliaments by plurality. Interwar Germany and Italy employed PR; but so,
in those same years, did the extremely stable Swiss, Swedes, Norwegians,
Danes, Belgians, and Dutch (who frequently attributed their "low-voltage

32. R. M. Punnett, British Government and Politics, 2nd ed. (New York: W. W. Norton &
33. To put the matter another way, disciplined parties in effect create larger (or, as Olson, in
Rise and Decline of Nations, would say, more “encompassing”) constituencies. Such parties’
strategies are determined less by local considerations than by the pursuit of a national majority.
35. Hermens, Democracy or Anarchy; Anthony Downs, An Economic Theory of Democracy
36. Hermens, Democracy or Anarchy, pp. 64–66.
37. See particularly Richard McKelvey, “Intransitivities in Multi-Dimensional Voting Mod-
472–482.
39. See, for example, Alfred Cobban, A History of Modern France, vol. 3, France of the
politics” to the proportional system). Overall, Rae concludes that it is “clearly silly” to hold that PR encourages insurgent parties or destabilizes regimes.

If we clear our minds of these misapprehensions and undertake to reason the matter through seriously, we might best begin by distinguishing electoral systems’ effects in three very different kinds of electorates. In the first, votes are determined almost entirely by “tribal” loyalties of ethnicity, religion, class, or inheritance—what the French have called familles spirituelles—rather than by any issues of policy; hence they barely vary from one election to the next. In the second, voters choose more freely among alternative parties and candidates, but their choices are aligned along a single policy dimension, for example, along the classical left-right continuum. In the final case, voters consider more than one dimension, such as a left-right choice in domestic policy and a more aggressive or more pacific stance in external relations.

Much of our confusion, I think, results from ignoring this crucial aspect of what Rae has called “the surrounding envelope of societal forces.” If, as one may plausibly suspect, the Netherlands and Austria fell into the first category during the first half of this century, Britain and Sweden into the second, and France and Germany into the third, then comparisons of electoral systems across those categories—for example, between Britain and France—will mislead us by failing to control for an essential part of social context. Let us therefore examine each of these three cases separately.

Where inherited loyalties prevail, stable policy is always difficult to achieve; but most accounts now agree that a presidential or plurality system practically guarantees instability in these circumstances. Where a single powerful office or parliamentary majority can be captured by a narrow coalition (or even by a minority) to the exclusion of the group’s traditional opponents, and where electoral outcomes may hinge on accidents of turnout or of local alliances, conflict and recurrent upheaval can hardly be avoided. Only PR offers some hope of making stable bargains possible through security of results and the authority of leadership—as, for example, Lijphart’s analysis

40. Katzenstein, Small States in World Markets, pp. 10, 32, and 100–103. That PR would stabilize policy was, interestingly, a principal argument for many of the system’s early advocates. Count Goblet d’Alviella contended that “changes of political orientation will be less frequent and slower . . . [there will be] substitution of evolution for revolution.” John Humphreys emphasized that PR worked against “those violent swings of the pendulum which have so often been a pronounced feature of election.” C. G. Hoag and G. H. Hallett argued that under the plurality system “the change in election results is out of all proportion to the change in public opinion . . . [but] PR . . . records each shift in its right proportions.” Count [Eugene] Goblet d’Alviella, La représentation proportionelle en Belgique: l’histoire d’une réform (Brussels and Paris: Weissenbruch, 1900), p. 19; John H. Humphreys, Proportional Representation: A Study in Methods of Election (London: Methuen, 1911), p. 219; Clarence Gilbert Hoag and George Hervey Hallett, Jr., Proportional Representation (New York: Macmillan, 1926), p. 96.

41. Rae, Political Consequences, p. 167.

42. Ibid., p. 169.
of modern Dutch history suggests.\textsuperscript{43} That most of Katzenstein's smaller European democracies fall into this category only underscores the point.\textsuperscript{44}

In the third case, too, Richard McKelvey's theorem suggests that presidential and plurality-parliamentary systems only conduce to greater instability of policy.\textsuperscript{45} (The United States in the 1960s and 1970s—when issues of race, foreign policy, and morality crosscut traditional economic ones—may serve as a striking illustration.) McKelvey shows that an incumbent in a plurality system can always be defeated and policy can wander unpredictably over an array of alternatives. PR offers at least the chance of greater stability, through bargaining among a small set of powerful parliamentary leaders.

Only in the second case (classically analyzed by Downs), where voters choose along a single policy dimension, PR offers no apparent advantage—but neither is it markedly inferior. Indeed, presidential systems and plurality-parliamentary systems with disciplined parties tend toward great stability in this case by driving candidates and policy steadily toward the position of the median voter. But PR does much the same in these favorable circumstances—and in this respect Downs's analysis erred. Robert Axelrod's hypothesis,\textsuperscript{46} that under unidimensionality there is a unique stable parliamentary coalition, which he calls "minimal connected winning" (that is, the smallest coalition that commands a majority and excludes no party between its "leftmost" and "rightmost" members), has been largely confirmed by subsequent testing.\textsuperscript{47} It implies at least a considerable stability of policy between elections, in contrast to the shifting coalitions that even Rae feared.\textsuperscript{48} And because "connectedness" implies that winning coalitions will not wander far from the position of the median member of parliament, policy should also vary little from one election to the next.

In the two most likely circumstances, then, PR is the considerably superior recipe for stability of policy. Even in the single case that is likeliest to yield stability, it is at most marginally worse. But what of Hermens's crucial contention that PR conduces to instability by: (a) so paralyzing policy that extremism becomes attractive in any emergency; and (b) easing the extremist parties' "breakthrough" to respectability (principally including the winning of parliamentary representation)? On the latter point, Rae has shown that PR actually makes it more difficult for insurgent parties to gain representation.\textsuperscript{49} On the former, one can observe again that extremist move-

\begin{itemize}
\item \textsuperscript{43} Lijphart, \textit{Politics of Accommodation}, pp. 25 and 110–111.
\item \textsuperscript{44} Katzenstein, \textit{Small States in World Markets}.
\item \textsuperscript{45} McKelvey, "Intransitivities in Multi-Dimensional Voting Models."
\item \textsuperscript{46} Robert Axelrod, \textit{ConFLICT of Interest} (Chicago: Markham, 1970).
\item \textsuperscript{48} Rae, \textit{Political Consequences}, pp. 170–174.
\item \textsuperscript{49} Ibid., pp. 158–160.
\end{itemize}
ments have had at least as good hunting in majority and plurality systems (Imperial Germany, Third Republic France, Republican Spain) as they have in ones governed by PR (Weimar Germany, interwar and postwar Italy). Also, many PR systems have weathered great stresses without spawning significant extremisms: Sweden, Norway, Denmark, and the Netherlands in the Great Depression. At most, PR may make governing more difficult once extremists gain a toehold,\(^50\) but extremism apparently arises for reasons that have little to do with electoral systems.

To summarize, I have contended that trade-dependent, advanced economies, which are likely in the first place to experience strong pressures for democratic participation, will find it advantageous to adopt democratic institutions that maximize the state's insulation, autonomy, and stability. I have advanced reasons to think that the institutions likeliest to achieve those goals are parliamentary systems, strong parties, PR, and large districts. It follows logically that the trade-dependent advanced economies will be impelled, more than their self-sufficient fellows, to adopt such institutions. Has that in fact been the case?

The evidence

I draw my principal evidence from the twenty-four member states of the OECD. As a qualification for membership, these nations are economically advanced and (in varying degree) democratic. The relations that I have hypothesized should manifest themselves in this group of states if they are to do so anywhere.

*Trade and PR-parliamentary regimes*

In Table 1, trade as a share of gross domestic product (GDP) is related to a rough classification of regime (as of 1970). We observe at once that nine countries that depended most on trade were PR-parliamentary democracies; of the twelve that lay above the median in their reliance on trade, only one (Portugal, then still authoritarian) was anything else. Of the twelve below the median, only two (West Germany and Italy) were PR-parliamentary democracies. Overall, the association between trade and form of regime falls strongly in the predicted direction: the estimate of the Kendall-Stewart tau-c, at .602, was 3.20 times its standard error; the Goodman-Kruskal gamma was estimated at .857.\(^51\)

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\(^{50}\) Ibid., p. 175.

\(^{51}\) The Kendall-Stuart tau-c is a useful measure of association where both underlying variables are ordinal and where the rows and columns are unequal in number. Moreover, it is the most conservative of the available measures for such a case. (The Goodman-Kruskal gamma, for example, would suggest a stronger association in each of the cases described here.)
TABLE 1. OECD states by trade/GDP and type of government, 1970

<table>
<thead>
<tr>
<th>PR Parliamentary</th>
<th>Non-PR Parliamentary</th>
<th>Presidential</th>
<th>Authoritarian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxembourg</td>
<td>(161.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>(101.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td>(92.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>(91.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>(84.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>(82.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>(67.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>(63.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>(58.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>(53.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>(49.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>(46.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.K.</td>
<td>(46.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>(43.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>(40.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>(32.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>(30.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>(28.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>(27.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>(20.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>(14.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.A.</td>
<td>(11.2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Kendall’s tau-c = .602
p < .002

Numbers in parentheses indicate the sum of imports and exports as a percentage of gross domestic product (GDP).


Size of districts

Figure 1 and Table 2 relate trade as a share of GDP during the same period to each OECD state’s number of parliamentary constituencies: more precisely, of constituencies for the more powerful chamber—or where that was unclear, for the one with more members. (In effect, this is an inverse measure of average constituency size.) To correct for the few states with extreme numbers of constituencies—the United Kingdom’s 635, France’s 489, the United States’ 435—we use the natural logarithm of the actual number for the plot in Figure 1. We find that dependence on trade could account for 42 percent of the variation in countries’ numbers of constituencies during the 1970s. At the median (trade/GDP = 47.9 percent), the slope translates...
out to an association of about 1.5 fewer constituencies with each additional percent in trade’s share of GDP. Given that the estimate of the regression coefficient is 4.02 times its standard error, these results seem statistically secure. They are not merely an artifact of the extreme case of Luxembourg: removing it from the set and repeating the regression on the remaining twenty-three states produces an r of −.628 ($r^2 = .394$) and a slope of −.036. Neither is the association timebound: a similar regression on the (then twenty) states of the OECD in 1960 yields an estimated equation of $y = 5.59 - .03x$, an r of −.70, and a t of 4.17.

Can these findings, however, be an artifact of country size? In other words, could it be that small countries, which inevitably depend more on trade, also use PR more and have fewer constituencies? It is hard to see a priori why small states would use PR more. Robert Dahl and Edward Tufte have shown, however, that states’ numbers of parliamentary seats are strongly (and positively) related to their populations; we might well sur-

52. The regression equation tells us, in essence, that the number of parliamentary constituencies will be predicted by the natural number e to the power $[5.31 - .0299(\text{trade(100)/GDP})]$. But for any function $g = e^{f(x)}$, $dg/dx = e^{f(x)} (df/dx)$, hence for any given value $T$ of trade as a percentage of GDP, the derivative is $[e^{5.31 - .0299T}] (-.0299)$.

53. I mean the t-score only as an index of goodness of fit. I am well aware that these nations do not constitute a random sample of all developed economies.

54. Dahl and Tufte, Size and Democracy, pp. 81–82.
TABLE 2. Population, trade as a percentage of GDP, and numbers of parliamentary constituencies: OECD states, early 1970s

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (millions)</th>
<th>Trade/GDP (percent)</th>
<th>Number of constituencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td>210.000</td>
<td>11.2</td>
<td>435</td>
</tr>
<tr>
<td>Japan</td>
<td>108.600</td>
<td>20.3</td>
<td>124</td>
</tr>
<tr>
<td>West Germany</td>
<td>61.400</td>
<td>40.1</td>
<td>10</td>
</tr>
<tr>
<td>France</td>
<td>52.000</td>
<td>32.1</td>
<td>489</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>55.700</td>
<td>46.1</td>
<td>635</td>
</tr>
<tr>
<td>Italy</td>
<td>54.900</td>
<td>35.0</td>
<td>31</td>
</tr>
<tr>
<td>Canada</td>
<td>22.300</td>
<td>43.9</td>
<td>264</td>
</tr>
<tr>
<td>Austria</td>
<td>7.480</td>
<td>63.8</td>
<td>9</td>
</tr>
<tr>
<td>Belgium</td>
<td>9.740</td>
<td>101.3</td>
<td>30</td>
</tr>
<tr>
<td>Denmark</td>
<td>5.010</td>
<td>58.8</td>
<td>17</td>
</tr>
<tr>
<td>Finland</td>
<td>4.670</td>
<td>53.6</td>
<td>15</td>
</tr>
<tr>
<td>Greece</td>
<td>8.940</td>
<td>28.4</td>
<td>56</td>
</tr>
<tr>
<td>Iceland</td>
<td>.212</td>
<td>92.8</td>
<td>8</td>
</tr>
<tr>
<td>Ireland</td>
<td>3.060</td>
<td>82.0</td>
<td>42</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>.350</td>
<td>161.4</td>
<td>4</td>
</tr>
<tr>
<td>Netherlands</td>
<td>13.400</td>
<td>91.5</td>
<td>1</td>
</tr>
<tr>
<td>Norway</td>
<td>3.950</td>
<td>84.9</td>
<td>19</td>
</tr>
<tr>
<td>Portugal</td>
<td>9.270</td>
<td>53.9</td>
<td>22</td>
</tr>
<tr>
<td>Spain</td>
<td>34.900</td>
<td>27.9</td>
<td>59</td>
</tr>
<tr>
<td>Sweden</td>
<td>8.130</td>
<td>49.2</td>
<td>28</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6.350</td>
<td>67.3</td>
<td>25</td>
</tr>
<tr>
<td>Turkey</td>
<td>38.100</td>
<td>14.5</td>
<td>67</td>
</tr>
<tr>
<td>Australia</td>
<td>13.100</td>
<td>30.8</td>
<td>127</td>
</tr>
<tr>
<td>New Zealand</td>
<td>2.960</td>
<td>46.5</td>
<td>87</td>
</tr>
</tbody>
</table>

Population figures are for 1973; trade, for 1970; constituencies, for 1974 with the exception of Portugal (1975) and Spain (1976).


mise that their numbers of constituencies would show a similar association. Moreover, small countries in general may be more homogeneous and hence may "need" fewer constituencies to insure appropriate representation of diversity.

Population is indeed highly correlated with the number of constituencies. For the early 1970s, the bivariate correlation between ln population and ln number of constituencies among the OECD countries is .574 (r-squared = .329). Worse, population—as one might expect—exhibits substantial col-
FIGURE 2. Path analysis: population, trade/GDP, and ln of number of parliamentary constituencies among 24 OECD states, early 1970s

linearity with trade’s share of the national product: for these same countries and years, ln population correlates with trade/GDP at \( r = -0.771 \) \( (r\text{-squared} = 0.595) \). Does trade, despite this, affect the number of constituencies independently of population size?

Three tests are appropriate. First, "flip-flop" regression, or "analysis of commonality,"\textsuperscript{55} suggests that trade matters more: entering population into the regression after trade raises R-squared by .04 \( (\text{from } 0.42 \text{ to } 0.46) \), while entering trade after population raises it by .13 \( (\text{from } 0.33 \text{ to } 0.46) \). Alternatively we may employ path analysis.\textsuperscript{56} The path coefficients for the simplest recursive model, shown in Figure 2, suggest clearly that population’s principal effect is through trade; its direct effect on constituency size is slight. Finally, simple inspection of the coefficients, t-scores, and partials when both popu-


TABLE 3. Ln of number of parliamentary districts regressed on population (in millions) and trade (as a percentage of GDP): 24 OECD states, 1970–1974

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficient</th>
<th>Standard error</th>
<th>t(df = 21)</th>
<th>Prob.</th>
<th>Partial r²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable: Ln of number of parliamentary districts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>.0077</td>
<td>.0063</td>
<td>1.221</td>
<td>.23552</td>
<td>.0663</td>
</tr>
<tr>
<td>Trade as % of GDP</td>
<td>-.0243</td>
<td>.0087</td>
<td>-2.803</td>
<td>.01065</td>
<td>.2723</td>
</tr>
<tr>
<td>Constant</td>
<td>4.7613</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Standard error of estimate = 1.1935

Adjusted r squared = .4109

r squared = .4621

multiple r = .6798

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of squares</th>
<th>d.f.</th>
<th>Mean square</th>
<th>F ratio</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of variance table</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>25.6998</td>
<td>2</td>
<td>12.8499</td>
<td>9.021</td>
<td>.001487</td>
</tr>
<tr>
<td>Residual</td>
<td>29.9140</td>
<td>21</td>
<td>1.4245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>55.6138</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

lation and trade are entered into the regression (Table 3) points in the same direction: trade has the stronger effect.

Inspection of the raw data (see again Table 2) lends conviction to this surprising result. New Zealand, with a population nearly a quarter of the Netherlands', has eighty-seven times as many constituencies; Turkey, whose population is about two-thirds West Germany’s, has almost seven times as many constituencies. Yet in both cases (and in many others) trade is associated in the predicted direction: trade claims only half as much of GDP in New Zealand as in the Netherlands, and almost three times the share in West Germany that it does in Turkey. Although both are strong, the association between trade and the number of constituencies is more consistent than that between population and the number of constituencies.

Strength of political parties

In Figure 3, I plot an index of mean party centralization derived from Kenneth Janda against the natural logarithm of trade as a percentage of GDP.

57. Here the independent variable is simply population in millions. I have experimented with various transformations, including ln of population and the cube root of population (following a suggestion based on the work of Prof. Rein Taagepera of the University of California, Irvine); in no case was the impact of population increased.

Janda has assessed, for fourteen of the OECD states from 1950 to 1962, the extent of "national centralization of control" for each major party.\(^{59}\) To arrive at a mean index of party centralization for each country, I have weighted each party's score by its mean electoral strength (again as calculated by Janda, usually on the basis of voting for the most powerful house of parliament) over the twelve-year period. For example, if a country had only two major parties, one drawing on average 60 and the other 35 percent of the vote; then if the first was scored as 5 on centralization and the second as 3, the country score was \(\frac{5(.6) + 3(.35)}{.95} = 4.26\).

These mean indices of party centralization form the vertical axis of Figure 3; the horizontal axis is \(\ln\) of trade as a percentage of GDP in 1960. We find that dependence on trade can account for just under half the variation in mean central control of parties. The estimate of the regression coefficient is 3.4 times its standard error, and the result again does not arise merely from an extreme case: if we remove the United States (trade/GDP = 9.5 percent, mean centralization = 3.0) from the set, we obtain still an \(r\)-squared of .43 and a slope of 1.39.

It has been accepted consistently that PR encourages the centralization of political parties, particularly when it uses large districts and immutable lists of candidates.\(^{60}\) Trade-dependent states, we have seen, tend to have both PR

\(^{59}\) Ibid., section entitled "Variable 9.01."

\(^{60}\) Hermens, *Democracy or Anarchy*, pp. 41–58; Katz, *Parties and Electoral Systems*, p. 32.
and large districts. Hence we might reasonably suspect that the link between trade and centralization is actually an artifact of that between trade and electoral system. The path analysis of Figure 4, in which PR is entered as a dummy, suggests that this is unlikely to be the case. Trade appears to have a direct effect on centralization as well as one mediated through PR.

One can reasonably ask whether these static and recent correlations reflect dynamic and historical processes: have such institutions as PR, large constituencies, and strong parties been adaptations to increased dependence on trade? Two points should be conceded at once. First, conventional secondary sources suggest no such link: neither trade nor wider economic considerations appear to have played any role in contemporary discourse on electoral systems.61 Second, timing points to the First World War, rather than trade or any other factor, as the crucial precipitant of PR in most European states.

On the other hand, three reasons cast doubts on these facts’ ability wholly to resolve the issue. First, the role even of major pressure groups in histor-

ical struggles over electoral systems has been discreetly ignored until recently. Second, we should carefully distinguish the historical precipitants of a change from its causes: lightning precipitates forest fires, but drought is the necessary prerequisite. With electoral systems, we must ask why some nations (Sweden, Denmark, Belgium) adopted PR years before World War I, while others (above all Britain and France) failed to do so even under wartime pressures. Third, we cannot expect that participants always understand the real causes of their actions. Societies often adapt their institutions semiconsciously, responding to surface manifestations of root causes that their members only dimly comprehend: feudal dues were not commuted, nor absolutist government instituted, nor slavery abolished, nor even "Keynesian" fiscal policies first employed by groups fully cognizant of what most would now acknowledge to have caused those changes.

Nonetheless, we can point to one case in which the links among trade, economic survival, and the electoral system appear to have been understood perfectly. That is the recently renewed debate over PR in the United Kingdom. In a 1976 pamphlet entitled "Industry Needs Electoral Reform," Viscount Caldecote put the matter this directly:

... I am convinced that... some form of PR is essential if we want to create a more stable political environment in which industry can flourish... the present system... produces drastic changes in government policy at intervals which are far too short to enable industry to plan and operate efficiently. In the countries which are our major competitors there is far less polarization of policy... election of MPs by a system of PR would make a major contribution to reducing [our] polarization. ...64

Caldecote was not being eccentric. His pamphlet was published by Conservative Action for Electoral Reform (CAER), which had been organized in 1974 and by 1980 had enlisted the support of over a hundred Tory luminaries (among them Lord Carrington, James Prior, Francis Pym, and Peter Walker), including thirty-six MPs, over sixty peers, and numerous "leaders of industry."65

Major scholars of British politics soon took a similar line. The estimable

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62. Contrast, for example, Verney's tame account of the Swedish reforms of 1917-18—Parliamentary Reform in Sweden, chap. 11—with the far more revealing version of Sven Anders Söderpalm, Wallenberg och Branting (Lund: Gleerups/Tema, 1970).
63. Equally, one can ask why some states have retained PR almost unquestioningly since its original adoption, while others—notably Germany, in the late Weimar years, in 1949, and between 1966 and 1969—have repeatedly re-opened the debate. (I owe this point to an anonymous referee.)
64. Viscount Caldecote (Robert Andrew Inskip), Industry Needs Electoral Reform (London: CAER, 1975), emphasis added.
S. E. Finer, Gladstone Professor of Government and Fellow of All Souls, edited under CAER’s auspices a significant volume, *Adversary Politics and Electoral Reform*, which supports PR. Many of its essays, especially including Finer’s own, echoed and substantiated Caldecote’s contentions about the economic costs of the plurality system. One contribution by the economist D. K. Stout specifically observed that those costs were magnified in Britain “because of its dependence upon international trade.”

Since Finer’s volume, two Hansard Society studies have thrown their weight behind PR. Both were financed by major banks and industrial firms, including on their expert panels such figures as the chairman of Midland Bank and Unilever. The second of these, entitled *Politics and Industry: The Great Mismatch*, tellingly catalogs specific disasters inflicted by repeated reversals of policy on investment incentives, taxation, regional policy, and the regulation of prices and incomes. Vernon Bogdanor accurately summarizes these studies’ conclusions:

> What industry seeks from government is not so much specific policies . . . as a climate of stability within which investment plans can be made with confidence. . . . It [is] not deep-seated ideological disagreement which cause[s] industrial instability [in Britain], but rather the practice of adversary politics . . . It is for this reason that the British electoral system is profoundly inimical to the country’s chances of industrial recovery.

This renewed agitation for PR is remarkable for at least three reasons. First, it occurs in a country which, by common assent, has achieved strong parties and a substantial insulation of MPs from local pressure by means other than PR and large districts. Therefore it is natural that the agitation focuses on the need for stability—the one thing that, if I am right, only PR can supply. But it also suggests that, at some point, the need for stability in a trade-dependent society can by itself impel change.

Second, there is the matter of timing: why is a serious demand for PR voiced only in the last decade, after a silence of fifty years? Surely, given

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67. Ibid., p. 140.
71. Pugh, “Campaign for Proportional Representation.” At this point, I must dispel a misconception occasionally encountered even among persons otherwise well-informed on British politics, namely that the U.K.'s renewed interest in PR has been stimulated principally by the direct elections to the European Parliament. In fact, the British controversy considerably antedates European elections. For the true recent history of the issue, see the useful sketches of Pugh (despite the title of his essay, he alludes frequently to the present-day debate) and Walkland, “Report of the Hansard Society.”
the statements of the advocates, it is not far-fetched to connect this pressure to Britain's increasing exposure to seriously competitive international trade. This exposure was accelerated by the final demise of even the informal empire and Britain's accession to the European Community.

Finally, we must consider the implications for earlier cases and for historiography. It is possible that businesspeople, scholars, and even politicians of earlier decades may have expressed themselves with a frankness similar to that of present-day Britons. Further research on the conscious tie between the expansion of trade and the choice of electoral systems is indicated.

Summary

Suppose that all I have argued here were accepted as true. One might still be tempted to respond, "So what?" A large literature in political science has been devoted to the question of why states choose or reject free trade—is this merely a footnote to that debate, suggesting that if they choose free trade, then certain kinds of institutions are a likely part of that choice?

I do not think so. As Dahl and Tufte argued years ago, and as Katzenstein has recently demonstrated in detail, small states depend so heavily on trade (in Hirschman's sense, adopted earlier)—that is, their gains from it are so large—that they are quite strongly constrained to remain open. More broadly, certain kinds of technological or political change—for example, the drastic cheapening of transportation occasioned by railways or steamships in the 19th century, or by containerization, trucking, and larger ships in the 20th; or the security that shipping enjoyed under British hegemony in the 19th and early 20th centuries—objectively increase the potential gains from trade to almost all economies. That is only another way of saying that such changes increase the opportunity costs of continued isolation and hence impel the affected economies more strongly toward openness. Beyond some point, changes of this kind make all states "small."74

History of course can provide examples of equally strong contrary trends. The neglect of roads and the insecurity of shipping that marked the last centuries of the Roman Empire so limited the gains from trade—as Henri Pirenne clearly saw, even if he misapprehended the central cause—that


74. Of course, states large enough to affect world prices by their tariff policies may find that their optimal tariff is greater than zero even when transportation is costless. But they will not find autarky advantageous; nor, if I am right, will they be likely to attain their optimal tariff through institutions that give wide sway to local interests or private wealth.

autarky even at the level of the manor became necessary eventually. In our own century, wars hot and cold have drastically, if only temporarily, restricted trade among belligerents and noncombatants alike. One can too readily imagine the more lasting damage that even a "limited" thermonuclear exchange would inflict.

In either event, individual states face a tide that they can swim against only with great difficulty. Where trade is becoming steadily easier, shrewd adaptation (for example, France's turn to nuclear power\(^{76}\)) can conceivably keep an economy self-sufficient at reasonable cost even while imports grow more attractive. More frequently, autarky-minded leaders have found that enlargement is their only effective escape from "littleness."\(^{77}\) Those who sought to keep Germany and Japan self-sufficient eventually turned, logically enough, to conquest.\(^{78}\)

I suggest that neither escape will be available under normal circumstances. In an age of objectively increasing dependence on trade, states will be increasingly constrained to remain open and to adopt the institutions that—if my hypothesis is right—conduce to openness and to effective competition on world markets. From this standpoint, U.S. institutions may be antique in more ways than Huntington suggested,\(^{79}\) and we may perhaps read our future in the paths others have already taken.


